TEACHING BOYS
A Global Study of Effective Practices

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INTERNATIONAL BOYS’ SCHOOLS COALITION
# Table of Contents

**CHAPTER 1**  
Introduction .................................................................................................................. 1

**CHAPTER 2**  
Research Design ........................................................................................................ 5

**CHAPTER 3**  
Teacher Responses ................................................................................................... 10
  - Determining Categories .......................................................................................... 10
  - The Ubiquity of Technology ................................................................................... 10
  - Active Learning Emphasis ....................................................................................... 11
  - Effective Lessons: Formative or Merely Fun? ....................................................... 11
  - The Transitive Factor in Effective Lessons ............................................................ 12

- **Product** .................................................................................................................. 12
  - PRODUCTS THAT GO
  - PRODUCTS OF USE
  - PRODUCTS THAT ILLUSTRATE
  - PRODUCTS THAT ENGAGE

- **Gaming** ................................................................................................................. 27
  - GAMING FOUNATIONAL SKILLS
  - GAMING DIFFICULT OPERATIONS
  - GAMING FOR RETENTION
  - GAMING INQUIRY
  - GAMING A PROCESS
  - GAMING THE COURSE

- **Motor Activity** ....................................................................................................... 46
  - EMBODYING A PROCESS
  - EMBODYING CONCEPTS
  - EMBODYING EXPERIENCES
  - THE GENERAL TRANSITIVITY OF MOTOR ACTIVITY

- **Role Play/Performance** ......................................................................................... 61
  - ROLE PLAYING A PROCESS
  - ASSUMING REAL WORLD ROLES
  - ROLE PLAYING CRITICAL DECISIONS
  - EMPATHIC ROLE PLAY

- **Open Inquiry** ......................................................................................................... 70
  - OPEN INQUIRY: EXPERIENCE AND THEORY
  - OPEN INQUIRY: DESTINATIONS WITHOUT MAPS
  - OPEN INQUIRY: ENCOURAGING PERSONAL PERSPECTIVE

- **Team Work/Competition** ...................................................................................... 77
  - TEAM WORK: ENERGIZING COLLABORATION
  - TEAMWORK WITH A COMPETITIVE EDGE
  - TEAM WORK/COMPETITION: PARTS COHERING INTO WHOLEs

- **Personal Realization** ............................................................................................ 84
  - PERSONAL REALIZATION: THE CONSIDERATION OF OTHERS
  - PERSONAL REALIZATION: SELF-DISCOVERY
  - PERSONAL REALIZATION: MASCULINITY
Introduction

Love goes toward love as a school boy from his books

*William Shakespeare, Romeo and Juliet, Act 2, Scene 2*

Maybe you have a son like Chance – smart, capable boy – or maybe a teenager who is starting to struggle in school. Possibly, you’ve had a wake-up call like Trina or are experiencing something that is less dramatic but equally troubling: a growing sense that your school-age son is falling out of love with learning. When he talks about his classroom experience, you’ve begun to notice that he seems fearful, bored, or frustrated. Or maybe you see ways in which he’s disengaged from the classroom altogether. Perhaps you’ve begun to see small but persistent signs that it’s gotten harder to be a schoolboy than you remember.

*Peg Tyre, The Trouble with Boys (2008), p. 2*

As the epigrams above suggest, boys for generations have tended to find the experience of schooling aversive. In her historical study of boys, Cohen (1998) captures the classical characterization of boys’ scholastic stance—“*a habit of healthy idleness*”—as if working hard to read, figure, and master tasks lay somehow outside a boy’s given nature. Tyre, in a recent, balanced review, attempts to steer clear of the politics that have confounded consideration of the problem to remind readers of its scope and social significance. Still, even with the alarms sounded over the past decade, many tend to normalize boys’ problems with schooling. Carol Gilligan (2005), in a forward to one of her students’ books, tells a story of conflicts her two sons experienced with teachers in their schools and of her own initial parental reaction: “Boys will be boys…”

But when Gilligan thought more carefully about her sons—what she knew of them, their personalities and values, and the nature of the conflicts that had arisen for them in their classrooms—she recognized this response as a facile and stereotypic conclusion. School, considered at the level of the actual human relationships her sons experienced with their teachers, had not been such a happy place for her boys. Both had reacted to perceived mistakes and misjudgments made by teachers with a refusal to cooperate, a response that had gotten them into some trouble. She generalized from her sons’ experiences to boys more generally: “It occurred to me that it is in the adamancy of this refusal that boys will be boys. Turning away from false relationships rather than acting to repair or smooth over what happened may explain why many boys become disengaged from school (2005, p. xiv).”

Over the past decade increasing attention on a worldwide scale, both in the form of analytic research and topical books and articles pitched to general readers, has been directed to a perceived decline in boys’ school performance and in their general development. This focus on boy-related
problems followed nearly two decades of similar concerns expressed about girls, concerns often grounded in more general considerations of gender relations and equity. This new interest in boys’ education has not come without detractors, however, particularly in the US. Recent studies of American boys’ and girls’ comparative educational achievement (Corbett, Hill & St. Rose, 2008, in connection with the American Association of University Women) have concluded the scholastic gains realized by girls over this period have not come about at the expense of boys, who, if considered in aggregate, also improved scholastically, although not as much. The authors state that their analysis “puts to rest fears of a ‘boy crisis’ in education” (Corbett, et al, p. 3). We have previously argued (Reichert & Hawley, 2006) that large-group comparisons can be and often are misleading, as they trivialize and blur significant differences in boys’ and girls’ personal and scholastic progress. We share Tyre’s (2008) concern with how such analyses of girls’ progress as these downplay boys’ struggles and, as she put it, show “just how ill-equipped some once-progressive thinkers are to participate in a discussion of gender equity that considers the needs of both girls and boys” (p. 45).

At almost the same time as the AAUW report was issued in the US, a large-scale study (Guiso, et al., 2008) comparing girls’ and boys’ performance data from the 2003 Programme for International Student Assessment (PISA) across 40 countries, ranging from the US, Asia and Europe, was reported. An interesting dimension to this study was an effort to correlate measures of gender equality with academic performance differences between boys and girls. The study found striking support for the conclusion that performance differences are largely culturally-based. In countries with the greatest discrimination against females, the largest gaps in math performance were found; where social and economic opportunities were more equal, these gaps disappeared altogether. But, the study also found that, across all countries, boys’ reading performance lagged behind girls’ and that, with greater equality, the gap grew even more pronounced.

This study’s findings point to a number of educational challenges to be met as social justice and gender equity are advanced in societies around the world. Obviously, promoting greater equality for women should enable girls to overcome certain barriers to their success in school. Less obviously, the study also reveals the failure in many societies, independent of gender equality measures, to understand how to advance boys’ academic success. Commenting on the core message of the study, that promoting greater equality seemed to correct girls’ historic disadvantage in math and science education, The Economist observed that “girls may acquire an absolute advantage over boys as a result of equal treatment” (May 29, 2008). For too many, the relative advantage of boys or girls has been the main story when it comes to educational experience, but such comparisons do not in themselves help with the more important question of how best to realize the learning potential of both boys and girls. Mortenson (2008), though he wrote specifically about the AAUW report, makes a point that applies to many countries around the world:

The recent release of Where the Girls Are: The Facts about Gender Equality in Education, by the American Association of University Women, presents an opportunity to review the extraordinary success of women in education over the last four decades. The release also presents an opportunity to review the failure of the entire education system—from kindergarten through college—to educate boys for their adults roles at work, in families and as citizens (p. 1).
Boys’ experience in schools can be looked at in two ways: through the lens of stereotype and easy assumption or more carefully, with a closer-in, more empathic willingness to consider their subjective experience. In the present study commissioned by the International Boys’ Schools Coalition, a world-wide organization of about 200 schools that have long been dedicated to the education of boys, we have had the luxury of listening to over 1500 male adolescents and nearly 1000 teachers describe their mutual experience of each other in the classroom. In their stories, we hear countless examples of teachers bending and refining their pedagogy, adapting their lessons to fit what they have come to see as boys’ interests and needs. From the boys, we received an outpouring of appreciation for these efforts, stories of male students taking in and cherishing the mentoring, mastery, high expectations and discipline of their teachers. The combined impression, from both boys and teachers, challenges the easy stereotypes that boys are stubbornly resistant to school and leaves us with a hope that, when conditions are right—when pedagogy fits boys’ lives and learning needs, when schools support teachers’ efforts to build responsive relationships with their male students—boys can and do thrive in school.

The stories collected for this study are both rich in voice and personal detail. They reveal how especially effective lessons are designed and delivered. Teaching boys well can be likened to a dance, or any sort of intricate partnership: while someone leads and another follows, the partnership involves both people united in common purpose, finely attuned to each other's moves. Despite boys’ historic reputation as being school-averse, we have discovered committed teachers who have hit upon demonstrable instructional strategies to reach boys and engage their hearts and minds in learning. Effective teaching develops in a given teacher’s classroom practice. In a number of ways effective practice is elicited by what observably delights, interests and motivates students in a teacher’s charge. In asking a broad sample of practicing teachers to narrate especially effective practices, we were interested in the extent to which this evolutionary process might point to insights and applications which could offer something of value to schools generally.

The classrooms our respondents describe are far from a one-way or top-down pedagogy; the reporting teachers plan and deliver their lessons, but students also shape those lessons in active, obvious ways. As teachers stand before their classes of boys in English or Science or Music lessons, they learn by trial, error and intuition to adjust their instruction to the appetites and learning styles of their pupils. And, as the students responses indicate, boys in turn study their teachers, sizing them up, reading their every gesture and tone. Together, these partners execute a dance that, at its best, can be purposeful, heart-felt and life-changing for both teacher and student.

In this study we asked both students and teachers the same question: Describe a lesson or classroom activity that “worked”. There was an abundant overlap in the types of lessons boys and teachers described to us in their responses. But there were also instructive differences that should guide teachers and schools to adjust their teaching to boys’ hearts. Overall, across remarkable cultural, geographic, language and social differences, the researchers were able to map defining features of successful approaches to teaching boys. While there would appear to be a broad, general applicability of many of the strategies and approaches recounted here, this compendium is not intended as a recipe book. The researchers propose, rather, that in their instructional roles teachers must pay careful attention to their scholastic partners, the boys, and must adjust how they teach depending on the affective responses and productivity they observe.
The study itself was an outgrowth of a prior project the authors had conducted for the Center for the Study of Boys’ and Girls’ Lives, which they have called the Boys’ Audit.

The Boys’ Audit is a combination of directed self-study and rigorous outside assessment enabling participating schools to take a measure of how well boys are thriving in a number of scholastic, personal and interpersonal domains. The Audit should serve to confirm positive practices already in place, and it may also point to practices that could serve boys better. Perhaps the most important result for the school undertaking an audit is a greater awareness of what it is doing on behalf of its boys, how well these efforts are working and prospects for improving these efforts (Reichert & Hawley, 2006).

Piloted at two boys’ schools, both members of the International Boys’ Schools Coalition, the Audit involves multiple quantitative and qualitative measures, leading to a comprehensive picture of boys’ experience at a school. The researchers come to this work from different backgrounds and experiences; one as a teacher and boys’ school leader for decades, the other as a psychologist in a clinical, consulting and research practice focusing on boys’ development and education. For the International Boys’ Schools Coalition, given the geographic spread of member schools and the desire to focus on classroom lessons, the present study was designed to be minimally demanding and easily conducted using online tools. The Coalition sponsored the study to find out whether there are particular themes or common practices in teaching boys among their membership schools. While intending that the resulting report might deepen the professional discussion among teachers within its membership, the Coalition was also keen to ensure that the study’s results might offer something of value to a more general audience.

We will have more to say about the intent of the study further on in this report. In Chapter Two, we detail the study design itself, describing our sample’s characteristics and data analysis procedures. Chapters Three through Five, the heart of the report, describe our findings and offer many examples of lessons from teachers and of boys’ reactions. Chapter Five offers a unique accounting of the critical importance of boys’ relationships with teachers and details the elements of these relationships that boys say matter most to them. In Chapter Six, we discuss the significance of the overlap between boys’ and teachers’ responses: where their respective “takes” on school converge and where they diverge. Finally, in Chapters Seven and Eight, we discuss what we feel are implications from this study for practicing teachers and for schooling generally.

The research team did not meet or consult with any of the boys or teachers face to face in the course of this project. The International Boys’ Schools Coalition’s leadership selected a representative sampling of schools from among its membership and the schools themselves invited their teachers and students to respond to our on-line surveys. The participating schools were chosen to represent a range of school types, both day and boarding, independent and state-supported, religious and non-sectarian, selective and non-selective. The study included no schools whose enrollment is predominantly comprised of lower income or racial minority students. The researchers found—and believe readers will also—a powerful authenticity and poignancy to many of these accounts of effective teaching.
The Wisdom of Teaching in Boys' Schools project was undertaken by the International Boys’ Schools Coalition to explore among its membership whether there are pedagogical practices that are especially effective for boys’ scholastic engagement and achievement. The study was based on five assumptions.

1. That boys’ schools are unique repositories of pedagogical practices that have evolved and been refined over many years, and that there is an accumulation of “wisdom of practice” to be found in such schools.

2. That valuable evidence of effective practice can be determined from what teachers themselves say about their work.

3. That the data reported by teachers will be rich and varied enough to sustain analysis.

4. That students can also be asked in a simple and direct manner about school practices that have helped them to engage with their lessons and that these accounts will provide additional corroboration and dimension to teachers’ reports.

5. That across a variety of schools, from different geographic and cultural contexts, a set of themes may emerge which can illuminate broader conversations about boys’ education.

To conduct this research project, the Coalition contracted with the Center for the Study of Boys’ and Girls’ Lives for the services of a research team. Both members of the research team have had a long-standing relationship with the Coalition, as well as with particular boys’ schools, and have developed a methodology, the Boys’ Audit, which has achieved promising results for deepening schools’ understanding of their practices with boys. Working closely with staff of the Coalition, the research team developed a design for the project, drafted instructions for schools and began the process of recruiting participants. In January 2008, a sample of 18 member schools, representing a careful geographical and school-type range, were selected, and while all but one of the participating schools are fee-based, there was considerable variation, country to country, in the degree of government-funded support and the economic profiles of the student bodies. The following schools participated in the study:

Auckland Grammar School, New Zealand
Belmont Hill School, United States
Brisbane Grammar School, Australia
Christ Church Grammar School, Australia
Collegiate School, United States
Crescent School, Canada
Dulwich College, England
In each school, all teachers of adolescent-aged boys (12–19 years) and a sample of students were asked to complete an on-line survey, designed to be open-ended and minimally demanding. After an orientation process conducted at the school by a project coordinator, who was appointed by the school Head and oriented by the research team, teachers were asked to identify and describe a lesson or unit, or teaching strategy or technique, they judged to have been notably successful in engaging boys and deepening their learning. The survey questions also asked them to reflect on whether and why they felt the lessons selected might be especially appropriate for boys and if they thought the learning outcomes could be measured in some way. Students, in a parallel survey, were likewise asked to identify and describe what they considered to be meaningful, memorable and successful teaching practices. In this research approach, we take an “emic” stance (Lett, 2007), trusting that from “insiders” in boys’ schools we might best capture the high art of effective pedagogy.

This approach contrasts sharply with purely quantitative methods that attempt to correlate specific, replicable instructional practices with easily measured results, such as performance on standardized tests or countable instances of specified student behaviours. It is important to note that the methodology of this study is no less “empirical” for being qualitative. Indeed given the kinds of outcomes sought, a qualitative approach is not only valid but especially promising. The scientific validity of a qualitative research project derives from several sources: the accuracy of description and interpretation, the theoretical understanding of the subject by the researchers and, most importantly, the practical usefulness of the study’s outcomes (Winter, 2007). Some methodologists have added “authenticity” to the list of validity factors applying to qualitative research, a consideration of the degree to which the project and its findings “facilitate and stimulate” action (Manning, 1997, p. 108).

Having agreed that the goal of better understanding effective teaching practices for boys was best served by a descriptive, theory-building research stance, the Coalition and research team then set about to compile a representative inventory of effective practices, to categorize those practices according to their distinctive contours, and to invite a consideration of the nature and replicability of their reported effectiveness.
The survey was introduced to teachers with the following instructions:

YOUR TASK: to narrate clearly and objectively an instructional activity that is especially, perhaps unusually, effective in heightening boys’ learning.

You are not being asked to describe or discuss effective teaching generally, or to describe a whole term-long or year-long course of study. The teaching practices sought here are lessons or units, individual projects or assignments, or instances of classroom process in which boys rise to the material under study with heightened attention, energy and performance, resulting—perhaps measurably, perhaps not—in superior work. This is of course a highly subjective appraisal. Nevertheless, teachers are clearly aware of activities and moments when boys rise to instructional business with heightened interest, energy and performance. Teachers tend to register this awareness in the satisfaction of having had an exceptionally good class, series of classes, or perhaps an exceptional moment in class. Students register the experience in the quality of their attention and of their participation. Students carry their interest in a good learning experience outside of the classroom, continue to think and talk about the idea, text, or project with peers and family on their own time. What is effective in a practice may lie in the appeal of the subject, topic or text under review. Sometimes it is not the topic or text, but an approach to investigating or discussing the text or to writing about it which elicits the heightened response. Sometimes effective practices seem to derive from the social structure of the learning exercise.

Teachers were then asked to respond to these questions:

1. Please describe an effective practice you have employed. In narrating your observations, take care to avoid evaluative terms like “wonderful” or “inspired.” Instead, show the qualities that evoke those feelings in you with clear narration of what is said and done in the course of the activity. Tell the story of the practice, as if you are explaining it to a colleague in another subject, or perhaps to a younger teacher who is looking for guidance. Be sure to identify the course and grade level for the instruction activity you have chosen.

2. To what do you attribute the special effectiveness of the practice or activity you have chosen? (There is no need to be authoritative or “scientific” in this appraisal.).

3. Is there something about this practice or activity that you believe is specially pitched to boys’ learning, engagement and achievement?

4. Are there measurable outcomes—or outcomes that might conceivably be measured—that could objectively document the effectiveness of this practice?

In response to these survey questions, the project received an outpouring of detailed and obviously well-crafted lessons from teachers, totaling 942 responses. 44% of the responses were from US schools; 22% from Australian; 18% from New Zealand; 7% from Canadian and another 7% from South African; 2% were from the United Kingdom. The study asked teacher respondents to report their gender and teaching experience to gauge the degree to which these factors might influence, in some way, the types of lessons they submitted or their rationale for the lessons. Three quarters of the teachers were male; the remainder female. Respondents ranged rather evenly in years of teaching experience from 1–44 years.
Again, to provide an independent assessment of the lessons narrated by the teachers, we also surveyed a hundred boys from each school with an equally simple questionnaire about memorable lessons. The project was introduced to the boys in the following way:

Thank you for participating in this survey! Your school is participating in a special project, *Wisdom of Teaching in Boys’ Schools*, sponsored by the International Boys’ Schools Coalition. In a separate survey, teachers in your school are being asked to talk about a lesson or an activity that they find especially memorable, and that they think is very effective in engaging boys in your school. The second component involves a survey of students. Your answers to the questions that follow are very important to the success of the project. It is important for you to know that your report is confidential. The project researchers will read and summarize survey answers, and their report may include comments and quotes, but student names will not be used.

Boys were then asked several demographic questions, including their name, age, grade, school and ratings of their motivation and achievement levels as well as their socioeconomic status and ethnicity. Then they were given the following instructions:

In the box below, tell us the story of a class experience that stands out as being especially memorable for you. By this, we mean that it was especially interesting, engaging or motivating for you. It might be a particular lesson, unit of study, a choice of text or subject matter, a class activity or exercise, or a project or assignment. It doesn’t have to be an occasion when you achieved well in a subject, but simply one in which you found yourself especially engaged, interested or motivated. When you tell this story, please give as many details as you can in describing what took place. Avoid judging or praising with words like “terrific” or “best”; rather, show what occurred. You do not need to give the name of the teacher, but if it is easier for you to refer directly to the teacher by name, it will be removed later on.

The results of the survey were surprising, even to the sponsors of the project. Boys related stories about their experiences in school that were informative as to particulars and often quite moving. In all, 1547 boys responded, ranging from 12–19 years old. Of the total, 31% of the boys attended school in the US; 26% in Australia; 14% in South Africa; 13% in New Zealand; 11% in Canada and 5% in the United Kingdom.

The study also asked boys a few additional questions in order to assess whether motivational and achievement levels, or socio-economic and ethnic variety, might be observed to differentiate responses. In the boys’ own estimations, 22% were “highly motivated”, 52% were “well-motivated”, 19% were “average”, 6% “somewhat less motivated” and 1% “not motivated at all”. Again in the boys’ estimations, 24% were “top achievers”; 49% were “above average”; 25% average; and 2% “below average”. In socioeconomic terms, 15% placed their families’ economic positions as in the top group; 52% placed them “above average”; 27% average; 7% below average. Ethnically, 62% of the boys said they were in the majority ethnic group in their countries while 22% said they were minorities and 16% said they would be harder to categorize.
Once responses were finally collected from participating schools, the research team set about to analyze the data. Initially, both members of the team read through responses of both teachers and students for a general reaction; Coalition staff were also asked to participate in this stage of the interpretative process, helping the research team to describe and identify common themes. From this initial reading, a preliminary coding framework was devised, so that teacher and student responses could be classified by type. As the researchers proceeded to review and refine their coding categories, it became increasingly clear that there was a pronounced overlap between teacher claims and student experiences; however, there were also interesting divergences, summarized in Chapters Five and Six.

The study concludes (Chapters Seven and Eight) with a summary of the implications of the reported findings for teachers and for school leaders. ■
CHAPTER THREE

Teacher Responses

Teachers from the participating schools were asked to select and narrate what they believed to be an especially effective instance of teaching boys—whether a specific lesson, an extended unit of study, or a particular approach to an assigned task. Nearly all of the respondents seemed to grasp what was asked. As indicated earlier, the researchers had previously solicited teacher-reported “best lessons” in the course of observing and studying particular boys’ schools in the United States, but in this more comprehensive, international study, they formed no prior hypothesis about the substance of the responses they would receive, determining instead to see what kinds of variety and patterns might emerge from each school’s teaching staff and among the submissions taken together.

A thorough-going reading of the submissions from all of the participating schools revealed a number of clear and distinctive features—some of them unexpected. One such feature was the remarkable convergence of similar accounts of what teachers found effective in their teaching. Despite the inevitable differences in particular schools’ composition and culture, the accounts of effective teaching practices did not appear to be marked by structural features of the schools—such as day or boarding, large or small—or by cultural differences in the regions and nationalities represented by the participating schools. Nor did it appear to the researchers that teachers’ gender, age or years teaching appreciably influenced the nature of the lessons they found effective with their students.

Determining Categories

After a preliminary review of all the teacher submissions, they were sorted into a number of categories determined by the kinds of activity the teachers narrated. Again, the convergence of similar practice was pronounced. Although for purposes of clear illustration the following accounts of effective lessons will be assumed under single categorical headings, such as Gaming, Teamwork, Competition, Created Product, nearly every reported practice includes multiple elements—as when a teacher devises a game wherein boys form teams to create a product which will be judged competitively against the products of other teams.

The categories, or elements of effective practice, derived from the totality of teacher submissions are Product, Gaming, Motor Activity, Role Play/Performance, Open Inquiry, Team Work/Competition, Personal Realization, Responsibility For Outcomes, Intrinsic Subject Matter, Interactive Technology, Boy-Specific Pedagogy, Metacognition, and Novelty, Drama, Surprise.

The Ubiquity of Technology

A word perhaps might be said at this point about Information Technology—computer-related school activity in particular. Information Technology has for the past three decades been a steadily
evolving and increasing presence in schools world wide—clearly so in the schools participating in this study. Classroom PowerPoint presentations, Smart Boards, sophisticated information searches, global positioning (GPS) applications, software specific to mathematics computations, animation, and historical simulations are not only in wide use in the teaching practices reported in this study, in many cases their engagement is claimed to be central to the effectiveness of the narrated practices. A number of participating teachers suggest that a particular application of information technology is the determining factor in the reported lesson’s success, some of them claiming further that ready engagement and facility in IT are specifically appealing to boys. But whatever role technology might play in facilitating boys’ interest in their lessons, the ubiquity of IT elements in successful lessons is striking in our teachers’ stories.

**Active Learning Emphasis**

Taken together the teacher responses combine to suggest a powerful endorsement of active, project-centered learning: boys on their feet, moving about, working individually, in pairs, and in teams to solve problems, create products, compose presentations to their classmates who are held accountable for the material presented. There is no reason to suppose that the reporting teachers did not otherwise engage effectively in more traditional kinds of instruction, such as lecture presentations and Socratic question-and-answer exchanges, but virtually none of the reporting teachers selected such instruction as a critical element of effective practice. Men and women reported strikingly little difference in the kinds of teaching they found effective, nor were such differences noted on the part of beginning and seasoned teachers. Also notable was the similarity in reportedly effective approaches to students of different grade and ability levels.

As might be expected from a large, unselective sample of teachers representing all scholastic disciplines, some of the narratives were nuanced and eloquent, others terse. The very few teachers who announced themselves as “traditional” with respect to pedagogy tended then to present a notably imaginative and untraditional example of effective practice. In past and contemporary educational parlance many of the submissions might be labeled “progressive” or “constructivist,” although none of the submitting teachers identified themselves in this way. The language of the narratives was largely free of theoretical educational jargon, though there were a few references to “assessment rubrics,” “scaffolded sequences,” and the like. Many of the submissions included frank and self-effacing admissions, including references to classes and approaches that had, with the exception of the reported practice, not gone well, classes in which teachers found their students unresponsive or difficult.

**Effective Lessons: Formative or Merely Fun?**

Teachers were asked if the effectiveness of the practice they reported had been measured or whether it could in principle be measured. To this there was a sprawling variety of responses. Many of the lessons reportedly resulted in measurably improved results on classroom exams and on standardized, externally given tests. Other practices, especially those resulting in an artistic composition, lay outside standard metrical assessment. The dominant note struck in the responses to the question of measurability—struck with special fervor by teachers of analytic disciplines, such as laboratory sciences, mathematics, and social sciences—was that measurability aside, the affirming feature of the reported practice was the visibly high engagement of students in the
process of the lesson and their warmth of response. Several of the reporting teachers took pains to point out that “years later” students indicated the formative impact of the lesson selected.

While the combined lessons reported reveal clear and perhaps even revelatory contours, a skeptical response might fairly be made to the effect that practices merely felt to be engaging and energizing to teacher and boys are not necessarily educationally formative. Creating products, engaging in open-ended research, competing, gaming, introducing classroom novelties and surprises may be memorable—fun—but perhaps not improving. This line of criticism is without question valid if it can be shown that (self-reported) engagement and enjoyment was the sole aim and ultimate result of the practice in question.

The Transitive Factor in Effective Lessons

As many of the teacher narratives make clear, diversion and easy engagement are far from the aim—or the result—of their effective efforts. There is, the researchers maintain, a quality of transitivity running through the effective practices reported. That is, the motor activity or the adrenal boost of competing or the power of an unexpected surprise in the classroom does not merely engage or delight; it is transitive to highly specific learning outcomes. An example of this transitivity is the English teacher’s narrative of teaching *Romeo and Juliet* to his early adolescent students in the course of which he introduces them to the discipline of stage sword play, to the extent that the boys train, practice, and master some of the conventions of swordsmanship. The activity is highly engaging on a number of counts: it is physically rigorous, it is dramatic, holding even the faint promise of danger, and it is novel. But, as the narrative reveals, it is also transitive to a deeper, more enlivened reading of those scenes in which Tybalt slays Mercutio and Romeo slays Tybalt—and to the play as a whole. The active exertions infuse the experience of tackling a dense, rich text with an altogether different kind of energy, appreciation, and attention. This kind of transitivity from pedagogical approach to learning outcome is widely and variously in evidence in the selected lessons below. Moreover, there is every reason to believe that some forms of this transitive property are especially effective with boys.

What follows are selected narratives, some whole, some in excerpt, from the reported practices under their respective headings.

■ Product

Educational theorists from John Dewey forward have proposed that a person cannot be proven to have learned something until he or she has performed some operation on it. The “operation” may be as scholastically elemental as answering a question or transcribing material from one medium to another—chalk board to notebook—but at the heart of the theory is the notion that some active imposition of a learner upon the subject under review is essential to effective learning. Possibly no scholastic task requires a more thoroughgoing imposition of the learner’s resources on the subject at hand as does making the thing under study or creating something materially that demonstrates the concepts under study. Thus it is perhaps unsurprising—although no less instructive—that so many teachers reported that their most effective practices involved student-created products. Moreover, many of them felt that vigorous creation of products was especially effective with boys.
PRODUCTS THAT GO
Perhaps not surprisingly, a number of teachers reported winning boys’ engagement and mastery when undertaking projects that involved vehicles, rockets, and planes, as in the following lesson reported from a teacher of Technology and Graphics in New Zealand:

This unit of work was based on the F1 in Schools CO₂ dragster project, an international competition for school children (aged 11–18), in which groups of 3–6 children (in this case individual students) have to design and manufacture a miniature “car” out of balsa wood. The cars are powered by CO₂ cartridges and are attached to a track by a thin wire. They are timed from the moment they are launched to when they pass the finish line by a computer. The cars have to follow specific guidelines (e.g., the wheels of the car must be in contact with the track at all times). The cars are raced on a 20m long track (in the international competition it is roughly 25m) with two lanes, to allow two cars to be raced simultaneously.

The lesson started with an introduction, in the classroom, to the project and an explanation of the processes involved. This included showing them the balsa wood billets, CO₂ canister and wheels they were going to use and an example of a completed dragster. They were then asked what the main features/key factors they needed to research in order to start designing and manufacturing their own car. These included aerodynamics, friction, momentum/inertia, surface finish etc., and were written on the board and copied by the boys. Then they were asked how fast the car would travel down the track, and a general consensus was met of about 30 to 40km/h, again written on the board.

Next they went into the workshop and formed two lines down each side of the track. Waiting until they had settled down and were paying attention, I explained the mechanics of the start gate, finish gate and timing system. We use a simple set of micro switches to start and stop 2 timers with red LED electronic displays. I then converted a predicted speed of 36km/h to a time of 2 seconds. Then the example dragster was placed on the track and attached to the wire. The CO₂ canister was placed in the back of the car and it was loaded into the start gate.

Then the students were instructed to start a countdown from 3. 3 - 2 - 1, a loud snap as the spring loaded firing pin is released, a puff of CO₂ and in a second the car has disappeared down the track and into the finish gate.

When the boys calmed down, the time was checked and converted into km/h. At less than 1 second the speed was an average of about 70km/h and the maximum was obviously higher taking into account friction and wind resistance versus momentum.

Returning to the classroom the dragster’s performance was then analysed with regard to which was the most important factor to achieving a good race time, and what they needed to research.

This led into a series of theory based research lessons that had a practical example to put them into context. The initial demonstration provided motivation to the students to produce self motivated work and was referred to as much as possible.

(New Zealand, male, Technology and Graphics, 7 yrs. teaching, 3 in boys’ schools)
Similar engagement in the creation of a moving vehicle was reported with slightly younger boys in Australia in the course of their Year 8 Science course:

Year 8 boys attempted to build land yachts as part of their junior science energy unit. The students enjoyed the activity immensely and were totally engaged for both classes. The activity was different, fun, involved groups and competition—everything they love!

They see a photo of a land yacht and are then asked to design and build one using set materials. This sets up the challenge and the ideas start to flow. As the designs take shape, groups get to see each other’s ideas and some make changes to their original designs. Paper sails need to be large but strong and light. Wheels need to turn with minimum friction. The whole yacht needs to be sturdy enough to survive the testing procedures. The final challenge is a race to see whose yacht can go the furthest distance.

The students love the races. They crowd around the desks and cheer on other groups. Those with poor results continue to modify their craft to better their distance. There is plenty of laughter and friendly banter. The race class needs to be timetabled for before recess or lunch as they always stay overtime to race again.

(Australia, female, Science, 20 yrs. teaching, 2 in boys’ schools)

An Australian teacher of Design and Technology was impressed by the intensity of interest and the pleasure in mastery his Year 8 boys took in the creation of working model cars:

A Design and Technology Year 8 project is to design and construct a battery powered toy plastic car. The boys research plastics and electro-mechanical systems, design the shell shape and a chassis to fit the shell. The shell is vacuum formed from either a preset mould or they can design and construct their own. The drive mechanism is a pre-purchased Scorpio electric circuit car kit containing a motor, switch, axles, battery pack and wheels. The project lends itself to many extension challenges depending on the interest of the individual. Some students develop aesthetic shell design elements and decorations; others design and implement additional electric circuits such as LED lights and horn; others design and construct steering mechanisms.

An effective practice that I have employed is demonstrating soldering techniques and safe working procedures to the class. The boys first design an electric circuit for their drive motor using Crocodile Technology and then put into practice the theory that they have learned. The switches and electric wire gauge are extremely small and demonstrating this to a class of 25+ is logistically difficult. I have made up a timber large scale example of the switch and have also sourced some very large electric wire. These work exceptionally well to explain the techniques required for the task.

Individual boys have expressed elation when they have achieved certain steps of the project, especially when they surprise themselves with success of a working motor drive system. Often those boys with lower self esteem receive greater sense of achievement. One example comes to mind when a student acknowledged at the end of a class that he had never finished a working model before and was so pleased with his success.

(Australia, male, Design and Technology, 13 yrs. teaching, 6 in boys’ schools)
The allure of propulsion, movement, speed, trajectory—“things that go”—was a godsend to this young American Physics teacher who confessed to “having no idea as to what I was doing” as he took up his post. His vision cleared somewhat, he writes, as he saw his students’ considerable engagement in constructing catapults of highly particular function:

When I began teaching at this boys’ school in the fall of 2003, I had no idea as to what I was doing, but I did know that boys needed to learn by means of doing, touching, and experiencing. Over the first few years of teaching, I developed a project that I have titled “Catapult Mini-Golf”. I use this project in my physics classes to teach a number of topics, including projectiles, springs, and graphing. Since I began this project, the boys have begun to get VERY competitive with each other.

The project is introduced about three weeks into the school year and the boys have two weeks to complete their catapult. After we have discussed projectiles and vector calculations, the project is introduced and the boys are paired up. Next, each pair is given the ‘spring’ (i.e., a bungee cord with a hook on each end) and told to build a catapult. The boys research designs and the history of the catapult, slingshot, and trebuchet to get their design ideas—they are not allowed to use plans from the internet—and watch select scenes of different age-appropriate movies that show different uses of catapults, slingshots, and trebuchets. After researching, they begin building and testing. Two or three class periods are used for building and testing. Groups who do not use this time wisely are docked points from their final grade.

There are few requirements for the project that have evolved over the few years that I have been doing this project. The catapult must be portable, meaning that the boys must be able to carry it themselves. The base of the catapult can be no larger than about 24 x 36”. The spring used must be the one supplied in class. Also, the group that spends the least amount of money on the catapult gets bonus points. This is to encourage the boys to build their catapult out of materials that they find around their houses.

As part of the project, each group must create a user’s manual for their catapult. This manual must describe the function of each part, the materials and procedure used to create the catapult, and graphs that show how far, high, and the spring constant of their spring. The manual also must include a bibliography page that shows where they researched catapults using MLA format.

Toward the end of the two weeks, the boys are shown descriptions of the different tasks that their catapult must complete. This part of the project is the competitive aspect that the boys really get into. The tasks range in difficulty, just like a miniature golf course does and a “par” is set for each “hole”. Some of the holes are shooting a tennis ball into a recycling bin or through the uprights on the football field. My personal favorite task is shooting a tennis ball through a basketball hoop.

The grading of the project is done in three different sections: building, golf, and user’s manual. The final “weight” of the grade ends up to equal one and a half test grades. Also bragging rights for the rest of the year on whose catapult won mini-golf, which seems to mean more to the boys than their actual grade!

(US, female, Physics, 5 yrs. teaching in boys’ schools)
And where vehicles that “go” are concerned, it is hard to beat the appeal of rockets, as affirmed by this American teacher of 6th grade boys:

Part of the sixth grade curriculum involves the study of experimental design. It has traditionally been a difficult set of concepts for the boys. In order, to bring those concepts “to life” for the boys, we have designed a rocket project that enables them to try experimental design first hand. In addition, it is a lot of fun. It has quickly become the most popular sixth grade science project.

The project is introduced after Christmas break. However, beforehand, the boys have been exposed to the key concepts of experimental variables, constants, and controls through case studies in class. Additionally, they have also written their own mock experiments with these components in mind and have analyzed other students’ mock experiments.

Each boy is provided with a folder that he decorates and pairs decide on a name and original design for their rocket. The boys work with a partner to build the original rocket design, using a 2-liter plastic bottle and other permissible provided supplies. The boys gather pre-launch data on their rocket and predict the distance it will fly. All rockets are launched from the same place, using a launcher built by the science teachers, and with the same amount of water and psi as one another.

On a predetermined date, the first rockets are launched and post-launch data is gathered. The boys each write up their conclusions about the flight based on the distance it flew, the path it took during flight, and the damage it acquired. Together, the partners decide what ONE change they will make to their rocket for the next launch. They are provided with supplies to make the change and the next launch date is announced in advance.

The rocket project involves five “official launches” and one “final challenger” launch. The official launch planning, data, and results are kept in chronological order in the rocket folder and graded as completed. The final project grade is based on the contents/organization of this folder, and only requires that the boys keep up with their papers as the project progresses. It counts as a test score and is an “easy A” for many boys to add to their final trimester grade. (This motivates them to remain organized throughout the project.)

The project begins in January and ends in early May. An inter-class challenge Launch is done the week before school ends as a culminating activity. The boys are allowed to build a final rocket based on all that they have learned over the course of the project and each class’s average distance is calculated. The class with the longest average distance wins the challenge and is awarded with rocket champion honors.

(US, female, Science, 14 yrs. teaching, 12 in boys’ schools)

PRODUCTS OF USE

Teachers reported similar success in overseeing projects in which students were asked to conceive and create something with a necessary or practical purpose. This New Zealand Design teacher posed the following challenge to her middle school boys:

I taught a 3rd form technology group a lesson where I wanted to encourage them to think about the user when designing new and innovate products, and to help me with this
I decided to find an everyday item for the pupils to assemble and disassemble whilst also providing other users with a set of clear and concise instructions to enable them to complete the task with a reasonable level of success. I decided it should be an everyday item that many of them would have used.

I asked my more experienced colleagues if they could help me to think of possible items that are suited to this type of activity, and we discussed the relative merits of furniture, toys, electronic devices, vehicle engine systems, cleaning tasks, CD racks, DVD racks, changing a punctured tyre and outdoor equipment.

We then hit upon the idea of looking into outdoor equipment and via a quite intense consultation process we decided it should be based on an item that offered the greatest chance for pupils to excel and achieve our goals.

We stumbled on the idea to look at outdoor sleeping arrangements or tents as more commonly known. This was decided due to the following: it requires pupils to work as a team, it encourages natural leadership, it would also encourage those more comfortable with theory based tasks to be involved. Along with this is fitted in nicely with the upcoming 4th form camps that all the boys would be attending, therefore it included a practical application.

The task was for the groups to assemble a 4 person tent without the use of instructions; the instruction booklet would be put together by the group explaining what tasks they are undertaking to another member of the group and them documenting the tasks using words and drawings.

These drawings and words would be used to produce a comprehensive instruction booklet for the next group to use. They would use this instruction booklet to assemble the tent to establish the quality of instructions given.

Groups had to decide whether to use pictograms, pictures, illustrations or text, or maybe a combination of these. The first task was to investigate other instruction booklets and decided what they felt were the most successful aspects of each, this in turn enabled them to plan how they would layout the instruction booklet.

It encourages all members to be engaged and take ownership of the work, this inspired the group to show some passion for the task as it was a timed event.

(New Zealand, male, Design and Technology, 4 yrs. teaching, 1 in boys’ schools)

In Australia a teacher of Year 7 Geography engaged boys in the design of an energy efficient house suitable for desert life:

This task was a culminating task based on the student’s work on (hot) deserts. Prior learning involved the students’ understanding the climatic conditions associated with deserts; the influence of high pressure systems, the nature of water and its availability, the adaptive characteristics of desert animals and how people have adapted to living within an arid environment. The age of students undertaking this task was 13–14.

This task involved a 3 step approach; researching examples of energy efficient homes in hot deserts of the world. Their research should involve researching and making notes on the
following topics; solar power of desert homes; water storage and supplies in arid areas, ventilation in desert homes; keeping warm in a desert home; (building/construction) materials used to make desert homes; household waste disposal in arid areas; native desert plants.

Step 2 involved the drawing of an annotated plan of a desert home: YOUR home MUST have the following; 3 bedrooms, 2 bathrooms, kitchen, lounge, dining room, family room and a garden.

Step 3: Demonstrating the application of stages 1 and 2. For example, the students were required to use a map to show the desert in which their houses were located, applying their understanding of map scale by estimating the distance (kilometres) between the capital city and the location of the desert houses.

The most frustrating part of this work for the students was doing the research. However, once they found some specific sites, they were stimulated and enjoyed their research. This interest reached even further heights as the boys started experimenting with the size of their rooms, how to keep their house cool during the day and warm at night. Some boys became particularly imaginative and wanted to use a geodesic shape for part of their home, while others incorporated part of their house underground.

The least enjoyable aspect of this task included the design of the garden. However, when they came to realise that they could place poisonous plants and snakes within their garden to deter outsiders from entering, they thought this was ‘cool’.

(Australia, Geography, 25 yrs. teaching, 5 in boys’ schools)

PRODUCTS THAT ILLUSTRATE

A number of teachers reported deep student immersion in creating products that illustrated the concepts under general study, as did this teacher of senior boys studying lyric poetry:

I teach Lyric Poetry to senior boys, and one of the most successful activities which I have done is to assign each of the students to create a final portfolio of their poetry. During the course I assign several different kinds of poems or topics for poems. These would include riddle poems, ballads, sonnets, a poem which clearly illustrates the meaning of poetry, a poem which is a response to nature, a poem about a particular season, etc. Throughout the course, the students will read these poems and have them workshopped by the rest of the class. They will also have to write poems on their own on subjects that they choose. At the end of the course, they must submit to me a portfolio of their 20 best poems. This portfolio must contain a table of contents, a thoughtful introduction about the way they wrote these poems and how they feel about them now that they are assembled. The poems are then arranged in any way that they choose to arrange them. Either before or after each poem is a short explanation of the process that inspired the poem and the meaning of the poem to the poet. Finally, they must write some closing remarks which talk about the course, what they learned, and how they now feel about poetry.

(US, male, English, 36 yrs. teaching in boys’ schools)
These impressions were echoed by another American teacher of poetry who found his 11th grade students especially stimulated by the prospect of their created work finding an audience beyond the classroom:

This particular lesson took place in April (2008), which is National Poetry Month as well as Diversity Month. My class is quite small with only five boys. Because of the large amount of time I can devote to each student, I often try to create projects that may ask a lot of each student in terms of his talents, but in turn, I am able to help guide them during the added time per student that I am able to give.

The boys were asked to write a poem modeled after one of their favorite contemporary American poets. The main guidelines asked the boys that their poems focus, somehow, on diversity. Their poems were required to be at least three stanzas of four lines per stanza. Outside of those guidelines, the boys had almost total freedom. The final instruction was for them to post their works on the class blog-page, which is open for public viewing.

The energy was palpable as the boys excitedly bounced ideas, themes, and potential voices back and forth between one another. The fact that their works were going to be available for (theoretically) anyone to read registered immediately. I was very impressed by how often the boys asked me to proof-read their poems. They were very concerned with staying on point and having a consistent “feel” or “flow” or “voice”. This was the first time I had every single student check with me at least once before they were satisfied that their poem was as strong and creative as he could make it.

After posting their poems, most of the boys related how proud of themselves they were. One student mentioned that he felt as if he had “been published”. Two of the boys said that since the posting, they had been inspired to write on their own and wanted to post more of their works on the blog-page. The entire class loved at least one aspect of that project. I plan to incorporate similar lessons soon.

(US, male, English, 3 yrs. teaching in boys’ schools)

This United States middle school Science teacher reported success and high engagement on the part of his boys as they illustrated the dynamics of various kinds of flight through the construction of paper airplanes:

An effective activity that I have employed is a paper airplane project. The project is used in conjunction with studying birds and their ability to fly. The main component of flight that we focus on is Bernoulli’s Principle. In order to better help the students understand this concept they are asked to design a paper airplane that will stay in the air for a maximum amount of time after being dropped from a high location. The idea here is to design a plane that will receive a maximum amount of lift similar to the lift that birds experience. The flight trials are completed from the indoor track where the students release their plane in such a manner that it will fly to the gymnasium 20 feet below. After completing one trial, each student reassesses their plane based on its performance and then makes the necessary design adjustments. After the second trial, the students compare the results and compose a written conclusion of the experiment.
Paper Airplane Experiment

1. You will design and build one paper airplane. The goal is to construct an airplane that will achieve maximum lift allowing it to stay in the air as long as possible.

2. You must prepare step-by-step directions on how to build the airplane. The directions should include the steps used in building the plane for Trial 1 and then the modifications made for Trial. The directions must indicate how you have used Bernoulli’s principle within your design. The directions must be typed.

3. Each plane must be built using 1 sheet of 8.5 x 11” white printing paper supplied by Mr. Greenwood. You may cut the paper to modify it and/or to make it smaller.

4. Other materials that may be used are 4 inches, maximum, of scotch tape, and colored pencils to color/decorate your plane.

5. No test flights should be conducted before the official Trials.

6. You must write a hypothesis prior to trial 1 and then another hypothesis prior to trial 2. Each hypothesis should be written below the directions for each trial using an ‘If, then’ statement.

7. Between trial 1 and 2, you will have an opportunity to make adjustments in your design. Every student must make modifications to their plane. The goal is to improve upon the amount of lift achieved in Trial 1. The lift cannot improve if the plane is not modified.

8. It is recommended that you practice building your plane using notebook paper first and then build the final product using the paper issued by the teacher.

9. You may work on the design and construction of your plane outside of the classroom. However, it is your responsibility to have the plane completed and in your possession at the time of each trial.

A Canadian teacher of 7th grade Science students reported similar success in conveying principles of aviation by having his students design balsa wood gliders that must be aeronautically effective and also strike a target:

The activity was constructing a balsa wood glider, learning how to fly it, and learning the best location for the wing assembly, tail assembly, and mass at the front of the glider impact the flight of the glider. The boys had to hit a target at the other end of the class, about 8 meters away. They used a launching pad, drew the flight path, and then changed the locations of all three variables. They did this for 30 minutes of trial and error and then we had a discussion about variables. Success was judged by straightness of flight and whether the plane hit the target. Students improved as they controlled variables. By the end of three 75 minute lessons, all students were hitting the target, much to their delight and all students understood the correct use of independent, dependent variable, and controlled variables.

(Canada, male, Math and Science, 33 yrs. teaching, 12 in boys’ schools)
And an American teacher of jazz history found that requiring his boys to create a radio show featuring the achievements of a distinguished jazz artist was highly effective in grounding various elements of jazz into students' understanding:

A recent project/lesson I used in Jazz History was to study the music of four artists of the late 50's. The class was split into 4 groups and they had to design and record radio shows for each artist. The students were all seniors and a mixed group both culturally and racially. From the start they were intrigued by the idea and as we started the process were more engaged than usual. The boys being aware of their job as announcers were taking added responsibility for their work.

They started by listening to the music of the the artists, and then they researched their lives. The next step was to write a narrative for the radio show, record it and insert the music they selected. The students found a new appreciation for announcers, as they found, when confronted by the recordings of themselves, that it wasn’t as easy as they had thought. This led to an increased effort on their part and an increased level of engagement. This process acted as a mirror when they heard how they sounded on the recording. In effect they “saw” themselves and that was an important lesson. In addition they learned the material in a deeper way because they were involved in the project in a personal way. I think the boys responded to this lesson in a profound way because of the multidimensional aspects of completing this project. It has made me reconsider the way I teach as well.

(US, male, Music, 18 yrs. teaching, 2 in boys’ schools)

A Canadian teacher of Computer Science wrote appreciatively about his class's collaboration to produce a documentary film which will have an audience beyond the school. Here the challenge of meeting a deadline, the stimulation of collaboration, and the pleasure experienced in mastering the task are transitive to engagement in the subject of the film, in this case robotics:

The most successful thing I do with my Media students, in Grades 10 & 11, involves producing a 10-minute highlights video for the CRC Robotics Competition (www.robo-crc.ca) in February each year. The competition involves about 750 students from over 25 high schools and CEGEPs, who spend 3 months building a robot, gathering for three days of action to crown a champion. My students arrive at the competition to catch the highs and lows on and off the playing field. They work together filming hours of competition and editing hours of tape to produce a highlights video which is shown at the CRC Robotics awards ceremony on the evening of the last day of the competition.

Several components make it memorable for my students. First and foremost is the rush of emotion generated as they show their work to an audience of nearly 1000 people. Very few students have the opportunity to showcase their work in front of such a large audience and the response is always tremendous as the competitors relive the moments. Having an outside audience makes the students want the highest quality product they can create. It pushes their imagination and creativity.

Another important component is the deadline. The movie has to be produced and they have to show it. Extensions are not an option. The robots are built to play a game. As the competition progresses, schools are eventually knocked out until, in the finals, only four
robots remain. The winner of the game is not known until about 5:30 on the last day. The highlights video has to be ready for 8:00. Anyone familiar with movie editing on a computer can attest to how long a process it is. Technical difficulties are inevitable and solving problems and working together as a team are important. Students quickly realize that teamwork is the only way they will succeed in meeting the deadline.

Each student has a role. One is the Project Manager, one is the assistant, one might be a cameraman, and one might be responsible for capturing the footage onto the computer. In all, there is a role for each of the 25–35 students in the Media classes and everyone learns their role. They work together as a team and they celebrate the completion of the project as a team. Of course some students do more, but they know going in what is expected of them and the boys choose their role. The system works well for everyone because students know that eventually they will be a Project Manager. It may be for a smaller project that involves fewer people, but there are plenty of projects to be done and they all take on a leadership role at least once in the class.

The project is intense, requires a lot of time and is exhausting, but it is something that bonds the students, brings out their creativity, inspires teamwork, and, in the end, showcases their work to a large, appreciative audience. As an educator, I love it.

(Canada, male, Computer Science, 14 yrs. teaching, 12 in boys’ schools)

PRODUCTS THAT ENGAGE

One recurring theme in the the accounts of lessons resulting in created products was the energizing effect of sheer engagement in the production process. This quality of engagement appears to be transitive to interest in and mastery of subject matter to which students might not otherwise respond. In the following example an American Biology teacher engages his students’ understanding of the immune system through the creation of comic strips:

In 7th grade Life Science students create a comic strip about the immune system. They create it individually. I have created a note packet that has all of the information that is required in the project. I lecture over the packet for about 60 minutes split between two class periods. During these periods there are several animation clips that I show that detail different parts of the immune system. Students then do a blood typing lab that uses simulated blood and antibodies. Students determine the blood type of a crime scene sample in order to solve a crime. Students develop a better understanding of antigens, antibodies, and agglutination by doing this laboratory experience. The comic strip details an infection by a chicken pox virus. It starts with primary exposure as a child, details the first primary immune response and it also includes a section where the person, as an adult, becomes exposed again to the chicken pox virus. The comic details the role of memory cells in life-long acquired immunity to the chicken pox virus.

Students have two 40 minute class periods to work on their comic strip. They have about two weeks total to complete the project. Students can do it all by hand or use a variety of computer software programs to draw. The comics must include a required set of scientific detail that is given to them in a comprehensive assignment sheet and rubric. This assignment is the assessment for the unit. Some students love it and others say they would rather take a
test. Students are allowed to make corrections to the comic after it has been graded. I have several examples from previous years that I let the students view very briefly. I don’t let them read it because I don’t want to hinder their imagination by having them get too many ideas from the examples. They just get a quick feel for the format of the comic. If there is a student who has special learning needs, then I let them read through the examples closely after they have been working on it by themselves for about an hour so as to make sure that what they are doing is matching the objectives of the project. The rubric has a check list that mimics the required components that are in the assignment sheet. 5% of the grade is given for creativity and I grade fairly easily on this component. I look for some side dialogue among characters and not just a pure fact driven narrative. I also assure them that artistic ability is not graded and my examples are ones where the artistic ability is not superb. 

(US, male, Biology, 8 yrs. teaching, 2 in boys’ schools)

Similarly, this American teacher of Computer Technology observed that the technical skills of media production are readily mastered when the product created is close to students’ hearts. In the following instance, the production of a music video tapped into students’ investment in pop culture:

The eighth grade Technology elective is a semester-long course designed to introduce students to film production as a medium for creative expression. Students especially enjoy and are fully invested in the creation of a music video. This unit is used as a vehicle for introducing the students to film production work flow and to basic editing techniques using Adobe Premier Elements.

From the outset, this is a collaborative venture in which the boys share ideas as a class and develop and refine those ideas in partnership with another student. The music video unfolds as outlined below:

- The class discusses music videos as a creative medium (some examples are shown).
- Students bring in music selections which satisfy a set of preliminary criteria (discussed and distributed in class).
- Each music selection is auditioned while the class analyzes it in terms of meaning and message.
- The list is narrowed down by determining which selections are richest in visual imagery and meaning. (Students work with partners to brainstorm the possibilities for each song and share them with the class.)
- A single “best” song is chosen. Each partner team is assigned a stanza to produce.
- Each team brainstorms the possibilities for developing their specific stanza.
- These are presented to the class as a group to establish theme and continuity. This will provide the “glue” that will allow each team’s work to be stitched together. This includes defining the range of the music which corresponds to the assigned stanza.
- Students develop a detailed storyboard (using the provided form) for each line of lyric. The storyboard details the action, location, props, actors, camera angle, etc. for each shoot.
- Students plan, schedule and shoot the required footage both in and outside of class.
• Students work with their partner at a computer station to edit the footage using the NLE post-production tools that have been demonstrated.

• Teams regularly confer with other teams to view their progress, to provide feedback and to coordinate ideas.

• Just prior to stitching the stanzas together, each team views the other’s work and provides written feedback and specific suggestions for changes that need to be made. The development teams then act on those suggested changes just prior to submitting their finished segment.

Throughout the process the teacher acts as facilitator, guide, technical “coach” and production manager to keep the project moving forward on schedule, to promote creativity and encouraging the boys to think “outside the box”.

(US, male, Computer Technology, 37 yrs. teaching in boys’ schools)

A Canadian Mathematics teacher reported a similar transitivity of engagement to subject matter when he assigned his students to produce an appealing compact disc cover that would require their effective employment of functions and conic sections:

In grade 11 Mathematics, where the topic of functions and conic sections are heavily taught and discussed, I had the students complete a project that I had done in previous schools for the past 5 years. The project requires students to create an original and eye-catching CD cover for a fictional or existing musical group/singer by using only functions and conics. For the past 5 years, I have found this project to be the most successful and engaging project for my students, whether they be girls or boys. Students are to call upon their creativity to create the best possible CD cover that matches their tastes and personality while incorporating the use of technology, primarily the use of graphing software. Many students even went on to use graphic design software. But in the end, it was important for students to show the equations, domain, and range for every single function or conic used in their design. They then submit a final cover design inside an actual CD case which must also contain the rough work done at each step of their project.

(Canada, male, Mathematics, 5 yrs. teaching, 1 in boys’ schools)

A high degree of student engagement can prove to be especially effective in helping boys attend to especially difficult ideas and operations. An American Physics teacher reported the transitive effect of such engagement in a challenging lesson in electronics:

The Theremin is the last circuit project of the year in electronics. The boys are carefully guided through the process of building circuits of greater and greater complexity until they arrive at the final project of constructing a working Theremin—no easy task. The Theremin was invented by Leon Theremin and is a musical instrument that can be played without actually touching it: the pitch and volume are controlled by the distance of the operator’s hands from the two respective antennae (here is a clip of the instrument played by its creator: http://www.youtube.com/watch?v=zuoqlr4Pn6M). While once considered a legitimate addition to the classical realm, the Theremin unfortunately took a detour into the high-camp of 1950’s sci-fi films and that is where it resides in the minds of most people. Regardless, the
Theremin remains a triumph of electrical engineering and physics, relies on several essential concepts of the sciences, and never fails to fascinate. (US, male, Physics, 7 yrs. teaching, 3 in boys’ schools)

Sexuality—as a topic for scholastic consideration—is a lightning rod for all manners of intense feeling on the part of schoolboys, including discomfort and a disinclination to engage. This Australian science teacher reported overcoming such obstacles by inviting his Year 9 boys to create an instructional “story book” for younger children, with gratifying results:

This is a lesson spanning around a week in a Science course focused on Human Reproduction with a class of twenty two Year 9 students, aged approximately fifteen years old. This topic typically generates much hilarity amongst pubescent boys, who generally have little to no real understanding of human reproduction. Moreover there is a common reluctance amongst this year group to ask questions and engage in any type of open classroom discussion on the subject.

To break down the typical taboos amongst pubescent boys I elected to have the students prepare a story book targeted toward 4 to 6 year olds, explaining “How babies are born”. To add gravitas to the assessment of their work I was able to use the services of my 5 year old daughter to act as audience and marker. An added benefit of the 4 to 6 year old target ensured the boys prepared work of an “appropriate” standard.

The structure of the task was based around group work. The class was divided into six groups of three or four boys and they were provided with written instructions and guidance on the preparation of a PowerPoint “storybook” to be presented in class of an approximately 4 minute duration.

The boys spent the first lesson researching human reproductive systems for men and women from the subject textbook and investigating relevant internet websites. A further two lessons (and associated homework) were then given over to collating their research, allocating roles and responsibilities for work, brainstorming a suitable theme, or story line, and structuring their presentation.

From the outset I was impressed by the enthusiasm and engagement shown by the boys in their race to prepare a storybook. They were focused on preparing research and of forcing each member to synthesize their understanding of human reproduction to a simplified format for a story line suitable for 4 to 6 year olds. With only one exception, the quality of the boys presentation were of the highest order and highly enjoyable and humourous. My daughter was able to follow each of the story lines and recount the boys’ presentation. My favourite was a group that used the man’s “car” parking in the woman’s “garage” and then “mixing petrol”. For the one group that failed to simplify their story and had insisted on presenting material almost directly taken verbatim from the textbook, their inferior attempt was obvious to themselves and their peers. By their own volition, they resubmitted a vastly improved piece of work. (Australia, male, Science, 2 yrs. teaching in boys’ schools)
Many of the teachers participating in this study noted the increased engagement their students exhibited whenever scholastic material seemed to bear meaningfully on their present or future situations. The challenge posed by this Canadian teacher of Economics to his 11th grade students was to augment micro-economic studies by composing an actual business plan:

Each year in my grade 11 Economics class I have the boys develop business plans in small groups. This is one of my favourite assignments because it is open-ended and allows the boys to put into practice many of the economic concepts we have been learning through the first half of the year.

At first the boys try to identify problems or needs that people may have. Once done, they then try to find a solution to that problem that they think people would be willing to pay for. As their plans evolve and we move deeper into the business plan the task becomes more complex, requiring them to start dividing the task (and the business into departments).

Each department evolves separately, but still requires close communication with other the others so that the overall plan is cohesive. This is a very challenging task as many of the boys are used to working independently. Often they get too far ahead in their planning and need to backtrack to get consistency across the whole company.

I offer a lot of feedback, but the project is really driven by the boys and so they are very motivated. I just facilitate them around road-blocks and group conflicts, but ultimately the projects are all theirs. I seldom judge anything unless asked, but will offer guiding questions to make sure they do not get completely lost or bogged down.

The project unfolds over about a quarter of the year. We usually start getting the boys thinking about it before Christmas and start in earnest in January. They have to submit a good draft by our spring break in the middle of March and receive feedback on it immediately after. They use this feedback to make any improvements before they submit their final copies which are sent to a group of experts (usually parents and old-boys of the school who are involved in business in one way or another) in the middle of April. At the end of the project the boys present their plans in our annual New Ventures Fair. They submit business plans, make a pitch and answer the questions of the judges. They then get feedback from the judges on how to improve their plans. I use this feedback as well as my own observations during the development of the plan to evaluate them.

This is a summary activity to see what they have learned about business organisation, costs and revenues, government policy and regulation, labour and capital markets, as well as many of the fundamental concepts of the course like supply, demand, opportunity cost and scarcity. (Canada, male, Economics, 7 yrs. teaching in boys schools)

The creation of a product like a video or instructional manual or a story book for children proved to be transitive to student involvement in a variety of scholastic pursuits. This American teacher of advanced Spanish found that an original video project enhanced her boys’ engagement in literary texts:

The following activity is one I have used as a final class project for students in advanced-level Spanish classes. The students have read numerous selections of Spanish literature and are
intimately familiar with characters, themes, plots, and writing styles of the given author. The teacher may choose to allow the students to select from a few literary pieces, or all students may be given only one literary selection to use.

The students work in groups of three or four to write, act out, film, direct, edit, and produce a video depicting an original ending to a piece of literature. Most successful among my students have been the groups that choose to create an original final chapter for *El ingenioso hidalgo don Quijote de la Mancha*. Because there is such humor and often absurd happenings in this novel, the students thrill at the chance to represent the zany deeds of the characters they have come to enjoy like Sancho Panza, Dulcinea, and of course, the hero himself, don Quijote.

Each student is asked to take part in all phases of the production of this 10–15 minute video. There must be 10–15 minutes of dialogue with the rolling of credits, silent slow-motion scenes, or panning the scenery excluded. Though there may be one main director or producer, each student must act in the video to earn credit. The grade for the project is based on the originality of script, the richness and precision of the grammar and vocabulary used, the proper pronunciation of the lines, and the appropriate connection to the original literary piece. The students are encouraged to film in a variety of locations and are given two or three weeks of class time to work on the project. Many students choose to include guest actors and incorporate music into the background.

Each group is asked to present the final video of their original video on the final day of classes or during exam day. This presentation day is treated like a screening of a new film, and audience critiques are encouraged. Each group is asked to make a copy for the teacher to keep while they keep one for themselves.

(US, female, Spanish, 19 yrs. teaching, 9 in boys’ schools)

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**Gaming**

One of the clear features of the teachers’ submissions, taken together, was the frequency with which they reported devising a game or adapting a preexisting game to advance a variety scholastic aims. There are obvious reasons why the introduction of a game in a scholastic setting might appeal to boys—as a break in routine, as an outlet for competitive spirit, as sheer fun. While those aspects of gaming were clearly apparent in many of the lessons reported, they were typically not sought for their own sake. The researchers were struck by the range and variety of learning outcomes claimed for the gaming activities and also by the positive results teachers reported in employing games to advance necessary but often tedious course work, especially memorization of foundational skills and material: rudiments of grammar, spelling, vocabulary, examination review. Enjoyable as many of the gaming lessons appear to have been, it is, again, the *transitive* capacity of the game to stimulate and enhance essential learning that appeared to impress the teachers reporting.

**GAMING FOUNDATIONAL SKILLS**

The acquisition of foundational skills necessary to enable higher order operations in a given scholastic field are often met with resistance by students who have not yet established a context to see the point of mastering them. Many teachers reported success—even their best success—in devising games that overcame such resistance.
This New Zealand Classics teacher reported success in gaming the process of grammar revision with his Year 9 students:

In Latin, I decided to make a competitive game of grammar revision (students vs. me—13/14 year olds, or year 9). I place verb/noun forms for conjugating/declining on the board and I get them up to the board to answer them. Each form they get wrong is point(s) to me, each correct form a point to them. I ensure that the game is always close, by taking off points for untucked shirts/socks down, etc.

In this way, the game is always close, and thus competitive. It rewards them for getting answers right, which hopefully encourages learning. I build it up, stating that I’ve never lost, and that they could be the first class to beat me, but “only if you know your Latin!”

They love the competitive nature of it and when used sparingly, it is an effective tool for encouraging learning in a fun way.

(New Zealand, male, Classics, 8 yrs. teaching in boys’ schools)

A New Zealand English teacher reported the effectiveness of strengthening the spelling skills of weaker students through the creation of crossword puzzles—which proved to be unsolvable unless the entries were spelled correctly:

I have been teaching a group of Year 10 boys that struggle with English. One area where I have focussed is their spelling. Each week I give out a spelling list which they are to learn for a test the following week.

Each list is made up of twenty words; 15 words are teacher chosen and the other five are words that they have spelt wrong throughout the course of the week. For the teacher chosen words, I have worked alongside their Science teacher picking chemicals, etc. that they need to know how to spell. This gives continuity between subjects.

After giving out the list, I also make sure they have an understanding of the meaning and context in which the word should be used. I have used a range of activities to do this including filling in the gaps in sentences, searching the dictionary either online or the book, and looking through articles to see words in use.

One activity that I found particularly useful however, was to get the boys to create their own crosswords. They needed to make sure the spelling was correct and they used this correct meaning of the word as a clue. The boys created the crosswords on puzzlemaker. discoveryeducation.com, criss cross puzzles.

The boys finished their crosswords and then printed them out. We then had a competition on who could complete the crossword in the fastest amount of time.

This activity showed me a number of things—those that could not spell the words properly could not put the crossword together properly, and those that didn’t understand the context also couldn’t make it work—this was the same for both the maker of the crossword and the answerer.
This activity was really simplistic but I found the competition and the interaction with the computer really engaged the boys and gave them a fun alternative to learning spelling.

(New Zealand, female, English. 2 yrs. teaching, 1 in boys’ schools)

An American Spanish teacher overcame his 6th grade students’ resistance to recognizing correct gender and number in their use of adjectives by devising a game which engaged the boys’ interest in their favorite celebrities:

As the 6th grade Spanish teacher, I understand that the students do not share the joy that I have in matching the gender and number of adjectives with their necessary subjects. So when they have to worry about multiple forms of several adjectives, I like to use an activity we call “Celebridades.” Individually, the boys try to describe a given celebrity/famous athlete as accurately as possible while using as many adjectives as they can, regarding physical description and personality. This can also be used with other grammar topics such as clothing, colors, likes, and dislikes.

As a first step, the students and I usually go over adjectives of physical description and personality and notice patterns in the information provided to them. This usually starts with the boys writing the adjectives in their notes as pairs, or opposites. This opposite approach (i.e., tall/short, funny/boring, strong/weak, etc.) allows them to link one adjective with another and allow them to memorize the meanings in half the time. We then discuss if each adjective can adapt to two versions (singular and plural) or four versions (singular or plural with masculine or feminine). Finally, using a rapid-guess quiz approach, typically with a ball, I “throw” an English adjective with a Spanish noun and encourage the student to give a quick and accurate response.

The night after I’ve presented the adjectives is usually devoted to the detailed and accurate completion of flashcards. These flashcards will include all four (sometimes two) forms of the adjective in Spanish on one side and the English meaning on the other side. The students are also encouraged to add a picture to the English side to help them visualize the meaning. The next several nights are devoted to several short assignments that help them practice using the adjectives in context. One example would be an activity in which they are given an object in Spanish and must describe it with a physical description adjective. Another example would be an activity in which they describe their family members, their teachers, and some famous people using two physical description adjectives and two personality adjectives. They may also translate some English phrases to Spanish, which allows them to work on gender and number matching of the adjectives, while reviewing some of the older material.

(US, male, Spanish, 2 yrs. teaching in boys’ schools)

That teacher’s colleague in Spanish reports similar luck with 8th grade students in employing a game designed to strengthen their memorization of verb conjugations:

As the 8th grade Spanish teacher, I understand that not all of my students share the joy I get from conjugating verbs. So when they’ve got to memorize the conjugations of several verbs at once, I like to use an activity we call “Terminamos.” As part of a team, the boys try and conjugate a given verb more quickly than their classmates on the opposing team.
As a first step, usually the students and I go over the verbs and practice the conjugations. This usually starts with the boys writing the verbs in their notes, then practicing them aloud, and finally using a rapid-guess quiz approach (sometimes with a ball) in which I “throw” a verb and a verb form at a student and encourage a quick, accurate response.

The night after I’ve presented the verbs, the students usually do several short assignments that help them practice using the verb forms in context. These usually include an activity in which they choose between two verb forms to complete a sentence, then an activity in which they fill a blank with the best possible form of an appropriate verb, and finally they use the verbs to complete a short writing task.

A day or two after the students see the verbs for the first time, we play Terminamos, an activity that the students have come to anticipate eagerly. I divide the boys into two teams. We move the desks to the sides of the room, and the teams line up at the back wall, about 15 feet from the white board. I give the first boy in each line a marker, and I remind them of the rules: First, it’s a silent game. If a member of Team A talks, a point goes to the other team. Second, students may walk fast, but they may not run.

I start the activity off by giving the boys a verb in English. The boy first in line on each team speed-walks to the board and writes the first person singular conjugation of the verb or, if he doesn’t know it, taps the board. Once he’s finished writing, he speed-walks back to his team and hands off the marker (like a baton) to the next boy in line. The second boy then speed-walks to the board and checks the first boy’s work, corrects any errors, and then adds the next part of the conjugation below.

When the team finishes the conjugation, the last boy to write speed-walks back to his team, which yells, “Terminamos!” (we finished!). I then come to the board and check that team’s work. If it’s correct, that team gets a point. If not, I advise both teams to keep playing.

At the end of the class, the team with the most points wins the game. Sometimes I give the winning team a piece of candy, and other times the losing team puts the desks back in order. The boys always have positive feedback about this game, and it certainly adds a little excitement to grammar study.

(US, female, Spanish, 15 yrs. teaching, 9 in boys’ schools)

A South African teacher whose duties are to support weaker students’ study skills found that an improvised “horse race” was an especially effective way to promote his boys’ comprehension of their daily reading assignments:

The boys had been required to read a particular text for homework. I needed to check their comprehension before moving on with the text. Instead of giving them the usual “written comprehension exercise,” we played a Horse-Racing Game. Boys were divided into pairs and assigned a distinctive postcard; a printed quiz with space left for the answer; and a copy of the text being studied. Postcards were lined up on the left-hand side of the board, with the number of columns across the board matching the number of questions asked in the Race. Rules: Both boys look up the answer together; only one question can be completed at a time; one boy is the appointed scribe for the answers; the other is the “runner.” When they have
an answer, the runner takes the written answer to the teacher; the teacher decides whether
it's correct or not; if correct, the runner gets to move his postcard/horse forward.

(South Africa, female, Academic Support, 15 yrs. teaching, 5 in boys’ schools)

GAMING DIFFICULT OPERATIONS
A number of teachers reported the efficacy of gaming not just foundational skills, but especially
difficult or challenging operations, as did this New Zealand Classics teacher:

A difficult aspect for third formers in Latin is learning Declension patterns (five declensions,
with singular and plural forms). I found boys respond well to turning this into a competition,
where they are challenged to beat the “world record” for reciting these declensions aloud
(in front of the class). I then turned this into an inter-class competition, with another class at
the same level. Each class put forward its three fastest decliners (plus the teacher) and a special
competition was held. Classes were encouraged to make up their own supporters chants in
Latin, so the event took on the character of a sporting fixture. The teachers were included in
the teams so that a class identity/cohesion was encouraged (not just the students, but the
teacher also!). Since the teachers were not as fast as the students, this also enhanced the
humour for the students. All instructions and judging were done in Latin, although the team
leaders pep talks to their teams were allowed to be in English. Impartial students from
another class were employed as timekeepers, and a “celebrity” judge (Head of Department)
ruled on questions of accuracy of pronunciation.

(New Zealand, male, Classics, 32 yrs. teaching in boys’ schools)

A British teacher of Modern Languages established a game of “consequences” to facilitate his Year
12 boys’ understanding of a subtle and difficult French verb tense, the past historic:

A Year 12 class will be studying French literature for the first time next year as part of their
final year of examinations and it became necessary recently to introduce them to the past
historic, a tense which is almost exclusively used in literary French. Having ascertained that
they had not encountered the past historic previously, I decided to follow a tried and tested
method of introducing pupils to new grammatical concepts which is known as inductive
grammar learning. This would involve exposing pupils to a passage of text which features
examples of the past historic and asking them to elicit a rule on its formation before allowing
them to practise using their new knowledge.

It was at the grammar practice stage that I decided to take a more innovative approach than
I had previously. Usually tense practice involves the use of close exercises or translation of
sentences or passages but these can be limited in their effectiveness, being seen as short-term
puzzles to be completed. On this occasion, having elicited a rule about the tense, I decided
that it would be beneficial to use it in a more appropriate environment, namely in a historical
narrative. This would help pupils to remember not only how the past historic is used but also
why and when.

I set up a game of “consequences” with the pupils. Each of the twelve boys was equipped
with a piece of paper and a pen. I explained that we would be writing twelve stories which
followed a set pattern: “He went to_”; “He met_”; “He said_”; “She said_”; “And so_”. They
would each write a line beginning with “He went to...” in the perfect tense (a tense used for the past with which they had been familiar for many years) before folding their piece of paper so as to make their writing invisible and passing it on to the next pupil. Now they would all write the next line beginning with “He met...”. The game continued until the last line was written starting, “And so...”.

After the stories were complete, they would be passed on one final time so that no one boy had a piece of paper on which he himself had written. Each pupil’s task was then to unfold the paper and make any required corrections to the spelling and grammar of the story in front of him, before rendering it into the past historic from the perfect tense. Therefore each of the twelve boys ended the task with a cohesive but not necessarily coherent text written entirely in the past historic. Finally, I asked for volunteers with the funniest or most interesting narratives to read them out loud to the whole class. While this took place, the pupils listened for any errors which had not been corrected or for any language which did not make sense to them. Five pupils had the opportunity to read aloud their stories.

(UK, male, French, 1 yr. teaching in boys’ schools)

Concerned that his otherwise willing students were resistant to engaging the issues raised in Nathaniel Hawthorne’s *The Scarlet Letter*, an American teacher was inspired by a popular sports talk television show to devise a game:

Earlier this semester, I was in the middle of teaching *The Scarlet Letter*, and I began to become frustrated by the general lack of enthusiasm put forward in discussions. The boys were not whiny about the novel. Overall, the boys here value good education, and as such, they realized that studying this 19th century romantic novel was a necessary, if not important, part of their educations. That said, the novel did not readily bring out their curiosity. I was beginning to have to lecture more than I like, and some of the weaker students were undoubtedly beginning to gravitate towards study aids like Sparknotes, Cliffnotes, and the like. Such aids do not give enough content to earn A’s, but they allow students to get by. In the case of *The Scarlet Letter*, the pay off for the dense reading was not there. I knew that I needed to change my approach. There is always the temptation to make contemporary connections to the novels subject to entice more discussion, but I did not want to have just an analog discussion, I wanted the student to find a way to get excited about what Hawthorne actually wrote. *The Scarlet Letter* is a powerful, seminal novel. I wanted to find a way to discuss it not just modern day stories like Hawthorne’s novel, but I also wanted the boys to talk and think, not merely listen to me. I was watching a sports talk show called *Around the Horn*, when I thought of a way to get the boys to talk. So many of the boys are “ESPN junkies” that they almost all knew of the show. I created a list of critical questions pertaining to *The Scarlet Letter* and handed those out to the student. I then split the class up into 4 teams. I gave the teams a day in class to prepare ideas and evidence for their responses, and then we had three days of competition. There were 8 rounds where one team member spoke up for his group in a fast paced debate. Students gained points for good insight and effective textual references and lost points for vague, inaccurate, or poorly communicated responses. The competition turned out to be a great success. The pace of the discussion, the competitiveness, and teamwork involved excited the boys and that excitement carried over to their study of the text. What I like about this particular exercise is that it energized our study of this difficult and somewhat distant novel without
A Canadian Chemistry teacher reported the effectiveness of a competitive game he devised in strengthening his eleventh grade students’ review of challenging chemical reactions:

When reviewing energy in chemical reactions I created a 35 question PowerPoint review contest. The class of 16 boys was broken into teams of two. Each team created a sheet with TRUE written on one side, FALSE on the other side. Each question was difficult, requiring analysis of information or application of knowledge. Time of one to three minutes was given for each question. Partners would discuss (and often disagree) on what answer they would go with. At a designated time, each team would flash up their TRUE or FALSE answer. A running tally of each team’s score was kept on the board. Each question on the PowerPoint had a follow-up explanation of the correct response. Teacher input was intentionally kept to a minimum. The exercise took about an hour to complete. Nutritional prizes were provided at the end of the class. The PowerPoint was then provided online for students to use as a test review.

(Canada, male, Chemistry, 32 yrs. teaching, 26 in boys’ schools)

GAMING FOR RETENTION

Many teachers noted the effectiveness of an improvised game in reviewing material at end of term or for exams. Such games, as the highly interactive example devised by this British Science teacher, were found to strengthen retention of a wide range of material:

I have been using quite an effective revision activity for my exam classes in recent years. The activity itself would last approximately 30–40 minutes but there could be more time spent on it for preparation.

The idea is to revise a topic or a body of work such as “Oil” or “Waves” or “Digestion” to give 3 examples from Science. It could, however, be used for any subject that requires students to remember a mass of connected information. All this material will have been previously taught but this lesson requires the use of a pre-prepared resource: all the useful information on the topic written out on a piece of paper in the form of a spider diagram. This could be produced by the teacher or by the students beforehand.

The activity requires the students to split into groups of 4 and for them to spread themselves around the room. They should be clustered around a piece of plain A3 paper that they can all clearly see. At the front of the room, in my case on the front bench, I put 4 or 5 copies of the resource, facedown on the bench. I then explain the activity to the students as follows.

One person from each group is to come up to the front. On my signal they may turn over the resource and look at it for 30 seconds. When 30 seconds are up they must go back to their
group and write down what they remember, setting out the points as they were on the original resource. After a pre-determined time ask another student to come up and repeat the exercise. The aim is to “reconstruct” the original resource, with all members of the group responsible for piecing it together. It is up to the teacher how many “visits” to the resource should be sufficient.

When you have decided to stop the game you can ask the groups to swap their versions of the resource and assess their rival groups’ versions by issuing each group with an original. You could ask them to highlight in one colour the areas that were done well and another colour for areas done less well. The groups can then feed back to each other or the whole class.

I normally then ask the students to return to their individual seats and issue them with a fresh piece of plain paper. I ask them in silence to write out again, from memory, all the points on the resource. (UK, male, Chemistry and Physics, 14 yrs. teaching, 1 in boys’ schools)

Another British teacher found that her Modern Language students’ review of end-of-unit material was enriched by the aid of an improvised Monopoly game:

The lesson is intended for the end of a unit, to help consolidate language covered and highlight any misunderstandings which have arisen on the way. The lesson would ideally be placed before a unit test, where the same language is being tested. It replaces drier methods of reviewing material.

In order to prepare for the lesson, it is necessary to devise a monopoly board with squares allocated to four hotels. Each hotel has a particular meaning i.e., a grammar hotel or a vocabulary hotel, depending on what is being reviewed. Lottery squares can also be added so that, if the boys land on them, they lose a certain amount of euros or, indeed, win some. All language on the board should be target and it is helpful to write in the middle some key game-playing phrases such as “It’s your go”, etc. Once the board is ready, a revision sheet should be prepared and the exercises should be divided into four categories and a hotel assigned to each.

At the beginning of the lesson, the class should be divided into groups of four. They should all be given a revision sheet and be asked to spend the first few minutes working out the answers to the hotel questions they have been allocated. They do this on their own, with reference to their books and must not let the others see their answers. As an alternative to this, depending on the ability of the group, the boys could work out answers together by joining forces with other “Hotel As” or the teacher could issue them with the answers.

The boys should then move so that they can all sit around a desk in their groups and they start to play, as they would Monopoly, except that when someone lands on their square, they ask them a question from their hotel and if the answer is right they take the reward that is marked on the board. Someone in the group keeps track of the money won.

The game should run for about 15 minutes and then the boys return to their seats and see if they can fill in the rest of the revision sheet on their own and ask any questions. (UK, female, German and Spanish, 13 yrs. teaching, 10 in boys’ schools)
An American colleague in Modern Languages found a variation on the game “Hangman” to be especially effective in vocabulary building:

**Practice:** To create a way to use vocabulary within the context of a game or competition between teams/partners.

**Example:** Hangman.

Best used to practice or review current/previous vocabulary, perhaps before a quiz or test or to break up the monotony of reviewing for Semester exams.

**Preparation before class:** Create several phrases/sentences that use as many vocabulary words as possible.

**In class:** Draw spaces for your hidden phrase on the chalkboard or electronic SmartBoard. Also draw gallows (or other method of recording incorrect guesses) for each team. Divide class into teams of 3–5 students. Inform the class what the prize will be for the winning team. Explain basic rules of Hangman and the additional rules of playing the game in Spanish. For example, any student heard speaking English during the game will cost his team a point. Next, ask the students what kind of things might they need to know how to say in Spanish in order to play the game of Hangman without speaking English. For example, “give me a ‘b’” or “give me an ‘e’ with an accent.” Next, assign a team captain who will be the one who makes the team’s official guess known to the teacher. Remind the students that captains will change every round. Then, begin the first round with teams taking turns guessing. Award points to teams who correctly guess the phrase. Finally, award the prize to the winning team.

**Observation:** Other than an occasional inadvertent slip-up where a student is excited and says something in English, all teams generally play the entire game (10–20 minutes) speaking only Spanish. They are so concerned about not hurting their team’s chances of winning that they work really hard to remind each other to speak in Spanish and to help one another say something in Spanish when a team member is confused or can’t remember how to say something.

(US, male, Spanish, 4 yrs. teaching in boys' schools)

This American classics teacher, while wary of relying on games to amuse his students, found that his student’s engagement and enthusiasm were heightened when he improvised a competition to see which “team” could best identify grammatical rules at work in translating English into Latin:

I find that competitive activities are often useful in getting the boys to use Latin grammar in an active way. For instance, in a Latin prose composition exercise I had the boys in a class work in teams of two. Their objective was take a paragraph of English prose and find all the Latin grammatical rules that they would apply to it in order to translate accurately into idiomatic Latin. The team that could find the highest number of applicable rules was the winner. I observed that the boys were excited by the idea of competition and approached their task with a little more enthusiasm than if I had just asked them to translate the English into Latin. They had to think carefully about how an English passage would be stated differently in Latin. They were also forced to review the Latin grammar that they had already learned throughout the year. After each group had finished going through the passage, we discussed the different Latin grammatical constructions that would have to be used in their translations.
I am not an advocate of using games regularly in class, but in this instance I believe that the competitive nature of the exercise increased my students’ enthusiasm for the work.

(US, male, Classics, 9 yrs. teaching, 2 in boys’ schools)

This American Geography teacher found himself, after thirty-three years prior experience, in a classroom full of boys, and soon began to see the efficacy of games in helping his students to retain the content of maps:

Although I may be thought of as an experienced teacher with over 35 years of teaching, my experiences working with boys has been limited to the past two years. I have learned that teaching boys requires some strategies that differ from practices that might be successful in a co-ed classroom. I hope to explain a few examples of activities that have worked well with boys in my classroom.

Games seem to keep that interest of our boys. Whatever the activity, boys seem more engaged if it is linked to a game format. I have used several types of games that have engaged boys in learning. One example is a game that I developed to help our students to become familiar with the political map of Africa. Often teachers give students a ‘blank’ map of Africa and have them label the nations. I was never convinced that this was a worthwhile activity. Did students really learn about any more than trivial geography from labeling maps? How useful is it to learn the relative positions of nations on the African continents. My belief is that using the game that to get boys to think about the map may be more beneficial.

The technique is simple and requires only a few materials. A large wall map will be helpful. Here is how it works. The teacher chooses an African nation but does not tell the students which nation he or she has chosen. The students work in teams (pairs seemed to work best for us). I generally used two teams. Each team was allowed to ask a question about the geography of Africa that could be answered only with yes or no. If students received a no answer the other team may take a turn. The questions must be based on correct geographical concepts. Questions may involve boundary nations, latitude and longitude, etc. A question might be ‘Is this nation north of the Equator?’ These questions force student to use deduction and reasoning in order to learn the political map. The winning team is determined when one team is able to correctly name the African nation. The game can be extended to forms leagues or tournaments as needed.

My experience with this game suggests that boys develop better skills and logic by using this game.

(US, male, Geography, 35 yrs. teaching, 2 in boys’ schools)

An American Math teacher reported his very “best lesson” is derived from a popular TV game show, *The Price is Right*, claiming also that the adapted game engages boys in the very most difficult operations in the course:

I believe that the best lesson I teach is the game of Plinko from the show *The Price is Right* for my Pre-Calculus & Statistics class.
In the game of Plinko, a contestant is given a chip and has the opportunity to earn up to four more chips. To determine how many additional chips will be given to the contestant, the contestant is shown four products. For each product, an incorrect price is given. The contestant must decide whether the 1st digit or the 2nd digit in the given price is correct. For each correct decision made by the contestant, one additional chip is earned. Thus, after this portion of the game, the contestant will have one to five chips to drop onto the Plinko board.

After the number of chips is determined, the contestant releases the first chip from any of the nine slots at the top of the Plinko board. As the chip makes it way down the board, it will encounter 12 pegs where it can either bounce to the left or to the right. If it encounters a peg that is directly adjacent to a wall, it simply falls in the only available direction (Source: www.amstat.org/publications/jsev9n3/biesterfeld.html).

By reflecting the Plinko board, the probability of success (bouncing to the right) remains constant for each trial; therefore, we the students may use a binomial distribution.

A binomial distribution is a very difficult concept for high school students to grasp. By using a real-world example (and a show that all high school kids watch when they are home sick) they are better able to master the concept.

I begin the lesson by showing a video clip from youtube.com that shows the game of Plinko from start to finish. I also show clips from the game that rarely occur (the plink chip gets stuck on the board two times in a row).

The boys are then tasked with determining which slot has the highest expected value (will win the contestant the most money) and which slot has the highest standard deviation (is the most risky).

The game of Plinko can also be simulated using the TI-84 graphing calculator.

The boys seem to love this lesson because of its real-world application and because of its ability to teach difficult concepts (binomial distribution, expected value, and standard deviation).

(US, male, Mathematics, 8 yrs. teaching in boys’ schools)

Moving to an adjacent channel of American television programming, this first-year Math teacher builds retention of course material by simulating another popular American game show, Jeopardy:

Another activity that the boys enjoy is a Jeopardy-esque game I use to review before an exam. In this exercise, I split the class into two teams and then ask each team to come up with a name. I then begin the game by asking a student from one of the teams to come up and answer a question on the board. If he answers it correctly, he earns a point for his team. If he does not answer the question correctly, then a member from the other team has an opportunity to solve the problem and “steal” the point. Next, regardless of the outcome, a member from the second team (the one that could steal the point) is invited to the blackboard to solve the next problem. All the while, students are required to work on the problems at their desks.

The students really enjoy this activity for two reasons. First, the boys enjoy the interactive nature of the game. They can speak up and get excited without (much) risk of being scolded
for interruption—they can have fun! From a teacher’s perspective, the interactive nature of the game keeps the students’ energy level high, which in most cases keeps them involved in and focused on the class activity. Second, the boys love competition. Even when there is no material prize to be won, the boys are very interested in coming out on top. And with the object of competition being math problems, they naturally have to focus on the problem at hand and thus review for their upcoming assessment.

(US, male, Mathematics, 1 yr. teaching in boys’ school)

Another American Mathematics teacher indicates his most effective lesson derives from a popular diversion among sports fans, a gaming activity called Fantasy Football, adapted for his middle school boys as Fantasy Football Math:

My most successful lesson with students has been a project—Fantasy Football Math. I read about using fantasy sports in math classes in the September 2006 issue of NCTM’s publication Teaching Mathematics in the Middle School. I’ve adapted some of the lessons into an 8 week project.

Each student drafts a fantasy team (while staying within our salary cap), keeps track of his players’ statistics, and computes each player’s fantasy points over a period of six weeks of head-to-head competition with his classmates. The salary cap helps level the playing field, so that even those who are not too familiar with football have a chance to do well. Also, players can be selected for more than one team so that even a football novice has access to all the best players.

Players gain points for passing, rushing, and receiving yards and touchdowns; they lose points for throwing interceptions and losing fumbles. At the start of the season, the class is given a formula that will be used to compute player points. Each week they gather their players’ statistics from box scores on the web and use the formula to calculate the points their team has earned. I provide a schedule for the season so students will know whom they face each week. The team with the highest score wins for that week.

Once the season is over, students also analyze the data they collect to determine which players were good values and which were fantasy busts. They use circle graphs to compare each player’s salary as a percent of the team’s salary and another circle graph to compare each player’s total points for the season as a percent of the team’s total points.

One aspect I like about this project is that it can be adapted easily. I’ve used this project with 7th and 8th grade boys. Each time I’ve used the project I adjusted it to fit what the class was working on at that time. One year we were discussing integers and absolute value during the Fall so the formula included those topics. Another year, we discussed decimals during football season so the formula included decimals. This project also incorporates multiple skills including using formulas, reading and understanding box scores, using the order of operations, using a scientific calculator, and creating and analyzing graphs on Excel.

(US, male, Mathematics, 9 yrs. teaching in boys’ schools)
The appeal of games based on popular national sports is by no means limited to football. College basketball serves equally well for the 6th grade students of this American geography teacher:

The purpose of the lesson is to work on our map skills of a designated continent. A major part of the 6th grade Geography class involves learning the countries of the world. We typically introduce this game during the NCAA basketball tournament in order to play off an event the boys are already excited about. The “tournament games” consist of rounds of questions the boys ask one another about the map.

When the boys enter the room, the desks are all arranged in pairs of two facing each other. On the board there is a tournament bracket drawn with all of the boys’ names listed in a particular spot. Usually I try to arrange the names so that the stronger students, based on quiz average, do not play each other until the later rounds (similar to a real tournament).

Each round of the tournament consists of ten questions. The first boy will quiz the second boy on five questions, and then they will rotate. Next, the boys check the five answers to see what the “halftime score” is. Then they repeat that process to complete the full round. Questions can range from asking the capital of a county and the boy must answer with the correct country, to spelling a certain country. Sometimes I will give a blank map that is numbered, and the boys can ask a question like, “what country is number 7?” In later rounds the boys can ask directional location questions. For example, what country is directly north of China? Once a boy is mathematically eliminated from the match, the match is over.

If we are studying a large continent we might break the rounds down into the different regions of the continent. For example, round 1 is North Africa.

One downside of the lesson is that there are eight losers after round one. To combat this problem I draw up a loser’s bracket tournament on the board which allows those kids who lost to keep competing. Since some rounds take longer than others, the next available competitor will play a game in order to limit the amount of time waiting.

Depending on the amount of time to compete rounds, I adjust how many questions are asked in each round in order to finish the whole tournament in one class period.

This lesson allows the boys to focus on the material we are covering, have fun competing, and get out of their seats, which is great for a 6th grade class. The boy who wins the match gets to go up to the board and write his name in the winner’s slot after each round, which the boys really enjoy. In the end we have a tournament winner who is crowned champion of the map. (US, male, Geography, 3 yrs. teaching in boys’ schools)

This American French teacher reports that her 6th grade students better retain and enjoy their new vocabulary in consequence of engaging in an improvised ball game:

As the sixth grade French teacher, I find that my students particularly enjoy activities in which they are each actively participating. They love to do activities that get them out of their seats and moving around the classroom, and I find that they retain material better if they are physically interacting with it. To this end, whenever I present new vocabulary, though we first go over it in a teacher-centered activity in which the students repeat the new words while
looking at them in a vocab packet and then complete written exercises using the new vocab, we always “play” with the vocabulary words through various interactive games. One such game is called “Qui a le bal a la parole” (Whoever has the ball can talk).

Typically, this game is played at the end of a period after we have already completed group work which requires them to identify the vocab words and use them correctly with their notes for reference. I tell them first to put away their notes and to form a circle on the floor. I then give one student a small ball and turn on some French music. Once the music starts, the boy with the ball gently rolls it to another boy in the circle, who rolls it to someone else, etc. They keep rolling the ball until the music stops. I stop a given song roughly ten times, and when the music is not playing, that is their cue to stop rolling the ball. Whoever has the ball at that time must then correctly give me the French equivalent of a vocab word that I give them in English. If the student correctly responds, he is allowed to stay in the game and given one point. If however, he is unable to produce the correct word, he must sit out a round and look over his vocab list while he waits to get back in the game. Furthermore, he does not receive any points. In order to get back in the game, he must also correctly respond to a “re-entry” question. I keep track of the points that each boy earns throughout, and at the end, whichever boy has the most points gets a coupon, which is equivalent to one quiz point.

After we play the game, I generally ask the students to continue to review the vocab that evening, either by making flashcards or writing clues to go along with the vocabulary. The next day, they are to come to class prepared to show off their knowledge of the vocab, either through a warm-up activity, a game of bingo, or a pop quiz, for example.

(GAMING INQUIRY)

A number of participating teachers reflected thoughtfully on the importance of guiding their students into the inquiry, or problem-solving, mode. Some of them, moreover, saw gaming activity as invitation to inquiry itself.

This American Science teacher devised a game which challenges her students quite literally to unlock intriguing mysteries:

As the standard chemistry class of Fourth Formers enters the classroom they see a sturdy metal box on the front desk, closed and sealed with a typical combination lock. Immediately they are drawn to the box and questions about its contents come from all directions. Several boys have to test the lock, others are compelled to test the weight of the box by picking it up. Eventually I ask the boys to gather in predetermined teams of three or four. As the boys take their seats I distribute a list of practice or review problems similar to problems they have worked on in teams in the past. During those previous team problem solving sessions the importance of each member of the team leaving with the knowledge of how to solve those particular problems is emphasized to encourage cooperative approaches and shared learning. There are too many problems for any one boy but if the work is distributed there is plenty of time to complete the task. I explain that their objective is to discover the combination to the lock and then open the box. The team that does so will share the treasure within. (snacks, school supplies, late homework excuses, etc.) Increased speculation begins and the boys’
At the end of the algebra unit, I had the students create an Algebra Scrabble game. This took 4–5 75 minutes periods. The preparation for this activity was two-fold. First, we began by discussing traditional Scrabble; rules, procedure of play, scoring, game board, etc. Second, we summarized all the algebra covered in the two years these students had been learning it; simplifying, solving, exponent rules, etc. Within this discussion, we characterized which aspects of algebra were the trickiest.

The students selected their own groups of four. Then they were given guidelines on how to create their own game. The guidelines were written on a handout but were just that, “guidelines”. Nothing was set in stone, the handout contained a handful of suggestions, but each group was encouraged to be creative. Additionally, they were given a marking rubric for the final product. The rubric clearly depicted what I was looking for in presentation, teamwork, methodology and final product.

Supplied with materials, the students selected the size of their game board and how many playing squares they wanted. Some groups took the initiative to add special squares to the board, “double point” or “triple point” scores.

The next step consisted of making the playing tiles. These had to match the size of the squares on the board and were sorted by color. Each color tile represented something unique:
integers, operators, equal signs, or variables. Considering the procedure the students were presented with were merely guidelines, some students added exponents as possible tiles as well as fractions.

The third stage is what took the longest. The students had to derive their own rules for their respective games. How would play proceed? How would scores be tallied? Most groups chose that a player’s turn would consist of putting down a complete, one variable, algebraic equation. This player would replace the types of tiles used in his play from a supply pile on the side of the game board. The next player had to solve the equation just put down before he could play an equation. If he solved it incorrectly, he lost his turn. Play moved to the next player. The player to correctly solve the equation then got his chance to put down an equation, stringing it to an equation already on the board.

Scoring also varied from group to group. Most groups decided that a player would be awarded a certain number of points for solving an equation correctly. This was a flat amount. On the other hand, if an answer was incorrect, the player would lose points. For example, you earned 5 points for correctly solving but lost 3 for incorrectly solving. Other groups issued the value of the variable solved for as the points for that player. Either way, every student was very aware of the equations they were putting down on the board; they did not want to just give points away to the next player. The equations had to be difficult enough to not be a giveaway, but you were restricted to what was in your hand during that moment of play.

The groups were asked to type up their respective rules in a formal manner. Some chose to make booklet with diagrams as seen in a real board game. Once completed the boards were set up in the classroom and were used as a study tool before the algebra unit test. The groups got to play each other's games.

(Canada, female, Mathematics, 3 yrs. teaching, 1 in boys’ schools)

An American Physics teacher devised an intriguing game of dice that cannot be resolved—or “won”—without engaging in the kinds of deductive thinking and pattern recognition that characterize true scientific inquiry:

One of the big ideas that I try to convey to my Intro to Physics students in their first semester of their sophomore year is that scientists often look for patterns in nature in order to understand how a particular phenomenon works. Finding patterns is a skill that requires critical thinking and problem solving skills so I introduce a couple of activities in which the student is given the opportunity to try and develop the skill set of finding patterns. The first activity involves a game called “Petals around the Rose” that uses rolls of five dice. The only rule of the game is that you can’t tell someone else how to play it once you figure out how to play it yourself. The only clue to how to play the game is the title of the game itself and the students receive six sample rolls of the dice with a corresponding numerical answer. By looking at the sample rolls and the numerical answer they have to deduce the answer to subsequent rolls by seeing the pattern in the previous examples. It is a challenging puzzle that is surprisingly simple but it requires the student to test and eliminate a large number of possible solutions. Some students find the pattern within minutes and others struggle with it until the bell rings. I know the activity is engaging because the students that didn’t get it by the end of class continue to work on it until they do. I’ve had some boys work on the puzzle for days.

(US, male, 10 yrs. teaching in boys’ school)
GAMING A PROCESS

Sweeping expanses of history, the confluence of current events, the complex interactions of multiple variables of any kind—all have the capacity to overwhelm students. Some teachers felt they had successfully engaged students, even younger ones, in the magnitude and intricacy of such processes by asking them to play a component part, as a competitor in a game. Such was this American Geography teacher's approach to teaching his 6th grade boys about African nation building:

In our 6th grade Geography curriculum, we spend the final weeks of our year exploring Africa's past. We focus on the idea of exploitation as we note the slave trade and era of European Imperialism in Africa.

In groups of 4, each group assigned a European nation (Germany, England, Denmark, France, etc.). The boys battle for control of different nations in Africa. After memorizing the location of each nation, they fight to acquire control of nations. I place a blank map of Africa on the Smartboard and tap a ruler to a nation. The group that provides the name of the country first gains control of it. I then mark that country with the group's assigned color. After all the nations are taken off the board, the group's next task is to figure out the resources that they have acquired by gaining control of such nations. They refer to the back of their Prentice Hall Eastern Hemisphere text book to find information about each nation's resources as they record their commodities.

From there, they estimate the amount of people they will now govern, the various ethnic groups, and different languages spoken. In this part of the activity, they begin to realize that there will be obvious difficulties to try and keep these diverse nations controlled under their imperialist rule, namely the people that inhabit the land.

The final part of the activity involves a point system designed by me that weighs the pros and cons of imperialism for the imperialist country. Points are awarded for natural resources but deducted for multiple languages and ethnic groups to show that while acquiring resources from Africa is beneficial to these European nations, there are various difficulties as well.

The boys are given the chance to drop countries that are “not worth the trouble” and focus on those areas where the pros outweigh the cons. The most valuable countries in their game they often find match up with those nations coveted historically by Europeans.

In conclusion, the boys are asked whether or not revolts and uprisings will potentially ensue in their regions of control. They are also asked how African tribes and peoples would respond to imperialist rule. Through these questions, the boys see that while the game being played in class is a numbers game, in large part about benefiting the European country, the people who are native to such African's regions are being entirely ignored. I reference that this game is not too different from the game played by such European powers years ago.

I wrap up the activity by asking what made these Europeans think that imperialism and the exploitation of African resources for economic gain was justifiable? Many conclude that they spread their rule because they believed they were superior and thus had the “right” to expand their empire globally to enlighten those who were inferior. Some conclude more directly that they needed to keep their nation competitive during European global expansion in a rat race.
This activity is effective because it gets the boys thinking about competition and acquisition of resources as it begins as a fight for “the most.” However, it ends as a reflective discussion of “why did this happen?” and addresses the victim, he who was first ignored.

In the end, the boys have learned about Africa’s nations, many of its resources, and European exploitation and imperialism in Africa through an interactive group activity.

(US, male, Social Studies/Geography, 4 yrs. teaching in boys’ schools)

A Canadian teacher of Mathematics and Computer Science found that she was able to exploit the attraction computer games held for her programming students in a way that enabled them to see and ultimately master the processes that produced them:

Computer programming is a complex activity involving understanding of commands, syntax, algorithm development, and debugging skills for both syntax and logic errors. It can be taught slowly with drill and practice and repetition of commands, but I have found that I can teach a great deal of material quickly by using games as the basis for student assignments. Not only do we cover the material quickly, but students have a thorough understanding of the programming constructs. This is because they are completely enthralled by programming their own computer games. Boys, in particular, are easily ‘hooked’ on video games, and while the games they create are crude in comparison to the games they purchase and play, they are still quite motivated to learn how to add functionality and features to their games.

In the past, I have used commerce-type applications for teaching programming (e.g., a bank interface) but nothing seems to get the students’ interest more than games. They become very involved in the assignments, help each other out, and ask far more questions— they are insistent about learning. A cross-curricular effect is the need to bring in math skills to develop more sophisticated animations.

The games involve simple animation with user interaction and scores. Students can be creative by adding their own features. Two of the most successful assignments include a race game involving shapes and a very simple “Space Invaders” type game. I start by introducing the idea of an algorithm, then the students watch me create partial programs on the projector. For example, I show them how to make a shape move, then they do it. Initially, they copy my code. Then I ask them to make variations on the program (i.e., move in a different direction, speed up or slow down, loop the animation, etc.). By this time, they understand how the animation works.

A second step involves decisions using if statements and introducing variables to control actions. With these three concepts, along with simple input and output functions, they can program games.

This unit is successful because it is very student-centred and involves the students ‘doing’ something. Initially, the classes are mostly lecture. After two classes of copying my demonstrations, they start to put the pieces together and begin working more independently. As the unit progresses, they spend more time in class working on their assignments and learn by doing. I become a coach working with students individually.
Debugging takes up quite a bit of time as students test their programs. This encourages independent thinking, and I help by asking leading questions to find the problem. This shows them that they do know the answers and models a problem-solving structure for them.

I don’t believe many of our students go on to become computer programmers, but I do believe that the process of thinking logically, developing algorithms, and debugging programs may transfer to other courses by improving their problem solving skills.

As a teacher, it is particularly satisfying when some students take on the role of coach/teacher to help other others debug their programs. It is also very fulfilling when I hear students say “Wow” or “This is the best class today” or “I wish this class was longer”, because they are enjoying the course and they are completely engaged in the task.

(Canada, female, Mathematics/Computer Science, 20 yrs. teaching, 19 in boys’ schools)

GAMING THE COURSE
It is hard to imagine more robust testimony to the efficacy of games in promoting scholastic outcomes than this report by an American teacher who, in effect, converted his entire 8th grade Latin curriculum to an elaborate game:

Our eighth grade Latin curriculum has been transformed during the last three years. We have attempted to help our eighth graders improve their transition into our high school Latin program. We created a new textbook which emphasized a grammatical approach while also including longer stories to translate, an introduction to questions similar to the ones the boys would see on the National Latin Exam, work with derivatives to improve the student’s English vocabulary, and we increased the number of vocabulary words threefold. We have incorporated daily use of a Smart Board to emphasize the work introduced in our text and to enable them to interact with manipulative exercises. We incorporate work at the board, in partners, in every class. We use PowerPoint productions to show the relationship between what we are reading and studying as it appears in later art and literature.

Throughout, each activity has an element of competition to it on a number of different levels. First, students strive to move up the Cursus Honorum throughout the year. This is based on the student’s average. His picture begins at the rank of “citizen” and he strives to improve his status until he reaches the position of “consul” and therefore, leader of his team. Lone perfect scores within a team enable that student to claim dictatorial power until his quiz scores are no longer the highest.

The teams are designated by color, similar to the teams which raced in the Circus Maximus. A class is divided into two teams of eight students each. There are six classes and thus twelve teams. These teams compete in a game called Bellum. Each quarter, the twelve teams (rotating each quarter) compete in a game of world domination loosely based upon the game of Risk. With each new quarter comes a new map. The maps represent roughly the time period being studied in their Ancient History class.

Each day, the teams strive to earn a maximum of forty denarii (points). This is accomplished in a number of ways. Homework is placed on the board after deliberating with their partner, questions are asked to individual students, and sight work is completed with the help of a
partner. At the conclusion of each class teams may then use accumulated denarii to purchase armies at a rate of ten denarii per army. These are then placed on the map in an area currently controlled and movement can then take place—often initiating a battle. Battles are resolved through a comparison of quiz scores. There are approximately two quizzes each week.

At the conclusion of the quarter, the team controlling the greater number of territories is declared the winner and prizes are awarded.

(US, male, Latin, 23 yrs. teaching, 14 in a boys’ school)

Motor Activity

The role of movement in boys’ development and learning has been closely observed and in one form or another prescribed since the ancient Greek pedagogues incorporated rhythmic exercise into the required instructional program for boys. In contemporary schooling physical education tends to be a discrete subject aimed at healthful conditioning, basic instruction in athletics, and simply providing an outlet for physical exertion and play. Contemporary observers of child behavior have documented differences in female and male motor development, noting, among other things, the earlier development of fine motor capacity in pre-school and primary grade girls and the tendency of boys the same age to prefer large-muscle activity—running, jumping, riding vehicles: a tendency generally to what the developmental theorist Erik Erikson called “intrusive play.” Overall less systematic attention has been given to the role of active movement in ordinary scholastic instruction. The teachers participating in this study, however, reported massively and positively on the transitive power of physical movement in mastering tasks and incorporating concepts. Of special interest here, perhaps, are those accounts of boys “embodying” a process under study—a chemical reaction, the human digestive process—in order to embed it more deeply in long-term memory. Claims for the positive effects of motor activity in ordinary instruction can also be seen in the entries under several other categories, especially, Gaming, Role Play/Performance, Competition, and Teamwork.

EMBODYING A PROCESS

There is an identifiable degree of motor activity in most kinds of instruction, but a number of participating teachers recounted lessons in which movement was expressly and intentionally linked to specific learning outcomes, including the following in which boys together literally embody the process under study.

This New Zealand Chemistry teacher takes boys outside to demonstrate a key concept:

This is a lesson on reaction rate, in particular looking at the role of activation energy on the rate of reaction. Normally this topic, although interesting, can be rather theoretical and is difficult for students that are not particularly self-motivated. Although it is possible to show increases in reaction rate using chemical reactions, it is of course never possible for them to see what the reacting particles are doing. Behaviour of molecules is often not realised by students, where it is absolutely essential to understanding chemistry. This activity is best done on soft ground outside with lots of boys and space. The lesson begins by looking at the simple idea that molecules must collide to react. A reaction is modeled by a rugby tackle where the outcome could be a failed tackle (unsuccessful collision), students (reactants) still standing...
after collision, or a successful tackle, (successful collision/a reaction) where the students end up on the floor. They can play no further part as they are now products.

The students begin by walking round and therefore most meetings do not involve a successful tackle, therefore a slow reaction rate. We can now introduce increasing temperature, and the students now run around. The tackles are now much more frequent but also more likely to be successful as more students have the required energy to tackle (react). This is generally a successful way to introduce ACTIVATION ENERGY. The minimum collision energy that results in reaction.

It is now possible to introduce the idea of a catalyst which lowers the activation energy. Half the students are now asked to hop around on one leg and are now very easily tackled by the others. We have now decreased the minimum collision energy that results in a reaction. They will find that everyone gets successfully tackled (reacts) quickly even when the others are walking (low temp). It is even possible to get some students (catalysts) to hold the others in place so they are tackled easily, thus explaining why surfaces are useful in heterogeneous catalysis. Holding molecules in place for reactions to happen.

It is now possible to go back to the class room with motivated students that have a good visual feel for the topic.

(New Zealand, male, Chemistry, 3 yrs. teaching, 1 in boys’ schools)

This Canadian Science teacher adopted a similar approach to teaching her 7th grade students the various properties of mixtures in solution:

In a grade 7 science course, I had to explain why certain pure substances have affinity or attraction to each other, while other pure substances can more easily be involved in mixtures. The scientific theory has to do with the Particle Theory and explains why grass stains come out when mixed with certain detergents but will not come out with just plain water.

The boys would stand up as a group and divide into half (one half being grass particles, the other half being water particles). I then explained to the grass particles that they were to behave like young boys of grade 3 age playing basketball on the playground. The water particles were to be young girls who were walking by the playground. I asked the grass particles if they would be interested in leaving the game to join up and talk to any of the water particles. The answer was clearly NO. I instructed the groups to return to their respective starting locations and did the experiment again this time the water particles were a detergent and the grass stain particles were not grade 3’s playing basketball but some grade 7’s and 8’s. When the detergent particles passed through, I asked if the grass stained particles would be interested in branching off for conversation. This time a fair majority said yes and left the group playing basketball. After a bit of time there were not enough playing basketball to sustain the game and they eventually broke up and joined the detergent particles in conversation. Through this activity I was able to demonstrate a key component of the Particle Theory.

(Canada, male, Science, 12 yrs. teaching, 8 in boys’ schools)
Nearly any observable operation can, with imagination, be embodied. This American Biology teacher devised a lesson in which 8th grade boys “act out” the process of cell division:

Lesson: Cell Division

1. Read about cell division (interphase, mitosis, cytokinesis).
2. With a partner use the model to act out each phase and stage of cell division.
3. Walk around and ask if they have any questions to clarify.

Next long period:
Cell Division play: the class is split into two groups and each person is assigned an organelle (a part of the cell)

4. They must work cooperatively and talk about how they are going to act out each phase, stage.
5. Rehearse
6. Each group will act out their play with the other group watching. There is a minor competition bonus, which usually boosts cooperation and creativity.

(US, male, Biology, 9 yrs. teaching, 7 in boys’ schools)

Embodying processes was also found to be effective with older boys studying more advanced concepts in science. In the following account an Australian Physics teacher reported how his Year 12 boys embodied the functioning of a superconductor:

The lesson plan was focused at year 12 HSC Physics. The topic related to the functioning of superconductors. The concept is a difficult one and I decided that the best approach would be to model the process of the way electrons pair and reduced the collisions with the conductor lattice. I asked students to stand at cones arranged in the form of a lattice. At room temperature there is still significant vibration of the lattice and this can cause collisions, friction and resulting heat which leads to resistance in the conductor. I asked the students standing and the cones to move back and forth and then asked two students to move through the lattice. They quickly realised how many collisions can occur at this state. At much lower temperature, the vibration of the lattice is reduced to near zero. As a consequence the positive ions (students at each cone) can move closer together. As a consequence this develops a positive region which can attract the electrons. Also, the oscillation of the lattice can impart energy to the electrons as they move through the lattice. When I ask two students to move through the lattice, one student is attracted to the positive region. Another student moving in the opposite direction pairs up with the other student as the first electron imparts some energy which overcomes the electrostatic attraction. The students soon realise that as a momentary pair there are fewer collisions with themselves and the lattice. Hence, the resistance is reduced dramatically. In fact at the critical temperature for the superconductor, its resistance drops to zero.

(Australia, male, Physics, 15 yrs. teaching, 13 in boys’ schools)
EMBODYING CONCEPTS

The reported effectiveness of physically embodying the subject under study was not limited to scientific processes. More abstract phenomena—concepts—were also susceptible to being embodied by students, as this New Zealand Economics teacher demonstrated with his senior students who were studying the concept of diminishing returns:

The lesson objective was to demonstrate to students Diminishing Marginal Returns and develop an understanding of why it occurs. To do this I cleared all of the desks from the centre of the room and marked out a track on the carpet approximately 1m wide and 8–10m long. At each end of the track I placed a bucket and at one end a bag of 30 hockey balls. I selected one student and told him his task was to transfer as many hockey balls, one at a time, into the bucket at the other end of the track. If he successfully emptied the bucket at one end he was to transfer them all back again. He was to be allocated 1 minute to complete the task.

At the end of his time I recorded the results and then selected a second boy so there were now two boys transferring hockey balls and repeated the exercise. Then I added a third, fourth, etc. The boys got right into the task and it became something of a competition among the boys to see who could make the greatest contribution to total output. I had not tried this experiment before so it was to my relief that diminishing returns started to set in after about 6 workers and we carried it through to about 10 workers. It only took a little prodding from me to get the boys thinking about why marginal output declined as workers were added and throughout the year we could refer to that experiment every time a question about diminishing marginal returns came up in a test or exam.

As a footnote: The next lesson a few students came back to say they had been thinking about the experiment and had come up with a way of improving their technique and so we tried it and were able to demonstrate how productivity gains from new technology lower costs as well!!

(New Zealand, male, Economics, 7 yrs. teaching in boys' schools)

In the following exercise an American Science teacher engages his students in a consideration of atomic structure using three different methods: drawing on paper, manipulating marbles on a Chinese checkers board, or "acting out" (embodying the structure by physically arranging themselves)—then asking each boy to choose which method worked best for him:

3 Ways to Draw an Atom: 3 Different Ways to Learn

In my class, I spent a considerable amount of time describing the electron cloud model of the atom. This is very abstract for the boys and requires a number of different strategies. We first worked with drawing an atom on paper. Students found out what the atomic number was and filled in each orbital with the correct number of electrons. I have a marble board that resembles Chinese checkers and allows the boys to create an atom by placing each electron, neutron, and proton in different wells of the game board. For the last activity, I had the boys acting out the atom in the center of the room using color coded index cards with N, E, or P written on them. On the last page of the atom quiz, I asked the boys feedback about which model worked the best for them in the class. Here are some quotes:
**Favorite Model: Drawing on Paper**

“When you draw it you can see what atom is and you can count the electrons easier and it is not as loud.”

“I like drawing the electrons. They were easier to see.”

**Favorite Model: Marble Board**

“The marble board has a few good things. First, it is to scale, unlike the drawing and acting. Second, unlike the drawing on paper, the marble diagram shows protons and neutrons. Finally, unlike drawing it with paper, the marble board is more hands-on. Overall, the marble board is the best model used in the science class.”

“I like it because it is easier to correct mistakes and I think it is more fun.”

**Acting it Out: Favorite Model**

“I like acting it out better because you get to have fun and stand up plus playing with the marbles distracts me. Also acting out helps you remember it better.”

“I really like acting it out, because it is active, fun, and shows the electrons moving which makes it a better model.”

Expressing their opinions regarding each model, each boy in the class really helped me to realize the different approaches each student has when learning the material.

(US, male, Physics, 17 yrs. teaching, 7 in boys’ schools)

Scholastically productive motor activity took many forms other than reenactment and embodiment. This Canadian Mathematics teacher recounted how his 11th grade boys’ foray into the practice of origami increased their understanding of certain concepts in topology:

Grade 11 Mathematics. As an alternative lesson/break from teaching curriculum, we did some origami. I found this activity in the book by Hull called *Project Origami*. I gave them all some plain paper, cut into squares as per the activity outline. I gave them each instructions on folding a crane with their piece of paper, after showing them a completed version to inspire them. They immediately set to work—their hands were busy, and the room was quite quiet. Some worked very well, and others were frustrated by the instructions, which are prescriptive enough to do the activity, but leave enough out to make it somewhat of a challenge. Some students had experience with origami, and were done in minutes, while others took almost an hour. I had two other much more difficult origami pieces (constructing a box and a “butterfly bomb”—from the same book) to keep those students busy when they finished the crane. This activity, in fact, relates to graph theory. When they finish the crane, they then need to unfold it, and mark the creases with a pen. We then discussed map-colouring, and how we would colour the maps we had just created. They (at different times) came upon the idea that it took two colours. This could open into a discussion of the 4-colour map theorem, as well, which I was able to get into only as a brief mention, unfortunately. The neat catch at the end is that they are then asked to predict what will happen to their 2-coloured maps when they are re-folded into cranes. The answer is that, because the cranes are two-dimensional, one colour ends up on one side of the crane, while the other is on the other side of the crane! It surprised almost all the students, and although some of the mathematics is beyond most of
them (at least within the curriculum/time restraints), they are left with a bit of a feeling of wonder of the magic of mathematics.

*(Canada, female, Mathematics, 2 yrs. teaching in boys’ schools)*

An American Mathematics teacher reported success in employing a highly specific motor exercise—shot putting—as a stimulus to engage students’ understanding of how parametric equations can model physical motions:

There are a number of things that boys love to do, simply because they are boys. They like to compete, they like to throw things and they like to use technology. This lesson allows them to do all of these things, while we learn to create a mathematical model for motion in two dimensions using parametric equations.

Parametric equations are used to compute an x and y coordinate based on another variable, usually time. This allows us to model the motion of something both horizontally and vertically as a function of the time the particle has traveled. Parametric equations are frequently used to create a graph for the motion of a thrown or fired object such as a ball or a rocket. In this lesson the projectile we use is a high school shotput weighing twelve pounds, and each student creates a mathematical model for the path of his throw.

After we’ve introduced the concept of parametric equations, and worked through a few examples we then determine mathematically what should be the “ideal” angle of release of the shot to achieve the greatest distance. With this information in hand we head out to the shotput circle. After a short demonstration on proper shotput technique each student is coached through some practice with the shot and then we film two attempts by each boy. A meter stick is placed vertically next to the shotput circle for scale. The distance of each throw is also measured for an additional data point. The film is then downloaded to a computer and, by using a software program named “Videopoint”, each student can create a series of data points for his throw. The ‘Videopoint’ program displays the path of each throw and the position of the shot in each frame of the film is given an x and y coordinate. These points are then downloaded into the student’s calculator so they can do an analysis of the data to create a mathematical model of the throw.

*(US, male, Mathematics, 29 yrs. teaching, 7 in boys’ schools)*

A South African Mathematics teacher reported similar success engaging boys in a challenging exercise in scatter plot graphing by, literally, getting them moving—in this instance running a specified distance:

The topic is statistics and the lesson attempted to use a scatter plot graph to illustrate a learner’s ability to run at a pre-determined rate. Each learner is required to determine his/her own running-rate.

I explained to the class that a good runner knows his/her capabilities and can therefore predict how much time he/she will require to complete a given course.

The learners were told how far they had to run and were also instructed that they had to run the same course twice.
They were then asked to predict how long it would take them to complete the course. This data was then placed on a spreadsheet under the heading “Predicted time”.

The objective of the exercise was to try and complete the course in the predicted time. The learner's were not allowed to run with watches.

The learner's ran the course once and were given their times on completion. Once they had recovered they ran it again.

Once back in class, I added a 2nd and 3rd column to the spreadsheet (“Actual time 1” and “Actual time 2”). I then completed the spreadsheet using the data collected from the individual learners. This data was projected onto the whiteboard. Each learner then completed a scatter plot graph using the entire classes’s data.

The graph had an x-axis (Actual Time) and y-axis (Estimated Time). A line y =x was also drawn. It was explained to the students that this line represented the IDEAL because it showed all the points where the predicted time equaled the actual time.

The lesson was concluded with a discussion on the effectiveness of representing this data using a scatter plot graph.

So for every student there were two points plotted on the graph. The Actual times were plotted against the predicted times. The extent to which the plotted points were away from the line y=x illustrated the extent to which the estimated time varied. If the points were scattered closely around the line y=x then this illustrated that the learners were good at predicting their running times.

(South Africa, male, Mathematics, 20 yrs. teaching, 1 in a boys’ school)

At a more concrete level, this teacher of introductory Spanish exercises his students’ mastery of basic numbers by having each boy embody a number and then engage in combinations on command:

**Lesson plan: human calculator**

This is an exercise we do at the beginning of the Form I Spanish class. The boys have just learned the numbers from 1–20. They are able to count and they learned the simple task of basic mathematic operations: addition, subtraction, multiplication and division.

First, the students count in consecutive order from one to however many there are in the class. Each student has to remember his number and represents that number for the game. Then I ask them simple math questions: What is 5 plus 7? The boys who represent number 5 and 7 have to stand up. The solution to that problem, number 12, has to stand up as well, restate and solve the problem. “Five plus seven is twelve.”

This is much more difficult than it sounds. It requires the memorization of all the numbers and the vocabulary for basic mathematical manipulation. It also requires the ability to hear fine nuances in language, for example: “dos mas doce” (two plus twelve) are very hard to distinguish, since they almost sound identical. This makes the boys pay close attention and trains their ears in a way a regular exercise would never accomplish.
There are several reasons why this exercise works in the classroom. Each and every boy has to pay attention. Since it requires the “numbers” to stand up, each boy is on alert. They do have to hear and recognize the numbers in the problem and know the mathematical manipulation, since any one of them could be the solution. This creates funny situations in the classroom: you might have four or five boys standing up because some might have misunderstood the math part and others the numbers. The boys then correct one another until they come up with the right trio, restating the problem and solving it.

(US, male, Spanish, 16 yrs. teaching, 9 in boys’ schools)

This South African teacher of Afrikaans language reports overcoming his Year 8 boys’ difficulties in internalizing grammatical structure by having them embody parts of speech, which required some of them to take the part of the opposite gender:

In Afrikaans the auxiliary verb and verb takes up various positions depending on the conjunction used; if the sentence change time or when you have Direct speech to Indirect speech.

The boys kept on putting the verbs in the wrong place in the sentence and I decided something must be done to help them to visually see how to apply the grammar rules.

I asked some of the boys in the class to dress up like super heroes, some like men and some like girls and some had to stay in their school uniform.

I decided to call the Verbs—men; the auxiliary verbs—women, and the strongest verbs (he/was/is and word) the superheroes. I then wrote a sentence across the whiteboard and the boys had to take their places in front of the word they represented. On each of the auxiliary verb “girls” I put a sheet with a different auxiliary verb written on it.

I changed the sentence to the future tense and the rule here is that the auxiliary verb and the verb goes to the end of the sentence. The auxiliary verb stands before the verb at the end. We told the boys always to let the girls go first as it is good manners (had a quick Life Orientation lesson there) and then the men who represented verbs had to go to the end of the sentence. There are only a few auxiliary verbs; the boys quickly learnt which ones they were as they could “identify” which the “girls” were. Although there are many verbs, the boys started to identify where in the sentence to find the men(verbs) and then to put them at the end of the sentence.

I then wrote down a sentence using one of the strong verbs in Afrikaans. I brought in the Superheroes and the children quickly realised that there are only 3 verbs that are stronger than any of the other and if they are identified in a sentence then they must go right to the end of the sentence.

Then we still needed to deal with the Infinitive. The rule for the infinitive is that it always goes after the verbs (auxiliary and other verbs) and no changes are made to the infinitive, no matter if the sentence change in time or from Direct to Indirect. So we would do the whole process—I would send the “girls” to their position, send the “men” to their position and then tell one of the children with a school uniform to take the place in front of the infinitive. They quickly identified the boys in uniform with “the part which do not change” and realised that one merely has to write the infinitive sentence at the end of the sentence without change!
I repeated the process a few times using different times and in the next lesson I used the same process to explain what happens to the verbs in a direct/indirect situation.

(South Africa, male, Languages/Afrikaans, 17 yrs. teaching in boys' schools)

This American English teacher uses abrupt transitions to motor activity—in this case, forming “line ups”—to bring energy and focus to especially compelling points in the texts being studied. In forming these “line ups,” boys physically, and not just cerebrally, commit themselves to various points of view:

An effective practice that I have employed in teaching boys is “line-ups.” Line-ups may be used at any time. At the start of class, it sets an active tone and provides a strong visual impression. During class, it changes the pace, gets the boys out of their seats, and recharges their batteries. At the end of class, it can provide a gauge for any number of things that happened during the class, whether direct feedback for me as the teacher or a chance for the boys to give their opinion about something we discussed during the class.

So, what is a line-up? It is essentially a line of people, arranged by height, arranged by date of birth, arranged by shoe size—whatever. In the English classroom, a line-up is more sophisticated than that. I ask the boys to come to the front of the classroom and arrange themselves, for example, according to their opinion of Blanche DuBois in *A Streetcar Named Desire*. If you think Blanche is insane, go to the right. If you do not think she is insane, go to the left. If you are not sure, go to the middle. Talk about Blanche with the other students in your group. Decide how you rank among all those who think Blanche is insane; among all those who think she is not insane; and among all those who are not sure. Voila! A line-up, representing the class’s opinions about Blanche DuBois!

At that point, I might go down the line and have each boy comment on how he arrived in the position he finds himself. This will involve talking about Blanche’s behavior, what we have learned about her past, what she says, what other characters say about her, and so forth. After each boy has checked in, we would probably go back to our seats to continue a discussion of Blanche.

Or—we might go into another line-up, this time registering reactions to Stanley Kowalski, Blanche’s male counterpart in *A Streetcar Named Desire*. The prompt might be something like, if you think Stanley’s character is a positive portrayal of masculinity, go to the right; if you think Stanley’s character is a negative portrayal of masculinity, go to the left; if you have mixed feelings about Stanley’s character as a portrayal of masculinity, go to the middle. At this point, as before, talk with the other students in your area to determine how you rank in your section of the line-up.

Line-ups can be done at any grade level, at any time, and with any area of the curriculum that the teacher is imaginative enough to find a way to adapt the line-up to the content. As implied by the examples, though, I believe that line-ups are particularly well suited to literature.

(US, male, English, 37 yrs. teaching, 5 in boys’ schools)
EMBODYING EXPERIENCES

An unavoidable fact—and a persistent challenge—in the teaching process is enabling students to see the full reality, and in some cases urgency, of experiences they may read about or be told about but do not experience directly. In the chapter to follow summarizing student responses, boys speak warmly of the value of getting out of the classroom and participating in the process under study—and the pleasure is not merely in “getting out of class.” Teachers also recognize the value of experiential learning, whether inside a classroom or out, as recounted in this New Zealand English teacher’s lesson on war poetry:

Teaching Wilfred Owen’s war poetry at fourth form level has really gone down well with these boys as they are at a stage where they enjoy action and are looking forward to excitement in life.

I taught three poems, Dulce et decorum est, Anthem for doomed youth, and Disabled, and used different techniques to make them come alive to the class. One of these methods I used was to simulate a war experience. I asked boys to climb under their desks to escape an aerial bombardment and while in that position to close their eyes and imagine they were in danger as they listened to a war tape with the sounds of war. They were then asked to write down their thoughts and emotions that they experienced in a war diary.

Another simulation lesson was for boys to imagine they were in the first world war trenches. This activity worked well with the cooperative class. They arranged their desks in trench formation, staking them up and crowding together. I then graphically related to them the conditions encountered in trench warfare—the dead bodies, crawling worms, aching sore feet and mud three to four foot deep in which men had been known to drown. They were then asked to express their thoughts and emotions in the form of a poem or a letter written home to loved ones.

Another extended writing task worked well as dramatization. I read the poem Dulce et decorum est and dramatized the death of a poor soldier who drowned in a green sea of gas as he failed to fit his gas helmet in time. I asked the class to do a writing task keeping as close to an account to the events of the poem as possible. They needed to describe: 1) where they were going and how they were feeling before the attack, 2) their reactions when they shell explodes and the attempts to fit their clumsy helmets, 3) their thoughts and emotions upon seeing the man drowning in his own blood.

The last method I used was to relate anecdotes from stories of war and real life experiences of soldiers. I found that boys were not squeamish and responded to graphic and detailed descriptions even if they were unpleasant.

(New Zealand, male, English, 35 yrs. teaching, 14 in boys’ schools)

THE GENERAL TRANSITIVITY OF MOTOR ACTIVITY

The many and varied accounts of the efficacy of engaging students actively in pursuit of mastery and understanding combine to suggest that motor activity deepens and strengthens learning of all kinds. Nor would it appear that the selected physical activity necessarily have a necessary clear or “logical” connection to the task at hand. As in some of the examples cited above, the intrinsic
stimulation of movement appears to be transitive to the mastery and retention of a wide variety of subject matter.

In the following account, an Australian teacher of Shakespeare's *Romeo and Juliet* to Year 8 boys indicated the transitive effect of stage combat on the overall engagement in and understanding of the work:

I have used the discipline of Stage Combat as a way to introduce Shakespeare to year 8 boys. The boys are taught the basics of stage combat in regards to swordplay and using practice weapons are drilled in the basic techniques. This is then tied to Act 3, Scene 1 of *Romeo and Juliet* where the characters of Mercutio, Tybalt and Romeo all duel resulting in the deaths of Mercutio and Tybalt. The students are required to act out this scene including choreographing the swordplay of the duels as part of the dramatic action. This works very well with the vast majority of boys because they are physically engaged in the action of the scene, not just purely the language. The “hook” of learning about weapons and combat not only motivates them to be involved in the scene but also helps them to be responsive to the larger issues in the play and to sustain interest in what seems at first to be a difficult text.  

(Australia, male, Drama, 24 yrs. teaching, 14 in boys' schools)

In the following example, the motor activity selected—passing a beach ball—bears no thematic relation to the task at hand—the mastery of Spanish subject pronouns on the part of 7th grade boys:

An effective practice that I employ with my seventh grade Spanish class is the passing of a beach ball. It is special because the beach ball has the subject pronouns divided on each side of the ball. Every color has a subject pronoun written on it. The ball is initially passed by the teacher, thereafter, the student passes it on to another classmate. The student has two responsibilities, know the verb he is to conjugate and what subject pronoun will his hand be on when he catches the ball. This allows the student to demonstrate his ability to conjugate any verb given and utilize tactile methods to do so. There is more engagement and a high level of energy when this practice is executed versus directly asking a student to conjugate a particular verb from his desk.  

(US, female, Spanish, 9 yrs. teaching in boys' schools)

Even when the point of instruction is mastery of movement—as in physical education, athletics, and stage performance—motor activity may prove transitive to other objectives, as in this American drama teacher's account of his efforts to build an “ensemble” spirit in his student performers:

Whether warming-up physically and vocally, or participating in theatre games and improvisations, or performing monologues or scenes, much of Theatre class is about getting students out of their seats and encouraging them to learn about Dramatic arts through self expression. Through exploration and risk-taking, students discover much about the world, the people and stories that inhabit it, and most importantly—about themselves.

One of my favorite theater lessons that highlight’s self-expression is a crash-course in becoming an ensemble member in a musical theater number. In an hour and-a-half, students
are directed to sing, move and act in a high-energy song that teaches them to be an integral member of an ensemble. It utilizes, mind, body, voice, and challenges students to work together to create a group piece where every individual is important to the whole.

This lesson comes at the end of the Musical Theater unit which encompasses a look at its powerful beginnings (*Show Boat*), and covers the substantial changes leading up to present day productions (*Wicked*). The goal of the unit is to educate students on the unique identity of this very American art form, the talented people who have and continue to create it, and that Musical Theater is alive and well and continues to enthrall, enlighten and entertain thousands. The song I use for this class is *Jacob & Son’s* from *Joseph and the Amazing Technicolor Dreamcoat*. It’s an ideal number for an all-boys’ school since it contains all male characters. The characters are “The Narrator” who introduces the cast in the song, “Jacob”, the father, and his twelve sons; fourteen in all.

During the process of staging the number, I make sure to compliment the performers often, taking special care to encourage those who need to be more energized. They are telling the audience a story and must use voice, body, movement and gesture in order to be successful. Also, encourage each performer to make a choice about his character. Is Jacob authoritative or benevolent? In what way can we individualize each brother? Am I the confident son? Am I the loving son? As I give the students these instructions, the number becomes richer and they begin to take ownership of the number. The pride the students take in being able to perform an entire number in a very short amount of time comes through in even more energy and many calls for “let’s do it again!” If you aren’t already there and have a stage you can utilize, announce that you’re moving to the theatre to do the number. This increases the excitement and energy. Add lights and maybe even an audience, especially other teachers from the school.

At the end of this lesson, students leave with great enthusiasm, some still singing and moving. The preceding days of musical theater discussions and recordings have come alive in a very real and visceral way. One other and very positive outcome is to see some of the students from this class attend the auditions for the next musical.

This veteran American teacher of French notes the efficacy of active, on-your-feet movement in building foundational language skills:

As the young men walk in to the classroom I have our French TV news/sports program on so that they can hear, see and listen to authentic French via the Teamboard/Smartboard, streamlined in from Paris. I take roll as the young men take turns writing the HW assignment on the Teamboard. Class begins with some sort of:

1. Rapid fire drill of the previous night’s vocabulary mixed with a physical activity. This is usually very interactive and only 6–8 minutes. Example: Imagine that the vocabulary was to review all of the ‘body parts’. I will play “Simon Dit”, (that’s “Simon Says”) in French to read their level of acquisition of the new vocabulary words. The young men are all smiles and listening attentively as I kick it up a notch half way through by saying and pointing to different body parts, thus creating a higher level of competition. I may say
“Simon says to touch your knees”; however, I really touch my elbow. The goal here is listening to spoken French and not to just do what I am doing but to think. I continually scan the dozen boys to confirm who really knows the vocabulary. Their competitiveness really comes out when their peers begin messing up and touching what I am pointing to and not listening, it is a fun way to learn!

2. Check over the Homework. This was always so boring when I was in school so I do it quickly but in a very structured manner at the Teamboard. Each young man reads as his peers and I all correct it together keeping everyone “on task” and thinking. The guys are engaged and lightly ribbing one another when someone has forgotten a basic rule or the exception to the rule. Usually all hands are in the air for this 6–8 min. activity.

3. Introduction of the new Structure. Through the use of the Teamboard/Smartboard I will introduce the Future tense with the “Stylus pen” and it becomes much more fun as the boys do an interactive “jeu” (game) again. I will have them stand up in a semi-circle and call out a subject and a verb in the target language (French) throwing a Grenouille (a Frog bean bag). One young man sends it back to me and I immediately toss it over to another young man who puts the previous future conjugation into the negative and the next must switch it all around and make it into the interrogative, all in the future. Statistically, this learning curve is very high with peers. This continues until the frog is dropped, flies too far, etc. but everyone enjoys the hands-on activity with difficult structure patterns for approximately 10 minutes.

(A US, female, French, 28 yrs. teaching, 8 in boys’ schools)

A Latin teacher reported similar success in devising an active scavenger hunt to build her beginning students' understanding of Latin prepositions:

I have found the most difficult task in teaching Latin to boys is making sure the material is presented in an interesting manner. In my most effective lesson for boys, I tried to engage the boys while keeping them actively involved. During a double block, we spent the first half discussing prepositions and their uses. We discussed how, when learning the English language, it is difficult for a foreigner to recognize the nuances of preposition use, and we came to the consensus that these are tricky words to learn in any foreign language. From this perspective, they were challenged to understand the grammatical concept of prepositions in Latin, and I asked them to identify and correctly translate prepositions and prepositional phrases from Latin to English. After the concept of the Latin preposition was mastered and the boys could identify prepositions in Latin, I divided them into three teams and handed a clue to each team. Scattered around the school grounds were more clues, all Latin sentences including prepositions, telling the boys where to continue their prepositional scavenger hunt. Once all teams collected all clues, they returned to the classroom and shared where they had been sent. As a class, we identified and analyzed each team's clues, and translated them into English. To complete the activity, the boys had to utilize their new knowledge of Latin grammar, but they were also asked to move around and actively work together.

(A US, female, Latin, 1 yr. teaching in boys’ schools)
The range and variety of invigorating motor activity would appear to be limited only by the imagination of the presiding teacher. This American Spanish teacher builds her students’ facility in spoken communication by challenging them, in groups, to negotiate an obstacle course:

In Spanish II, the students review and master commands. They also learn the vocabulary necessary to give directions. This lesson incorporates these two things into a fun activity to give the students a break from normal classroom learning. The idea is to have a maze/mini-obstacle course that the students would have to navigate in groups of three. The first student would be blindfolded and would have to rely solely on the directions given by their group members. The second student would be in charge of giving the commands that would lead the first student through the maze. The third student would be there to make sure that the first student is never in danger of hurting himself. The three students would rotate roles until everyone plays each part once. If the numbers do not work out so that the students can be paired in groups of three, a group of two would work. One student would have to both give commands and watch to make sure that the blindfolded student was safe at all times. Students would be encouraged to take their time and move slowly throughout the course.

First the class would need to review the command forms and the types of directions they will need to use during the activity. The class should go over direction words, command forms, and parts of the body vocabulary. The students could help in setting up the course. The teacher should make a decision about if this activity should be assessed or not. Some classes may require some sort of evaluation in order to make the students work to their potential. If it is already a highly motivated class, it may not be necessary to assess. If the teacher chooses to give students a grade, he or she may want to end with a paragraph reflection in Spanish. The teacher could also choose to add some sort of worksheet before the activity to make sure that the students are well prepared.

In order to prepare for this lesson, the teacher would need to have blindfolds/scarves, desks, mats, or chairs ready and would need to have access to a space large enough to accommodate the activity. If the regular classroom is big enough to set up the course, this is the most convenient option. If not, the teacher should ask if there is a small gym available to use and that there is equipment that could be used to set up the course.

(US, female, Spanish, 4 yrs. teaching, 3 in boys’ schools)

In an exercise he calls the “movie lesson” this South African teacher assigns the boys to assume active roles in movie production and to simulate making a movie of a poem. The activity is transitive, the teacher reports, to total retention of the poems selected:

This is called a movie lesson. Choose a suitable poem. Ask the boys to bring props for the movie. The teacher is the director, the pupils the actors, camera men, clip-board operators, etc. They then read the poem and act out the poem. The director stops them when he is not happy with the reading or acting. It is all fun but the boys learn the poem off by heart without realizing it.

(South Africa, male, Afrikaans, 23 yrs. teaching, 4 in boys’ schools)
An American Science teacher reflected on the way actively carrying out on-site investigation—field work—is essential for students to understand the distinction between actual scientific practice and learning “about” science:

Each spring we conduct a thorough exploration of vernal pools with our Third Form (freshman) students. This study entails extensive field work to a vernal pool site in which we chronicle changes in vernal pool habitat over the course of the spring term.

A vernal pool is an ephemeral (temporary) wetland that supports unique species of organisms that have evolved to utilize this wetland to complete their life cycle. The objective of our studies is to determine if the body of water is indeed a vernal pool based upon both physical and biological parameters that define a vernal pool. Physically the vernal pool must be dry for part of the year, have no inlet or outlet, and it must fill with water once a year (usually spring) by means of runoff, snow melt, or ground water. Biologically the pool is defined by certain indicator (obligate) species that must utilize the pool for their life cycle. It must also be so deficient of dissolved oxygen that it can not support fish. (The fish would be significant predators to the developing obligate species.) The obligate species are all amphibians and consist in the Eastern US of: wood frogs, 4 species of mole salamanders, fairy shrimp, and spadefoot toad. Other species frequent these pools, but do not rely on the pools exclusively for their life cycles. These are known collectively as facultative species.

This field based study is particularly effective with boys as it involves a great deal of “hands-on” investigation into wetland habitats. The boys glean a visual and tactile sense of of these wetlands by collecting and identifying obligate and facultative species in the pool. In addition, they record weekly data on changes in the pools physical parameters such as pH, dissolved oxygen, electrical conductivity (dissolved ionic solids), temperature of the air and water, and fluctuation levels of the pool due to rainfall, evaporation, and infiltration. Many of the physical tests are closely linked to the biological activity of the pool. The boys collect data over the course of the term and then synthesize their findings in a scientific document at terms’ end.

Why is the practice effective? The boys learn science by doing science, following traditional scientific method. The visual, tactile aspects of the study in conjunction with the physical tests give them an accurate sense of scientific investigation. They learn to observe, record observations, and draw conclusions from those observations most of which support the original objective of defining the body of water under study as a vernal pool.

(US, male, Science, 27 yrs. teaching, 14 in boys’ schools)

The value of active field work in natural sciences was underscored by this South African Biology teacher, who notes that in addition to its other transitive effects, such activity serves to override students’ disinclination—in this case quite literally—to get their hands dirty:

I have found that the most effective way of teaching Ecology is to take the pupils out on a field excursion to a game reserve. The aim of this lesson is to give the boys hands-on experiences in investigating food chains and food webs and to make links to various aspects of the syllabus.
To start off we locate elephant dung and each boy has to take some into his hands and break it up to find out what the diet of the elephant is. This is usually met with some resistance, but then as the boys start to identify the variety of leaves, grasses and seeds, the interest is sparked. Of special interest are the acacia seeds (*Acacia erioloba*) and marula nuts (*Sclerocarya birrea*). Both these require the acid digestive juices of the elephant to scarify them so that germination can occur. I then get one of the boys to take a pen knife and to open up one of the three trap doors of the marula nut to expose one of the seeds. I then explain to them that the hydrochloric acid in the stomach loosens the trap door so that germination can take place. I also explain to them that the marula seeds are extremely nutritious and form part of the staple diet of the peoples of Northern parts of South Africa. They have the highest Vitamin C content of any nut or fruit.

The pupils are then divided into groups to study the dung of different animals, both herbivores and carnivores, and comparisons of the content of their dung are then made.

At this point various links can be made between producers, primary and secondary consumers and the need for specialization of structures to ensure continuity of life cycles.

This brings about interesting discussions, such as the role of dung beetles. I then encourage the boys to look for dung beetles, of which there are usually a number of species. I was told by a game ranger in the Okavango delta in Botswana, that there is a symbiotic relationship between the dung beetle and tiny flies that reside under the carapace in the neck area of the dung beetle. The tiny flies fly ahead to locate the dung, and then return to guide the dung beetle to the source where the beetle then lays its eggs. This again leads to more discussion with respect to food chains and the importance of symbiotic relationships, such as the effect of transferring dung beetles to Australia to break down the dung of cows. The boys always find this interesting and proceed to locate these flies by lifting the carapace.

Much of what is learnt in this lesson is by stimulating discussions from hands-on experiences. I follow-up of this lesson by taking dung back to the classroom and then use the electron microscope to view and identify the contents.

(South Africa, female, Biology, 29 yrs. teaching, 3 in boys’ schools)

### Role Play/Performance

Requiring boys to take a role—whether an impersonation or as an embodiment of a purely physical process—was found by many teachers to be transitive to a deeper, surer understanding of the material under study. In many cases, too, the requirement to perform before others was found to enhance the student’s sense of responsibility for and ultimate mastery of an assigned task. Such performance and role playing obviously require a significant degree of motor activity which, as seen in the prior section, seems to play a central part in lessons deemed to be effective.

**ROLE PLAYING A PROCESS**

In the previous section, a number of teachers reported the effectiveness of embodying an observable process. This New Zealand Biology teacher devised a lesson in which a highly specific biological process—human digestion—was broken down to the extent that students performed the key roles in each successive step:
I was teaching the human digestive system to a Year 11 lower stream class. This was the summative lesson in a series, in which we had learnt about each stage of digestion. The students were able to describe the need for digestion and recall the organs involved in the digestive process, but I needed an activity to help them conceptualise the entire system. I saw this as an opportunity to use a role-play scenario, to illustrate the journey of food through the digestive system. So we set the classroom up as the human gut, moving the tables and chairs aside to make room. The head at the front of the room, the anus at the back. The side tables also double as some of the major organs that “feed into” the digestive tract. These included the pancreas and the liver from which pancreatic juice and bile was secreted. The “food” we used were balls labeled with nutrients: glucose, amino acids, fats as well as oxygen molecules wrapped in layers of newspaper. Some students carried these food parcels into the ‘mouth’ of the room to be met by a few students mimicking the chopping, tearing and cutting action of the teeth. At the same time being coated with “Amylase” from spray bottles. Then moving into the oesophagus and being squeezed along by peristalsis to the stomach where the “hydrochloric acid” and “pepsin” coating is applied. Enter students with other juices from the side tables. At the small intestine the remaining wrappers are broken down, while the oxygen and nutrients are absorbed through “holes” in the small intestine back in to the bloodstream. Finally, entering the large intestine, water is absorbed by giant sponges, that mop up the excess liquid. The undigested newspaper is stored in the rectum, then passed out through the anus into the rubbish bin. The activity was captured on video to ensure that a ‘walk through’ narrative could be played back to the class next lesson.

(New Zealand, male, Biology, 6 yrs. teaching, 2 in boys’ schools)

An American Economics teacher reported a productive transitivity in having her 12th grade boys enter into a fairly theatrical “wild west” role-play in order to introduce them to essential concepts in money and banking:

Teaching money and banking is one of my favorite activities in Economics. I use the same lesson for both Advanced Placement students and those in the Introduction to Economics classes. Between the two presentations, questions, and a test, it takes about 4 class periods, a week on our schedule.

To introduce the concepts of money and banking, I use an interactive presentation first developed by Professor Don Wells, University of Arizona, and shared with me by Stephen Reff at an his AP institute in Tucson. It’s called the Story of Pine Gulch. Stephen has a video of himself presenting the story to his classes on his web site at http://www.reffonomics.com/textbook/macroeconomics.html.

When I present this story, I dress as a cowgirl. I bring bandannas, hats, and cap guns for the boys. I encourage them to dress as cowboys and I assign parts. I am usually the narrator. Boys are uniquely gifted in making noises, I have observed, so I get them to make the sounds of the horses, of the robbers, and the wounded “Slim” as he goes down after the duel at the end of the story. I encourage the boys to make “rabble, rabble” noises as the townspeople gather, to shoot their cap guns to call a town meeting, and to shout out the lines of the crowd in the story.

In the story, Slim is hired to be the “keeper of the gold” for the townspeople. He eventually develops currency and fractional bank lending as a way to make things more convenient for
himself and for the townspeople. Students get the idea that money is whatever is generally accepted in exchange for goods and services. They also see that the money supply grows and the economy grows when Slim makes loans. It's a fun lesson that they remember.

(US, female, Economics, 15 yrs. teaching in boys' schools)

ASSUMING REAL WORLD ROLES

The energizing potential of role playing also served a number of teachers in their efforts to illuminate world events, both contemporary and historical. A New Zealand English teacher assigned his class to assume the roles of reporters, editors, producers, and on-camera presenters and to produce a news bulletin. In carrying out their assignments students had an opportunity to see how news is shaped and colored by the various personal choices made by those who gather, edit, and deliver it:

Students were asked to watch a television newscast for homework and to look at the role of the presenters as well as the style of editing or continuity. A few examples were given so the students had a reasonable idea of what to look for. The next morning I asked for comments about the presenters' roles, attitudes and delivery. Some useful discussion followed about body language, voice modulation, neutrality and their change in register and tone for different types of news articles. We then discussed how news items were grouped and the techniques used to link various items. Some student comments were quite perceptive and included comments on inappropriate groupings and clever links.

After the 10–15 minute discussion, I played the class a video-clip of a news bulletin, asking them to fill in answers to a worksheet set. The bulletin was presented by two readers. The worksheet drew attention to presenters and reporters, and their different roles; as well as the editing or linking devices used in the newscast. Once we had discussed the answers, I told them that they were about to present a news bulletin, in pairs, as part of their oral assessment for the term and then briefly asked them to tell me why we had discussed the video clip and the homework bulletin. They were quick to bring up the idea of an exemplar and the need for some degree of emulation, and also mentioned how they had not really thought critically about presentation or continuity before.

Students were encouraged to use “minimalist” props (hats, scarves, etc.) as they assumed roles of reporters, rather than presenters, as each boy had to present two items and act as a reporter in the other two. They were also encouraged to use different mannerisms for these reporter roles: accents, pace, body language, etc. They were given two lessons to work in the pairs I appointed to discuss, divide and plan their own news bulletin. The bulletins were required to be 3–5 minutes in duration. A weekend homework was assigned to the “rehearsal” and “learning” of their own parts and then they were asked to present the bulletins to the class. They were told they could use notes but that, in the absence of Teleprompters, they would need to establish eye contact, and therefore know the bulletin fairly well.

After the presentations, students were asked to nominate the best presentations. Eventually the one selected was luckily the same as the one I had awarded highest marks to and students were asked to give four reasons why it was best. The discussion that followed this “voting” was valuable in what it said about oral techniques and creative presentation.

(New Zealand, male, English, 35 yrs. teaching, 11 in boys’ schools)
A New Zealand History teacher’s “best lesson” was the result of collaboration with a colleague in which their classes reenacted a consequential moment in national history:

The practice detailed below was undertaken with a Form 4 (Year 10) Social Studies class of 35 students. The topic was the Treaty of Waitangi, and the sub-topic under investigation was the New Zealand Wars. Prior teaching experience had indicated this was a not such a well liked aspect of the course; however students were required to have an in depth knowledge of a single battle in the New Zealand Wars to satisfy the curriculum guidelines. The preparatory phase of the activity ensued over 3 periods, beginning with two evenings of independent student research into the pre-determined battle of Rangiriri, a significant turning point in the colonial movement south from Auckland in the 1860s. This independent student research was followed by one teacher-directed lesson on the finer content of the conflict, one period for student discussion on costuming and a final session preparing the logistics and movements for the day in question. Put simply the aim was to re-enact the battle of Rangiriri on the neighbouring Mount Eden in Epsom, Auckland. The time afforded for the actual activity on the day was a single 40 minute period, plus the accompanying lunchtime. My class was instructed to undertake the activity from a British colonial army perspective, whilst a colleague informed his class, running parallel with mine, of their instructions to undertake the activity from a native Maori perspective. Both sets of students were informed that the purpose of re-enacting the offensive and defensive ambitions of each side was to bring history to life in such a way that a sense of being there could be achieved. On the day of the actual lesson students arrived and changed into elaborate costumes, with bamboo as rifles and spears and proceeded to the surroundings of Mount Eden where the pre-organised Maori occupied the summit of a steep ridge and the British formed at the base. From that point onwards the students representing the colonial army acted out a planned invasion reminiscent of the tactics and realities of official accounts from Rangiriri. The other class responded as the local Maori of the land defending their “fortified pa” from high ground. All of this action was caught on video for post event review and laughter. Students completed this module of work by reuniting as a combined cohort to watch the footage and the acting talents of their fellow class members.

This American Geography teacher’s “best lesson” was a 6th grade collaborative research project in which boys assumed roles of specific production team members:

In teaching World Geography to sixth graders, I developed a country presentation project in which four boys were responsible for researching and presenting information about a country. The boys did the project four times during the year, once each for a country in Africa, Asia, Europe and South America. Each boy had a specific area of the project for which he had primary responsibility, but all of the boys played a role in all areas. The areas of responsibility were Research Organizer, Citation Manager, Technology Director and Lead Presenter. The Research Organizer made sure that all of the required information was included in the presentation. The Citation Manager reviewed the sources used in gathering information and was responsible for creating a bibliography with accurate citations that fulfilled the requirements of the project. The Technology Director created a PowerPoint presentation that provided visual support for the oral presentation. The Lead Presenter provided information orally while using the PowerPoint to provide visual support.
The boys were expected to find some specific information about the physical geography, the government, the economic system and the culture of the country. We studied each of these topics before we began working on this project. In addition to the specific information required in these four areas, the boys were expected to provide information about what made their country unique. The project culminated with an eight to ten minute presentation about their country. The oral presentation was to be made with visual support in the form of a PowerPoint presentation with maps, photos, charts, graphs, statistics and other pertinent information.

The projects were graded on the quality of the information provided during the oral presentation and the visual presentation, the ability of the group to answer questions about their country and the quality of the bibliographic information. Characteristics such as articulation and voice projection were evaluated as part of the oral presentation in addition to the accuracy of the explanations provided. Both the quality of information and the clarity of visual support were assessed when looking at the PowerPoint presentation. When evaluating the ability of the group to answer questions, both their knowledge and understanding were assessed. Finally, the bibliographic information was evaluated based on specific requirements as to the kinds of sources to be used and the formatting of the citations.

(US, male, Geography, 23 yrs. teaching, 20 in boys' schools)

ROLE PLAYING CRITICAL DECISIONS

Role playing was also found to be effective in helping students identify and assess their own values in critical personal matters. An Australian Social Studies teacher reported building such awareness in the course of a presentation about military conscription, in which boys, in the role of potential draftees, were challenged to commit their service, or not:

My most recent AHA! moment was teaching a Year 10 class about military conscription in World War One. After reviewing a text input on why young men in Australia volunteered to fight in WW1, we constructed a list of reasons from that input plus any other reasons the boys could think of that would lead them to fight for another country in another land. Not surprisingly for 21st century boys from comfortable backgrounds this was quite a short list. Several boys immediately took the view that almost nothing would make them join the army if they didn’t want to because “no one had the right to tell them what to do…”

I then began a scenario where a close ally of Australia was under a threat from a near neighbour. I asked the boys to stand along a continuum across the room as to whether they would volunteer to fight or not. A few stood to show they would, we discussed why and really it was because they wanted the adventure (an entry off our earlier list) I then increased the scenario to add that the enemy were now massing on the northern border of Australia and using some colourful prose explained what was happening (Numbers of troops, ships, aircraft, etc.). A further shift of boys occurred, and again they had to justify why they had moved. Debate was now starting between the boys as some shouted over to others to move or not to move, and even hinting that they were being cowards (but within classroom behaviour parameters), which we again discussed. Over the next 20 minutes, I sketched in more and more intense scenarios in a progression from data I had prepared earlier. By using known geography, towns and places in Western Australia the attempt to make the feeling of threat and being under attack was very successful. By the last part of the lesson, almost all
boys were now standing as volunteers. By this process we had clearly established that there IS a point where boys/men would volunteer to fight even today given the right circumstances. We then spent the next few lessons looking at the circumstances of a 20 year old Australian boy in 1915 and why they did in fact choose to go in large numbers. As a corollary we could also look at how the classroom mentality reflected the community mentality during that period and the pressure that could be placed on young men at that time.

(Australia, male, Social Studies, 4 yrs. teaching in boys' schools)

EMPATHIC ROLE PLAY

Many teachers’ peak moments and “best lessons” occurred in consequence of asking boys to identify personally with someone under study, to act and feel as that character would, and to produce an account of the experience. This American English teacher asked his 8th grade boys to assume the identity of a real-life child soldier in Africa:

After some decades of co-ed, high school teaching, this was my first year teaching 8th grade and my first year teaching boys, so the data is a little sparse. However, the most distinct and memorable experience of the year was the boys’ response to a relatively common assignment about Ishmael Beah’s memoir, A Long Way Gone. Beah’s book chronicles his life as a child soldier during the civil war in Sierra Leone. An apparently true story about boys and war, it was an instant hit with the students, though a certain “fascination of the abomination” paralyzed their usually active critical habits. They liked it in spite of bad writing and strained credulity.

The writing assignment that closed the unit asked them, in part, to write a “personal response” to the novel:

Clearly, a good portion of A Long Way Gone will strike you as significantly different from your personal experiences. That said, we’re hopeful that, as you read the book, certain moments, certain thoughts and feelings that Ishmael has about his life, will seem familiar to you.

Here’s what we’d like you to do. Choose a passage from anywhere in Ishmael’s book that resonates with you in some personal way, and do two things with that passage. The first section of this project “the passage explication” should be one paragraph (7–10 sentences); the second section “the personal response” should be longer, since in it, we’d like you to use details and or an anecdote or two from your own life to support and develop your personal connection to the passage.

What was good and surprising in the boys’ essays was the degree of empathy that they were able to extend to the writer and the analogies that they were able to draw between his and their experience, despite the dramatic differences between his experience as a child abducted into an army and theirs as children of privilege raised by mostly intact families. The first part of the assignment, the “explication”, required them to pay close attention to Beah’s language and understand the emotional subtext, often the loss of self and the putting on of masks or roles, that allowed Beah to cope. The second half of the assignment, the personal response, asked them to see how this same psychological process can operate in their lives, albeit under far less stress. Although they didn’t use the word “integrity” in their pieces, many boys wrote
about a loss of personal compass or judgment that they have experienced as a member of group. One boy in particular wrote about the erosion of “the concept of I” that Beah experienced in his cold-blooded soldiering that he, the student, experiences in his daily life in choosing to do what his friends ask rather than what he would do on his own. He even saw this loss of integrity operating in the everyday lies he tells himself and others: that his homework is done when it’s not; that he was playing in the park when he was actually spending money in an arcade; that he got an A on a quiz but neglecting to mention the D on a test. Although Beah engaged in varsity-level coping by lying to himself about the inhumanity of the civilians he killed, the assignment opened many of the boys eyes to the connections between Beah’s and their own shifting, furtive responses to powerlessness in the face of authority. Their writing was engaged, fresh, truthful and purposeful.

(US, male, English, 32 yrs. teaching, 1 in boys’ schools)

An American classicist assigned his students roles as educated school boys in ancient Rome—boys privileged not only to study rhetoric but to hear great oratory, such as Cicero’s in the forum. While still immersed in their classical roles, they were invited to consider how that rhetorical tradition passed through the centuries to a great American orator, Dr. Martin Luther King—from whose most famous address they are then invited to prepare and deliver selected passages:

This lesson takes place on a day in January just before the holiday celebrating Dr. Martin Luther King, Jr. on the occasion of his birthday. The goals are twofold: to introduce students to the classical traditions of oratory and rhetoric, and to help them understand Dr. King as one who stands shoulder to shoulder with the greatest orators and statesmen of all times. Since by this time the students are familiar with many aspects of Roman life, they can involve themselves in the lesson from the moment class begins.

I proceed through this enactment without introduction. The seating in the classroom is arranged to suggest an open area on which the different scenarios will play out. Pictures suggesting the various venues will be displayed in life-size projection as the lesson unfolds. A rostrum is available. A few togas are ready. All other props exist in the imaginations of the boys. Interactions depend on a repeated reference to what the boys hold in their rich imaginations.

Rather than the usual classroom greeting, to begin class I mimic the cock’s crow and then describe the early morning routine in the typical Roman household. With the help of his paedagogus, the young son of a worthy Roman citizen dresses in his toga praetexta and joins the clientes who have gathered in the large, open atrium of the family domus. Here the clientes talk politics while they await their opportunity to do business with the paterfamilias, their patronus. At just the right moment to maximize the impact of their arrival, this prestigious assembly walks in procession to the Forum (the new scene now projected on the life-size screen): the young boy to his teacher, his senator/father to the Curia, and the others to their places of respective places of business. But on their way, they stop to join the excited group who await Cicero’s ascent to the Rostrum. The boy’s teacher, a well-educated Greek freedman, tells his eager pupil about the famous Greek orator Demosthenes as they wait.

After they have heard and applauded Cicero, the acclaimed Roman orator and statesman, the scene changes over space and time to the Gettysburg Battlefield. Now the boys listen to
words and rhetorical rhythms that echo Cicero’s and that they will hear again when the battlefield fades and the Lincoln Memorial becomes the center of our attention. As we find our place here in Washington, D.C. yet a century after the last venue, the impressive statue of Abraham Lincoln becomes the backdrop and the Reflecting Pond becomes the focus. We imagine the citizen from all over America arriving, at first slowly with the dawn, and then in droves as the heat of the day rises, to support and be inspired by the young pastor and leader, Dr. Martin Luther King. While awaiting his arrival at the rostrum, students learn of Dr. King’s life, schooling and scholarship, his spirituality, his respect for the peaceful force of Gandhi, and his commitment to the civil rights of all people. They see clearly that he is a scholar and statesman who has learned well the best lessons of the classical tradition and deserves recognition as a man among men. As both climax and conclusion to the lesson of the day, after a dramatic silence in recognition of his arrival, I begin, “I have a dream…” and continue through the entire speech with the best rhetorical voice that I can offer.

The class ends without further comment or discussion. The assignment is on the board and webpage: Select a portion of the I Have a Dream speech that is especially meaningful to you. Prepare to deliver your interpretation of that passage in a style (representative of the best tradition in oratory).

An American English teacher found her 11th grade students deepened their understanding of a series of quite different novels by assuming characters from the texts and interacting with others in the course of being interviewed on a simulated David Letterman Show, a late night American television standard:

V Form English (junior year) is a study of American Literature. We read One Flew Over the Cuckoo’s Nest, The Scarlet Letter, selections from Emerson, Thoreau, Whitman, and Douglass out of The Norton Anthology, A Streetcar Named Desire, The Great Gatsby, and The Adventures of Huckleberry Finn.

For the midterm exam review, I assigned each boy in the class a character from one of our first semester texts: McMurphy and Nurse Ratched from One Flew Over the Cuckoo’s Nest, Prynne, Dimmesdale, and Chillingworth from The Scarlet Letter, and Emerson, Thoreau, Whitman, and Douglass from The Norton Anthology. In addition, I assigned one student to be David Letterman. The assignment was to prepare for The Letterman Show, where David Letterman would interview his literary guests. The “guests” had to come to class prepared to answer questions “in character;” they had to know themselves well enough to respond in a convincing manner, consistent with all that they had said or done in their piece of literature. They had to bring in a typed outline of their character traits, with supporting textual evidence outlined in detail. They also had to bring in one specific question for every other guest on the show. David Letterman had to come to class with two questions prepared for each guest. His questions could address the guest’s feelings towards another character in his/her own novel or in another text; he could also solicit his guest’s views on contemporary American life (religion, politics, war, health care, government, education, freedom of speech, gay rights, etc.). The boys had a week to prepare for this exercise, and each student was graded on how truthfully and thoroughly he represented his assigned character (Letterman was graded on the
thoughtfulness and appropriateness of his questions). Each student had a name placard and cup of water at his desk, to simulate a formal talk show environment. Many chose to come in costume; Hester Prynne wore her scarlet, embroidered ‘A’ on her blazer lapel, and Arthur Dimmesdale had his ‘A’ hidden on his undershirt. I sat as an “audience member,” taking notes on how well they represented their assigned character in their questions and answers. What ensued was a lively and entertaining discussion, with every member of the class involved. Because they had to interact with the other characters from the other texts, I felt that they were well prepared for the exam; they had to review their assigned text well enough to impersonate their character, and they had to know the other texts well enough to ask and answer questions from those other characters.

(US, female, English, 12 yrs. teaching, 4 in boys’ schools)

Another American English teacher reported deepening 8th grade boys’ understanding of human diversity by assigning them to assume for four weeks a secret identity, an alter-ego, and to report impressions of the world from this seemingly alien perspective:

While teaching To Kill a Mockingbird, I have the students (typical class 15 boys) consider the words of Atticus Finch which he tells Scout early on in the novel: you never really know a person until you walk around in his skin. With these lines in mind, we begin a project I call either the “Filter Project” or the “Alter Ego” project.

First we brainstorm individuals or groups of people that either have in the past or currently do suffer from discrimination or who tend to be stereotyped. The list can end up rather long, but I end up narrowing the groups to 6, based on prior knowledge of which groups work best for the activity. Typically these groups are women, poor people, African Americans, gays, non-Christians, and Hispanics. I then write the names of these groups on cards and invite the boys out in the hall one at a time to choose a card from the deck. They choose their card without being able to see what they are choosing. They are instructed to keep their choice a secret, lest their friends and family may act towards them in an artificially good or unpleasant way.

For the next four weeks the boys will filter all their daily experiences through not only their own eyes, ears, and sensibilities, but now through the eyes and ears of an alter ego which they likely know very little about. Each week the boys report on their experience with their alter ego by writing a journal entry. They may choose to keep their character at an arm’s length by writing the entries in third person, or they may go out on a limb and assume a first person point of view, taking on the character himself/herself.

Depending on what card a boy has chosen, the first entries are often a bit tentative and unsure. But as the weeks pass, many boys find that they are indeed getting to know this alter ego by “walking around in his or her skin” for a while. Even a gay character, which normally would be a considerable threat for an 8th grade boy, tends to receive a more charitable reaction once a boy has discovered how it might feel to actually be gay in a society which often is harsh towards that group. The “woman” card tends to be equally rich in possibilities, especially for boys in an all-boys’ school. After four weeks and several journal entries, we finish the novel and have a coming out party where guys admit to who their alter ego was.

(US, male, English, 31 yrs. teaching, 30 in boys’ schools)
Open Inquiry

A prominent and recurring feature of many of the lessons reported as especially effective were those in which problems were posed to which the outcome was indeterminate. The goal was not for the boys to discover or compute a “right answer,” but to formulate a solution according to their own researches and best lights. Science teachers referred to this approach approvingly as “doing science” as opposed to studying science. Reporting teachers noted the energizing autonomy and the self-confidence revealed in the course of open investigations carried out in a wide range of scholastic disciplines.

OPEN INQUIRY: EXPERIENCE AND THEORY

Well established theories and laws, principally in the sciences and social sciences, tend to be accepted by students as authoritatively and remotely “given.” A number of teachers remarked on the empowering sense of understanding boys exhibited as they explored the relationship between actual experiences and the theory postulated to describe it.

This New Zealand Mathematics teacher set his students to work to test some probability assumptions by designing a series of in-this-world trials to be tabulated and assessed:

I have chosen to report on my 5th Form NCEA Mathematics class which has a wide range of mathematical ability, despite being a mid-streamed class.

This year, I began the section of work on probability by using some simple practical activities. I had printed out a results sheet and used the data projector to explain how the students should fill it in, using tallies.

There were 4 different experiments that I expected the students to get through.

1. Toss two unbiased coins and record the number of heads obtained. Repeat this at least 10 times in the time allotted.
2. Roll a dice 20 times and record the outcome of each throw.
3. Select 3 cards randomly from a standard pack of 52, and record the number of red cards obtained. Return the 3 cards to the pack, shuffle it and choose another 3 cards. Repeat 10 times.
4. Drop a paper clip from a height of approximately 20 cm onto a sheet of paper with large squares already drawn on it. Note if the paper clip lands completely inside one of the squares or if it touches the side of a square.

Enter the data gathered onto the common spreadsheet that was being projected onto the screen at the front of the class.

This was such a different lesson from the ones they have come to expect from a maths lesson, where much of the work comes directly out of a textbook. Students commented on this fact immediately. There was plenty of movement and a fair bit of noise as they went from one task to another, but the students remained focussed. They were clearly having fun “playing with the tools” and were eager to get the tasks completed so they could enter their results for whole class to see.
I felt that the main benefits from this introductory lesson were truly felt later on in the module. For example, students were able to discuss and see the difference between theoretical and experimental probability using their own experience as “proof.” The teaching of the vocabulary associated with probability was made easier. Words like trial, outcome, event, frequency, and simulation were not simply definitions out of a book, but had specific meaning based on the activities. When we came to the section on probability simulations, students had a much better understanding of which experiments and tools they could use. They also had a better grasp of the concept of independence and conditional probability: you can always tell the moment when a student suddenly “gets it.” Perhaps the biggest compliment paid was by students who had been struggling with other areas of maths asked if they could do more experiments in class because this one had helped them to learn.

(New Zealand, male, Mathematics, 3 yrs. teaching in boys’ schools)

In a similar manner, this American Mathematics teacher challenged boys to investigate the mathematical law of sines by puzzling over the area of given cardboard triangle:

One exercise that I found was particularly effective in teaching the law of sines to Advanced Algebra II students and Precalculus students involved the use of simply made manipulatives. When I first started using this technique, I simply cut out a cardboard triangle on which I marked the degree all of the sides and angles. I passed it around the room and asked the boys if they thought they could calculate the area. It was not a right triangle and they were not allowed to use any measuring device. They only had the lengths of the sides which were marked and the measures of the angles which were marked. Eventually, one of them would invariably suggest dropping a perpendicular to one side and using the fact that the area is one-half the base times the height, they could calculate the area. Usually, I had them work in groups and different groups came up with the same area using different bases and heights. Since all of the sides were labeled with letters as well as lengths, I asked each group to write the “formula” that they used to find the area using the variables for the sides and the angles. Usually, different groups came up with formulas using different sides and lengths. I then asked them whether these should all be equal and they quickly agreed. Then we were able to set the various expressions equal and manipulate the equations to eventually derive the Sine Law. One modification that I found worked when I had the time was to actually make paper copies of a single triangle and hand it out to specific groups to work separately. This had the advantage of separating the groups more so that they worked more independently.

(US, male, Mathematics, 41 yrs. teaching, 3 in boys’ schools)

An American Economics teacher assigned senior boys to test one of the foundational laws of economics, the law of demand, with consumer responses to a product they had conceived themselves:

In the second unit of a typical AP Microeconomics syllabus, one introduces the theoretical foundation of market demand—the amount of a certain product that consumers are willing to buy under various price assumptions. A common approach, as taught in both secondary and higher education, is a presentation of the theoretical determinants of the relationship between price and quantity demanded, as well as the graphical representation of this relationship on a two-dimensional graph. A typical Economics course does not delve into the world of real data.
My approach to this lesson is a week-long project in which each student conceptualizes a fictional product or service that would be of interest to members of the school community, and then estimates, through real data-gathering and analysis, the real market demand curve for that product. In the past, boys have imagined products and services ranging from “dorm-room cleaning”, to “personalized bumper-stickers”, to “summer lacrosse camp”, and every conceivable product in between.

The project starts with the creation of a valid sampling technique and survey questions, which are tested out on the class first. A typical survey question would be: “would you rent a dormitory refrigerator for $20.00? How about $30.00?” etc. The data gathered through the survey is input and analyzed in Microsoft Excel, and eventually presented to the class as a market demand curve, along with a written summary of the student’s process, conclusions and vulnerabilities of the analysis. Students are allowed to work alone or in pairs.

Throughout the unit on market demand, students are encouraged, in class and in writing, to apply new theoretical concepts back to the actual market for their fictional product or service. When I introduce the concept of “substitute” goods and the resulting shift in market demand, I would ask a student who modeled a market for a snack bar to discuss the impact on his market of a change in the menu at the school’s dining hall. When I introduce “complements” I would ask the student delivering groceries on campus to describe what would happen to the demand for his service if the school outlawed fridges in dorm rooms.

(US, male, Economics, 5 yrs. teaching in boys’ schools)

**OPEN INQUIRY: DESTINATIONS WITHOUT MAPS**

Across scholastic disciplines teachers noted the energizing effects of setting boys to tasks for which successful resolution was perhaps possible but by no means certain—or easy. Such was the experience of this American Geometry teacher:

Over the past several years, I have been giving my honors geometry (10th grade) students series of challenge problems throughout the year. These problems are designed to be more difficult and thought provoking than typical assigned problems. The students are allowed to work in small groups and have a variety of resources available to them, including compasses, computer program (The Geometer’s Sketchpad). I try to assign problems whose solution is not obvious. It is good for them to struggle and have to try different approaches for a single problem. I have found that by varying the groups, kids have to play different roles in the process. It is thrilling to see kids working on math and arguing about various approaches. It is good to see them thinking their way through various approaches and why (or why not) it ought to work. They also have to wrestle with what their results mean and when it means they have found a dead end.

(US, male, Mathematics, 14 yrs. teaching in boys’ schools)

This South African Science teacher reported gratifying results from challenging his students not merely to carry out an experiment illustrating a principle, but to design such an experiment themselves:

As a scientist and teacher I have always attempted to duplicate those lessons and strategies that I find produce the moments you are talking about. As such, I try to ensure that these
moments are replicated using these methods and, as such, I feel it will be useful to describe one of these methods. Teaching science is exciting in that experimental work is part and parcel of most lessons. Boys are given an experiment to perform and then learn from what they observe. These lessons in themselves bring out the “hands-on” approach which boys identify with. This approach though, can be taken a step further. Instead of providing experimental procedures and a listed method, I have found that actually getting them to design the experiment takes the learning process (and excitement level!) to a new level. One such example is the examination of the relationship between extension and load (Hooke’s Law.) They are also asked to compare two springs. They are then left to design the experiment (guidance is provided, but no answers given) and they are left to come up with a comparative graph of extension vs load for each spring. This particular experiment is for the Grade 8 level and forms part of the component on Force. No introduction or explanation of the Law must be given, a brief demonstration of apparatus is all that is required.

(South Africa, male, Science, 15 yrs. teaching, 9 in boys’ schools)

An Australian Geography teacher engaged her Year 8 boys in an intentionally contentious consideration of a policy the validity and legitimacy of which was still an open question:

Year 8 Geography class—to discuss the issues surrounding Introduced Species in Australia.

The lesson will consist of a contentious proposal being written on the board, “All cats should be banned from Australia”. The aim of the lesson is for students to work in small groups, in which they take on the role of a particular stakeholder concerned with this issue, produce an argument that supports and justifies their group’s view, and present this back to the class in the form of a “town meeting”. The students will then be encouraged to question and argue the merits of the proposal, making sure they are courteous to the other groups in the room. They are encouraged to use their knowledge about Introduced Species, their impact and management strategies in their argument.

(Australia, female, Geography, 4 yrs. teaching in boys’ schools)

This South African Mathematics teacher reversed standard practice in teaching the factoring of mathematical expressions by presenting the “answers” to which 9th grade boys are challenged to discover a process that would result in such an expression:

Teaching grade 9 factorisation of quadratic trinomials. I like to use a method of self-discovery so that the boys learn how to factorise these expressions without actually realising that they are learning “factorising” per se. At this stage they are proficient in multiplying out so I ask them to “reverse” the procedure—i.e., if I give them the “answer”, what was the question. Once they are able to produce the factorised version of the expression in several cases I tell them that they have “factorised” the expression, and what this means.

(South Africa, male, Mathematics, 23 yrs. teaching in boys’ schools)

An American Mathematics teacher reported that his most effective lesson was to challenge boys to consider a variety of complex real-world variables in order to predict a consequential outcome:

In my classroom I have found that the most effective teaching method that I have used is a hands-on real life approach. Every year I have tried to find real life examples that can be used
to illustrate the material that we are covering in class. Using the cost of postage a particular group lesson I have used combines individual thinking with group organization. The task I set before my students was to create a model of the price increases that our country faces when having to buy postage. I supplied the students with data which contained the prices of postage stamps over the years. Their job was to work together and find a way to predict the prices in the future. This was done using the graphing calculator to find a model that best fits the data. The use of technology and a hands-on problem solving approach really pushed my students to think outside the box and use the tools given to them. The excitement of problem solving was apparent with every student and at the end of the lesson the realism that it was possible to predict price increases with a high level of accuracy. I have found that boys enjoy solving problems and more importantly solving problems that affect their lives in some way. The combination of technology use with real life data, in my opinion makes this teaching method a very good one for teaching boys.

(US, male, Mathematics, 5 yrs. teaching in boys’ schools)

OPEN INQUIRY: ENCOURAGING PERSONAL PERSPECTIVE

A promising means of helping boys bridge the gap between their personal concerns and seemingly remote scholastic subject matter is to devise lessons that draw on the former to illuminate the latter. This American Classics teacher successfully engaged her Latin scholars in the epic adventure of Jason and his Argonauts by asking them to rewrite it along what each boy considered more satisfying lines:

We begin the year in Latin III, a class filled with sophomores, translating the legend of Jason and his compatriots, the Argonauts. The story enables us to review Latin grammar in context, increase vocabulary, gain facility in translating, and follow the terrific exploits of an ancient hero. The boys thoroughly enjoy the more “unbelievable” of Jason’s adventures and discuss or shall I say argue about aspects of the adventure that they like and/or dislike. After almost two months of translating and approximately 400 lines of Latin translated, the finale of the story includes Jason’s wife, Medea, murdering their two sons and then escaping in a chariot provided by the god of the sun. At this point the boys are expecting major fireworks from Jason and a gruesome end to either Jason or Medea or both. Oddly enough the story concludes with Jason being crushed to death by his own boat.

The lesson requires the boys to rewrite the conclusion to the adventures of Jason. The following instructions are given to them:

For several of you, the ending to the story of Jason and his compatriots, the Argonauts, was not very satisfying. A ‘beached boat falling upon the sleeping Jason’ somehow lacked the grandeur or at least imaginative quality of Jason’s previous exploits and adventures. The task now falls to you, then, to rewrite, in the style of our translations of the Latin, the ‘boring’ demise of Jason. Using all your knowledge about Jason and the full capacity of your creative genius, write a fitting end to Jason and the story.

Panic immediately ensues as the students, erroneously, assume that they are writing this conclusion in Latin, deo nolente! Once they realize that they are writing in English and not Latin they relax and instantly have a million ideas on what Jason’s fate should be and how to
tell it. Should it sound like their literal English translations of the previous Latin passages and therefore, actually, quite awkward? or could it read with the flow and grandeur of a great classical epic? Some try to be as outlandish as possible, others gruesome, and others still, as true to the basic story as possible. Before they actually begin their own version, we review the stylistic elements of the Latin stories. Armed with ideas and a framework they have two nights to write their story. In class each boy then reads his story with as much dramatic flourish as he can muster. We conclude with a class vote on which were the best and worst stories; each year the class determines what is meant by “best” and “worst”. (As might be expected of boys, the title “worst” is almost more proudly carried!) There is much pandering for votes and the winners are awarded prizes—usually replica ancient coins or miniature Roman soldiers, which are much coveted and add to the competitive atmosphere.

(US, female, Latin, 24 yrs. teaching in boys’ schools)

The notion of imposing student generated material onto or into established texts also appealed to this Canadian English teacher as she presented John Steinbeck's *Of Mice and Men* to her 7th grade boys:

This is an assignment spanning 5 or 6 class days in a Grade 7 English class consisting of 20 students, between 12 and 13 years of age. This task was assigned after the students had read and analyzed the novella extensively. We focused on Steinbeck’s character development and his brilliant use of dialogue. Most of the boys seemed to genuinely enjoy reading and discussing this poignant work of literature.

Their task was to write a script and perform a scene that could have, or maybe even should have, appeared in the novella. They worked in pairs. I allowed them to choose their partners. The scene had to be 2:30–3:30 minutes in length. They could set their scene before, during, or after the story. Both group members had to be involved in the writing of the script. As they were assessed on the quality of their performance, their lines had to be memorized. Simple, effective, and appropriate costumes and props were also required. Their scene had to be plausible, meaning they had to create an episode that would have made *Of Mice and Men* a stronger, more complete story. They were asked not to parody the characters or events in the story in any way. Some of the scenes that were performed included: Slim and George at a bar after Lennie's death, Curley meeting his wife for the first time at a dance, and Lennie and George right after Aunt Clara's death.

(Canadian, female, English, 8 yrs. teaching, 6 in boys’ schools)

An American English teacher deepened his students' appreciation of the way editorial choices shape seemingly “fixed” and inviolable texts by having his 12th grade boys recast a selected scene from *Hamlet* according to their “best guesses” of what, given varying earlier editions of the text, was the playwright's real intent:

In a two-day lesson offered in the middle of our six-week study of *Hamlet*, I introduce my students to the work of the editors and scholars who put together editions of old works. I have my Sixth Form students create their own version of a scene from *Hamlet*, using only the original sources available to editors and critics. Students weed through digital images of the *First Quarto* of 1603 (notorious among Shakespeare critics as “the Bad Quarto”), the *Second Quarto* of 1604–5, and the *First Folio* of 1623. At first glance, students note that the *First*
Quarto is the shortest of the three; it also uses markedly different language from the other two editions. The Second Quarto and the First Folio are generally quite similar, but subtle distinctions abound, such as wild differences in punctuation and capitalization. Students quickly realize that there is no ‘correct edition’ of the play—we have no idea what “The Director’s Cut” of Hamlet might be; we have only what critics have pieced together using sound scholarship or even sensible hunches about what the Bard intended. Using their own best guesses about what a modern reader would find helpful and mindful of the balance between “authentic” and “readable,” my students then type up their own “edition” of the scene complete with footnotes and explanatory material.

After comparing their various editions and hearing their specific questions and comments about punctuation, spelling, and word choice, we walk across the street to the university library to view one of the 238 surviving copies of the First Folio. Our wise guide there answers student questions about the publication of old texts, comparing the First Folio the boys now know fairly well to a medieval Bible manuscript, a page from a Gutenberg Bible, and even some quarto editions of other Shakespeare plays.

My modest hope is for my students to understand the differences between various editions of Shakespeare plays. My grander aim is to encourage them to question and challenge the validity of any text and to seek, whenever possible, the original source. (US, male, English, 24 yrs. teaching in boys’ schools)

An American teacher of instrumental jazz describes how he successfully helped boys create an instrumental “voice” that would allow them to improvise—and thus personalize their contribution to a score:

This lesson took place over an entire grading period in the fall semester. The students were enrolled in the intermediate band and were mostly eighth graders that had been playing their instruments for one year. They had gone through a beginning band experience and decided to continue in their study. They have generally had a positive experience in making music and are motivated to improve their performance.

In the beginning of jazz studies, most middle school students are reluctant to attempt improvisations. Jazz music is a language and until they become more fluent in the vocabulary, they feel uncomfortable performing. This lesson is designed to equip the performer with the necessary jazz vocabulary skills to construct short improvisations.

The students began by taking one of the major scales they learned in beginning band and determining how the scale was constructed using whole steps (going from one note to the next) and half steps (going to a sharp or flat). They then compared structures. No matter which major scale they chose to analyze, the results were the same: whole - whole - half - whole - whole - whole - half. The students used that pattern to construct each of the twelve possible major scales.

We then experimented with the scales by playing them over a recorded rhythm section playing an accompanying part. The students evaluated which notes sounded okay and which notes did not. We began altering each scale (introducing various jazz modes: such as Dorian,
Mixolydian, and the minor scale) to make it sound better. The students then took turns selecting three notes from the scale and playing a rhythm with the accompanying recording. I would then ask them to change their pattern slightly—adding a fourth note, not beginning on the first beat, etc. Soon the boys were creating little melodies on their own that fit in with the changes.

This increased their confidence significantly. They began listening for ways to use the modes in the songs we performed in rehearsal. They are also asked to begin figuring out how to play familiar melodies which we then work into the improvisations.

(US, male, Music, 10 yrs. teaching, 4 in boys’ schools)

Team Work/Competition

Both in their reported practices and in the teachers’ assessment of the effectiveness of particular lessons for boys, two of the most frequently stated claims were “boys like competition” and “boys like to work together.” As can be seen in the previous selections, especially under the categories Gaming and Motor Activity, competition and teamwork are coextensive in many of the reportedly effective lessons. Examined closely, the “competitive” element in most of the exercises cited is very mild: the victory or prize usually no more than the collective pleasure of the pair or team in having finished first or having been voted best. It would be a delicate and perhaps unfruitful task to attempt to separate or compare the relative degrees of teamwork and competition in a particular lesson. That some exercises felt to be effective involved paired or team activity with no competitive prod indicates that team work and competition are indeed separable and that a mutually understood purpose can stand in for competitive advantage.

In schools’ interscholastic athletic programs and more recently in scholastic instruction generally, serious criticism has been leveled at practices of any kind that pit students or groups against one another for differentiated rewards. In this view competitive pursuits by their very nature produce a dispiriting and desensitizing effect on most children involved and should thus be replaced by cooperative activities (Kohn, 1986; 1993). Another view, again originating in athletics but with clear application to school work, maintains that competitive structures rightly conceived can be a boost to the most effective kinds of mutuality and regard for others (Marx, 2004). A fair generalization might be that a wide range of teachers found that forming teams to complete a task that would in some way be judged competitively was found to be transitive to learning and mastery.

TEAM WORK: ENERGIZING COLLABORATION

In some of the “best lessons” reported by teachers the very process of collaboration seemed to drive the intended learning outcomes forward, as in this American account of an 8th grade English class deriving characters from a common text and then combining those characters into a new story:

In my 8th grade English Language Arts class, I have had success over the last several years with a cooperative writing project that arises from the reading of Pirandello’s story War, which thrusts a group of strangers together in a railway carriage during the First World War. The characters are nameless. They have in common that most are parents of boys who have gone off to fight for King and Country. The theme of the futility of war gradually emerges as the strangers converse and become briefly involved in each other’s lives.
As a follow-up activity, I have the boys individually create a character, using a list of types of information they need to know about the nameless person they have drawn. Then once each has shown me his character sheet, groups of four or five boys are selected by a random process to work together. They then draw a sheet describing a setting and a basic situation in which their randomly assembled group of characters find themselves. Taking turns on a laptop computer, the boys then create a short story in which their characters' dialogue and action bring the problem to a climax and resolution. The boys get very much involved in their stories, effectively sharing the tasks of creation and revision. The results are usually some of the best writing produced all year. On several occasions stories created in this manner have been published in the middle school newspaper. Similar cooperative writing activities have been developed and used successfully with other literature units, including Greek drama and a Shakespearean play.

(US, male, English, 45 yrs. teaching in boys’ schools)

An American teacher of History found that allowing his senior boys to collaborate on strategic matters—how best to solve difficult multiple choice questions—produced unexpected and welcome benefits:

In a strong senior AP European History class which routinely featured pretty frequent tests consisting of 4 or 5 fiendish multiple choice questions in addition to standard essay questions, my students bemoaned their repeated lack of success on the multiple choice section. So I offered them an opportunity to have a test consisting of nothing but hard multiple choice questions, but they could work together in two teams which would each turn in a single test that reflected their collective best wisdom and the team with the best test would get a 5 point bonus. Students prepared for this test with eyes more wide open. They analyzed previous test questions and uncovered patterns which revealed the kinds of subject matter on which I most frequently focused, they came to recognize that some questions revealed my sort of hard left agenda while others tended to treat conventional wisdom with a fair amount of irony. In other words, their metacognitive switches were fully engaged. Ancillary benefits also accrued during the actual test when on several questions “smarter” and louder students’ faulty choices prevailed over “weaker” students’ more considered correct ones and student discussions about the answers probed pretty deeply into the matters at hand with a sense of purpose and clarity often lacking in our class discussions.

(US, male, History, 34 yrs. teaching, 25 in boys’ schools)

While the following exercise divided Philosophy students into groups advocating opposing sides of an ethical issue, the “competition” provided an occasion for exceptional collaboration:

The most effective practice I have used in class involved dividing class in half and assigning each side the opposite position of a controversial topic. The topics have included whether God was omniscient and omnipotent, why bad things happen to good people, the extent to which God actively participates in our lives and others. In my Ethics class the topics have included stem cell research, abortion, the death penalty and other controversial issues. Each side was asked to collaborate on writing a seven to ten page paper in favor of the position assigned. Each group was responsible for arguing its own position and everyone in the group was required to share in the presentation. The presentations were given without questioning
by the other side. After the presentations, I asked each side to give me a list of issues they wanted to argue with each other. I put the list of issues under each team’s name on the board and then began an open argument/debate between the sides. I assigned points for the effectiveness of the argument. At the end of the period there was generally a winning side, but the scores were very close. I found that the boys were so invested in being prepared to outdo the other side that the topics were extraordinarily well prepared and the formal written work on which they collaborated was better than any work done individually during the year. The argument portion of the assignment was structured and regulated by me to maintain order and fairness in presentation time. When I have used this method, my classes have been better prepared, more interested, and personally invested in the outcome.

(US, male, Philosophy and Religion, 2 yrs. teaching in boys’ schools)

A Canadian Mathematics teacher reported similar gains in allowing boys to collaborate in pairs when tackling especially difficult problems:

I have found that by giving students assignments that consist of more challenging problems than those which they would normally find on a test or quiz, and allowing them to work in pairs, they have become effective problem solvers.

I give approximately eight assignments per year, four are counted for marks and four are not. These assignments must be completed in class so that students cannot cheat by asking someone else (i.e., parent, tutor, older sibling, etc.) to help them with it. The assignment usually consists of four questions that must be completed by the pair during one seventy-five minute class period. The strategy I suggest is that each student completes the assignment individually and then compares his solutions to those of his partner. At the end of the period, each pair is to hand in only one copy of the completed solutions to each problem.

The assignments differ from tests in that they consist of problems that are more challenging than those that the students would have previously completed in class. Furthermore, the students are allowed to use their class notes, textbook, internet, and of course, discuss their solutions with their partner. They may NOT, however, discuss their solutions with any other group.

Sometimes I create the groups and sometimes I allow the students to choose their partners. I have found that some classes prefer that I create the groups and others prefer to do it themselves. The biggest problem that I have found when they choose their partners themselves is that will fight over who will be paired up with the “smartest” student or there is one student with whom no one wishes to be partnered. I have found that heterogeneous ability groupings work best for material that is new to all students and homogeneous ability groupings work best for extension material (based on something previously taught but goes further). When the assignment counts for marks, I will not allow a students whose marks differ by more than 5% to be partners.

I have used this method of teaching problem-solving in co-ed schools, single-sex schools, with accelerated math groups, and remedial math groups. In all cases, the students, like this method of learning and evaluation.

(Canada, female, Mathematics, 11 yrs. teaching, 1 in boys’ schools)
TEAMWORK WITH A COMPETITIVE EDGE

Across disciplines and across the lesson categories examined in this study, teachers reported the positive effects of forming teams of students who “compete” with other teams to produce the first or fastest solutions to the problems posed. This American English teacher reported success putting such collaboration/competition in service of building vocabulary and spelling skills:

For learning of vocabulary, I use a kinesthetic method of review which engages the boys. Boys are divided into teams of 3–4. Each team is given a bag of small blocks (I use beads) with letters of the alphabet. Each team is given a few minutes to arrange their letters. One boy sits in the hot seat which contains all the arranged letters. I read a definition of a word we have been studying, and the boy in the hot seat must try to spell out the word which I have defined. The first boy to correctly spell the word earns a point for his team. The player in the hot seat rotates every turn. No one on the team may help the boy who is in play each turn. We play this game with anywhere from 10–50 words at a time.

(US, female, English/Study Skills, 12 yrs. teaching, 9 in boys’ schools)

This teacher of beginning Spanish students reported similar results in her employment of student “teams”:

Reading comprehension can be a daunting task for 7th grade boys whose Spanish experience is minimal and who are concurrently developing their reading skills in English. Therefore, I like to engage the boys in various activities from individual tasks to small group exchanges in order to minimize the anxiety and maximize the comprehension. A favorite activity for the boys is the team quiz station swap, which takes place after a series of preparatory, team sessions over about three days.

The first step of the activity preparation is a creating a group plot questionnaire and vocabulary list building based on a chapter of our reader, Mayan Safari. The boys are put into teams of 3–4 by picking names out of a “hat.” The previous night the boys make their own list of 8 vocabulary words with definitions and write 6 sentences explaining important facts/information from the assigned chapter (chapters are usually 1–2 paragraphs). On the first activity day, the boys meet for 15 minutes and consolidate their lists into a group list of 10 vocabulary words/definitions and 7 information sentences. The second part of the class is devoted to the group reading a subsequent chapter, making a group list of 10 vocabulary words/definitions, and writing a group set of summary sentences about the chapter. Each team comes up with a team name, is provided a folder, and puts its work into the folder at the close of class.

The next day is spent in teams once again. The boys are provided 3 color-coded sheets of paper. One is a pre-formatted quiz sheet, one is a pre-formatted answer key sheet, and the last is a pre-formatted quiz answer sheet. At the start of class, the boys review their group lists and set to the task of writing a quiz that the other teams will take. They have 15 minutes to make a quiz covering the 2 chapters they were working on with their team; the quiz should consist of 5 plot-related questions as well as 2 extra credit questions. One of the extra credit questions must be about their Mayan Safari reading up to this point, and the other question may be about anything as long as it is in Spanish. The boys particularly enjoy making these
challenge questions. They also must make an answer key within the 15-minute time frame. They may use the text as well as their group's vocabulary and chapter question lists to assist in the task. When they complete the 15 minute quiz-making session, the boys put the answer key sheet in their folder, put the quiz on top of their folder, grab their group quiz answer sheet and get ready to rotate from station to station to take their peers’ quizzes.

The remaining time in class is divided into 7–8 minute segments in which each team rotates through the other teams' stations taking the reading-related quizzes. There is much competition, teamwork, energy and competition in the air during these segments! The boys must work well together to maximize their team's outcomes per station. Not only must they recall the information from their group reading discussions, but they must also work together to come up with an accurate and coherent Spanish answer. They must strategize to answer as many questions successfully, gain as many points possible and make sure that they check their answers against the provided answer key and tally their score prior to the buzzer to move to the next station.

(US, female, Spanish, 13 yrs. teaching, 3 in boys’ schools)

This American English teacher engages competing student teams in “recomposing” literary texts from their scrambled component parts, such that the puzzle-solving energy becomes transitive to an understanding of the structure of literary master works:

Both on the playing fields and in the classroom, most boys enjoy and learn valuable lessons from competition. One of my more effective teaching practices in upper school English classes fosters healthy competition and sharpens readings skills.

After grouping the boys in pairs, I give each team of two an envelope containing the same text, a poem or chapter from a novel they are studying, which I have photocopied and cut into lines or paragraphs. The first team that correctly assembles the textual puzzle earns the satisfaction of a job well done and, perhaps of more incentive, bragging rights and bonus points on the next quiz.

This activity is valuable for boys, not least of all because it requires them to read closely: they must employ their critical reading skills in order to find the text's beginning, middle, and end, and determine from context where lines or paragraphs make logical transitions. This activity also requires boys to negotiate with their classmates and to teach themselves, a welcome break from the routine that often results in their remembering better what they have learned.

My Third Formers reassemble Shakespeare’s Sonnet XIX, which, in addition to being a surreptitious way for me to remind students of the sonnet's structure and rhyme scheme, generates rich discussions and leads the boys to make thematic connections to other works in the course. In reassembling a chapter from Douglass’ Narrative of the Life or Fitzgerald's The Great Gatsby, my Fifth Formers not only sharpen their critical reading skills and test their recall of what was the previous night's reading assignment, but they also gain more appreciation for the thoughtful composition and graceful prose of an important work of American literature.

(US, male, English, 10 yrs. teaching in boys’ schools)
TEAM WORK/COMPETITION: PARTS COHERING INTO WHOLES

Several participating teachers reported productive student engagement in exercises in which each student was assigned a task which, when mastered and “taught” to classmates, resulted in the collective understanding of the topic or process under study:

Most often this practice has been described as the “jigsaw puzzle” method. A question, situation, or problem is presented to the class as a whole. Each student is assigned a particular part of the whole. It is their responsibility to become the “expert” for their part, meaning they are to only focus on their particular task in regards to the larger problem. After a predetermined amount of time, that individual student meets with other students working on a different part of the bigger problem. It is each student’s responsibility to report or “teach” what they have found to the other members of the group, knowing they might have no prior knowledge of your findings. After each student has taught his individual piece, the group as a whole addresses the larger problem/questions to come to a group decision.

(US, male, Science, 8 yrs. teaching, 2 in boys’ schools)

An American Chemistry teacher engaged boys over the course of a whole school year by dividing the class into teams organized on a “business model,” the success of which depended on team members’ combined productivity:

For the last two years, the Science Department has attempted to utilize cooperative learning exercises during sophomore year Chemistry classes. In order to achieve this goal, a year-long, student-run project has been established, wherein the students form teams and work together on a wide variety of assignments, including homework, quizzes, labs, and projects.

These teams reflect the format of the business world. Each team member occupies a different position (Director, Planner, Public Relations Officer, and Chemist), with different responsibilities specific to each assignment.

For example, in a lab, each member of the team is responsible for a specific portion of the lab and lab report. He must prepare for his role by completing a pre-lab, perform a lab activity in class that ties in with his teammates’, and write up a portion of the report. For oral presentations, the team brainstorms a topic with a prescribed assignment, and each member researches a different aspect of the topic and presents it.

The students are assigned both individual and team grades for their efforts, but they are also able to earn “stock points” in a personal portfolio for every grade. Better grades earn more stock points. (For example, tests earn up to 1000 points, and homework assignments up to 100.) The points are additive, and there are incentives built into the program for maintaining strong, consistent results.

The value of those stock points is determined by the boys’ average team performance. The sale of these stock points can be used to purchase many things that make their average school day more enjoyable, like food or hobby items, or they can use their stock points to improve their grades, along the lines of extra credit.

In addition, the stock program allows the students to relate chemistry content to real world problems in a real world format like business or politics. For example, while learning thermo-
chemistry, each team will pose as a company and research a future source of energy. They will then present their findings to a panel of teachers who will invest in their company accordingly.

The program is very popular among the students because of the excitement and competition it generates, as well as the focus on practical rewards. These are all sentiments that are useful when engaging boys. The team assignments can be homework, quizzes, labs, or projects, but in general, they all involve teamwork, visual stimulus, and procedures that are worked out by hand.

(US, male, Chemistry, 2 yrs. teaching in boys’ schools)

Another American Chemistry teacher improvised a “business model” approach in which she challenged competing student teams to form a company capable of producing a highly distinctive product—in this case an Academy Award statue for runners-up:

The silver opportunity exercise is a group work activity where students pull together all the information that they have learned throughout the semester and apply it in a real world setting. Students are divided into groups of two or three depending on the number of students in each class and are given two class periods and evenings to complete the assignment. The scenario is that they form a company to produce a silver Oscar for the Academy Awards to be presented to the second place finisher.

As we begin our math unit in September students study density and units of density, and then progress to percent problems and factor label problem solving. We spend several weeks learning to write and balance chemical equations for the five simple types of reactions. In this exercise, they are required to determine a metal that will displace silver from a solution of silver nitrate. (They have studied the activity series of metals and know that a metal can replace any metal located below it in the series.) They are given pages from a chemical catalog, which includes prices for various types of metals and the different forms, which may be purchased like granular, wire, strips or sheets of the metal. They have done a lab using aluminum strips to displace copper from a solution of copper II chloride and have seen me do a demonstration using copper wire to displace silver from silver nitrate. Students discuss which metals are possible choices for their single displacement reaction and then narrow the field but looking at characteristics. Hopefully, they read the hazards given for each metal in the catalog, for example—reacts violently with water or know from class discussions which elements are poisonous. After selecting several metals that might work, they write balance equations for the metals to see which metal will produce the most moles of silver. Using the information from the catalog, they do a cost analysis to further determine which metal to use and the cost of the raw materials. In the last steps, they determine the percent mark up for the Oscars with an explanation of why they chose that percentage and finally conclude with the cost their company will charge for the Oscar.

By the time they complete the activity, they have used almost every concept we have learned all semester. It is graded as one half of a test grade and bonus points are awarded for first, second and third place finish with the best answers. Help hints are available for a price of five points each in case they reach the point of total frustration.

(US, female, Chemistry, 29 yrs. teaching, 25 in boys’ schools)
There are of course endless variations on the “business model” approach to solving scholastic problems, as in this South African teacher’s challenge to his students to devise a marketable procedure for separating salt from rock salt:

In teaching Separations of Mixtures to grade 8 boys, I have found a lesson that works well involves self discovery and competition. The boys are given an introduction where they are told that their group is a company that has to develop a method of separating salt from rock salt. This is put into perspective in terms of industry and producing salt. Each member of the group has to take on a certain role (CEO, marketing, finance, etc.). The boys are asked to plan how to separate the mixture. They then get to use any apparatus to put their method into practice. At this stage they often have the wrong method but discover for themselves why it doesn’t work and make their own improvements. A few boys who really struggle need some guidance with thinking through their ideas. Once the group has completed the experiment they then write up what they have done. The write up is submitted as a tender to the company (teacher) who is looking to implement a method on a large scale in industry. Each group then presents their report. The presentation includes the Science, the costs, the marketing and why their company should win the tender. After the presentations, the teacher with input from the class gets to choose the successful group. They are awarded with a bar of chocolate.

(South Africa, female, Science, 13 yrs. teaching, 8 in boys’ schools)

**Personal Realization**

While the effectiveness of most of the categories of instruction reported by teachers can be attributed to what the researchers call the transitive capacity of the instructional method to the subject under study, the impact of some of the reported lessons lay in their striking an especially responsive chord in the boys’ personal lives. In some cases such lessons brought to clear consciousness matters of deep personal importance, clarifying and energizing boys’ awareness of realities and values beyond what might be expected or required in school.

**PERSONAL REALIZATION: THE CONSIDERATION OF OTHERS**

One concern voiced by those concerned about the limiting effects of single-sex education is that essential knowledge of the other gender will be diminished if not forfeited altogether. Counter claims can be made that consideration of the “other” gender in the absence of cross-gender distraction and stimulation is especially effective. This American teacher of History engaged her boys in a sustained consideration of historical feminism:

In an elective for 11th and 12th grade boys, Global Women’s History, students explored women’s movements around the world. For about three weeks, they read essays about the origins of twentieth century women’s movements and feminist movements in various countries around the world. The case studies included Egypt, Vietnam, South Africa, Brazil, Kenya, Korea, Japan and Iran. The essays were supported with the use of primary sources. The students examined the relationship between an interest in gender equality and the socio-political context in each country. In some countries, they noted that the issue of women’s rights is often co-opted into a nationalist movement when women’s support is needed to gain independence from a colonial power or establish a new nation. In other circumstances,
the students noted that women are often drawn into social activism for causes other than what might be labeled ‘feminism’ at first, but that once involved, those women often slowly find their way to more explicitly feminist causes.

In exploring how, when and in what circumstances people are drawn to feminism, the students struggled to define “feminism” and “feminist.” While I planned different class activities, the boys usually got involved in heated discussion quickly each day. They were stimulated by the issues raised in each case study. As they worked their way through their ideas about feminism, they gained confidence about the history they were studying. As their confidence in understanding the history grew, they were ready to take their knowledge to a more personal level by defining “feminism” and “feminist.”

They still struggled with definitions of “feminism” and “feminist.” I asked them to use the historical examples of women’s movements, the participants in women’s movements, and the way people in different countries had self-identified as feminists, to inform their own conclusions about what kinds of people can be feminists.

I decided that they needed an opportunity to demonstrate their independent definition of “feminist.” Ms. magazine had a page titled “This is what a feminist looks like.” The page included a collage of photographs of dozens of faces. The class discussed the message Ms. magazine was sharing with the collage of faces. I asked the boys to make their own photo collage answering the question “What does a feminist look like?” Each collage was to be accompanied by a written explanation for why each photograph had been chosen.

Each boy interpreted the challenge differently. They brought their collages and explanations to class and presented them to their classmates. The collages sparked interesting conversation as the boys questioned each other’s definitions and choices of illustrations. The boys enjoyed explaining their collages to each other.

This study provoked a lot of emotions for the students, and that emotional reaction stimulated their desire to pursue the study.

I think that the boys were intrigued by the variety of forms that women’s movements have taken around the world. They were outraged when they learned that nationalist movements in some countries had enlisted women’s support by promising gender equality but then not delivered on those promises once in power. They were surprised to learn that in many countries, most women were not necessarily interested in the notion of feminism. Rather, many women were drawn into social activism for other reasons. The boys were fascinated to discover that often women slowly found their way into feminism only after getting involved in other social causes. The boys had not previously thought about how involvement in one cause might lead a person to another cause. They also had not considered that many women do not prioritize gender issues in their lives. The boys were intrigued by their discovery that what concerns most women are not gender issues, but are issues that may disproportionately affect women. Women’s own slow discoveries of this phenomenon caught the boys’ attention. I think the boys were stunned by the idea that many women have no time or interest in being labeled feminist.
There was nothing flashy about this unit of study. We read scholarly essays. Boys discussed them in small groups or whole class discussions. The format was fairly traditional. It was the emotional reaction that made the lessons come alive for the boys.

In the final stages of the unit, the boys enjoyed stepping back from the details of the historical examples to make assertions about patterns. They enjoyed taking control of the material in that way.

The final assignment of the photo collage gave them a chance to own the notion of feminism. They were proud to feel mastery and insight about the subject. They also enjoyed the opportunity to create their own version of it.

(US, female, History, 19 yrs. teaching, 8 in boys’ schools)

An American English teacher reported gratifying responses from her 12th grade boys in consequence of asking them to recount in a sustained series of journal entries their experience of serving others:

Students choose two months of the four month semester to keep a journal. There are four weekly entries for each month: one month the journal is about a service activity which they choose using good decision-making procedure; the other month is a description of their life as a Sixth Former.

JOURNAL I: Write about a service activity*:

Entry 1. After researching and brainstorming possibilities, write about several service activities you are considering. What information have you gathered about them? Measure their value and what skills they require. What is appealing or not appealing about each?

Entry 2. Decide on a service to another or others. Write about your expectations and anticipations. What preconceptions do you have about performing this activity?

Entry 3. Describe the actual service. Use sensory details. What happened? What did it feel like to perform the activity?

Entry 4. Several days after the service, write a reflection. What surprised you? What did you learn? What could have been done differently?

* I do provide a list of service ideas along with contact people but strongly encourage students to explore their own interests, an opportunity for creative and independent work which many seize.

JOURNAL II: Write about being a Sixth Former who is completing his last year of high school:

Entry 1. Describe a day in your life. Show what it is like to live in your shoes, i.e., sensory details.

Entry 2. Write about something you are learning in class (any class) which interests you—no matter how small or large. Explain so that an outsider may understand what it is and what about it that intrigues you.

Entry 3. Describe a friend or a teacher or another member of the community who has affected the person you are today. Draw this person with words.

Entry 4. Describe your best moment at the school. Again, show through sensory detail.

Journals are graded on the apparent thought and commitment students give the choosing and performing of the service activity as well as on the clarity and cogency of their writing.
Students read sections from their journals at the end of the semester and reflect on what they have learned, discovered, and experienced.

(US, female, English, 33 yrs. teaching, 12 in boys’ schools)

Another American English teacher challenged boys to engage more deeply in a consideration—and appreciation—of personality types normally marginalized: odd-balls, outsiders, “nerds”:

Nothing gives me greater pleasure than playing advocate for two of contemporary literature’s oddballs, Leper in John Knowles’s *A Separate Peace*, and Simon in William Golding’s *Lord of the Flies*. To healthy-minded, optimistic, teenage boys, each of these characters, if not a candidate for the looney-bin, is certainly the kind of odd-man-out adolescents dismiss as a “nerd” or “geek.” For one thing they are both loners. Neither is varsity material. Leper spends his time collecting snails, drawing pictures of birds, and cross-country skiing in search of beaver dams when he should be working with his classmates shoveling snow to clear the tracks to help the war effort. Simon, another “nature freak,” an epileptic, has the odd habit of wandering off into the jungle which frightens everyone else, going to a little hideout where he sits and—of all things—thinks! Neither of these characters is the sort of boy other boys admire. They are tolerated, but consistently viewed with barely concealed irritation and suspicion. They are what Thomas Mann called “wallflowers,” creatures of the margin who “fall down” in the dance of life. What vigorous, sports-playing, outgoing, college-aspiring boys’ boy would want anything to do with them? I love playing defense lawyer for Simon and Leper, citing on their behalf evidence from the text that their creators, John Knowles and William Golding, are their secret admirers. Attracted by risk taking, by daredevil acrobats, and just as compelled by an allegiance to fairness, to rendering a just verdict, boys are curious, then, to observe the intellectual gymnastics they think must be required to justify my claim that, in the most important sense imaginable, Simon and Leper are the sharpest boys in their books.

(US, male, English, 38 yrs. teaching, 36 in boys’ schools)

PERSONAL REALIZATION: SELF-DISCOVERY

Many teachers’ “best lessons” engaged students in taking a considered measure of themselves, including looking at themselves in unfamiliar ways. An American Art teacher of 9th grade boys recounted:

The goal is to create a life size terra cotta self portrait bust as a monument to each boy’s unique individual personality at this time and place in their lives. Before the project is introduced the boys are asked to make an extreme facial expression and are photographed from multiple angles. This is fun and automatically reveals a great deal of personality.

The teaching begins with the history of classical documentary portraiture up to its role in contemporary art. Then, human structural anatomy is introduced as is “body language” as a universal form of human visual communication. Sculpting begins with about 60 lbs. of clay which is physically challenging and helps the boys maintain their engagement throughout the sculpting process.

This is a fairly straightforward and traditional project, and is therefore accessible to the full range of adolescent maturity levels. It is more often an advanced exercise at the undergraduate
art school level. The project can work with teen boys because they respond to the challenge of scale and the direct tangibility of realistic rendering. The quality of the resulting sculpture depends (like most 3-D Art projects) on the levels of concentration maintained throughout the process.

The finished portraits adorn our campus informing our community of the creative potential of each boy. Parents are incredibly proud of the sculptures and years later the busts trigger memories of the boy's special years at the school.

(US, male, 3D Art, 28 yrs. teaching, 15 in boys' schools)

An American teacher of Philosophy and Religion reported striking a resonant chord in her 9th grade students by asking them consider the role of honor in their lives:

With my freshmen Gospel of Mark course, I employ a technique of striving to make the text applicable to the boys today. One theme that boys resonate with greatly is honor. When examining the text of Mark, there are multiple examples of Jesus lifting up honorable behavior as the best course of action. Whether it is in his dialogue disputes with the Pharisees or a parable of how to live one's life. I find that when the boys can see that living right has its own rewards, the boys come alive. They so want to do the right deed, to be thought of as honorable. The more stories I can share that exemplify that, the higher the bar they set for themselves. At the conclusion of the course I ask the boys to write a modern day parable that illustrates a moral truth. Over half the class inevitably writes a parable that demonstrates doing the honorable course of action in the face of overwhelming temptations. This is a course that is historical in nature and yet by the course's end, modeling our lives in the example of Jesus is something the boys take away from the class.

(US, male, Philosophy and Religion, 18 yrs. teaching in boys' schools)

This Australian teacher of Career Skills engages boys in a potentially life-saving consideration of a dimension of male behavior they may not want to hear:

In Career Skills, a Year 10 compulsory subject, I teach a number of units. A high priority unit is safe@work, a mandatory state-required unit. I usually begin with a story related to safety in the workplace and then follow it up with a discussion of situations the boys know about from their own experience and their parents' stories. This I target to the superiority of males and young males in particular at the skill of killing themselves or seriously injuring themselves in the work place. A PowerPoint demonstrating some very unsafe practices follows and with each we discuss the issues as they may apply in the upcoming work.

(Australia, male, Career Skills, 32 yrs. teaching, 13 in boys' schools)

An American English teacher invited his 12th grade students to a deep consideration of what it is about composition—about style—that moves them—that, as he puts it, makes certain images and phrases “explode in the mind”:

Throughout my senior English elective College Rhetoric (a fall trimester) class, we stress the subtlety of written and spoken language. One of the principal texts we use is the classic by William Strunk, Jr. and E.B. White—*The Elements of Style*. 
Typically we cover a “rule per day” in an effort to make the messages manageable and specific. I assign a specific rule or portion of a page every night for homework (in addition to whatever writing or reading assignment we may have). For our work in *The Elements of Style*, I ask that the students read the assigned portion, being ever mindful of these three questions: “Do I understand?” “Do I agree?” “Can I articulate why I do (or don’t)?”

With a few exceptions, we move from the front of the text to the back. Accordingly, this lesson appears in the ninth week of the term—as we are beginning the last chapter of *The Elements of Style*.

This lesson is based solely on a portion of the opening paragraph to the last chapter of *The Elements of Style*.

Chapter V *An Approach to Style*, written by E.B. White, begins with a brilliant introduction about “style” in writing before the more-familiar-looking list of twenty-one rules (he calls them “reminders”) in that chapter. This four page introduction (pp. 66–69 in the 4th edition) should be required reading in any upper level English class. Not only do we read this four page chunk for homework, we read all of it out loud in class, too. Much of this chapter’s introduction articulates the difficulty we have in defining style and identifying exactly what it is. White writes:

> In this final chapter, we approach style in its broader meaning: style in the sense of what is distinguished and distinguishing. Here we leave solid ground. Who can confidently say what ignites a certain combination of words, causing them to explode in the mind? Who knows why certain notes in music are capable of stirring the listener deeply, though the same notes slightly rearranged are impotent? These are high mysteries, and this chapter is a mystery story, thinly disguised (Strunk & White 66).

From this passage, I linger in class long over the notion that some combinations of words “explode in the mind.” In the lesson, I ultimately ask and want my students to think about what sets of words they have encountered which produce this “explosive” effect for them.

Before I direct their attention to the “combination of words” though, I ask each student instead to think of his own favorite song (pop or classical) and identify why it is his favorite.

(US, male, English, 20 yrs. teaching in boys’ schools)

**PERSONAL REALIZATION: MASCULINITY**

In a variety of ways, and not just in the lessons categorized here as Personal Realization, teachers indicated that “best lessons” often engaged boys in considering the nature of their masculinity.

This American English teacher asked his students to determine the nature of “manliness” through a consideration of the values and behavior of Atticus Finch, the hero of Harper Lee’s novel, *To Kill a Mockingbird*:

A couple of my favorite classes this year occurred when I used a topic in a novel as a jumping off point for a discussion of a vital life lesson. An example of that, and one that is particularly cogent to this study, was a discussion I led on “masculinity”. In chapter 10 of *To Kill A Mockingbird*, the Finch children learn a lot about what it means to be a real man. The chapter begins with Scout explaining that, “Atticus was feeble; he was nearly fifty… Our father didn’t
do anything. He worked in an office, not in a drugstore. Atticus did not drive a dump-truck for the county, he was not the sheriff, he did not farm, work in a garage, or do anything that could possibly arouse the admiration of anyone."

The kids believe that their father is the least manly father in the whole town, and it is a source of shame. He doesn’t do any of the things a masculine father should do like hunt, fish, farm, gamble, smoke, play in the church football game, etc. Later in the chapter, however, Atticus is forced into a situation in which he must reveal a more “masculine” side of himself. When a rabid dog approaches the house, it is Atticus who shoots him. He doesn’t volunteer for this position, but rather the other residents beg him to do it. Scout and Jem learn that their father is actually the best marksmen in the entire state. Certainly that is a manly thing. And while for Scout it is the shooting ability that makes her proud of her father, the more interesting and more important lesson is Jem’s revelation that Atticus had intentionally kept his marksmanship a secret. Atticus wanted his children to learn that shooting a gun and other things of that nature are not what make Atticus a man.

This is the jumping off point for our class conversation. We now move beyond To Kill A Mockingbird, to have a discussion about the idea of masculinity in modern society. For the rest of class, I have the boys list the things that we consider masculine in our society (money, power, capacity for violence, access to beautiful women, athleticism, strength, toughness, etc.) and examine whether or not those characteristics are really virtues. Thankfully, the boys come to the conclusion that those “masculine” characteristics do not make a man. I label this characteristics as part of a cultural phenomenon known as false masculinity. We then shift the conversation to explore what characteristics a good man should have. A good man is a man with integrity, honor, courage, compassion, purpose, and loving relationships. We spend a lot of time talking about he relationship aspect of being a good man, and how a man can be judged by his relationships. Is he a good: son, brother, father, husband, teammate, friend, colleague, boss, etc.? At the end of the lesson, I felt that the boys had a much better understanding of what it really means to be a man as opposed to the false masculinity espoused in our culture.

(US, male, English, 2 yrs. teaching in boys’ schools)

Responsibility for Outcomes

Teachers reflecting on their vocations are often struck by the realization that they had never been true learners until they found themselves responsible for teaching others. The sense of urgency and the drive to mastery one feels when one is responsible for what others must do and know are clearly transitive deepening one’s own knowledge. In many of the lessons reported—and not just under the category heading above—teachers identified the effectiveness of putting boys in charge of consequential outcomes.

An American English teacher recounts how student-conducted class business can not only meet teacher-determined standards, but even exceed them:

As part of a four-week study of poetry, my freshmen both read and write poetry. This year I experimented with having the 9th grade boys lead the discussion. For each day of class I designated one of the fifteen students to lead the first twenty minutes of discussion of an assigned poem. I moved to a chair in a back corner of the class, moved one of the students
to the front of the class, and listened as he led the students’ discussion. My principal job, which I usually fulfilled, was to listen and let the students do the talking. From Gwendolyn Brooks’ mothers through Philip Larkin’s This Be the Verse, a student led the first twenty minutes (or more) of each class. Particularly memorable were discussions on Milton’s When I consider how my light is spent, Keats’ Ode on a Grecian Urn, and Stevens’ Emperor of Ice Cream. Near the beginning of the discussion on Emperor of Ice Cream, I was sorely tempted to intervene, as the student leading the discussion was (in my opinion) reductively taking the line “Let the wenches dawdle in such dress” as a reflection of the poet’s denunciation of prostitutes. Keeping my silence, I was thrilled to see that the students disagreed with their leader’s interpretation. The free-flowing discussion that followed was among the finest conversations about a Stevens poem I have ever witnessed. As I told the discussion leader the first chance I got, “You taught such an impressive class. Although you clearly came to the class having prepared for hours to share a particular interpretation of the poem, by listening to your classmates’ skepticism you showed the flexibility of letting the discussion develop into a richer reading of the poem.”

(US, male, English, 29 yrs. teaching, 23 in boys’ schools)

This British Chemistry teacher reported that “putting his boys in charge” of lessons resulted not only in thoroughgoing understanding of course material but also improved retention of that material:

I employ this practice with year 12 and year 13 (age 17 and 18) Chemistry students, as a way of making pre-examination revision sessions more involving and effective.

After leading a few revision sessions myself on those topics which I think warrant the most attention for a particular class, we review the list of remaining topics in the syllabus, and each boy selects one topic on which he will lead a revision session for the whole class. In a lesson, we typically cover two or three such topics, so it takes normally about three lessons for each boy (out of a class of about ten) to have had his opportunity. Each boy then prepares the revision session on his selected topic, and runs it for the class.

I give the boys freedom as to how they run their session, and so the approaches taken by each boy vary, but they know the standard expected. They model their session on the ones I have run, and on effective approaches they have observed in other teachers. They typically prepare a short description of the topic which they present using PowerPoint or other aids; they prepare a handout containing the key points; and they prepare a worksheet with sample questions to be worked through and discussed as a group.

I have not yet been disappointed by any session, and some have been outstanding. The approach creates a co-operative learning culture in the classroom—the boy leading each session takes pride in the quality of his session since it is judged by his classmates and not by a teacher, and the boys receiving each session pay close attention because they are keen to see how their classmate performs and they quietly assess how they themselves have performed, or will perform, in comparison. In addition, the boys receiving each session hear the topic explained in their own “teenage” language, which is different in many cases from a teacher’s explanation. Many of the sessions would have scored high marks in any formal lesson observation of a teacher covering the same topic.

(UK, male, Chemistry, 6 yrs. teaching, 5 in boys’ schools)
Students’ sense of responsibility for the work they produce is heightened, in this American History teacher’s account, by its appearance before a potentially world-wide audience:

In my 12 grade elective course, Modern European History, the final examination is a group entry to the online encyclopedia, Wikipedia for the Russian novel, *Life and Fate*, by Vasily Grossman. As a group, we created categories that each member of the class is responsible for writing, editing, and submitting. The collaborative entry requires a knowledge of the book and the period in which the novel takes place, Stalingrad in 1942–1943. Since the book has well over 800 pages and character list of over 100, the boys are required to share many of the responsibilities and then collaborate on the final entry.

(US, male, History, 16 yrs. teaching, 5 in boys’ schools)

This American teacher of Urban Studies reports a similar boost in boys’ dedication as they carry out an assignment that will have a direct “real-world” impact:

I teach a course in Urban Studies which includes a six week off campus project at an elementary level school in an at-risk neighborhood in the inner city. We travel by van for fifteen minutes from our campus and arrive in a different world. Many of the students with whom we work have never left their neighborhood. Our students work as tutors with fifth and sixth graders who are preparing for the annual high stakes standardized tests which will determine the school’s ongoing accreditation (*No Child Left Behind* legislation) but will also determine their future placement on a potential college prep track. Students who do poorly on these tests rarely graduate from high school. Over the six weeks that our tutorial continues, our students work one on one with a boy or girl, and they develop a close relationship. Our kids are also reading a book by Jonathon Kozo entitled *The Shame of the Nation*, which lambasts the government and society at large for allowing the deterioration of our public school system, particularly in the cities. Our students must write 7–10 page essays which evaluate the legitimacy of Kozol’s criticism. Is your charge being left behind?

(US, male, Urban Studies, 26 yrs. teaching, 23 in boys’ schools)

This American teacher of Ancient World History reports measurably superior student performance in consequence of assigning them to become resident “experts” in component parts of a larger unit of study:

History obviously involves a lot of reading, of the text and supplemental materials. That reading then needs to be discussed and extended to higher level thinking. I’ve learned that the best way to do this is not to give notes and lecture. Instead, in my ninth grade Ancient World History class, one of the methods I use is a cooperative jigsaw, where boys are assigned a “chunk” of the reading to become experts on—they meet in an expert group and agree on what the main ideas are; they then teach that material to their peers via small group (known as home groups) discussion. Usually, I will then take the notes that the expert groups were giving to their home groups and use them to create a quiz on the material. This way, the boys have complete ownership of their learning, they are actively engaged with the material, and the quiz at the end raises their level of concern about their efforts. In addition, the jigsaw allows the class to move through a good amount of the text without having to read all of the pages on their own, which is another motivational factor for the students. I recently used this strategy in my class to move
through a good deal of material in the text about ancient China. Not only did the boys attain good information from their expert and home groups, but the class averages on the subsequent quiz was an A-, which is far above their normal performance on reading quizzes. (US, female, History, 13 yrs. teaching, 1 in boys’ schools)

An American teacher of History reports that in his experience boys in all-boys’ settings rise readily to the challenge of not only informing but inspiring their fellow students with their presentations—in this case, PowerPoints:

I have found that one of the most successful assignments I give my students is a presentation that must be done with a partner/small group. Asking boys to present a topic to their classmates almost always brings out the best in them and helps reinforce several very practical and widely applicable skills that will serve them well in their education and later in the workplace. The assignment is very straightforward, and I will use an assignment from the Vietnam War class I am teaching this spring as an example. I assigned the boys a partner (I didn’t allow them to pick their partner), and ask them to produce a twenty slide PowerPoint presentation on the topic of their choice from the Vietnam War. I had to first approve their topic before they could begin researching it. The twenty slides of the presentation could only contain four slides that were entirely words. All other slides must contain pictures, graphs, charts, video, music or any other type of media that was applicable. They must also create a works cited page and an outline or hand-out for their classmates to take notes upon. The class was going to be quizzed on a later date about what they learned from the presentations. Aside from the grade I give the presentations, I also ask the other boys to grade each of the presentations as well as their own partner. Interestingly, the grade that I give is usually very similar to the one given by the boys.

I find the assignment to be productive and enriching because of the skills it calls into use. The ability to effectively and accurately research to first create a topic and then present it is a skill that is useful in all subject areas and fields. The ability to use technology effectively clearly has growing importance in education and our world in general. The ability to work with another person or persons that you wouldn’t necessarily choose to partner with is also clearly important. Public speaking is a skill that is exercised as well in this assignment as they present and teach to their classmates about the topic. The assignment also gives the boys a chance to use their creativity and artistic abilities that aren’t often as used in a social sciences class.

I have given this assignment to all different grade levels over the years, but as I have largely been teaching juniors and seniors the past several years, that is my most recent example. It clearly works best with older students as they have research abilities and truly appreciate and do not fear some of the freedom that is associated with this assignment.

This assignment is much more effective in the all-boys’ environment than it was in my previous co-ed teaching experiences. The boys have far fewer reservations about speaking in front of the class when there is not social anxiety, competitiveness, nor any of the other drama/stress that comes with co-ed teenage interaction. When the social competitiveness is removed from the classroom, students are free to express themselves in ways that more closely represent their true ability and voice. As mentioned prior, this assignment also calls on
their sense of “brotherhood” and “duty” to look out for each other that is ever present in a boys’ school. Whether it is their partner or partners who are counting on them, or their classmates who have worked hard on their projects and expect the same from them, the boys seem to come through for each other more often then not. They are less likely to let each other down than their teacher.

I also find many boys to be most successful learning in non-traditional methods. Self directed researching, being creative while crafting a PowerPoint presentation, and preparing to teach to their peers gives them the opportunity to practice skills and express their personalities in ways that are often not presented in the normal academic course.

(US, male, History, 9 yrs. teaching, 4 in boys’ schools)

In this lesson a History class studying the American Supreme Court is divided into groups responsible for conveying the substance of significant judicial decisions. Within each group a “teacher” is delegated the responsibility of explaining and clarifying his group’s work to the other groups:

This is an activity for the US History survey course that has a variety of different content applications. This description deals with the John Marshall Supreme Court but I have also used a similar exercise to assess the communitarian movement in mid-19th century America. It is important to have a large room available to do this assignment. Other material requirements are poster board/newsprint and colored markers.

Prior to the assignment the students in two sections are divided into groups of four or five. At that time they are given a series of readings covering one of the Marshall Court’s major decisions. Each group will review a different case. These readings are readily available on the Internet or in other sources in any library. I usually try to get one reading from journals such as American Heritage, History Today, or American History Illustrated plus at least one legal rendering of the case. They are also encouraged to use the text.

As a boarding school we can have evening meetings in lieu of the regularly scheduled classes. Since this assignment involves two classes it is easier to take an hour to an hour and a half in the evening to get the work done.

Each group is provided with a poster board or newsprint and colored markers. Their charge is to: 1) briefly summarize the background of the case, 2) describe the constitutional issue under review, and 3) the decision. They should also think about the application of the court’s decision and how it affects us today. Second, they have to draw a picture that represents the case. The object of creating this poster is to teach their fellow students about their case and the results of the decision.

Once the project is finished the group selects a “teacher” and posts their creation at a designated station around the room. The “teacher” stays with his poster to explain the case to his fellow students while the rest of the group goes to a separate poster and “teacher”. The class begins with the “teacher” explaining the case as the students from a single group take notes. Key to this, and the part of the assignment that often provides the most humor, is interpreting the picture for the students who have no background on the topic other than what they have been told by the “teacher”. After about five or six minutes, depending on available the time, also taking time for questions, the groups rotate to a new location and
repeat the process until they have reviewed all the cases under consideration and completed the circuit around the room.

Once the groups are back at their original poster and with their “teacher” they should brief him about all the cases they have heard so he can take some notes and have the same information that they do about the Marshall Court.

(US, male, History, 35 yrs. teaching, 31 in boys’ schools)

Intrinsic Subject Matter

Repeated reference has been made in this study to the transitive effect of certain teaching approaches to the achievement of desired scholastic outcomes—such as a game’s transitivity to the mastery of basic Latin grammar or motor activity’s transitivity to understanding a chemical reaction. The effectiveness of some of the lessons, however, derived not—or at least less—from any transitive energy than from the essential nature of the subject under study. In these instances the content of the lessons reported tend in the teachers’ view to address life issues especially pitched to boys—their money and future work, their treasured possessions, their obsessions, their character, their social place and, as in the following example, their understanding of masculinity itself:

My junior American Literature class reads Moby Dick. Inevitably, there are the snickers when we read in Chapter 4 that Ishmael and Queequeg sleep together at the inn before they depart on their voyage. But I restore order by pointing them to the line where, when the two of them wake up the next morning and Queequeg has his arm around Ishmael, he extracts himself from the embrace “by dint of much wriggling, and loud and incessant expostulations upon the unbecomingness of his hugging a fellow male in that matrimonial sort of style.” That seems to take care of it for a while. We set sail.

As Ahab becomes more obsessed with his pursuit of the white whale, he inspires all of his men, including Ishmael, to take an oath and vow “death to Moby Dick.” Yet Ishmael, being the romantic that he is, soon realizes the folly of his participation in his captain’s vengeance. In the chapter called “A Squeeze of the Hand,” he renounces his oath, and thus he attains ultimate salvation. It’s a difficult but crucial chapter, and I want the boys to understand its importance.

In this scene, Ishmael and several of the men are sitting around a tub of the “sperm” that has “concreted into lumps,” and they must squeeze it back into liquid. Here, only Melville’s words will do:

I forgot all about our horrible oath; in that inexpressible sperm, I washed my hands and my heart of it. I felt divinely free from all ill-will, or petulance, or malice, of any sort whatsoever. I found myself unwittingly squeezing my co-laborers’ hands in it, mistaking their hands for the gentle globules. Such an abounding, affectionate, friendly, loving feeling did this avocation beget; that at last I was continually squeezing their hands, and looking up into their eyes sentimentally; as much as to say,—Oh! my dear fellow beings, why should we longer cherish any social acerbities, or know the slightest ill-humor or envy! Come; let us squeeze hands all round; nay, let us all squeeze ourselves into each other; let us squeeze ourselves universally into the very milk and sperm of kindness.
In my class, we sit around a Harkness table. It’s perfect for this lesson. I ask the boys to join hands to form a circle with me. They are reluctant at first, but after the obligatory rolled eyes and shrugged shoulders, they finally go along with it. Leaving nothing to chance, I am the one who reads the passage aloud. They listen. Slowly, glancing like a dozen Ishmaels from one pair of eyes to the next, they begin to sense the purpose of the exercise. As my reading of the chapter progresses, they themselves become the crew, and they start to feel and then understand the deep brotherhood and mutual dependence that defines one of the central themes of the book. At last, as the chapter ends, I send a squeeze of the hand around the circle, and they release their grips. The physical moment is over, but the lingering stillness signals that the impression has been made.

*(US, male, English, 41 yrs. teaching in boys’ schools)*

Investigating the wilder, darker side of boyhood—in this case being geographically dislocated and orphaned—stimulated the students of this American teacher of 6th grade boys:

One of my favorite units of the year involves introducing my students to *The Lost Boys of Sudan*. We begin by having a discussion about Sharia and the disadvantages of having a government based on religion. During this discussion we compare life under Sharia to the religious freedom we have here in the United States. For homework, the boys read one of the vignettes from Joan Hecht’s book *The Journey of the Lost Boys*. The next day in class we have a brief discussion of the story, followed by a viewing of the film *The Lost Boys of Sudan*. This is a wonderful documentary which follows several Lost Boys as they make the transition from a Kenyan refugee camp to their new home in the United States. Usually class time does not allow for an entire viewing, so their homework for the night is to either read another vignette from Hecht’s book or write a reflective paragraph on what they read the night before. The next class is dedicated to finishing up the film and discussing the immense difficulties faced by the young men as they flee their homes and then once they arrive in the United States. I am very fortunate to know a local Lost Boy who generously gives an hour of his time to speak to the boys. The students are thrilled meet a Lost Boy and they are typically moved by his story. The next day we follow up with a discussion of how fortunate the boys are to have a loving family, a roof over their heads, the opportunity for a wonderful education, clothes on their back, and food on their plate.

I enjoy this unit because I find that it is very eye opening for the boys. Many of the Lost Boys were the same age (or younger) as my 6th grade students, so they can relate to the hardships faced by the Sudanese refugees. The unit contains great lessons in courage, self-sufficiency, and overcoming adversity. Overall, I stress the fact that the boys are incredibly blessed and therefore they should feel an obligation to help those who are less fortunate.

My goal is to eventually add a service component to this unit. In the past, the school has made a financial contribution from a larger fundraiser to a charity operated by Lost Boys living in America. In the future, I would like to lead the 6th grade in a fundraiser in which the proceeds go to that same organization. The goal being that the boys experience making a positive impact in the live of children they will more than likely never meet.

*(US, male, History, 6 yrs. teaching in boys’ schools)*
The beckoning appeal of the sinister was incorporated productively into this South African English teacher’s challenge to boys to enter the world of Raymond Chandler’s crime fiction:

The task that I want to share is a writing exercise for Grade 10 boys. The unit is entitled “Writing in the style of Raymond Chandler”. The unit comprises a series of structured and scaffolded tasks that introduce pupils to the writing of Chandler before finally asking them to write the opening chapter to a private detective novel. The tasks work well as they all build on the previous one and most of the preliminary tasks can be done in pairs or groups. Boys have always responded well to the task, and the reasons I think are:

1. gangster/detective genre stories appeal to boys
2. the scaffolding of the tasks helps the boys develop confidence in their ability to write
3. pair and group work is fun and generates good ideas
4. they enjoy adopting the voice of a detective and imagining his shady world.

(South Africa, male, English, 10 yrs. teaching, 4 in boys’ schools)

While boys’ preoccupation with violent and dangerous pursuits is an abiding contemporary social concern, this South African History teacher guides her 8th grade students’ fascination with grisly combat to broader cultural considerations:

Studying the history of Vietnam with a group of Remove boys (grade 8), I found they were fascinated by the blood, gore, killing, hardship, etc. of the war. I taught 5 separate classes in the year group. I inveigled my co-teacher who had one class to join me in a project near the end of term. Much of the content/facts had been covered in class so they had all the basic knowledge and had done some reading. The year group was divided into groups of 6. Each group was given one aspect of the War to research, e.g., the capture of Hamburger Hill or the tunnel rats. They had to research their topic full, write a script for a short 5 minute dramatisation. The script had to be factually based. Each boy had to take it in turns to be the narrator. Each script had to have an introduction giving the context of the dramatisation and a conclusion stating what happened after.

The dramatisations were presented to parents at a Vietnamese evening after which the parents enjoyed a Vietnamese meal and the boys watched a Vietnamese movie. The boys by the end of this knew their History inside out! They had learnt it without realising it as they had researched it, write about it, acted it, discussed it in their groups and then watched each other. The best of inadvertent learning experiences ever!

(South Africa, female, History, 30 yrs. teaching, 3 in boys’ schools)

This American mathematics teacher found boys especially responsive to an application of a mathematical principle that carried the promise of conferring a financial benefit:

I am the mathematics department chairman and I consider myself a teacher of teachers as well as a teacher of boys. The practice that I am going to narrate involves the practice of showing your students real life examples of mathematics that can be used throughout the curriculum from anywhere, grades 6–12. I have many of these type of topics but I will limit myself to the idea of compound interest during this discussion. The formula for compound
interest is relatively simple. The formula is: \( A=P\left(1+r/n\right)^{nt} \) raised to the nt power. The formula has 5 unknowns which are:

- \( A = \) Amount of money at the end of the investment
- \( P = \) Amount of money at the beginning of the investment (Principal)
- \( r = \) rate of interest (must be converted to a decimal for the formula to work)
- \( n = \) number of times the interest is compounded in a year
- \( t = \) number of years in the investment.

If I am teaching Algebra I, I could give the following:

John wants to invest $1000 in an investment that promises him 4.5% interest compounded monthly. How much money will he have at the end of 5 years?

If I am teaching Algebra II, I might give the following:

John wants to double his money in 6 years. If the investment is to be compounded daily, what rate of interest does he need to achieve?

If I am teaching Pre-Calculus, I might use the following:

John had an investment that was worth $5000 after 3 years. If he invested $3000 8 years ago, what was his annual rate of interest? (This is usually referred to as APR in investments.)

(US, male, Mathematics, 38 yrs. teaching, 5 in boys’ schools)

An American Economics teacher also found his 11th and 12th grade students responsive to investigating and mastering operations that promised financial gain:

For my 11th and 12th grade elective course in Economics and Personal Finance we have designed a stock-picking and investment selection contest which seeks to utilize in a “hands-on” practical way many of the concepts about financial analysis, finding good advice and making good investment judgments that I teach in the course. Each student is provided with a balance of $50,000 (not real money at this time, although that might change in the future.) and is asked to use all manner of investment advice and analysis to select 5 common stocks traded in US dollars in the United States financial markets. In an accompanying form, the boy provides the name of the corporation, its trading symbol, industry area, price per share and “reason for buying.” The last information can be analysis, news, advice, or speculation. The boy is required to hold on to these stocks until the end of the next marking period (about 3 weeks or so) at which time they may trade for other stocks, take profits, or absorb losses. I require that their portfolios be diversified, (not heavily weighted in any particular areas). After the initial investments are made, they may have more than 5 stocks, including a foreign stock when we study foreign markets. As an incentive to participate and do their best, I award extra points on the term and marking period averages of boys whose gains are most impressive: 5 extra points for the winner, 4 points for second place, 3 for third place, etc. I do not deduct points for portfolios that lose value, and a boy must have some amount of profit to gain any points at all. In a falling stock market, like the past year’s, not many boys have shown profits, yet a small number of assiduous and diligent “investors” are in the black, so to speak. Students are welcome and encouraged to use all legal forms of obtaining
investment advice and information including professional advisors to their family, family
members, the financial press, investment advisory services and the internet. One of the many
goals of this project is to teach young men to do proper research, to use the internet
effectively, and to invest responsibly. It fosters a healthy sense of competition such as they will
encounter in their future lives. On the advice of one of our speakers, we use Yahoo Finance
as our investing site. It offers bountiful investment information and advice for free, and is very
easy to navigate. I keep the password to the account so that any trades or portfolio changes
must go through me as the “broker.”

We allocate a certain amount of class time for stock trading and boys are able to check their
own portfolios on their own laptops, although they do not have access to their peers’
information or accounts.
(US, male, Economics, 38 yrs. teaching in boys’ schools)

A Canadian Mathematics teacher challenged her algebra students to use algebraic tools to explore
the acquisition of the car of their dreams:

In mathematics, my teaching partner and I created a project to have the students do some
research and apply their algebra skills acquired in the algebra unit. They had to research a
model of car of their preference online, select options of their choice, select a payment plan
and see how much it would cost them per month for a lease for this car. We also supplied
them with average costs for other expenses, such as gas and down payment. They used all of
the information to figure out what their total expenses would be per month and created an
algebraic expression for the amount of money spent over a time period of one year. In the
end they had to prepare a presentation to present their information to the class.
(Canada, female, Mathematics, 1 yr. teaching in boys’ schools)

Subject matter close to boys’ hearts of course extends beyond material acquisition. This American
Mathematics teacher tapped into her 8th grade boys’ immersion in major league baseball:

This topic is covered near the end the middle of a Pre-Algebra/Algebra I course. I will use
chalkboard demonstrations, ask questions referring back to previously learned material that
will impact the lesson, give the boys opportunities to practice the routine and answer any
questions they might have subsequent to trying to do the problems.

Class begins with a discussion about baseball. Who is their favorite team or ballplayer. We
discuss the hardest positions to play. Through the discussion, most boys will throw out
numbers that they have heard on TV or the radio. For instance, “Jones is hitting .302!” or
“Maddox has a 1.25 ERA.” We talk about the meaning of a batting average and earned runs
against a pitcher.

Today’s class will begin with the following formulas on the board.
Batting Average (AVG) = Hits / At Bats
Earned Run Average (ERA) = (Earned Runs * 9) / Innings Pitched

We continue to discuss what constitutes an ‘At Bat’ and when a complete inning is or is not pitched.
I will produce the newspaper sports page and use specific baseball data from the night before. I will ask the selected students to calculate a few AVGs and ERAs from the data.

I will write on the board and have them calculate the following:

Consider the following two pitchers:

Jones: 1 IP, 4 ER = ?
Smith: 8 IP, 1 ER = ?
Total: 9 IP, 5 ER = ?

Jones: 6 AB, 3 H = ?
Smith: 5 AB, 1 H = ?
Total: 11 AB, 4 H = ?

From here the boys will notice that all the AVGs are decimals and not the whole numbers that are used when speaking about the AVG. They previously learned that a % is something out of 100. They will see in the batting averages that their AVG is based on how many hits they get out of ten at bats.

ERAs are calculated in the same way but are whole numbers with some decimals.

I then stretch the calculations to the whole team’s batting average and ERA.

We then move onto more complicated calculations such as slugging percentage. The following information is written on the board.

Slugging average is calculated as—Total bases/(Official At bats)

Official At bats is calculated as—Plate appearances—walks—hit by pitch—sacrifices

Total bases is calculated as—singles + 2 * doubles + 3 * triples + 4 * home runs

We then pick more data from the sports page and calculate a batters slugging percentage.

Interactive Technology

As discussed in the overview of this chapter, the use and even reliance on current computer technology has become increasingly standard in contemporary classrooms, although it cannot yet be stated with certainty exactly what scholastic benefits have been wrought. Strong claims are made for the acceleration of mathematical computation, for a new ease in composing texts, for the quality and clarity of material illustrated on screens, while indisputable claims can be made for the speed and depth of access both teachers and students now have to information generally. Indeed so great and alluring has the speedy access to cybernetically-stored information become, that the contemporary scholastic challenge is no longer to access information of any kind, but rather to discern the relative value and veracity of the limitless sites and entries accessible on the internet. Teachers reporting under nearly every category in this study indicate some use of computer technology, whether central or peripheral to the lesson under review. Some reporting teachers indicate that a particular application of technology engages students effectively in ways previously
not possible. And although such claims are not easily verifiable, some teachers believe that working interactively with technology is especially appealing to and effective with boys.

Many of the promising uses of technology reported involve software that allows students to create compositions far beyond what their drafting or other skills would allow, as indicated by this American Art teacher:

Students are asked to identify imagery that best describes who they are. The symbolic self-portrait isn’t a traditional portrait in that it represents the image of the subject. Rather the portrait is a collage of symbolic imagery and metaphors. Students find imagery for their portraits from published sources they’re familiar with such as the internet and magazines. The collected imagery is pieced together in Photoshop and manipulated as the student sees fit. Photoshop is equipped with many tools designed to emulate the processes of traditional photographic development with the added function of digital filters and enhancements. Students are introduced to the basic, seminal tools within Photoshop and encouraged to experiment with other tools to find more expressive capabilities. The end product is a unique combination of imagery that provides insight on the student from many perspectives. The subjects chosen by the student reveal a great deal about their interests and the way they compose the images gives insight to their sensibilities about each subject.

Multimedia Art Class is open to IV through VI Form students. In many cases the class is the students introductory upper-school art course and in some cases their last.

(US, male, Arts, 1 yr. teaching in boys’ schools)

An Australian Music teacher reports similar success in employing elegant music composition software to guide his Year 9 boys through the complexities of creating their own classical pieces:

An effective practice that I have employed is step-by-step modeling. For stage 5 students (year 9 and 10) learning composition, the process can be mysterious. Students use Sibelius software to make the process of composition give immediate feedback and a sense of accomplishment.

I would break the process up into small steps and making the instructions on the task document and marking guidelines reflect these steps. For a classical composition, the first step I would demonstrate is the use of chords I and V. I would write chord I into bar 1 and write chord V into bar 2. Then I would break the chord into scale degrees 1, 3 and 5 across the duration of the bar. I would then show them the opening bars of Beethoven’s 5th Symphony, Mozart’s Eine Kleine Nachtmusik and Haydn’s Surprise Symphony. All of these pieces simply use broken chords I and V as the material for the melodic line. They are all instantly recognisable to students of this age group. The students would then write their own two bars using chords I and V broken for the melody. I would then ask the students to show their bars to me to make sure they had understood the process.

After that, I would write music for bars 3 and 4 using chord V for bar 3 and chord I for bar 4. I would explain that bars 1 and 2 are an antecedent phrase and that bars 3 and 4 are a consequent phrase. I would play the melody Mary Had a Little Lamb to demonstrate this. The melody is well known to the students and highlights the essential nature of antecedent-consequent phrasing. Music for bars 3 and 4 would be based upon the material from bars
1 and 2. I would then ask the students to write their bars 3 and 4 and then check their work to see if they understood the process. When the students have finished four bars, I would then ask them if they could guess the principles which they might use to finish the eight bars of the piece. The use of chords I and V only, the use of antecedent and consequent phrasing, the use of broken chords and balanced phrases could be possible answers. Students would then complete the eight bars.

After checking the work, I would then ask the students to consider how such a melody would be accompanied in the classical style. I would show them *Sonata in A minor (K440)* and *Sonata in C Major (K545)* (both Mozart) and ask them to identify the material on which the accompaniment patterns are based. In the C major, an alberti bass is created by alternating scale degrees 1, 3 and 5 of chord I. In the A minor, the chord is simply repeated in semiquavers under the melody. I would then add the alberti bass to my melody and play it back. Then I would add repeated quaver chords to my melody and play it back. I would ask students to determine which was more effective. They would then complete the accompaniment for their piece using either the repeated quavers or the alberti bass. They would determine their choice based upon the playback from Sibelius software.

In this way, students see that the process of composition can be broken down into small steps which are logical and within their power to emulate. This gives the student a sense of accomplishment and power over what are sometimes seen as unwieldy ideas.

(Australia, male, Music, 13 yrs. teaching, 6 in boys’ schools)

A New Zealand Geography teacher indicates how successfully mastering a technological application, such as the production of a PowerPoint or the process of animation, can be not only valuable in itself, but transitive to the subject under study:

Year 10 Social Studies students undertake research concerning “Inequalities of Wealth.” Boys are exposed through discussion and examples that develop outstanding inequalities of wealth on a global scale. Boys select two countries in the world that best in their opinion reflect gross disparities of wealth as measured by GDP per capita, Infant mortality, Life expectancy and literacy. Following the research period boys make a 6–10 minute PowerPoint presentation including animation, of their findings as well as submitting an A4 size tourist brochure for assessment. Boys are assessed on their technical expertise in presenting effectively, oral presentation skills and the efficacy of their “tourist brochures”. Boys enjoy exploring injustice and revel in the clear structure involved in this exercise. In addition the technical challenges of the PowerPoint presentation are enthusiastically entered into. By the end of the exercise all boys are sympathetic to the many inequalities that exist in our world. Peer assessment is also conducted. Over the ten periods of the exercise highly purposeful and meaningful activities are engaged in and boys self worth and self confidence is readily apparent as having developed.

(New Zealand, male, Geography, 35 yrs. teaching, 27 in boys’ schools)

An American History teacher reported a gratifying increase in his students’ engagement when he introduced them to a sophisticated software program that simulated the variables of the Cold War:

I was fortunate earlier this winter to have an opportunity to observe a colleague teaching his class on early American History. He was using a software simulation created by Tom Snyder
Productions (Scholastic) called *Decisions, Decisions*. In this particular instance, he was using a title called *Revolutionary Wars*. I was amazed at what I observed that day. Students were engaged and excited about the lesson. Since almost all of them were former students of mine, I was particularly pleased to see students who often were shy and reserved seek opportunities to get involved.

Anyway, I decided to look further into the series following my class visit, and I found that there was another unit called *The Cold War*. As we were finishing our class study of the period, it seemed like it would be the perfect way to wrap things up. Our librarian volunteered to purchase the set, and when it arrived, I was pleased to see that it contained a very complete book of instructions and support material.

In short the lesson presents a situation that the students must resolve in whatever way they see fit. I divided the class into four different groups, and this allowed them to discuss issues in a smaller setting when it seemed fitting. I also gave each group a set of manuals that accompany *The Cold War* set or advisor briefing books as they are called. One group represented Secretary of Defense Martha Pratt, another represented Secretary of State Peter Clay, a third represented Chief of Staff Alan Bromfield, and a final group represented Campaign Manager Susan Lotte. Each manual contains opinions which are rich with historical information. The students consult these ‘advisors’ as they make their decisions.

Because it was my first time using the software, I allocated three days to run the simulation. Once each class was given the initial facts, it had to set a list of goals or priorities (e.g., to get reelected). From that point forward, the students are reminded to heed the advice of their advisors while also paying attention to the goals they set. What was really neat is that depending on the decisions each class made, the simulation could go in a number of different directions.

Students were actively engaged throughout, and there were numerous opportunities for discussion, disagreement, and consensus building. Boys volunteered opinions freely, and there was a strong sense that this was actually fun. 

*(US, male, History, 17 yrs. teaching, 5 in boys’ schools)*

An Australian History teacher employed the internet’s mapping capability to help his students reconstruct a historical event—a conspiracy—in ways that, short of traveling abroad to Venice, would have been otherwise impossible. In this case, the internet visually and literally “took them there”:

When explaining in detail the narrative of the Tiepolo Conspiracy in Venice in 1310 I managed to combine a range of primary sources, secondary sources whilst having Google earth up on the IWB. This enabled them to read the account whilst we plotted the course of events through a variety of sources on the map on the IWB. The boys in the class could visualise the physical geography of Venice to help them. This use of a variety of sources helped boys gain, I feel, a very detailed understanding of the chronology of the coup but also how the physical and social map of Venice impacted on the revolt.

*(Australia, male, History, 12 yrs. teaching in boys’ schools)*
**Boy-Specific Pedagogy**

The great majority of the reporting teachers indicated that they believed their approach to instruction was in one or more ways pitched to boys’ learning; others, especially beginning teachers and those beginning in boys’ schools, were not sure, while a few stated emphatically their belief that their approach had worked or would work equally well with girls. Difficult to verify as such claims may be, the telling point here is that the teachers selected lessons they found to be especially effective, and the recipients of those lessons were all boys. What follows is a sampling of teachers who intentionally and explicitly designed lessons directed to what they believe is a distinctive boys’ learning style.

This New Zealand English teacher, with three decades of teaching experience in both co-ed and boys’ schools, reports that teaching boys to write essays works best when the process is highly structured, as boys do best addressing “short sharp tasks”:

> Whether teaching language or literature I always highly structure each lesson. The lesson always begins with “Tell me 5 things…” —this could be about last lesson, the text, etc. and followed by “What shall we do now?” The lesson then follows with 10 minute (max) activities which are structured within themselves. E.g., If planning an essay: We will write the first paragraph—brainstorm ideas. Task 2. “Write the opening sentence only.” Stop. Listen to some. Copy the best one and say why. Task three. 5 minutes to write two more sentences. Stop. Take two examples and discuss, etc. All steps are tightly timed—sometimes with a clock on the whiteboard (from the data projector). Every step they take in structuring (e.g., a paragraph) is written on the board by a student. I try to get as many students as possible up and writing on the board each lesson—to keep them active. I place strong emphasis on the words and phrases of the instructions using words like “list”, what are the 4 steps…” as these are less elusive than “discuss” “analyse”. The lesson always ends with a summary, e.g., “What were the three most important things…?” I use this structure for most of my lessons as I feel the boys like structure, simplicity, short tasks and pressure. It ensures there is plenty of writing going on as opposed to very little with open ended tasks. They like clear deadlines and limits.

> I think it is connected to boys needing short sharp tasks as they can only concentrate for short time periods. I believe boys respond to things being timed and have clear limits. They are wired for dominance (fastest/strongest, etc.) so activities which light-heartedly encourage this are popular. They need more recesses so a change of activity can seem like a “rest”. They like established and monitored rules and routines/deadlines.

(New Zealand, female, English, 30 yrs. teaching, 7 in boys’ schools)

A New Zealand colleague underscored the value of crisp process and clear structure, especially with his Year 6 English students:

> The following lesson was conducted with a high academic 6th form class. The subject of discussion was Wordsworth’s concept of time in its relationship to the process of the creative imagination.

> I invited the pupils to interpret the following statement and then cite evidence from the poem *Tintern Abbey* to establish its validity: when the reaction of the census, chiefly of eye and ear, to
the external natural world at a given moment in time is suspended and exquisitely fitted to the
mind by way of the creative imagination, that initial, transient, sensory experience dissipates and
the soul, at a later time, feels an eternal kinship with transcended and spiritual meanings.

Before they could cite evidence from the text to establish the above statement's validity,
students were required to interpret the statement itself. They were permitted approximately
15 minutes to ponder the statement, then explicate the obscure implications inherent within
the statement. To begin with, they were somewhat confounded; nevertheless I persuaded
them to look at operative, individual words and word clusters and engaged them in a
discussion which would unravel precise meanings.

I employed the method of repetition, reinforcement and reagitation, while maintaining
sustained eye contact. Although the class of 24, intelligent, and academic minded boys was
awed at first, they gradually began to apprehend the difficult concepts and engaged in rapport
with each other as well as me. We then proceeded to apply the key concepts to the text.

I distinctly felt that constant repetition, reinforcement and reagitation of crucial issues
were the strategies that unified thought logically and effected clear understanding in the
minds' of the pupils.

The pupils themselves, of their own volition, admitted that their minds were formatively
infused and heightened by the thrust and meaning of the topic discussed. I asked the pupils
to submit a brief, written comment explaining what particular method or at what moment
they began to gain clarity of understanding. The merit and success of the lesson is strongly
attested by the following responses educed from the pupils.

“Dr. A. is both unimposing and never patronises our class. His treatment of us as equals leads
to a free and liberal but guided class discussion. In one particular lesson, another student in
the class was struggling with a particular concept; I had not fully grasped it either.
Nevertheless, Dr. A. suggested that I explain it to him.”

“Dr. A. promised to help me along. By the end of the lesson, he had understood the concept
and so had I. This is a method whereby he not only included us and taught us, but also gave
us enjoyment.”

“Dr. A. repeats, reinforces and reiterates words, phrases and ideas. He involves the class in
discussions, making sure we all understand. He causes everything to sink in by following the
discussions with extensive notes, making it easier to apprehend the text. He also tells the
occasional story or joke to keep us interested.”

“I found that it really helps me to understand the difficult concepts if it is explained by
another member of the class. Dr. A. would invite other students to explain the concepts in
their own words so that it is reinforced through the words of a peer.”

“Although the ideas were somewhat complex, I always listened because his reasoning
was logical and he assisted us in the understanding of the subject. An old story or two kept
us entertained.”

(New Zealand, male, English, 32 yrs. teaching, 21 in boys' schools)
In an altogether different vein this New Zealand teacher of Year 10 Mathematics felt that shared male experience—the apt “man-to-man” anecdote—was a useful aid in driving home the importance scholastic points, in this instance the Pythagorean Theorem:

When I was a pupil at secondary school, my father got me a job working for a local plumber and drain layer, Cliffy Johnson.

Mr Johnson had captained the national rugby league team—the Kiwis—and was a powerfully built rugged man, a veteran of WW II.

On my first day on the job, Mr Johnson told me I had to dig a foot deep trench parallel to the boundary line of a residential property and then a second trench at a right angle back towards the corner of the house.

After collecting the required tools from the back of his old blue Bedford truck, he threw me three wooden pegs, a hammer and a length of fawn coloured string that had four black marks strategically placed, in order, 3 yards, 4 yards and 5 yards apart.

“See you soon”, he said and off he went to get morning tea and a newspaper.

An hour later, he came back to find me still digging the boundary trench and asked how I intended making sure I got a perfect right angle back to the house.

I suggested using my eye and judgment which he insisted was far too inaccurate.

“Haven’t you heard of Pythagoras?”, he asked.

I replied that I was familiar with his theorem and as he walked back to his truck to read the paper, he barked out, “Well you shouldn’t have any trouble then.”

Suddenly realising the significance of the string and the pegs, I proceeded to stretch out and mark the arms of a 3,4,5 triangle.

By starting with two pegs and the ‘3’ along the boundary line and estimating a right angle in securing a peg at the ‘4’ I then stretched out the third arm of the triangle to see if the ‘5’ matched up with the starting peg.

It didn’t. The arm was too long!

I instantly knew my triangle had three acute angles and the ‘4’ peg would need adjusting outwards.

Measuring again, the arm was now too short meaning I had an obtuse angle at the ‘4’ peg.

After one more adjustment I had my right angle and started digging.

About an hour later Mr Johnston came over to check on progress.

“No bad”, he said. “Your old man said you had a few brains. But you need to know two more things about plumbing and drain laying if want to stay working with me, son.”
I politely asked Mr Johnston what those two things were and waited with baited breath for his pearls of wisdom.

“Well, firstly”, he said, “pay day’s on Thursday and secondly, shit doesn’t travel uphill.”

I thanked Mr Johnson as we shared a healthy chuckle.

“Come on then”, he said. “Time for lunch.”

(New Zealand, male, Mathematics, 28 yrs. teaching, 21 in boys’ schools)

An American Mathematics teacher motivates her boys by illustrating mathematical principles with demonstrations likely to resonate with their personal experiences:

I start almost every lesson with a motivational problem because I want my students to appreciate the value of mathematics in solving real world situations. These problems stimulate discussions which generate sound ideas and possible solutions. The class is then ready to derive a formula, theorem or an applicable generalization. In this way, mathematics is seen as a tool, yet the final product allows the students to see the beauty and elegance of the subject as well.

As an introduction to quadratic equations, I will begin by talking about the path of a well-hit golf ball. As they discuss the important information; the horizontal distance traveled, the time in the air, the maximum height of the ball, they begin to see what data is needed in order to track the entire flight of the ball. Ideally, I will take the students on a “field trip” with a club, ball, stopwatch and tape measure. Once they have the necessary measurements we analyze the problem. Near the end of the unit, when the students know the general form of a quadratic equation, we return to the problem so that they can calculate the exact velocity with which the ball was struck. They are delighted to know, not only the speed, but also the angle at which the ball rose into the air.

(US, female, Mathematics, 36 yrs. teaching, 3 in boys’ schools)

This Canadian English teacher takes pains to locate “masculine” elements in what his students assumed would be a “girl’s” novel:

Teaching Austen’s Pride and Prejudice to senior male English students. Students first saw it as a “girls’ novel”. To counter this perception, I taught it as a novel embedded in its time—the Romantic Revolution—and suggested that it was a subversive work in the Romantic tradition. I had them research the period and track the appearance and movements of troops in the novel, and explain their presence. Also encouraged them to examine the social turmoil evident in the novel: Why was the ancient aristocratic estate that the Bingleys lease vacant? What is the Bingley’s background? Students became excited about reading the book in a “new” way and were soon pointing out their own examples of social upheaval. Great opportunities for writing assignments, especially in interpretations of the ending: e.g., “cop-out” or not?

(Canada, male, English, 33 yrs. teaching, 25 in boys’ schools)
An American English teacher reported success in engaging his students with a difficult and potentially opaque text, in this case Shakespeare’s *Macbeth*, by radically “activating” the process of analysis:

Teaching *Macbeth* to sophomore boys proves simple on the surface but challenging at heart. The prevalence of violence, witchcraft, and political machinations in the narrative never fails to engage the adolescent masculine imagination, but the challenge lies in guiding boys to a deeper understanding of the major themes of the play: the question of fate vs. free will, the relationship between gender and power, the nature of mortality. This challenge can not be approached like other literary texts—novels, short stories, poems—for the simple reason that *Macbeth* was not intended to be read, but rather to be viewed. In order to foster a full appreciation of the play, I have developed a Visual Literacy unit centered on film adaptations of *Macbeth*, which seeks to frame the students’ understanding of the dynamics of the play through analysis of visual images, angles, effects, and relationships. The unit begins with an interactive discussion of film terminology. The terms covered include camera angles, camera movement, elements of cinematography, and elements of frame composition. The method of teaching these terms is twofold: first, I show selected film clips (mostly from popular films) and point out the concepts in action, reinforcing the concepts with questions (e.g., “Based on what we just learned, is this a pan or a tracking shot?”); second, I set up a camera and monitor at the front of the classroom and have the students actively demonstrate the concepts for their classmates. For example, one will student will work the camera and the other two will play the roles of Macbeth and Banquo; then, as the two actors are reading lines, I prompt the cameraman in terms of shot selection: “Over-the-shoulder! Reverse angle!” After an understanding of the terminology is adequately demonstrated (via a comprehension quiz), the terminology is then employed in analyses of specific scenes from the following *Macbeth* adaptations: Orson Welles’ *Macbeth* (1948), Akira Kurosawa’s *Throne of Blood* (1957), Roman Polanski’s *Macbeth* (1971), Trevor Nunn’s *Macbeth* (1979), and Billy Morrisey’s *Scotland, PA* (2001). In one class period, for example, we might screen 3–4 versions of Lady Macbeth’s sleepwalking scene. Then, via group discussion and individual writing assignments, the students analyze the decisions made by each director and the meaning communicated through these decisions. (Sample questions: Why does Welles use a deep-focus, continuous shot? How does it influence the meaning of the scene?) Each screening is followed by a discussion of which of the versions best adapts the essence of the play, which requires the students to synthesize textual literacy with visual literacy. Finally, after 4–5 screenings in class, the unit culminates with an out-of-class analytical essay in which the students compare 2–3 film versions of a scene not viewed in class. In addition, the class may complete an extra credit project in which two or more students collaborate on a film adaptation of a specific scene from *Macbeth*, putting their understanding of visual literacy into practice.

Simply put, boys love movies. This, in itself, should not be a cause of dismay among English teachers, but an opportunity for curricular innovation. The key, however, is not merely to play into the typical passive relationship between film and spectator, but to transform the students’ relationship to visual media through active analysis of the cinematic language. At first, they tend to be resistant to the change because they are used to watching films without having to think deeply about what’s going on; however, once they become comfortable with reading films in addition to merely watching them, the majority comment that the experience has enhanced and transformed their understanding of the art of filmmaking. In addition, the
unit is specifically aimed to make use of boys’ natural predilection for active participation, teamwork, and performance.

*(US, male, English, 2 yrs. teaching in boys’ schools)*

An American Spanish teacher combines a number of “boy-specific” strategies—high drama, clear structure, and sports references—in building foundational vocabulary:

Introductory level Spanish units are usually divided by vocabulary themes and one thematic unit that usually peaks the interest of the high school boys that I have taught deals with sports vocabulary. The textbook that we use focuses on soccer, baseball, and basketball and the related vocabulary. As John Rassias from Dartmouth has taught his students and colleagues, I employ rapid repetition, full and frequent class participation, and theatrical definitions to teach the vocabulary for the unit without using English. I utilize props like a soccer ball or a baseball bat, and I try to conduct the class in a gymnasium or outside.

Before I start with the lesson, I explain in English what we are going to do and from that point forward, the whole lesson is in Spanish. I give the students a sheet with the vocabulary and sentences made from the vocabulary. If the word is “mano” (hand), I point to my hand and I say in Spanish “mano” twice without using the English. The students repeat this as a class. I then rapidly point to at least 6 students to repeat what I have said while holding up their hand so that they may associate the word in Spanish with their hand without translating. We do this for each vocabulary word that the students can visualize, including verbs. When the time comes for the verbs, not only is a visual definition of the action emphasized but also the correct conjugation is highlighted according to different subjects. For instance, if the verb is “lanzar” (to throw), I act out a throwing of the ball while saying “yo lanzo” (I throw). And so on. With the new vocabulary, I construct basic sentences and act out the sentence, and then the students repeat the sentence while acting it out. When the students are familiar with this format, I encourage them to create their own sentences. They are given time to play each sport and are encouraged to say aloud and in Spanish what they are doing while playing the sport. After more written and oral practice with the vocabulary and verb conjugations, the final assessment for this unit involves each student acting as the Spanish commentator for a sports game while it is being shown without sound on the screen. They don’t know what will happen in their 2 minute clip of sports coverage so the boys must be ready to think quickly in the target language and express their Spanish thought process immediately without losing their place in the game. I grade the students on their vocabulary variety, correct verb conjugations, pronunciation, fluidity, and enthusiasm.

*(US, male, Spanish, 5 yrs. teaching, 4 in boys’ schools)*

An American English teacher grounds his 11th grade boys’ understanding of a lofty and elusive abstraction—“transcendentalism”—by inviting them to “sing of themselves”:

My best and favorite classes to teach occur during the unit on Transcendentalism in the Form V American Literature curriculum. Over the course of 6 weeks, we read Ralph Waldo Emerson, Walt Whitman and Henry David Thoreau and attempt to define the slippery word “transcendentalism.”

Some of my favorite moments in the classroom always occur during this unit because I get to step back and watch my students teach each other. For example, while reading Whitman’s
opus, *Song of Myself*, each student is assigned the 2 stanzas where they lead the class in discussion. Students must read the stanza out loud, relate it to the transcendental themes of the unit, speak to specific lines from the poem and then offer a discussion question. I find this to be one of my “best practices” because I watch the boys discover a confidence in their ability that they perhaps did not realize they possessed. When I watch boys arguing confidently and knowledgeably about the existence of the Oversoul, I know that they understand transcendentalism. This lesson works because it allows my students to learn from the text, from me as I contribute to the class discussion; but most importantly, from each other.

The unit culminates with a project in which students create their own *Song of Myself*. Students can present this song using any media they wish. The wide range of talents of our boys always impresses me, as I see presentations revolving around art, music, poetry, theater and pottery, to only name a few. This assignment gives the boys an opportunity to focus on what truly represents them, and they always put their best effort into the assignment.

I enjoy teaching this unit because I believe Thoreau, Whitman and Emerson put into words some thoughts that have been percolating in the outer reaches of their minds. A high school boy can easily relate to the concept of following his inner ‘genius’ and that helps lead to the success of the unit.

*(US, male, English, 10 yrs. teaching, 2 in boys’ schools)*

An American teacher of engineering puts his boys to active work on a problem he believes lies very close to their hearts: designing the “perfect car” for an eighteen-year-old boy:

A truism for boys is “tell me and I will forget it; show me and I will remember it; involve me and I will understand it.”

After a lifetime in engineering business I learned that the core essence of good engineering is teamwork and the ability to make good decisions. Therefore this lesson is designed to involve the boys in creativity in a group process. It also introduces them to how a formal process may be applied to make complex decisions and how if they understand how their future customer may make their decisions then they will make smarter choices.

My lesson is where the senior engineering class, in teams of 2, is asked to design the perfect car for the 18 year old male. Once the groups have designed their car, the entire class then participates in the process where we agree 6 important criteria that we would use to compare each team’s car. These criteria may be safety, performance, fuel economy, style, initial cost, tricked out, storage, comfort, etc. The entire class boys and teacher decide what these criteria are to be. The class then divides 100 points between the chosen 6 criteria with more points being assigned to those attributes that are deemed more important. I do the same, but as a parent obviously assigned the point differently.

Each team then presents their design to the class and the rest of the class debates and assigns a number of points to the car for each criterion. Through the assignation of these the class begins to see what customers might value and how their earlier design choices impacted their success.

*(US, male, Science, 4 yrs. teaching in boys’ schools)*
This Australian teacher enlivens his History lesson with a series of “short, sharp activities” in which boys take the role of criminal investigators in order to make sense of a historically significant murder:

I developed an activity for dating historical items called CSI (Crime Scene Investigation) Hawaii. It involves starting the lesson with the CSI theme tune and then working their way through a murder mystery uncovering clues given to them as to an unidentified murder victim. They crack the clues and put in a code to give a date of death. Then they use the internet to find out who died in Hawaii on that date and the internet tells them it was Captain James Cook. The kids enjoy the task. It consists of a variety of short, sharp activities which grab their attention. It also involves a variety of media and is intellectually challenging. It turns an activity that we cover into a fun activity and one that they remember. It is pedagogically sound and effective in achieving the outcomes that I want.

This is a lesson that I do with year 7 History. It is done early in the year as part of the “What is History?” topic. This sort of fun, yet intellectually challenging activity is very rewarding for the students and gets them interested in the subject of History. For a less able class, I allow them to work in pairs and act as CSI teammates. They enjoy the opportunity to work together. For more advanced classes, they are to do it by themselves for the extra challenge. For extremely advanced classes, I give them some clues as to who the murdered person might be (by describing how the person was murdered) and they need to solve the crime without the use of the internet. I usually put up a prize of some type to add a little bit of healthy competition to the activity.

A lesson plan for this lesson would be as follows: 1 minute playing the intro to the TV show CSI; 4 minutes “inducting” them as honorary CSI detectives and explaining the task that they have to complete including going through the instruction sheet with them; 10 minutes identifying the three main methods of dating using the textbook—the methods of thermoluminescence, carbon dating and dendochronology; 20 minutes deciphering a picture of the crime scene that gives them the date of the murder; 5 minutes searching the internet to find the answer; 5 minutes debriefing the activity with the class; 5 minutes reinforcing the key terms and giving homework. I enjoy this lesson because the students get a lot out of it. They enjoy the different activities and that gives me great satisfaction. 

(Australia, male, History, 15 yrs. teaching, 10 in boys’ schools)

In this American English teacher’s “best lesson” his 7th grade students are asked to make the case for admitting a decidedly unscholastic character—Mark Twain’s Tom Sawyer—to their school. In attempting to explain and endorse Tom’s irrepressible boyishness, students are encouraged to evaluate their own:

At the conclusion of reading The Adventures of Tom Sawyer, I have the students write a letter of recommendation to our school on behalf of Tom Sawyer. Students may choose to recommend or not recommend Tom for acceptance to our school. The letter they compose will consist of an essay that states the students’ reasons for or against accepting Tom Sawyer. Students must use details and examples from the novel to support their opinion. They will focus on Tom’s character and his growth in maturity as a means of justifying their decision. Students will be given an actual recommendation form used by our school.
Prior to starting the novel, I tell the students that they will be writing a letter of recommendation for Tom to attend the school just as they had asked teachers, alumni, or other significant people to write letters of recommendation for them. In this way, it makes a real-world connection.

I explain that normally one would not write a letter against a student attending a school and that if they were ever in the situation where they felt that they could not write the type of letter the applicant was looking for, then they should politely decline and explain that in a gentle manner.

However, for the purposes of our assignment, the students were allowed to write a letter cautioning the school against Tom’s acceptance if they felt that was in the school’s best interest. I felt this would engage the students more since they had a choice, and it would make them have to weigh the pros and cons of accepting Tom.

Additionally, I provided the students with a t-chart on which they could cite incidents from the story that would support either recommending or not recommending Tom. The purpose of this was not only to choose a side and support it, but also to encourage the students to take notes as they read.

In class, I created a chart that included such topics as: mature—immature, responsible—irresponsible, self-centered—others-centered, honest—dishonest, etc. Periodically (three or four times) during the reading and discussion of the novel, we rated where we thought Tom stood on each topic. What the students noted was that Tom was gradually growing/improving in each category. It was not always a smooth growth as sometimes it was two steps forward, one step back. However, we were all in agreement that there was growth.

Upon completion of the novel and beginning the recommendation letter, the question then turned to evaluating Tom’s character and determining whether or not he could/would be successful at our school. Students then had to determine whether Tom’s growth in maturity, responsibility, etc. outweighed his earlier ‘sins’ in the book.

(US, male, English, 12 yrs. teaching, 6 in boys’ schools)

As a means to honoring scholastic excellence, an American Mathematics teacher devised a classroom ritual intended to recognize high achievement as something masculine—even romantically heroic:

In my third year back in the classroom, following an 18 year hiatus, I was looking for a practice in my all-male school which would be rewarding for the stronger students.

It seemed many teachers adhere to the 90/10 Rule: spending 90% of their discretionary efforts directed at 10% of their students. I wanted to generate positive student energy by ‘rewarding’ those who were performing well.

The practice I adopted is called “Last Man Standing”. After grading a chapter test, all tests which are not in the “A” range are returned first. Then, all students who have NOT received a paper are asked to Stand. Papers in the “A” range are then returned in increasing grade order; the student with the highest grade being Last Man Standing.
My goal of generating positive student energy has been aided by this practice. The stronger students want to be the Last Man Standing. The weaker students have invested more preparation energies because they want to join classmates who are publicly asked to stand. The repartee between students during the practice is, to me, priceless (boys being boys).

Incidentally, each student standing receives a sincere congratulations/thanks, a handshake and eye-to-eye contact… intended to provide closure to a positive event, and, encouragement to continue making the preparation investment.

(US, male, Mathematics, 8 yrs. teaching in boys’ schools)

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Metacognition

Metacognition is an increasingly central term (Flavell, 1976) in educational theory. It is generally understood to be the reflective awareness of one’s own cognitive processes: the understanding not just of what is learned but how it is learned. There is no doubt a degree of metacognition in every instance of learning, but some instructional approaches seek this outcome—“learning how one learns”—in itself. Evidence of metacognition sought and realized can be seen in many of the lessons selected under this study’s several categories. Included below are a few examples of metacognition pursued as an intrinsic good.

For example, this Australian Physical Education teacher supplemented his instruction of a fundamental athletic skill—throwing balls—with an analytic consideration of the physiological factors at work and how understanding them might lead to improvement:

**Summation Of Force Lesson, Year 12.** Using a worksheet created I applied the theoretical knowledge taught in class to a throwing activity. The boys were given 6 tasks ranging from throwing a tennis ball sitting down with their back against the wall, kneeling with rotation of their torso, throwing with only their upper body while standing, rotating their upper body while standing, taking a step to throw the tennis ball and finally a run up and throw the tennis ball. Through the course of the experiment the boys used more and more muscle groups to generate greater force and apply the principle of force summation. They also sequenced their muscle groups and by the last task were stretching to their fullest extent to generate maximum force. This reinforced the use of a greater range of motion. I added an element of competition by having the boys work against each other in pairs which stimulated the boys further and kept them on task. They threw against each other for each of the 6 tasks and measured their throws each time. At the end of the lesson they evaluated their results and graphed them for analysis. Their homework was to suggest the reasoning as to why the throwing distance increased and how this could be applied to a different sport. I encouraged them to use a sport they currently played. This narrowed their focus and allowed the principle to be more real to the boys and something they could benefit from when they competed in their sport.

(New Zealand, male, Physical Education, 10 yrs. teaching, 8 in boys’ schools)
An American Biology teacher employed a collaborative, open-ended laboratory investigation in which his boys were to discover not only a number of features of plant cells, but also how problems generally are best approached and solved:

This lesson was assigned right after Thanksgiving and occupied the two weeks leading up to exams. The boys in this class range in age from 14 years to 18 years (9th–12th grades). Most of these boys are strong students though not in the most demanding science track.

The lesson assigned involved learning and distinguishing major cell types, implementing scientific skills introduced during the semester, such as qualitative and quantitative observation, measurement and estimation, and data organization and analysis, learning principles affecting the structure and function of cells, such as diffusion and osmosis, and practicing the scientific method.

The students had been previously introduced to the use of the microscope. They were then given a series of questions about a water plant that they were to answer using the microscope. The questions were posed giving a minimum amount of instruction on how to find the answers. They were told that I, as their teacher, would not answer their questions, but, if they became confused or stymied, they could come to me, ask their questions, and I would respond with questions that might indicate whether they were on the right track.

I emphasized that what I was looking for in this project was not so much a ‘right answer’ as a description of how they thought through the question and solved it. They were encouraged to collaborate with each other. The project was big enough that it took working with their fellow students to accomplish it all. Using digital cameras on the microscopes, they were to take pictures to illustrate their report. Because we only had three cameras in the class, they were to all share their pictures with each other, because very good pictures illustrating the solution to a particular question were hard to get. As they got in to the project, the need to collaborate became more and more apparent. They were asked such questions as what are the regions of the cell?, how does it support itself?, what parts of the cell are visible?, what parts of the cell are not visible with the light microscope?, what do they estimate is the number of cell layers in the leaf and how is that determined?, what are the dimensions of the cell and how is that determined?, how do they know that a large vacuole is present?, what are the dimensions of a chloroplast?, how many chloroplasts are there on average in a cell, and how thick is the cell wall? Additionally, they are to observe, describe, and illustrate the appearance of the cell in distilled water and in a concentrated sugar solution. They were asked to answer similar questions about a Paramecium.

Although collaboration is encouraged as they carry out the procedures in the lab, when they write their report they are asked to do that on their own with no collaboration, so that their answers are in their own words. Again, it is emphasized over and over that they will be graded on the descriptions of how they solved the problems more than what their exact answer was.

(US, female, Biology, 19 yrs. teaching, 15 in boys’ schools)
In this “best lesson” An American Art teacher has her life drawing students monitor their brain states as they draft figures:

To begin the Drawing from Life unit I spend a couple of days on right brain/left brain info. The boys seem to understand the so what of the drawing assignments as well as the how to much better since I’ve started doing that. The toughest part of drawing from life is learning how to see… and when we take it step by step beginning with this is where your brain has to go in order to do this assignment and here are some ways to get there, the results are MUCH better than if we were to jump right into demonstration and drawing. We talk about how it feels to be in the right brain (they discuss the kind of activities where they lose track of time, have intense focus, are very engaged in activity but not through verbal communication). They seem to get it. We then do some right brain drawing exercises. I show them how to see in a right brain way: to look at the still life objects in terms of axis lines, proportions, shapes, angles, and value rather than pumpkins, gourds, baskets, and plants.

(US, female, Studio Art, 27 yrs. teaching, 16 in boys’ schools)

To prepare his students for the precision necessary to conduct scientific research, an American teacher begins his course with an exercise designed to heighten the awareness and accuracy of their own powers of perception:

Getting young students to understand the detail involved in the “Scientific Method” is made easier by demonstration. I give them 3 seconds to read a printed statement that I hold up while standing in the front of the classroom: Paris in the the Spring.

I then ask them to write down on a sheet of paper what they read. Inevitably 95–98% of the students write—“Paris in the Spring.” It is then a good idea to discuss why they missed the second “the” in the statement. What makes this an effective example, is when one looks at the step of observation which is found in the “Scientific Method” sequence of steps, it makes a very valid impression on them. The point being, if one misses a simple word (which is in plain sight) in a sentence, imagine the attention to detail that is required when actively working the “Scientific Method”.

We then note that George Stahl of the 16th century, stated that phlogistan must be present in a substance for it to burn. For 200 years students were taught this incorrect theory; they didn’t see the second “the”. We even do experiments in the lab to support Stahl-1. we observe the loss of weight in a burning candle (losing phlogistan), 2. flame goes out of a burning candle when a beaker is placed over it (phlositan fills up the beaker—a container can only hold so much phlogistan). Finally Antoine Lavoisier meticulously pays attention to observations while testing Stahl’s theory, which leads to his discovery of oxygen.

It is then that we look at present day theories; are there any problems with some of the theories today. Then we discuss some of them; the bottom line is they (the students) need to do their own research rather than believe everything they hear, even if it’s in the classroom without a preconceived bias to the end result.

(US, male, Earth Science, 37 yrs. teaching, 28 in boys’ schools)
Novelty, Drama, Surprise

Over the past quarter century findings from neurological science have converged with long-held observations in experimental and clinical psychology to the effect that memory attaches to strong feeling. And as memory is a crucial component of every student’s capacity to master, replicate, and use what is offered in instruction, the implications of teachers arousing strong feeling, and thus stored memory, are profound. Many of the reporting teachers noted the transitive efficacy of surprising students in some way, perhaps by conducting usual class business in an especially dramatic or unexpected manner. In some instances presenting unlikely material for analytic consideration appeared to arouse a usefully energizing and receptive climate for learning—there were two separate accounts from geographically distant and otherwise quite different schools about the positive consequences of lessons on flatulence. Extreme theatricality, pushing limits, taking students temporarily out of their comfort zones, or simply delighting them in unexpected ways—all were given positive endorsement as effective practices for boys.

A HINT OF DANGER...

Perhaps unsurprisingly, teachers in all disciplines noted—and to an extent were willing to indulge—their boys’ fascination with (sometimes literally) volatile material. The following account from a New Zealand Chemistry teacher of long tenure suggests the transitivity of providing students with a safe brush with danger:

A series of around 30 second video clips throughout a chemistry lesson (Form 5 or 15 year olds) which also includes some practical demonstrations on the same topic. Sometimes chemical reactions are too violent, unpredictable and indeed forbidden in a school laboratory. Boys are fascinated by things with an element of danger. An example is the reaction of the alkali metals with water. With care, some reactions can be demonstrated in a school laboratory (lithium, sodium, potassium), but the others cannot. YouTube has some wonderful videos, particularly the Brainiac series which boys can and certainly do follow up on their computers at home. Bath tubs have the elements placed in them and the bathtubs are blown to pieces with the most reactive metals. It is important, though to show the part that can be safely demonstrated for the lesson to have the same impact. Once viewed the reactivity of alkali metals is always remembered. Nobody would ever repeat the Brainiac experiments, but since the clips are available they can be used. I think boys also become very conscious of laboratory safety also and appreciate the limits of what can be done.

(New Zealand, male, Chemistry, 43 yrs. teaching, 39 in boys’ schools)

A New Zealand colleague found it effective to take such demonstrations to a more theatrical level:

One of the most effective ways to reach boys when teaching chemistry is the theatrical demonstration. This method is employed best by “mad professor” types with lab coats and strange glasses, combined with colour, gases that envelop the floor of the lab and explosions to match. This can be achieved in the school laboratory with a little organisation and imagination. The lab coat must not be new, should have many stains on it and may well be coloured by construction or tie-dying. The teacher needs to adopt the thespian approach and get the boys to believe they are on the set of a Harry Potter movie or something similar. It is
essential to act out the demonstration as you do it and elicit the help of one or more of the boys in attendance. Probably the most effective level for stimulating an interest in Chemistry is the first year of “pure Chemistry” which for us is Form Five. At this level you are generally getting boys who want to study Chemistry because they see it as a tool to go further in science and a form of entertainment if there are lots of exciting practical things. Some of the better demonstrations I have used are:

- a large stick of sodium in the school swimming pool
- balloons filled with hydrogen/oxygen in a 2:1 mix lighted with a long taper outside
- smaller scale explosions of sodium and consequent spattering of sodium hydroxide in a fume cupboard
- anything with dry ice

(New Zealand, male, Chemistry/Physics, 29 yrs. teaching, 8 in boys’ schools)

The transitive effectiveness of stimulating students by exposing them to dangerous and even tragic mishaps was affirmed in this English teacher’s consideration of the Challenger space disaster with his Year 10 students:

In a class introducing rhetorical devices and the language of speeches to a high level year 10 class the lesson began with a short clip of the Challenger disaster streamed from YouTube. It was then explained that prior to 9/11 this was probably considered to be the most public postwar disaster in America. It was particularly hard felt since a lot of time had been spent on a PR campaign to reignite interest in the Space Race with the inclusion of a teacher on board. The explosion had been watched live by millions, including school children.

Students were then asked to comment on what the expected and appropriate reaction would be from the US President. The results from this brainstorm were put on the board.

The class then watched a clip of Ronald Reagan’s famous speech made that same day, in which he declared that “The future doesn’t belong to the faint-hearted.” Boys were asked to comment on what his main message had been, and any particularly effective phrases that stood out.

A transcript of the speech was then handed out and we listened to the whole speech again. On the other side of the handout, students were now asked to respond to a list of rhetorical devices—some of which were known to them. Students had to either find an example of a particular device or explain which device was being employed in a particular sentence/phrase. In each case, students were also required to identify the reason for the use of the device. Final questions concerned the main aims of the speech.

Students were then called upon to give their answers and corrections were written into students books. At the same time a list of rhetorical devices with a simple definition for each was written on the board and students were asked to write it down in their books.

The lesson ended with a brief overview of what made this particular speech effective, with comments being elicited from students and written on the board.

(New Zealand, male, English, 1 yr. teaching in boys’ schools)
A New Zealand teacher introduced his students to Newton’s Law of Cooling by setting his students to approximating the time of death of a murder victim:

During a double period, while students are at interval, I set up room as a murder crime scene. With a taped outline of a body on the floor and a thermos of warm water placed on the body, the scene is set. Upon entering the room the boys are subjected to the situation of walking around the body. The instructions are given. Armed with a thermometer, they are required to find the approximate time of death. Given a temperature of the body an hour before, they must measure the temperature of the body and room temperature. Doing the calculations using Newton’s Law of Cooling, it always amazes the students that they are all within 10 minutes of each other. This is a good practical demonstration of the uses of Differential Equations. The model creates a lot of debate about methods and interest in mathematics side of science.

(New Zealand, male, Mathematics, 23 yrs. teaching, 18 in boys’ schools)

An American Classics teacher of 7th grade boys engaged his boys actively in the assassination of Julius Caesar, allowing them to take turns as assassins and victim:

As I approached teaching Julius Caesar to 7th grade, all male, English students, I planned to focus on the plotting of the conspirators and the actual murder of Caesar. At the beginning of the unit I asked all the students to bring a bed sheet from home (a double/full size worked the best). They would leave the sheet at the school, and each day they entered my class, they would put on their “toga” and wear it for the duration of the class. This helped them get the feeling they were in Rome as they actually read aloud the play.

We focused on each conspirator by identifying his connection with Caesar, and then we tried to understand his motives for assassination. As the boys dressed the part, read the part, and then acted out the part, Shakespeare seemed to come alive. I had them act out ‘bathing their arms in Caesar’s blood’ and take turns being Caesar or a conspirator. We watched part of the movie to gain a visual perspective, then we made it our own.

We went outside to the steps of our school (the Capitol if you will), and Caesar stood on the steps as the conspirators boldly and publicly assassinate him, reveling in his fatally wounded body, dripping with blood from all the stab wounds. The boys would ask to reenact it over and over, wanting to each have a turn at being Caesar and Brutus.

(US, female, Latin, 11 yrs. teaching, 8 in boys’ schools)

A Canadian teacher of Physical Education and basketball coach reported that introducing his teams to the principles of Sun Tsu, *The Art of War*, both intrigued his players while deepening their understanding of the game:

Several years ago it became apparent that in order for me to go to the next level of coaching it was important to pass on the knowledge of not only how to play basketball but also how to coach it. In other words why was I making the decisions that I was making. The players, I thought, should understand why certain things were done and what thought process brought me to these decisions. In the end, they too should be able to find solutions to game time problems. To this end, I needed to be able to articulate to myself my approaches before I could pass them on to the players. I began to teach and discuss principles of attacking and defending
and how set plays could come out of these principals. The main theory that applied was from Sun Tsu, *The Art of War*. My senior Basketball team took to this approach carefully at first. They found things interesting but did not quite see the relevance. As I connected more directly some of the principles from *The Art of War* to the application of a set play, they began to understand how to attack, for example, different defenses and presses. The best illustration is the reverse pass against a zone defense. The principle is to be first to “gain the ground of contention.” We place a player on the opposite side of the court just outside the three point line while the ball is on the right side of the court. We throw a skip pass across the court where our player has “gained the ground of contention.” This creates a situation of a defending opponent running towards the player to defend. As they “empty their energy” we counter full of energy. Hence the principal of “attacking emptiness with fullness.” The players were all over it.

*(Canada, male, Physical Education, 24 yrs. teaching, 23 in boys’ schools)*

**VISCERAL EXPERIENCES**

While exposure to visceral experiences can be initially aversive to some students, the drama of such exposure was found by several teachers to be transitive to sustained and long remembered engagement in the material under consideration. This New Zealand Biology teacher indicated the transitivity of his Year 12 students’ experience with dissection:

Every year I demonstrate a lung dissection with my Senior Biology (Year 12/13) class. It comes as a heart/lung set—a pluck—and I concentrate on the lungs since the students do a heart dissection themselves at a later date. In these times dissections are not as accepted as they once were and it is a rare occasion. The students are fascinated by the real thing and, to me, this is real biology. Along with the actual cutting up of the lung, (boys are usually very interested in cutting things up), I have a large repertoire of stories about lung cancer, pulmonary embolism, diseases etc which accentuate the event. The students are delighted when I inflate the lungs with a Bunsen burner hose and always encourage me to blow it until it bursts, (which it never does). The students poke and prod the lungs and are often surprised at the pink and spongy nature of the tissue. Once, many years ago, a student fainted. From time to time I meet ex-students who have gone into medicine and they tell me that they remember the dissection and that the human biology part of the course prepared them really well for the university course.

*(New Zealand, male, biology, 30 yrs. teaching, 25 in boys’ schools)*

Another example of the positive transitive effects of immersing students in visceral considerations was recounted by this New Zealand teacher who had his Year 9 boys simulate the experience of slaves bound fast in the hold of a slave galley:

I had an extremely low-ability Year 9 (13 years old ) Social Studies class a few years ago. We were studying the Slave trade, and specifically the voyage from Africa to America. I sensed that the boys had gained no real understanding of the horrific nature of the voyage. The text we were using was “dry” and the language was perhaps pitched a little too high, so I decided to take a different approach. Without any real prep or lead-in I instructed the boys to group their desks together in a solid block. Then they had to climb under their desks. They had to make sure that their entire body fitted within the boundaries of their desk. I joined them, under my desk. Once they were in place and settled I told them to close their eyes. I told them
to imagine that they were slaves, chained and stuck in this tiny space for 6 weeks or more. They were on the middle of the 4th deck, with hundreds of other slaves packed above, below and beside them like human sardines. I described rough seas, forcing the sailors to keep the hatches closed; slaves vomiting, urinating, defecating as they sat chained in the dark. I talked about fellow slaves dying next to them and starting to decompose in the hot and humid conditions. The language I used was graphic, at times profane. I conjured up images of the most horrific sights, sounds and smells. Within 2–3 minutes we were all extremely uncomfortable but the boys simply had to cope. The boys didn’t make a sound apart from some rustling and jostling of desks, even as the discomfort levels rose. All up we were only under the desks for something like 10 minutes but everyone was greatly relieved when we finally came out. The follow up activity was a piece of empathy writing. The students were asked to imagine that they were 60 years old, having lived in the US as slaves all their adult lives, and they had to describe their slave-ship experiences on the voyage to America to their grand-children who had been born into slavery in the US. This was arguably the best piece of empathy writing that the class produced all year.

(New Zealand, male, History, 24 yrs. teaching, 20 in boys’ schools)

An American teacher of Health and Physical Education reported positively on the effects of introducing his 10th grade students to a dreadful reality, testicular cancer:

In a unit on Cancer I bring in a group of people to discuss Testicular Cancer with our boys. The group involves a cancer survivor, who explains his journey through diagnosis and treatment, a medical doctor who works with Cancer patients to answer questions the boys have about cancer in general and a hospital staff person who describes the patients experience through their eyes. The combination of these professionals being present in the classroom lends a feeling of importance to the lesson. A short film is also shown that chronicles the life of a college athlete who is diagnosed with, and eventually succumbs to testicular cancer. It is a vivid and moving lesson that has really resonated with the boys in the past. The lesson is taught to 10th grade boys in the health portion of our health and physical education curriculum. This is generally a sensitive issue for boys to discuss, but with the help of the group, they are able to bring the boys face to face with a disease that affects millions.

(US, male, Health/P.E., 31 yrs. teaching, 29 in boys’ schools)

While some kinds of exposure to visceral or repellent subject matter could fairly be considered exploitative or potentially emotionally overwhelming, under the guidance of a thoughtful and sensitive instructor, even the most unthinkable and unviewable material can serve to deepen boys’ empathy and understanding. This South African English teacher recounted a lesson in which he brought the realities of the 9/11 World Trade Center attacks very close to home for his Year 12 boys:

We were expected to discuss a poem entitled *Man Falling*, dealing with the by now iconic photo taken of Jonathan Briley as he plummeted to earth. I chose to use a PowerPoint presentation and prefaced the lesson with a slide show of pictures taken at school of an Old Boy who had perished in the attack, without telling the boys why I was showing them this. They had a lot of fun laughing at this little boy with socks around his ankles, missing teeth, wet from being thrown into the swimming pool on the last day of his grade 12 year. The next slide was of the impact on the Northern tower. I could point to the 106th floor where Nick would have been preparing a business demonstration. I knew
it would get their attention, but was unprepared for the shock they experienced as evidenced by their absolute silence, stillness and (to my horror) several teary eyes. In attempting to make the poem real and relevant to us, I had succeeded; possibly too well. After a read-through of the poem and a few YouTube clips showing the impacts, pictures of jumpers and the aftermath, we could discuss the poem itself with great understanding.

(South Africa, male, English, 22 yrs. teaching, 13 in boys’ schools)

CROSSING BOUNDARIES, BREAKING EXPECTATIONS

Teachers participating in this study submitted a wide variety of lessons in which the principal—and most transitive—element was surprising them, often to their delight. This New Zealand English teacher enthusiastically departs from standard classroom decorum as he introduces his students to some of the more expansive characters in Shakespeare’s plays:

The main idea of this lesson was to introduce the class to a larger-than-life Shakespearean character, in this case, Sir Toby Belch, from *Twelfth Night* (I have adopted a similar approach with other characters from other plays, with similar success). All students, boys and girls, need a context in which to study, in this case, Shakespeare. I am trying to to provide that here-and-now historical, Falstaffian figure, if you will. A man of his time. A man given to great gouts of excess—food, drink, etc.—Henry VIII-style. To complete the picture, I own full Elizabethan nobleman’s regalia and I wear it, in class, whilst delivering the lesson. Initially, when I add to the effect by burping, farting, etc., in a very loud manner, this creates a degree of mirth amongst the student body but, when I explain the significance of Sir Toby’s surname, they invariably settle down and start to get the picture. If they are a bit slow on the uptake, I can always introduce the notion of sex. Sir Toby was infatuated with his niece’s (Lady Olivia) chambermaid, Maria. This infatuation leads to an examination of a particular form of love in the play. Eventually, Sir Toby ‘boarded and woo’d her’.

Drunken carousing, dancing, capering, stoops of wine, etc. plus the ‘gulling’ of Malvolio (one of the two major sub-plots in the play) all add to the over-the-top character of Sir Toby. I always act the part myself (and, usually end up very hoarse for my pains). This ALWAYS works. I find that a clinical dissection of Shakespeare’s language is a waste of time—far better to let the part (and the character) “flow”. I usually follow my own performance with a screening of the excellent BBC television production of the play, starring Robert Hardy as Sir Toby.

In summary, the main idea here is to engage all five senses of one’s students. I believe that my approach is successful and, I also believe that my students’ understanding of this character, this play and the language therein is improved.

(New Zealand, male, English, 31 yrs. teaching in boys’ schools)

In the following account a New Zealand English teacher outlines a series of experiences that intentionally shatter boys’ expectations about what constitutes “school”—in the interest of enabling them to understand the work and intentions of a great modernist writer:

‘Habit is a great deadener’—teaching Beckett in the classroom.

To introduce the class to the notion of the absurd it is important to break them out of their normal routine so they can appreciate what Beckett was trying to do in the theatre.
Tactics used during units on ‘Waiting for Godot’ and ‘Endgame’ over the years include—

- Class and teacher only allowed to speak in questions.
- Teacher remains silent throughout lesson.
- Teacher doesn’t turn up for class but sends a messenger near the end of the lesson ‘he/she will be there tomorrow’.
- Class spend lesson sitting underneath desks.
- Teacher confines his/herself inside a large dust-bin at the front of the classroom.
- Class are blind-folded.
- Class watch projected time count-down of the lesson on a large screen:
  40:00
  39:59
  39:58
  39:57
  39:56
  39:55
  And so on
  BELL RINGS
- Perform the 1969 play ‘Breath’ (running time 30 secs):
  I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on. I can’t go on. I go on.

These devices need to be employed sparingly...

(New Zealand, male, English, 28 yrs. teaching, 18 in boys’ schools)

Breaking student expectations so that they can gain fresh perspective does not necessarily imply the abandonment or negation of scholarship. In the experience of this American football coach (and English teacher) expectations are sometimes usefully shattered by the reverse process—introducing scholastic material into the extra-scholastic world, in this case the rough and tumble of contact sports:

I teach two sections of eighth grade English, about 30 students, of the 60 in that grade, and I also am one of the coaches of eighth grade football, basketball and middle school track teams. The practice I use almost every day in the classroom and on the athletic field is to use the vocabulary and quotations from our poetry and Shakespeare lessons. For instance, the offensive line in football must leave the huddle with “panache,” (a word essential when teaching Cyrano de Bergerac) or using “we band of brothers” from Henry V, or quoting from Tennyson’s Ulysses “To strive, to seek, to find, but not to yield.” Vocabulary words like ubiquitous, truculent, umbrage, alacrity work well in context when talking about sports.

(US, male, English/Football, 30 yrs. teaching, 18 in boys’ schools)
School lore and literature, both fact and fiction, is full of appreciative accounts of memorable eccentrics. This Australian Mathematics teacher builds eccentricity quite intentionally into his instructional process:

Engagement by eccentricity. Changing the “state” of a student/class by using unusual language or gestures. For example, the equation \( y=2 \) is independent of \( x \), so staring at the whiteboard/smartboard from a few cm away for several seconds and saying I can’t find any \( x \) here usually does the trick. Kids remember the unusual, that which is different, that which is eccentric. In maths I use or make up words or phrases few have ever heard of—the funnier the better. In getting them to remember algorithms like the quotient rule in calculus, instead of the dry algebra format, saying “do me leave me minus do me leave me over me squared” and pointing to the relevant terms seems to aid learning considerably. Keep the kids on the hop so they seldom know what you are going to do next. I’ve seen one teacher lying down at the back of the classroom talking to 25 boys and they were enraptured! Put on some music in the classroom—baroque is allegedly the best for learning. Boys soon get the idea of it and bring CD’s in for a listen. No heavy metal, of course! Burning incense also adds variety to a class—something different. It seems unlikely that the smell, per se, has any effect on their learning, but they feel special because they are treated differently. On occasions use a red or green or blue paper for a worksheet/handout… they’ll wonder why it’s different. Keep them guessing about what is happening next. Boredom bedevils learning…

(Australia, male, Mathematics, 34 yrs. teaching, 26 in boys’ schools)

Few veteran teachers are unaware of the high stimulation that results when clearly “inappropriate” material makes it way into school business. This Canadian English teacher was able to channel what could easily have been an anarchic response on the part of his students—to a consideration of flatulence—into productive inquiry and analysis:

The genesis of this class was a newspaper article on farting—a natural draw for Grade Nine boys. The article was an amusing overview of the science involved, demographic surveys, sidebars of slang terms, etc.

The immediate application was analysis of a general interest piece of journalism—what was the headline? How were the first paragraphs slanted to draw the reader into the piece? How were statistics and scientific research woven into anecdotal and amusing cultural references to make it an interesting read?

But the real payoff was in the planned discussion. The lead question was derived from the cold statistics: men and women, old and young, cultured and crude—we all fart, on average, fourteen times a day. So, the question: “How come we are so embarrassed/offended by a perfectly necessary, universal and natural body function?”

A few boys zeroed in on results, not cause—social disapproval, parental admonishments, etc. Then one boy weighed in with: “It’s one more mask we put on to pretend that we aren’t an animal like every other species on our planet.”
The floodgates opened—we had a discussion that ranged from vivisection to animal testing to factory farms to all the other horrors we visit upon the rest of the animal kingdom—all from an amusing little article on the social improprieties of farting!

(Canada, male, English, 26 yrs. teaching, 5 in boys' schools)

In the review of student responses which follow this chapter, there are many appreciative references to the enlivening effects of teachers' good humor. This veteran American teacher of French testifies to the scholastic uses of jokes:

Often on the weekly printed syllabus, on quizzes and even on tests I add a joke in French. I do this at various levels. The joke is usually the first thing the students look for. There are numerous teaching uses the jokes provide. For example, French attitudes towards other nationalities, i.e., Swiss, Belgians, English, are often transparently evident. Vocabulary lessons are built in. Grammar lessons are equally self-evident.

(US, male, French, 45 yrs. teaching, 35 in boys' schools)

Some jokes are durable enough to become “classics”—as might be said of the American comedy team Abbott and Costello’s famous routine, *Who’s On First*, which for this American English teacher became a “best lesson” on the uses of pronouns:

The Perils of Pronouns

**Objective:** To introduce students to the various functions of pronouns and the importance of their proper use

**Materials:** The Perils of Pronouns: *Who’s on First?* (attached)

A recording of Abbott and Costello’s comedy routine *Who’s on First?*

**Time Required:** One forty-minute class period

**Procedure:** I ask the class what the word “pronoun” means. Most respond with examples and explanations such as “it’s like a noun, but it’s not.” I guide them to break the word down into its parts: “pro-” (for) and “noun.” With a working definition of a pronoun as a word that stands in for a noun, I distribute the packet “The Perils of Pronouns: *Who’s on First?*” I direct them to page 25 and say “Now we’re going to listen and read along as pronoun confusion creates havoc at the ballpark.”

After listening to the recording of *Who’s on First* (during which most of the boys progress from being perplexed to being convulsed with laughter and finally, to remarks such as “He thinks the pronoun’s a name!”), I ask “So what was the problem in this dialogue?”

After brief discussion of the many types and misuses of pronouns in the routine, we begin studying and practicing personal pronouns.

I believe this lesson is particularly effective with boys for a number of reasons. First, it appeals to their love of the great American pastime. When we act it out at the end of the pronoun unit, there is much competition for coveted roles “based” on players’ positions. Because the boys already understand the story, as it were, they can focus on the wordplay. And that is the second way the lesson seems to draw them in.
By the time we reach the exchange where Costello asks “When you pay off the first baseman every month, who gets the money?” and Abbott responds “Every dollar of it” the boys have picked up on the word confusion and start to anticipate and even try to guess the next example. Many actually read ahead to find it.

Finally, most students have been so conditioned to think of grammar and groan that it’s a pleasant surprise when they get the chance to have some fun with it.
*(US, female, English, 9 yrs. teaching, 3 in boys’ schools)*

An American teacher of Mathematics recounted the transitive effectiveness of surprising his students by one day, without warning, presenting his lesson in mime:

To mime a geometry class, certain parameters have to be set and a certain system of classroom management and style must be in place.

On rare occasions, I present a lesson in mime. I give no indication to the students prior to the class but merely walk into the room, take attendance in silence, and then present the day’s lesson. I begin by writing the words “Practice problems” on the board. This is the accepted queue that they are to open their notebooks to section one. When I start a typical class this way, I begin with easy review problems and begin to introduce some new concepts as the problems increase in difficulty.

I might begin by drawing a trapezoid, labeling the parts, and writing $\text{Area}=?$. Typically, someone will volunteer an answer and I will write it on the board if it is correct. Facial features and body language are part of the feedback to coax, encourage, or redirect thought. Though some students are not quick to participate in the class, there are always plenty of students that will ask questions and explain steps to others. If the class is stumped, I may give a non-verbal clue such as writing a formula or pointing to a certain part of the drawing or equation to attract their attention to a specific point they may be overlooking. I may write the first step in setting up an equation. In my typical class, students are encouraged to work together as a class or in small groups to solve problems so there is usually no hesitation for at least one student to volunteer an answer and for others to either support him or add their own solution. There will often be a great deal of student-to-student exchanges. Because there is no auditory queue, the students must be more visually focused on the lesson. Students are very engaged as problem-solvers, as sharers of strategies, or as seekers of strategies.

When we finish, I will move to the next part of the board and again with body language, I will rock between problem number 1 and problem number 2 indicating that I am about to move on but can return to the first problem if there are still questions. The class continues through the practice problems at which time I write the homework assignment on the board. With time about to expire, I attract attention with dramatic body language, wait until there is silence, look at them, and say “Have a nice day”. Many will quickly ask questions about the process of the day but we usually wait until the next day to debrief.

The following day when we debrief, students are asked why I ran class that way and what the advantages were. Every time the consensus by the students is “to get us to think for ourselves”. Students speak positively about the entertainment factor, the amusement of my
movements, the change in routine, and the opportunity to work together. Occasionally, a student will have difficulty with the efficiency of the class because he felt that I should have taught the material directly rather than allowing the students to try strategies that led to dead-ins. Typically, this is the concern by the conscientious student who is very concrete in his approach to math and sees the assignments as disconnected rules that must be memorized with little emphasis on logical thinking.

(US, male, Mathematics, 36 yrs. teaching, 29 in boys’ schools)

An Australian teacher of Art and Design found that inviting her students to consider the absurd proved to be, especially for impatient or resistant boys, a stimulating prod to better work:

This unit of work is for Year 11 Visual Communication and Design Students. It is based on the Japanese design philosophy of Chindogu (weird tool) or useless design. Chindogu are design solutions to the everyday problems of life. Chindogu designs must spectacularly miss the mark in solving a problem. For example, the problem of eating hot noodles was solved by attaching an electric fan to chopsticks. In another Chindogu, weary subway travellers wear a helmet suction-cupped to the train window so that they can doze upright, and a sign on the helmet indicates what station they should be woken up for. This absurdist approach to problem solving is useful in order to focus on the purpose rather than the appearance of a design.

At the core of teaching design is the Design Process, a structured problem solving methodology used to create design solutions for a specified human need. As part of the design process, students think about the audience, context and purpose of a given design problem, and use a range of research, analytical and drawing to skills to present solutions. My experience on teaching design is that students are impatient to arrive at a final outcome and have a tendency to commit to a single design before they fully explored a range of possible solutions.

Students easily get sidetracked by aesthetic considerations of what a product should look like before they have considered function. Another difficulty is students who restrict creative responses to problems with negative behaviour patterns typically identified by responses such as “I can’t draw” or the need for design solutions to be practical or “make sense”.

By asking the students to produce a Chindogu as a design task, they must define and focus on the specific nature of the problem. Because they have been given permission to be absurdist in their approach, students are free from restrictions of logic, ambiguity and practicality. They focus not appearance, but on problem solving. The results are usually extremely humourous, and students enjoy themselves immensely. Students who stick to “safe”, practical solutions are encouraged to raise the stakes and to design for greater impracticality until they see the humour in what they are doing. Importantly, they realise that the design problem is central to the design process, and that there can be multiple design solutions.

This activity is conducted over a double lesson. Students are shown Chindogu examples, as well as a slideshow of absurdist designer such as Droog or Mr Jones. Students initially work in small groups to brainstorm potential problems. From here, they generate rough sketches and ideas before selecting one idea to develop into a presentation drawing, which each group presents to the class. Because of the time restriction, the representational quality of the
drawing is not as important as the ability to communicate the idea, another key facet of the design process. The exercise may also be repeated with the entire class.

(Australia, male, Art and Design, 5 yrs. teaching in boys’ schools)

The efficacy of introducing an anomalous element into familiar classroom business has been a feature of a number of lessons cited above. For this South African Geography teacher, the catalytic ingredient was also delicious:

The teaching of contours has always been a challenge because it is an extremely difficult concept to grasp from diagrams. Added to this, my experience has taught me that the use of as many senses in the teaching situation is what acts as a reminder of the information that is being taught. In discussion with other Geography teachers, I came upon a tried and tested method.

I arrived in class with small individual chocolate cakes and knives. The smell of the cake and the thought of what it must taste like immediately drew the attention of my class, but not before I had assured them that they would be eating it at the end of the lesson. They broke up into groups of 3–4. I gave each group a sheet of overhead projector transparency that was divided into sections which were numbered and labeled. I then slowly guided them through the process of carving these patterns into the cake. Making use of images on the screen in front of them. The group was divided into the person who was carving the cake landscape, a person who was making sketches of the cake and guided by a person who kept a careful eye on the screen and on the sketches and held the group task together. Finally, the group tidied up the sketches and added the relevant labels.

Each group displayed their completed task to the class and was advised by the other class members if anything had been omitted or needed adjustment. Each pattern was discussed and photos of each were projected onto the board. The spirit of competition came alive and the boys selected the best set of diagrams and the group was rewarded. Finally, what they had all been waiting for—to eat the cake.

(South Africa, female, Geography, 25 yrs. teaching, 11 in boys’ schools)
CHAPTER FOUR

Student Responses

From teachers’ comments, we learned of a pedagogy that aims to activate, or prime, boys’ imaginations and willingness to learn. Getting and holding boys’ attention, engaging them in the subject matter and the process of learning, was a critical step in constructing a successful lesson. The transitivity of the pedagogical plan—how approach determined involvement and mastery—seemed to us to be a critical skill developed by practiced teachers. Across so many different schools, with such different histories and traditions, this core feature of their partnership with boys was a remarkable constant. From the boys, we heard this feature echoed, deeply appreciated and explained from the point of view of the other partner, the learner.

The following themes detail the various ways teachers accomplished this partnership with their male students. The themes listed and described in the following two chapters were deduced from a systematic read of each and every response submitted by our 1500 male students; as we read their responses, these were the central ideas that emerged. While there is considerable overlap with themes that emerged from our reading of teachers’ stories, it should be noted that these themes were independently discovered. The two sets of data were only compared after each researcher had conducted an initial coding. In our report, we have permitted this inductive process to carry into the titling of the themes; even where there is great consistency between teacher and student accounts, we have built the teacher and student themes independently. It was only in examining our initial coding that we realized both boys and teachers were describing this same feature as the outstanding element in their favored lessons.

The boys responding to the project survey were promised and given complete anonymity. Not surprisingly they tended to speak their minds. The researchers have made only minor changes to grammar, spelling or other infelicities, as they believed the boys’ authentic, if often unpolished, voices best convey what they wanted to say. Most of the responses were thoughtful and a few of them remarkably eloquent. Taking into account the predictable frustrations and preoccupations of a few boys in a sampling of more than 1500, the researchers were impressed overall by the thoughtfulness and cooperativeness of the boys who participated in the survey. It was clear, in fact, that most of the boys wanted to contribute, wished to go on record appreciating the difference their teachers had made in their lives. The major themes reported below represent various qualities teachers appealed to as they sought to prime boys’ engagement with their lessons. Under each major theme, we list a variety or more particular expressions of that theme, illustrating each with examples.
Playfulness

Boys—of all ages and from all of the schools—frequently selected times when they had the chance to be active and lighthearted as their most memorable learning experiences. They recounted times when games, team competitions, spectacles and teacher performances, explorations, role plays and movie viewing were part of their lessons. They cited these as instances when they were “carried away” by fun or team spirit and when learning was an organic outcome in an emotionally-charged, collective and transcendent process. In these stories, it was evident that boys can love to learn, especially when the lesson “fits” with this spirit of youthful exuberance, playful exploration and spectacle. So many stories, in fact, validated this notion of boys as high-spirited learners, ever ready to engage when their active, playful hearts are recognized, summoned into learning tasks, that this was our largest and most nuanced thematic category.

FUN

Lessons that included jokes and times to laugh seemed especially memorable to our respondents. Reading their responses, we were reminded over and over that these were youth who claimed a right to their light hearts. These lessons ranged across our sample of schools and across the curriculum. Boys could have fun in many different classroom contexts. Many loved to eat and play with food, for example, as this 7th grade US boy shared:

In science in seventh grade I enjoyed bringing in food to talk about fungi and bacteria. Kids brought in many different foods such as cheese (lots of varieties), chocolate, bread, and yogurt. This had an impact on me because I realized that things are not always what they seem. As I thought that chocolate was just milk with added flavors and coloring, actually it had milk which is a bacteria. This also showed me to look more closely at what I think is bland which is really not. This was also an enjoyable activity as we got to eat lots of food in class that tasted amazing. This was also a fun and exciting class during that day.

And a Year 9 Australian boy enjoyed both the food and the related learning experience:

An experience that was especially memorable for me was a German food day. We organised to have different German foods brought in to learn about the culture and traditions of Germans. We also did many different things like bake bread and sample some different German cheeses. The teacher brought in some German cold meats and we tried all the different ones. It was a very different experience than looking in a textbook all day. To add to the German atmosphere, we had to speak only German during the lesson. If we wanted some bread, we had to ask in German, and this was alike for all the different foods. This gave an idea of what kind of food Germans eat. We also sat around the table and when we wanted someone to pass something we also had to ask in German. This was not only a learning experience, but a fun one. At the end we all gave in some money to pay the teacher for the money spent on the meats, cheeses and bread. After we had finished eating we again went over the phrases that we used, which were related to the current things we were learning in the textbook. It didn’t take long to clean up, which is always good. We also learned the names of the different German meats and breads. There were some weird names alright. This activity motivated me to learn more about Germany and taught me about the country whose language I was learning. It was definitely an interesting and engaging activity.
Also, this 6th grade US student:

I remember when we celebrated Chinese New Year and we had a huge party with Chinese food and then what was sooooo fun was that we all got like 500 pieces of confetti and we threw it into the air. It was so much fun because we learned many different cultures and we had a party to learn about the food and things that we would do in a normal day.

Or, playfully recalling a science dissection, this 8th grade US boy:

In seventh grade, in Mr. G’s class, we dissected squids. We did all of this by hand. Once we took out various parts of the squid, some people ate the eyeballs, played with the esophagus, and drew with the ink. We later on cooked the squid into breaded calamari. It was both fun and tasty.

Unlike these lessons, sometimes the fun seemed gratuitous, unrelated to a particular lesson but more obviously included by the teacher as a much-needed break from daily work. Here is an example from a 10th grade US Latin class:

A memorable experience of mine occurred in the spring of freshman year. I was in Latin class and the teacher told us we were going to take a day off to go outside. We played his famous game called D. Ball. This class was different than any class I had ever had anymore. First of all, I’ve never played a game remotely close to D. Ball. Everyone got a number and I started with the ball. I was told to call a number, throw the tennis ball high in the air, and run. It was my friend’s number. He got the ball, took 3 steps and pegged someone. The game continued, and if you got hit with the ball three times, you had to stand against the wall and get pegged continuously. It was a memorable experience, like no other class period I have ever had at the school.

Sometimes teachers devised incredibly clever strategies for capturing enthusiasm and focus by allow boys to play full out, as these Year 7 boys at an Australian school seemed to grasp:

The best subject I have ever participated in was a class at the beginning of term two. In this English class taught by Mr A. we were studying a unit of Shakespeare and to help us understand language from Elizabethan times we read some sheets and then we hurled insults at each other. I found this very engaging because I really enjoyed the unit and the whole idea of insulting people in my class in Shakespearean language was so fun and out there. My best insult was when I called E. a “surly rumpfeed strumpet”. This was my most engaging lesson so far this year.

My favourite lesson was when in English we were hurling Shakespeare insults at each other. This lesson took place near the beginning of term two in the English department. Since in this topic, we were looking at Shakespeare, our English teacher gave us a sheet with many insults made up by Shakespeare. We were instructed to try and memorize as many as we could in five minutes. He told us that we would be trying to insult each other with as many insults as possible. The person with the best insult for that round would get a point. The first person to reach 4 points won the duel. But the trick was that we could not look at the sheet of paper with the insults in the duel. It was all based on memory. Our teacher was to decide who won the round. The class had great fun ridiculing each other with insults such as “puttock” and
“ratsbane”. I enjoyed this lesson because the topic was funny and interesting and because it put a different view on learning, other than just writing on the board and trying to remember impossible facts. The setup was good as well because the desks were in a big square because in the duel, we had to stand up and face each other. We were not allowed to break eye contact with the other person. This lesson was one of the most fun lessons so far, along with a few others. Again, I really enjoyed this lesson because it was one that put a different and better view on learning.

In my Year 7 English lesson I learnt some put-downs that Shakespeare would have used and it was one of the most intriguing lessons I think I have ever had. First we had a list of words we could use and we had to put three words together, two adjectives and a noun, that we thought were the most insulting. This lesson made me more confident when talking because when I said some good put-downs the class clapped and Mr. A. would laugh so when I won I felt exhilarated and proud that I had beaten somebody at a lesson that involves talking which is new for me because I tend to be shy if not nervous whenever I stand up with people watching me. This was the best lesson I have ever had.

In this story from a 6th grade Canadian boy, the fun is both allowed and programmed by the teacher, making lessons in this Drama class among his favorite:

The thing that I enjoyed the most this year was drama class. Everything that we did was fun and interesting. It was just the activities that we did like: the wax museum when you pretend to be a wax figurine at the given museum. A student will walk in the room and pretend to be the security guard. The figures can move when the guard looks away. The point of the game is not to be caught moving or you are out of the game. At the same time you will be posing like a figure at a wax museum, at the end of the game you will need to find out what the museum is about. The best part of the game is when you are walking behind the guard and he turns around and does not see you. The best part of drama class is that you never got in trouble for screaming because it was part of the class. The homework that we had was not very hard but it was fun. It may sound weird but we once had to observe some people walk and make some observations about it. Like they look like a penguin when they walk or they have a limp, all of these are ways of walking. I never realized that some people walk very weird. The most fun part of the class is that we never did any writing work. All we did was do work in the middle of the room. I think the reason why I liked drama the most is because we did things that were fun and interactive.

PLAY
Teachers in the schools attended by our students obviously recognized the transitive value of a good laugh, a fun game, for capturing and engaging boys’ hearts and minds. Many shaped their lessons to engage these qualities by both permitting play and by setting up lessons that invited it. The invitation to play issued by teachers seemed to flow seamlessly from instruction and application, as with this 7th grader from Canada who told the story of a teacher who recognized how much the boys in his class would love to play with the model planes they had built in their Science class:

This year, in grade 7 science with Mr. A., we learned about forces. In this unit, we also learned about flight. But instead of reading long, boring books about the physics of flight, our
inventive teacher decided we would do an exciting and intriguing project. He decided he would let us actually build a glider. So what we did was take a lightweight wood, some rubber bands, and some Styrofoam to build them. Once we had built our flying machines, we were confused because we did not know what we were going to do with them. “Were we going to launch them with our hands?”, we were asking ourselves. But that is not what was going to happen. We saw our teacher's hidden smile. We knew this surprise would be a great one. Out of his desk, he pulled out a ruler, and another rubber band. All of a sudden, our joyous feelings of hope started to drift away. When almost all excitement was lost, our teacher attached this rubber band to the end of the ruler. Then, at that moment, we knew. We rushed up to his desk to form a line. One by one, we were launching our gliders off his desk using the rubber band. Our planes went soaring, all of them landing at the back of the class, all of them tearing through the air. This was one of my education's greatest moments because it was an innovative way of learning new stuff in a fun and exciting way. We had never done this type of experiment before, and I don’t know why, because it was so cool. If every project we did were this fun and if we learned new stuff by doing experiments, learning would be a much greater thing!

In this US boy's story, we hear an example of two boys playing, with encouragement and in partnership with their teacher, during a dissection:

7th grade Life Science class was probably the most enjoyable science class I have been enrolled in. The whole semester was based on how things move: muscles, ligaments and tendons. So, on this day we had a chicken dissection. I paired up with my partner, and we suited up, I put on Latex gloves and we acquired all the instruments we would need. I held the scalpel in my hand and cut an opening down the length of the chicken's wing. Then, slowly, we peeled off the skin and were greeted by a maze of muscles, ligaments, tendons, and veins. Then our teacher said that we could have some fun; she said pull on the tendons and ligaments. I did this and the chicken wing moved. I was amazed that we could make a dead chicken move. Then the bell rang and my partner, who was cleaning up, waved goodbye via a chicken wing.

Whether for middle schoolers or boys nearing the very end of high school, opportunities to play certainly seemed to enhance learning. A Year 12 boy from the UK told the story of a Physics lesson, in which he and his classmates danced, as an example of how boys can “study and play at the same time”:

I remembered one AS physics lesson which was very impressive. We were learning displacement diagrams. The teacher let us play with a motion sensor to learn how displacement is related to time. We could change the shape of the diagram on the screen by moving towards or away from the motion sensor with different speed. Everyone was involved in the interesting game. The teacher also put some sample diagrams on the screen and let us do the shape as the model showed. I also did one and I got a high score for my performance. Some of the diagrams were very complicated. People danced in front of the motion sensor which made everyone laugh. We learned things and had a good time in that lesson. I like this style of lesson. We can study and play at the same time which can also help us learn better.
Another Year 12 boy from the UK also related a lesson in which he and his classmates had played together, this time as a reward for finishing a task ahead of others:

This year, one lesson that I found to be both fun and educational (yes it is possible) was a mechanics lesson spanning two periods. The lesson took place in the staff snooker room and was split into two parts: applying principles we had learned; having fun. During the first period, we were charged with finding figures for the following: the coefficient of restitution between the billiard balls; the coefficient of restitution between the billiard balls and the cushions; the friction coefficient of the table surface. To do this we were given crude measuring materials, having to find ways to overcome not only the basic provisions, but also the obstacles of external forces not covered in the syllabus (such as air resistance) that would distort our findings. After a dodgy start, especially regarding our initial misuse of formulae, our team regrouped to see where steps had been miscalculated and where we could improve upon our practical experiments. The collaborative effort paid off as our group managed to draw figures which even surprised our teacher with their accuracy. We then waited for other groups within our class to come out with their figures (producing successful efforts also) before a discussion over the practical methods and calculations used to derive our answers. Having completed this mentally taxing ordeal, we were granted permission to use the table in the way it was originally intended to be used, although with woeful results when compared to our previous exploits. All the students found the lesson stimulating as it allowed us all to participate, putting theory we had recently learned into practice, giving us a chance to evaluate it, rather than just being taught to accept the writing on the board. Overall, the lesson was particularly enjoyable as I felt that I was taking an active participation in it, and I look forward to more lessons of this nature.

GAMING

A very common theme in respondents’ stories, frequently cited by both teachers and students, was the pedagogical device that invited boys to participate in some sort of game. Sometimes the game was obviously part of the lesson, as when its content drew from the curriculum. But other times the play was simply that: allowing boys to laugh, compete, thrill or be wowed. In either case, however, both teachers and students seemed mindful of this point: games are a sure way to prime boys’ attention, to involve them in the collective pursuit of a lesson orchestrated by the teacher. In their stories, boys were quite honest about their common difficulty paying attention to routine lessons; the examples they cited as best lessons sharply contrasted with this sense of school as tedium, as we hear in the story of a Year 13 New Zealander:

This year in my History class there was one memorable moment that stood out for me. In this lesson we were learning about English monarchs such as Queen Elizabeth, King James and King Charles. Normally I find it quite hard to concentrate in this class, but in this particular period the teacher made it a lot more enjoyable by turning revision exercises into a board game. This board game consisted of a dice and a number of mutly choice questions based upon Queen Elizabeth’s reign. The game went like so. You start at the starting point on the board and roll the dice and move the number the dice shows. When you land on the number you have rolled you have to answer the question; if you got it right you have to stay on that question till your next turn of rolling the dice. We did this in groups of 3 with one person in
charge of reading the answers. The point of the game was to get to the end of the game without answering any questions wrong. This activity built a good sense of competition among the class, making it obvious that they all were getting something out of it. I found it good instead of constantly copying notes off the board day in and day out, and getting bored out of my mind when I am trying to learn but can’t because of the same old routine. This activity taught me a lot about the topic in such a short space of time (40 minutes) and got me highly motivated.

We found the gaming strategy effective across the entire range of ages in our sample. Here, we hear from a 7th grader from the US:

Before a quiz on mythology in English class we would play Jeopardy. My teacher owned a whole set and it was a good way to learn. There would be teams of about 5 and everyone would get a clicker that was their team color. We would play for the whole class, 40 minutes, and sometimes part of the class the next day. There was a scoreboard that would keep track of all the teams points and a winner would be named at the end.

Similarly, we heard such strategies applied by creative teachers across the full range of subject areas. Having heard from English and History, here is a Drama example, offered by a Year 12 UK student:

In my opinion I believe that my best lesson I have ever experienced in my school career was when I was in year 8 and I attended a drama lesson. Normally these drama lessons are quite boring; however I believe this lesson explored many different aspects which would not normally be touched in any other lessons. We began this lesson by playing a game which was called “Ms A’s balls”. This game was the first game we played once we entered the class. It was seen as the warm up game for the lesson. For this game we have to all stand in a circle. Then a tennis ball would start with a pupil from the class and he would throw the ball to another member of the class. This would then be continued to another member of the class until everybody had touched the ball. The hard part of the game is that we had to remember the order of those we threw it to. Once it started getting easier the teacher would inject more balls into the circle, making the game very challenging. One of the main reasons why this was a great lesson was because at first when the teacher told us about the game we thought it was a joke due to the fact it was too easy. However as the game progressed we realised that there is a lot of brain work that goes into the game, because not only do you have to remember the order but you have to look out for the next ball that is coming your way. This lesson really improved our communication and coordination between the pupils because it was necessary in this game. I also believed it bonded our class closer together.

Boys appreciated the opportunities such lessons afforded to play and to move around. But they also seemed to respect the connection between the game and the curriculum. This Year 10 boy from the UK, for example:

One of my favourite lessons was a Drama lesson, in which we had speech lessons. During this time we played a variety of games to improve our public speaking skills. Seeing as it was early on in the term it helped everyone to get to know their fellow classmates and generally have a laugh. One of the games required us to stand in a circle and try and describe our first day
of life. Personally I found this very interesting because it really allowed people to show off their imaginative side, and for some of us their funny side as well. There were only about eight of us in this Drama class so you really felt like you were learning something because there were not twenty boys shouting for attention from the teacher, but a smaller group all gaining a solid and fun learning experience. Another game involved passing a tennis ball around the room and when you caught it you had to say one word to add to the story, and after a few minutes we had built up quite an interesting story with different parts reflecting on the variety of characters in the group. Unfortunately we do not take Drama in year ten any more, which is a shame. But those lessons really got me into some out-of-school drama activities. I believe those lessons build up confidence for later life, and have definitely helped me in social activities as well as some things in school. I would definitely recommend those drama lessons to anyone at the school, because of the skills you can learn there.

The same connection between the fun and utility of the game was affirmed by this 11th grader from the US:

The experience that stands out for me the most during my time at this school occurred during my ninth grade year in Biology Class. We had a test the following Friday, and we were thinking of a way to study most effectively. My Biology teacher decided that we should play a review game that is fun and effective at the same time. The teacher described to us a game called “Trashball”, where the separate teams (three or four students) were asked questions, and if they got the question right, they could shoot a ball of tape into a trash can for extra points (farther away from the trash can means more points). The teacher would read off the questions and one player could answer a question for five points, or get help from his team for two points. If they were wrong, the question is passed to the next team. The winner of the game receives two free points on the next test. My class played this game many times, and my team won the game once. The two points I received helped me boost my grade a third of a letter grade, and I learned some material that I otherwise would have missed.

This same connection was appreciated by a Year 12 student from the UK:

My favourite and most interesting lesson was an Economics lesson at AS level. It was a game that the teacher set up before a lesson (double-period). The game was set up to demonstrate to the students how globalisation works and how international markets bargain and trade. It was called the “International Trading Game”. Four tables were arranged around the class and each table had some resources. The class was split up into four equal teams and the aim of the game was to make the most money. The way money was made was by cutting shapes of a certain length, width or radius, out of paper. Three shapes were used. A circle which was worth the most money, a triangle which had the second highest value and a rectangle which was worth the least. To claim any money, a team had to produce five of a particular shape. Once five of one particular shape had been produced, you could trade these for money (Monopoly money was used). To create these shapes, though, a team had to have resources. Paper, scissors and a ruler were needed for all shapes, and a pair of compasses was needed to make a circle. Each team was supplied with certain resources. One team had a lot of paper, two teams had all resources except for one with a lot of money, and one team had a lot of scissors. The teams with a lot of resources were representing MEDCs, as they have a lot of
power in the world economy, and the two teams with less resources represented LEDCs as they don’t have as much power or money. The game started and straight away teams were bargaining and trading and using what resources they had to their advantage and everyone could clearly see what the game was set up to show. This lesson will remain in my memory as it was such a clear representation of how world trading works. It made what can be quite a complicated theory, very simple. Not only did everyone learn and gain from the lesson, but everyone left the class talking about how fun the lesson was and the fun factor proved essential to the success of the game.

Teachers from our sample of schools seemed able to turn just about any kind of lesson into a game, to the delight of the students. Here, in a Canadian 8th grader’s example, is a game that was cited by numerous respondents:

The most memorable activity that we did this year was the Dictionary game. I specifically enjoyed it because it allowed us to expand our English vocabulary. Mr. A., my English teacher in charge of the activity, presented us with this game at the beginning of the year. Basically, you are separated into groups of four to five classmates. The objective of the game is to correctly define the word, as well as guess the correct definition. First off, you are given a word that nobody in the group recognizes. Following that, everybody secretly jots down what they believe to be the correct definition. The next step is to submit the small pieces of paper to the scorekeeper, who later reads them out loud. The tricky part is to guess the correct meaning; in addition to hoping that other people choose your definition. After people give what they think is the right answer, the scorekeeper gives the dictionary's definition. If that is the answer that you picked, you receive one point (if not you don’t receive anything). On the other hand, if other people selected yours, you receive one point for every individual that chose your definition. Similar to most other games out there in the world, the one with the most points is declared the winner. Although we only played this game three times, I do believe that it is a great way to promote the English language. Additionally, I also think that the game allowed us to enjoy ourselves while still being under educational circumstances. I can only hope that sometime in the near future we will do this activity once again.

This seemingly simple game generated a great deal of enthusiasm, judging from the number of boys who recounted it as a favorite lesson. Here, in another Canadian boy’s comment, we hear of the degree that boys can get excited by even the simplest games:

One of my most memorable things that I experienced during my middle school years (grades 7–8) took place in grade 8 with the famous Dictionary game. Before I explain what the dictionary game is, let me just tell you it is the funniest, most amusing and politically incorrect game ever, which is what makes it so fun. The whole point of this game was to go in a group of friends that may be large (over 5 people) or small (3 or 4) and we are each assigned papers and a dictionary. Each person gets a turn to look through the dictionary and find a strange word that is hard to find the definition for, and then everyone else in the group must use their smarts or imagination to try to guess what the word means. Of course, as a group of teenage boys, we tend to get a bit creative in a sense that everyone finds humorous. The point of the game, in my opinion, was never to actually get the word right, but to basically have a good time, and I think that this was the most effective form of learning. I don’t believe that learning
should be all about throwing a book in front of you or simply writing down a few math problems, but to explore the nature of learning through fun and games and other things that reach out to students of my age a lot better than dusty old books and boring lectures. Unfortunately, the reason I am not doing as well as most of my peers are due to this belief, but I don’t think it’s too late to change.

Boys seemed to appreciate the effort and creativity exhibited by teachers as they try to make lessons enjoyable. Yet another Canadian 10th grader, for example:

At my school there are dozens of activities to choose from, but my favorite one was a project in English. Our class had read a book about the adventures of Odysseus and our teacher had thought it would be fun to design a board game. With the map of the ancient Greek story, as a group we designed a board game. There was plenty of planning that had to be done with all of the 3D objects that had to be put on the different parts of the board. The most challenging part to the project was making the question cards because it used up most of our time. It was an enjoyable experience because I had not done anything like this. At the end of the project we finally played the board game There were some small mistakes in the game but we played it anyway. At the end this was the funniest experience I’ve had at school.

Another lesson, mentioned by several different boys, illustrates the same point: allowing play and laughter into the classroom, even when addressing what would be considered “serious” material, enables boys to engage. Here, the story of 7th grade US boy reveals a skillful teacher understanding the value for boys’ ability to engage with the more serious sex education lessons by inviting them first to be silly and playful with a “loaded” word at the heart of the curriculum:

In a sex education class we played a game called the Penis Game. We go around the room and say penis and try not to laugh. The first time we were goofing but after some practice we got it down.

SURPRISE

Inviting boys to play, as these boys’ stories attest, was one tried and true strategy for engaging them in learning, across all ages, schools and subject areas. Another popular strategy, we found, was for teachers to do the unexpected, present a novel, surprising, even shocking moment. Though most of the examples we received came from science classes—not surprisingly—teachers doing the unexpected was a theme we also heard in other contexts. Whenever they occurred, boys found such lessons memorable, recalling them with obvious appreciation. A Year 10 boy from New Zealand, for example:

Back in year 9 we had a memorable lesson in science. We were learning about tectonic plates and volcanoes. We walked in to the room and there on the desk we saw a large pile of red solids in the shape of a large volcano. Mr A. told us to stand back and then he lit the pile. All of sudden the pile started spiting fire out just like a volcano. It seemed like a volcano was on his desk. This lesson was memorable as I never saw this before, and it was really cool to see.
There was a sense of boys truly responding to their teachers’ efforts to make the lessons interesting and fun in these stories, their trust that teachers were thinking about how to make their points in a manner that would appeal to them. In this Year 9 Australian boys’ story, for example, we hear his appreciation for his teacher:

Early in the year, our teacher was demonstrating how history can be wrong because people mainly write about their experiences. To prove his theory he got a student and “stabbed him.” Our teacher then got others in the class to run through everything they had seen. Almost everyone’s story was different in some way. I found this interesting, not because of the idea, but the way he explained his idea through example.

One surefire strategy seemed to be to include things that exploded or otherwise shocked in their lessons, particularly in Sciences, as this story by a Year 12 boy from the UK exemplified:

The best lesson I’ve ever had was a Physics lesson. One day we did an amazing experiment. The experiment itself was quite simple and it didn’t take a long time to prepare it. However, the Physics (and also Chemistry) behind it is very interesting. What’s more, almost the whole class managed to participate in it. Basically, the whole experiment is about an amazing, very “light” and safe fire effect. First you need to prepare some chemical bubbles (I think it might have been soap bubbles, but I’m not sure. It might have been dish washing liquid or some other substance). Then you take a small pipe with gas (you must be able to change the amount of gas flowing through it and be able to cut it off, otherwise it will not work). You should put this pipe into the liquid and produce the bubbles. Then you wet your hands (both sides!), turn off the gas and take some bubbles into your hands. Finally another person lights the bubbles (with matches). For a second or two a very nice and even quite big fire burst appears. It doesn’t hurt or burn hands at all. Since it doesn’t last very long and the gas is turned off, the whole experiment is very safe to yourself. I only regret that no one had a camera at that time so I don’t have a photo. However, what’s more important is that even though I’m generally not interested in practical Physics (I prefer the theory), this experiment has really fascinated me. In my opinion it’s one of those experiments after which you can say, “Wow, that’s great, I want to be a physicist!”

Physics, of course, seems to lend itself especially well to the shocking and unexpected physical event. Here are several additional examples, the first from a 10th grade Canadian:

I am in grade 10 and this year I took Physics. There was one subject in Physics that really engaged me. My teacher was able to make this lesson very interesting. The topic that we were covering was light. In this lesson, Mr. B. was able to demonstrate how light travels in a straight line. He set up a series of mirrors around the class and made a laser beam reflect off all of them. He then sprayed a kind of smoke to show us the actual laser beam. I really enjoyed this lesson because it really strengthened my understanding about light rays. The part that really engaged me was the fact that he let everyone in the class try this demo out.
These next examples of surprise are from South African schools, the first from an 11th and the second from a 10th grader, and also illustrate this approach in Physics lessons:

Grade 11, Science. Our teacher thought it would be a good lesson if we went out and experienced the build up of water pressure. So we went down to the field with an oddly shaped red rocket, and plugged it into a hose pipe using a special nozzle. Our teacher then turned on the hose pipe and water pressure started building up. The rocket then flew 20 feet into the sky. It was amazing! We then each had a try to see who could shoot the rocket the highest.

Close to the end of last term, we did an experiment with hydrogen. We filled a balloon with hydrogen and then lit it with a match. When the balloon popped, the hydrogen inside reacted with the oxygen and created an enormous explosion. The noise was deafening and the shockwaves were very powerful. The class was very interesting and I learnt a lot. I think it was a very effective lesson because everyone was more focused and interested.

Also from a South African boy, this time a 12th grader, in an example from Biology:

It was in grade 11 during a Biology lesson with Mr D., when we fed a rat to his python. It was interesting and entertaining as it is a more practical approach to teaching rather than the usual theoretical approach. It was something that most people don’t see every day. It was exciting to see how quickly the snake was able to attack the rat.

As with gaming, these strategies knew no age limits. In their instructional dance, boys and teachers of all ages found room to include these moves. Just as with the 12th grader above, here a US 6th grader recounts a similar delight:

One day in my homeroom, my teacher, Ms. A., put up a mirror in the class. I was in 5th grade and at break. The sun was shining into the mirror and Ms. A. put a marshmallow on a piece of paper under the light from the mirror. The marshmallow and paper both set on fire and it was really funny.

And an 8th grade US student:

About one year ago, while in Science class, Mr. B. decided to do an experiment with our class. It involved using a soda can heated up on a hot plate, and a can of ice water. When he grabbed the can with a giant pair of tongs and put it into the ice water, it immediately collapsed in on itself. Then he said that’s what would happen to a submarine if it went down into the ocean and it was not prepared for the journey.

ROLE PLAY
Also frequently mentioned in boys’ examples of their best lessons were times when they were invited by teachers to role play some aspect of the lesson. The boys report with unmistakable approval their pleasure in assuming roles, whether historical or make-believe. This Year 10 boy from the UK, for instance, explained how enlivening a History lesson had been because of its element of play:
The History teacher had been given the cursed Friday afternoon lesson which normally consisted of pupils talking amongst each other and discussing what they were going to do at the weekend while the teacher valiantly tried to get through the material of the lesson in vain. However, the teacher said that we were to have a different lesson that day. He took us all to the drama theatre and passed out a plastic sword and shield and we lined up on the stage. The teacher explained that we were going to reenact the Battle of Hastings. Throughout the lesson we reenacted the battle, half the class as Normans and the other half as Saxons, with the teacher giving step by step analysis of the battle while we acted out what he said. By the end of the lesson we had finished the battle and had even seen a death scene from a student!! The lesson is particularly inspiring for me as the teacher had made a real effort to make the lesson fun and the pupils resolved to make an effort from then on during the Friday afternoon lesson. Also I hadn’t realised that History could be so interesting. I know that the lesson was etched onto my brain because when I took an exam I remembered the lesson vividly.

Including this element of play, even in more serious lessons, enabled boys to engage wholeheartedly with the lesson. A Year 8 boy from Australia explains:

In English, our class had finished the novel we had to study. Our teacher had given us a play that we were reading aloud in class. The play was An Inspector Calls and was a play about how a high-class family in England tied in to a suicide case. The family originally thought that they were all innocent, but all found out that they all had large parts to play in the girl’s death. The play also pointed out how different people reacted to the accusations and the truth that came out under interrogation. We enacted this play in class. It was enjoyable because the audience had a laugh at their classmates expressions, voices and acting, while absorbing the underlying message. In the third or fourth session of the play, I went up to act as the inspector. It was really fun. I found it easy to get into the role of the inspector. The class laughed when we forgot lines, but were subdued in the more serious parts of the play. Although to an outsider, it may have seemed like we were not listening, everyone absorbed the play’s meaning, the characters’ personalities and why it was chosen for the play and other specific details. The story was different from what I usually read and enjoy, but because everyone was having fun watching and acting, I enjoyed following the story as much as I would have reading something more to my taste. The advantages to reading and acting the play aloud were that we did not get bored even when the plot was not at its most exciting. The lesson was most enjoyable, and I would have liked to do something else like it again.

Acting parts in literary texts was selected by a number of boys as a memorable experience, one that was both fun and deepened their understanding of the piece of literature. This 7th grader from Canada, for example, had a “great time” with Of Mice and Men:

During English class in grade 7, the whole class read out loud the book Of Mice and Men. This was memorable because the book was probably the best book I’ve ever read in my lifetime. We had so many discussions on whether a part in the novella proved the American dream or friendship and more. Reading the book was fun and motivating because we had to act out the characters with their accents. The story setting was in the country with the people having rather western accents. Including the accent was fun and made the experience funnier in perspective. While reading the book each student individually had to write down notes that
they would use for their final examination essay and fill out a few pages of activities on the book each night or so. Before the essay, and using our knowledge of the book, we had to make a play with a partner that was part of our final English exam mark. The plays went on during 2 full hour-and-a-half periods with 30 different plays to listen to. Each play was rather a success. It was surprisingly fun to put on the costumes and imitate accents. We had to do an “unseen moment”, a moment that was missing from the book. My unseen moment was before the book started. I had a great time making my play and reading *Of Mice and Men*.

This 8th grade Canadian made it clear, both by the trouble he took to recount the experience and by his explicit comments regarding how effective it had been, as well as fun, that the role play or simulation strategy often works quite well with boys:

In my grade seven History class, we conducted simulations of ancient civilizations. We were divided into four or five different tribes of four or five people and every History class, we pretended to live in their time. During class, we were required to complete many different tasks, always learning about whatever time period we were studying. My favourite was the Mesopotamian simulation. Our class divided into five groups: the Persians, the Hittites, the Phoenicians, the Assyrians, and the Babylonians. My group was the Phoenicians. Our first task was to design a flag for our group. Since our tribe specialized in water combat, we decided to center our flag on the theme of a boat. Then, our teacher posted a small map on the board at the front of the class with five flags of different colours on it, which represented the home of the five different tribes. We were given a certain amount of “Mesopotamian money” which we could use to accomplish many tasks. The team with the most money/ goods at the end of the given time period (about a month) would win the game. First, we were required to split up the tasks. Each group member was given a certain position, some of which included general, financer, or scribe. Every week we split jobs. The general was required to move troops, and the financer dealt with the money. The scribe had to record everything, including trades, moves, and how much money was gained or lost. I cannot recall the last job. Our second task was to buy armies. These would be used to fight other tribes and protect our base. When you bought an army, a small flag would be placed on your base. We rolled a dice to find out how far we could move. When a fight occurred, the generals of the fighting armies would stand up at the front of the class, and chose a card from a deck of cards that was facedown. Each card represented one army. The team that scored the highest card would defeat the other team’s army, and when all armies of one team were eliminated, than the other team would win. Luckily, we were given the right to ally with other tribes. Throughout the entire simulation, tribes were also required to collect resources from certain parts of the map. Resources included things such as silk, wood, or certain livestock. These were very valuable, since if a certain amount of all ten were collected by the end, they could be used to gain a lot of money. These resources could also be traded. Four pages of assignments were given to all of the teams. Each group started out as a nomad tribe. Once the group finished a certain amount of assignments on the first page, their class of nomad tribe would be bumped up to small city. The next class would be city-state, and the final class was empire. My favourite assignment was to write a song about certain hazards that had occurred throughout the simulation. Ours was really funny. Although my group did not do so well by the end of the simulation, I learned a lot about the Mesopotamian civilizations and cultures. Everyone had fun, and even those who normally did not do so well in the class were highly engaged.
There were many variations on the role play strategy that were employed by teachers in these schools. Sometimes the strategy was getting boys to “try on” a role or activity, as in this US school where an 11th grader remembers a “business day” in middle school:

There are many experience that have been especially memorable for me during my tenure at my school, but one that seems especially significant was in the formative year of fourth grade. Fourth grade was one of the most entertaining years at our school. The school work was not very challenging, and looking back on it, I probably worked too hard. It was a year when we went to a theme park to “study” roller coasters, and we went to work with our dads to “learn” about their professions. The most fun and most influential experience, however, was the fourth grade business day. Our class spent about a month in the spring preparing for business day in which we would sell our masterful product to the rest of the lower school. I was lucky enough to be elected president of the company. I was a pretty timid young student, and this was the first time that I really was put in a position to lead anybody. Because of my newly appointed position, I was forced to stand up in front of class every other day and lead a stockholders’ meeting. I cannot remember the specifics of what we I talked about, but I do remember being nervous. It was the first time I felt personally responsible for the success of a group I was working for. I learned how to make sacrifices for the good of our company. One time, for example, I had to kick one overzealous shareholder out of our meeting for talking out of turn. This was probably the first time that I had hurt somebody's feelings, and I felt bad about it. However, experiences like that one helped prepare me for my role on the Honor Council, when cases sometimes result in expulsion from our school. Also, it helped me gain confidence. First, I learned that my classmates trusted me. That was the first time that I actually thought of myself as any sort of a leader. Also, I learned that I could stand up in front of a group and speak with some success. In conclusion, business day was a very beneficial diversion from our normal school work. Especially in lower school, activities like this help students to like coming to school, but also increase their ability to work together. The skills learned in these early years really become useful as the obstacles that school and life present become more challenging.

Often, the simulation was a big project, the culminating event in a course, as this 11th grade Canadian recalls about his 8th grade year:

Although I am highly motivated in all class activities and assessments, one Grade 8 Geography project sticks out as truly engaging. To simulate real-life political affairs as effectively as one could to middle school students, the teacher separated the class into six/seven groups, identifying each group as a country. For about a month's worth of time, each group did various assignments at will. These assignments included the creation of passports, mini-constitutions, bills/acts, and summaries on various sectors of the country. To make it more interesting, each group was allowed to choose any form of government, thus creating greater variety. Each group was awarded points of varying magnitude for every assignment it completed. After the month, to simulate war, the teacher had all the “countries” engage in a simulated military conflict, with the accumulated points serving as military strength. Basically, each group had the opportunity to create alliances and contemplate strategy. At the end, after a definitive winner was established, “peace talks” were held. I remember how this project had the entire class completely immersed in its work. Most students, myself included, treated
“country development” and “war” as if it were reality. I have rarely come across a project which could be so engaging yet so educational in my academic career.

This Canadian class tackled another big concept, democracy, using the role play approach. A 7th grader explains its success:

In the 7th grade, in English class, our teacher was doing a project on classroom democracy. He wanted to know if a class could handle a democracy. It worked out really well. We tried many different types of democracies: councils with everyone in the class a member, one council of elected representatives, and pretty much anarchy, where the whole class just did things without any organization. I enjoyed the first two because they were better organized, but I especially enjoyed the form of democracy where there was only one council of elected representatives who represented four other people besides themselves. I enjoyed this because I was in the council, and we got a lot of things done in a way that made people enjoy them. For example, instead of what other classes did (read the book in class, do a big essay, and write a play) we read the book in class and over the weekend. This was much more efficient than the other classes, because we finished the book in much less time. After the weekend, when everyone had read the book, we watched a movie. The council and I decided to let people bring snacks and drinks, and the seats were arranged with the shortest students at the front, and the tallest students at the back. I think that everyone in the class enjoyed the class democracy because everyone got a say in what we were going to do, instead of just a teacher deciding what we would do in class.

Overall, the role play or simulations described by our respondents were fun, stimulating, and allowed for a deeper and more concrete experience of complex topics. The strategy demonstrates the wisdom of the transitive approach to boys’ education, where strategies to prime boys’ attention and investment result in deeper engagement in learning. This 12th grader from the US described a major History simulation and how it helped to elicit a deeper level of involvement from him and his classmates:

The class experience that is most memorable to me was the World War I trial in my sophomore year of my History class. My classmates and I were teamed up and assigned a specific country from WWI. Our job was to research the country’s involvement and prove their innocence to a judging committee that consisted of teachers and our peers. Through hands-on research and debating with our fellow classmates, I felt as if I had gone back 60 years and was a part of this occurrence in our history. This project made me see History class in a way I will never forget and made me more interested in a subject that I saw to be inferior to the rest of them.

This 7th grade Canadian student was equally articulate; fun helps engage him in learning:

A time in my schooling which I enjoyed very much because of its educational, engaging and interesting status was the unit in History class when we studied ancient civilizations. This unit consisted of studying how civilizations were made and the beginning of man, which then evolved into a much more sophisticated society. We first started learning about how man became and we then learned about the beginning of civilizations. We were then later put into
groups and had to make a presentation on a great ancient civilization. Once we understood the makings of civilizations, we studied more civilizations. Then it was time for our final assessment, the most fun, engaging and educational part of this unit. We, in a group, had to make a skit which was around ten minutes in length about a day in the life of our own made-up civilization. We had to make up a script which revolved around all the aspects of a society: economy, military knowledge, population, hierarchy, etc. All the aspects had been brought together and made into a ten minute skit, of the day in the life of our ancient civilization. This interesting way of doing a final assessment was a great way of putting all what we had learned in this unit plus all our learning capabilities to the max. It was hard, fun, exciting, amusing in some cases and educational. This mix of characteristics made this project the ideal way to learn and have fun at the same time.

SCREEN TIME

Particularly these days, as boys spend more time than ever with screens, watching videogames, TV clips and other forms of visual entertainment, the incorporation by teachers of movies, YouTube videos, PowerPoints and so forth in their lessons is appreciated by many students. The visual media, as several of our respondents explained, make learning especially accessible to certain boys when used by skilful teachers. In their stories, boys not only reported that they were better able to grasp the concept better for seeing it, but a quality of losing themselves in the visual dimension of the lesson also seemed to facilitate their attention to the lesson itself. This Year 10 boy from New Zealand, for example, could not fathom the Holocaust, until he had the opportunity to watch a documentary movie about it:

The lesson that really “clicked” for me was in year 10 History. We were learning about the Holocaust and I didn’t really understand how the war started. We were learning about the Arab-Israel conflict. We started off with how it all started, when the Romans attacked and the Jews fled; then the Arabs took over and the Jews returned and so on. Then we moved on to the movement of zionists back to Jerusalem and that topic flowed on to WWII without any real distinction between the two. That’s what confused me. I couldn’t decipher between the two and didn’t know the actual start of the war, if it was Hitler’s eradication of the Jews, which was what I had heard before, or the movement of zionism. I was the only one in the class who couldn’t figure it out. Then I was really stressing because we had a test coming up and I just didn’t understand. Then a day or two before the test we watched a documentary about zionism and the Holocaust and I got it and everything clicked. I ended up getting 75% and I would never have dreamed of that if it wasn’t for that movie.

Likewise, this 8th grade Canadian was explicit about the contribution watching the History Channel made to his learning about the Crusades:

In History we were studying the Crusades. This was a very memorable experience for me because we watched a History Channel special. This special wasn’t just fun to watch because of the dramatic scenes, it was also very factual. I enjoy when Mr. B. allows us to watch documentaries that aren’t just lectures. They have action scenes that provide factual information, which I find helps me learn. It really helps when a teacher is able to find fun things to do while still learning. Activities, I often find, are a great way to learn about many
different topics. This really helps me to learn because I find that I pay more attention when there is an interactive program because I’m not just learning, I’m having fun. I also find that the different learning techniques are different throughout teachers, but I enjoy the way that all my teachers are supportive in choosing ideas that not only they like but that the students like as well.

Like the Canadian boy, this Year 9 Australian was clear that he can manage his attention better when it comes to watching a movie than he can listening to a classroom lecture, even in a subject as abstract as Philosophy:

We were doing a year 9 unit of Philosophy and Ethics when we came to a unit concerning the study of happiness. One of the branches we looked at was the study of stoicism. We were watching a video on stoicism. We did not take notes until the video was over. I found not needing to take notes while the video was running enjoyable because I could concentrate on the actual video and I absorbed much more information than I would have otherwise. That particular unit was also significant in that I enjoyed learning techniques that could control the mind, to an extent at least. This concept was attractive to me because I had never learnt before anything in my lessons that I could apply to what was going on inside my head. It really gave me an insight into who I was and how I reacted to different stimuli in a way involving my feelings and moods. From that lesson I gained several pieces of knowledge about myself: I learn best when observing a piece of information undisturbed by the prospect of taking notes and looking out for the things mentioned in the notes, and I learn well about things that I know about and can relate to.

Across a full range of subject areas, it seemed, some boys could “listen” differently in the context of a darkened room and a screen, as this Year 9 boy from the UK explains:

The most inspirational and interesting lesson that I can think of that I have had in this school, would be the French lesson in which we watched a BBC 2 made show called *Clementine.* The teacher put on the video and a quite silly theme tune was played. Everyone laughed, expecting it to be a poorly made rubbish film. But when the main character, Clementine, introduced herself, I realised that it was not as corny as I thought it would be. It was a very good video. Clementine introduced herself, her family and then her room. The film progressed into showing a day in the life of Clementine, through eating and at school. It finished just after the break had begun, and we all filed away quickly. The video was a very informative and interesting show of the school system in France. I particularly enjoyed it because I was never particularly good at French listening, but this helped me to get better at understanding the language, and helped me to get better at listening to the language as well. Also, it gave me more words which I could know and use in other aspects of learning the language, like writing and grammar. Moreover, it helped me learn how to pronounce correctly a lot more words that I didn’t quite know how to say properly before. I think this film helped me greatly to get a better grade in the oral section of the French end of year exam, enabling me to achieve an A star grade.
Or, as this 8th grader from Canada explained, movies “force” boys to learn, “with no real discipline”:

In English class we often watch movies that appeal to the subject we are learning at that time. We often get very good movies that are a hit with the students. Many of these movies have life lessons and I find movies are more effective than work or projects. With movies it catches everyone’s attention and they cannot take their eyes off the screen. They are basically forced to learn with no real discipline. In English class in particular we watched a movie called Falling Down which was about two men’s struggles with daily life. Both men were different and similar. Both had some similar aspects like annoying wives and horrible jobs. But both men were also different, one ignored everything that happened around him and took it in stride but the other took it personally and overreacted with every situation. The importance of this was that it introduced us to the next novel we were about to read, Catcher in the Rye, which was similar to the movie, in that the main character cannot handle daily life. Students were able to get prepared for the book we were going to have to read for the final exams of the year and they went in, interested and awaiting to begin reading. Movies allow the student to relax and still be entertained. If the teacher controls the students to listen to the movie, the students get the most out of the movie and are ready for the novel. It also provides a good break from the hectic daily schedule and relieves their stress. Movies have so many aspects that appeal to students and end up teaching us a lot. As I look around the room when we are watching a movie, everyone’s attention is on the screen and cannot be distracted.

Movies are good, but slides, PowerPoints and videos from YouTube seem to work as well.

A Year 12 Australian, for example, appreciated a PowerPoint presentation in an art lesson:

The teacher did a PowerPoint slide show of various images and paintings from 1300s Renaissance Florence. The visual images combined with the teacher’s engaging manner made the lesson come alive. We discussed each image as it came up, talking about how it was relevant to the course. Additionally, he provided us with copies of the images and his own notes so that we could better understand the things we discussed in class.

While this New Zealand Year 11 boy found a teacher’s use of a YouTube lesson especially helpful in understanding the complex concept of totalitarianism:

In the History section of my Social Studies subject in year 10 we were studying the Israeli-Palestinian conflict and learning about tyrants such as Hitler and Stalin. It was quite difficult for some people including myself to understand how Hitler managed to control and influence so many people. We just couldn’t see how he could convert so many people to his cause when he was committing so many atrocities. Mr D., our teacher, was the kind of teacher who would give you a good amount of information to remember and then spend a few lessons explaining the events which occurred. Most of our class really enjoyed this way of teaching. So when we asked him why everyone would follow Hitler in his reign of terror he showed us a video on YouTube called The Wave. In The Wave a classroom similar to ours asked their teacher the very same question and he decided to conduct an experiment to answer their question. He came into the room the next day and made new rules and mottos by which they had to live in the classroom, and he made a name for their class group called “the Wave”. Each day their little society strengthened and they had three main principles to live by. After
a while the teacher told them to start converting other members to “the Wave” and created a hand signal to signify membership in the group, similar to that of Hitler’s salute. Before long the situation escalated to the point where people who didn’t join “the Wave” were considered outsiders and were even beaten up. It almost turned a guy against his girlfriend who didn’t believe in this controlling system; however these two figured out what had happened to them. Finally the teacher who started it all called a meeting to display the leader of “the Wave”. The couple tried to stop it but when they got there and all the people had assembled the teacher announced their leader and put up a big screen showing videos of Hitler. The kids realised how easily they had been influenced and broke down crying. This was a good interactive way of showing our class how Hitler managed to draw people to his cause.

And this Year 12 student from the UK appreciated the teacher’s integrated use of both slides and movies, particularly film masterworks:

My best learning experience was in a recent Spanish lesson, in year 12, where we began learning about the Franco dictatorship in Spain. The teacher began by showing a slide show with some background information on the revolution, etc. This gave us a general understanding of the situation of the time, and then the teacher handed us a pack of notes, which analysed various scenes from a movie we were about to watch. Before watching each scene we would read the notes, and then watch the respective scene. We would then discuss whether we understood what the analyst was getting at and whether or not we agreed. I felt this really engaged me in the lesson, and I wanted to find out more. The use of a film is always a great lesson tool, because the film was both interesting and incredibly relevant to the topic. I find often when teachers show videos in class, they are very mundane and are simply trying to spoon feed you information in the same way text books are. The use of an actual masterpiece of Spanish film was a very clever way of gaining my interest as well as teaching me more of the dynamics and relationships of Franco’s Spain. Not only did this motivate me to find out more about the topic; I also found that I wanted to learn more about Spanish cinema and further my knowledge in that area. By the end I was eager to continue on to the next lesson.

The same skillful way his teacher built a lesson across different media, including movies, was appreciated by this Year 10 Australian:

A particularly memorable class experience for me was during a period of Elective History. This is an elective course for years 9–10, I was in grade 9. It wasn’t an individual period experience, but a whole year; I found it particularly memorable because of the methods the teacher used. During a typical period, we would watch a documentary, be given a handout of information on a given topic, and then examine essay and inquiry questions on the topic. This experience was at no point passive, as the teacher was very enthusiastic and helpful at each stage. This was engaging for me as the documentaries were always to the point and informative, but also interesting.
Boys seemed often to bridle at confining classrooms, routines, predictable pedagogy. Many remembered times they were allowed to set their own direction—picking a topic for a paper, selecting a project of some personal relevance, experiencing little interference or supervision from their teacher—as special, memorable times. In our survey data, we found many stories of boys feeling joy and excitement when permitted to transcend the predictable bounds of their schools. It seemed that lessons which tapped boys’ personal efficacy evoked their deepest appreciation and eager participation. This theme is quite parallel to the theme, Open Inquiry, described by teachers.

**BEING ‘FREE’**

Whether the lesson was English, Drama, Math or Science, boys appreciated the opportunity to make independent choices, ones that could define a direction or perhaps lead to the discovery of some aspect of the lesson that was of personal interest. And while many other elements of good pedagogy are apparent in their stories, this element of having freedom to make choices seemed especially important to the lesson’s effectiveness. Boys’ comments reflected their appreciation of teachers’ understanding of how important this freedom was and for their willingness to permit boys to exercise it. This Year 12 boy from New Zealand, for example, described a writing assignment:

> A class experience that stands out for me is my year 11 coverage of the English topic of narrative writing. My teacher’s approach to this topic was unlike many that I have had before. He inspired me by showing us some of the best previous work and he encouraged us to write by not only giving us the freedom, but by also showing us the true scope of that freedom and what that could entail for us. He introduced us to narrative writing by giving us other students’ work from previous years that was truly outstanding. To know that these pieces were written by students no different to myself was important to me because it gave me the confidence of knowing that I too could achieve that level of accomplishment. The fact that these were the best was also important because they inspired me to try and match their level of writing. That was the motivational side of this topic. In terms of content I enjoyed this topic because we were given the freedom to write about whatever we wished. In English this is often daunting, and the best work is not always produced when given this freedom because students struggle to choose the right subjects and when they do it is often a poor subject for writing on. This was not the case with my teacher. Without putting any limitations on what we wrote about he managed to get us all writing on subjects that were good for an English essay. He got us all to think about actual experiences that we had had or could have had in the past and it was these experiences that we ended up writing about. I found this good for my writing because all of my past experiences are my own, but they were easy to write about and never got too far-fetched because they had actually happened. This is how I managed to do very well in year 11 English and why I enjoyed this particular topic more than most others.

This Year 9 student from the UK described the freedom he experienced improvising in an Drama class:

> The lesson which had the most positive effect on me was the first Drama lesson I had in year 9. We had a chance to act what the script was about with a motion that was totally different
with us in person. We were separated into groups and tried to run through the whole script by ourselves. We could choose the character we were trying to act, and then we had to present it to the teacher and our classmates. We could use anything in the theatre to help us to have a better performance. It’s a different experience than just standing on stage and performing what the teacher wanted you to do. But in this lesson, we got a script and we could do anything with it. We could use different ways to perform it as far as we thought was the best; it was something to do with creativity as well. Also, we could know each other better when we were practising, both his own personality and his skill in acting. It’s a great Drama lesson!

Many boys spoke of being able to relax in a different way in classes where they enjoyed some freedom. This 7th grader from Canada was pointed in his appreciation for the open structure:

Our Grade 7 Drama class is one of the most interactive classes of them all. We have it twice in our ten day cycle every Wednesday, but it only lasts one term, then we switch to another program. It is a treat or vacation compared to the rest of the day and it is a time where we can sit back and relax while expressing how we feel or what we’re thinking by acting it out in front of the class. We’re always “chilling” and we aren’t afraid to present to everyone else what we came up with. We sometimes fool around but the teacher understands that it is a time where we let out all our energy from sitting at a desk all day; it is our moment of liberty. It is not a specific class of drama that affected me; it is all the classes together. We play acting games that brings out our creativity and imagination which let us bring out the craziest of ideas such as the wax museum where we pose in a certain position to illustrate a theme that the curator (a student in the class) has to figure out while trying to catch anyone moving. Our teacher often lets us vote on the activity, which enables us to participate in a democratic society. I highly favor the idea of letting the students vote on activities or topics in class due to the fact that it lets us decide the best course to follow, but guided by the limits set by the teacher. I think that the school should either integrate more drama classes into our curriculum or have the other classes use similar ways of proceeding.

For this Year 9 boy from the UK, although the topic was human development, itself a special subject, the relatively open structure of the lesson especially appealed to him:

In particular, the first PSHE lesson that I experienced. Our class had been split in two so only ten or so people went to PSHE, the others went to Music. This made it much better because we could get more involved in the lesson. The teacher straight away made us much more comfortable with the subject we were talking about which was basically puberty and what we thought of it. He made jokes about the subject and allowed us to express our opinions on the subject. I remember PSHE as a relaxing and fun lesson during the week, allowing a break from normal lessons. We were allowed to talk about it to our friends as well which made the whole experience more enjoyable. The reasons why this particular lesson worked for me is because it provided me with a break from normal academic subjects. It allowed me to be more open and relaxed about the subject and I talked about things that I wouldn’t normally to another teacher. It was much more enjoyable as it was on a subject we can relate to and enjoy. It gave me a time to be free with my thoughts and talk about a subject which is much more relevant to us at our age. Everyone in the class was laughing at the teacher’s jokes and at our friends’ ones as well. It was overall a very enjoyable and memorable experience.
This 8th grade US boy even described the freedom encouraged during a Science assessment as “exhilarating”, because it placed responsibility for learning the lesson on him and his teammate:

This year, in 8th grade Science, there was a lab called the sludge lab which was somewhat of the final lab that summed up the whole unit of Science that we had been covering. We were paired into groups of two and given a jar of liquid and other unidentified materials and asked to somehow separate and identify the seven substances using the methods we learned throughout the unit. It was exhilarating to have free rein over the lab materials but at the same time I felt in control because I had to be careful and take all precautions because this wasn’t a watered down textbook lab. The most intense part of the lab was the time when our teacher burst through the door, came running right at our lab station, and took an evaporating dish we were using from us and put it out the window. He later explained that there were mothballs in the sludge and if we were to release these harmful chemicals into the air, people could pass out and have to be hospitalized. Luckily that obstacle was avoided. Overall, this lab experience was both beneficial for my learning, and gave me the opportunity to have more responsibility which made me feel mature and in control.

As these examples suggest, boys appreciated the teachers who could organize the lesson, set them at it and then serve as back-up resources while they exercised their own initiative. This Year 8 Australian explained in the following terms:

My most enjoyable lesson would have to be an English lesson when we were researching the topic of picture books. Our teacher divided the class up into small groups of about two or three and we were asked to create our own picture book. It wasn’t as if we did just a random story in about five minutes and did some illustrations. We had to research the topic in further detail which meant lots of computer use—that was great. We had to decide which age group our picture book would be for, and the research would help us have a clear mind to steer away from the stereotypical picture book that was aimed at the younger age groups. The key focus of the enjoyment of this lesson for me would have to be the independence that we received. Our teacher was only there to assist rather than to conduct the lesson. If we had a question we could just ask the teacher and the teacher would also review the work we did. In my group there were 3 people and each person was allowed to do his part of the picture book that they were best at. I would make the storyline (with constant consultation with my peers), while another person would draw the pictures. The main idea is the use of computers, the independence and the group work.

For this Year 8 Australian, a similar note of appreciation was sounded regarding a Technology class:

My favourite lesson was in a Technology class in term 2, year 8. This was a practical class. We were building CO2 dragsters. I guess the reason I enjoyed this class so much was the independence given to us when using tools such as a scroll saw. The structure of the class was a five minute instruction, then work for 40 minutes and finally an evaluation with the teacher about what we had achieved that day. While we were working, the teacher came around to supervise us and monitor our progress. I do not think it is just the subject that I enjoyed but the structure of the class to work independently. I believe all classes except Mathematics should be planned like this. The teacher should give us a research task every lesson and I think this would really motivate me.
As the above story demonstrated, for many boys having a measure of freedom summoned their motivation. This 12th grade US student explained:

The creative writing part of the English curriculum stands out for me. There are no boundaries or limits on the subject and it has to be an original piece. This inspired me to create my own characters, stories, plots, and lessons in my writing and I especially enjoyed that. The freedom of writing about whatever and whomever is such a relief from the rules, regulations, and conformity in the other classrooms.

This 10th grader from the US expressed a similar sentiment, attributing the motivation to being his being able to do “whatever we chose”:

While I was studying History this year, my teacher had us do a research project on whatever we chose. This may seem like a normal project; however what made it interesting was the fact that we were allowed to write about whatever we pleased. This enabled every student in the class to choose a particular topic in which they were highly interested. Because we could choose whatever you desired it made every single student in the class be very interested in the topic, instead of having a rigid topic to choose from, which would only appeal to a small number of the students. While I do realize that it is important for teachers to adhere to a certain guide about what things they must cover in their class, it is especially important for the teacher to stress these points in a way that engages all the students. In order to do this, a teacher must truly know what type of class he or she has, and know what things they will be interested in.

Another 10th grade US student offered a similar explanation for his high level of motivation in a writing assignment:

I would have to say that the moment that stood out to me most was a project in English class. This project can be described as a personal narrative. For this we were given the option of choosing a moment in our life that had the biggest impact. It had to be about 3 to 4 pages long and we had the freedom to pretty much write about whatever we wanted. But it had to have some sort of impact on us. For my personal narrative I wrote about how I had Bi-Lateral Hip Arthroscopy. We had guidelines that were to lead us through the narrative. For the first day it was due, we brought a draft to class and we used peer editing to make our narrative better. We were then given another day to have our second draft ready. Our second drafts were peer edited once again. The day our final draft was due we all had to read our work to the class. The teacher then had us talk about our stories very briefly. This whole process took about one week and each day in class we would either peer edit or just on our own write more to our story. I thought that this project had the biggest impact because I improved my skills as a writer and it also gave me the freedom to write about almost anything. The peer editing strengthened my editing skills and also helped me realize things in my own paper that I could edit myself. The class discussion was also beneficial because it helped me learn what the teacher is looking for. This was definitely the most memorable class project for me.
This 11th grade US boy echoes the motivational value of a writing assignment that was “completely your own”:

In my 11th grade English class, we were given an assignment to write a one act play based on the theme of dealing with the “American Dream”. This was one of the only English assignments where I truly tried to go above and beyond. What I felt was most engaging about this assignment was that you were allowed to write your own story. The writing style was completely your own, and proper grammar was a loose restricting guide, because you spoke in the voice of a character and not a student. I also enjoyed the idea that you could create an entirely fictional world in your own mind, rather than attempting to meet the world of literature that English classes are usually based on.

For this Year 9 boy from Australia, we hear the same appreciation for the teacher’s confidence in them as well as for his support in a Maths class:

An experience from school that stands out particularly for me is the work that we do in Maths top set in year 9. I really enjoy Maths classes and because of this I think that I learn better in these classes. Our teacher trusts us to work well and tries to cater for our needs, and is quite successful at this. Once he has set our work he mostly just sits at his desk, not disturbing us unless we become particularly noisy. However he is still there for us to ask him questions if we are stuck or have a problem. Because we have to solve the Maths problems ourselves, instead of being guided through step-by-step, I think that we remember the method we used better and learn more, from both the methods that worked and those that did not. It also helps us feel independent and more motivated and able to extend upon the question if we please. In this lesson we were also allowed to work on our own or in groups of however many people we wanted. This lack of restriction allows us to solve the problem in a way that works best for us. I think that I learn more by not being guided step by step through the problems because if we were then we would only learn one way of attacking the problem and would not have had the satisfaction of knowing that we had solved the problem and not simply written down the answer. It also makes us feel more responsible for our own learning. I also think that devoting a whole lesson to solving a single problem that is particularly vexing is a much better way of learning than if we were to do a large number of simple, repetitive problems of the sort that we could solve with calculators without really thinking very much. These simple repetitive problems only lead to becoming bored and having a lack of interest in the subject. And therefore not enjoying it or being motivated in class which in turn decreases how much we learn or remember. I think that our focus on problem solving in Maths is very important as that’s what Maths in the real world is really about: solving problems. Problem solving is also a great deal more interesting and “gripping” than straight forward sums and arithmetic. Surprisingly, because of the way in which my teacher runs our Maths classes, I actually look forward to them and am quite pleased when I see them on my timetable.

BEING ‘OUTSIDE’

Many boys described their enjoyment of lessons in which they were permitted to transcend the usual bounds of school or routines of the syllabus—whether actually or symbolically. In some cases, teachers capitalized on the transitive quality of being “outside” by literally taking boys out of
doors. This US English teacher, for example, took his class to an outside gazebo for a literature discussion; this 7th grade boy registered the meaning:

One English class, we were going to discuss Ray Bradbury's *Dandelion Wine*. The story starts with the main character waking up in his grandparents’ cupola and his sudden realization of summer’s inception. He thinks of the rituals which he know will take place in the weeks to come. He realizes what it truly feels like to live life to the fullest in these first few chapters. My English teacher took our class up to the gazebo from 1913, which is the highest point on campus. This setting for our class was symbolic of where the book started off. We had a Socratic discussion (reminiscent of that which we have around a Harkness Table) about the main character’s outlook on life, and how we choose to live our life to its fullest and furthermore what the purpose of life is. This is not only my most significant class experience but possibly that of my whole life. I realized that in coming to an independent all-boys’ school that I would learn much more than academics, and my purpose as a human being.

Experiential learning courses lend themselves especially well to this sort of concrete, sensory metaphor for transcending usual experience and routine. In this story, a Year 9 Australian student describes the impact of the solo component of a course:

When I was in year 9 at school camp I had to complete one of the biggest tasks of my life, the solo. This was a major learning experience for me because it made me realize how lucky I have been in my life. On this solo we were put out in the bush for 15 hours and made to survive by ourselves. We were supplied with dinner but it was still something that I have never done before. The 15 hours did consist of a night, though. I spent the night thinking about how I have been brought up in a very protected society and that many in the world don’t get to have the luxuries I have been given. When I woke up the next morning I was a completely different person. I was no longer only concerned about myself. I now knew that in fact I was very lucky and that it is others that I should be concerned about. This solo experience is a very important thing to have in all schools, especially the ones with richer students, so hopefully they too can realize how lucky they actually are. Although I only talk about this one solo experience, the whole camp in general is a big learning curve and very enjoyable. The camp is made to try and develop our knowledge about the bush and to make us into stronger people (not strength wise but inner strength). I would advise all schools to develop a school camp or outdoor education camp as it will be an advantage to all students in the short term and in later life. The skills that you learn are essential to becoming a stronger and more well-rounded person.

But the impact of this approach was not limited to concrete metaphors. This Year 10 boy from Australia appreciated a Chemistry lesson in which the teacher was able to let the group roam, “transgressing the boundaries of the subject”:

One particularly memorable occasion was a Chemistry lesson which I feel enriched my learning by digressing to a class discussion which far transgressed the boundaries of the subject, whilst still containing particular aspects pertaining to the subject itself. The discussion started with the teacher’s explanation of the chemicals used in lethal injection executions in America. This morbid topic soon led to another form of execution, the gas chamber. This in turn led to a discussion of the use of poison gas in the First World War and later a general
discussion of this topic. This followed the pattern of earlier lessons in which we discussed various aspects of English grammar such as the number of “had”s that it is possible to have in succession (11). Discussions of British naval history even merited a report comment on my knowledge of this subject. While these lessons transgressed the boundaries of the subject in question, they did not adversely affect any of the participants’ achievements in Chemistry. These discussions provided an interesting and enriching experience which, arguably, enhanced the Chemistry that we did learn by stimulating students’ minds.

This 11th grade US boy described a lesson in which the teacher deliberately challenged all conventions, to his deep appreciation:

Well, during my junior year of American Literature my teacher posed the class with a question: “What if everything you knew was untrue or a lie?” This question left most of the class in silence seeing that none of us had ever been asked that question before. Before coming to this school my first school had one day a week when we would do a seminar on a topic and since then I have been missing being able to bounce ideas and state my own opinion on a given topic. This in-class activity, to say the least, spiked my interests. The first thing that came to my mind was a way in which a whole society could be wrong and no one had ever come along and said that we were all wrong. Then I thought that maybe people don’t challenge the ideas and accepted dogmas of society because they don’t have these types of situations in which one is given a question and has to look inside one’s self for the answer. Without seminar and discussion there can be no growth and no new knowledge. The world becomes stagnant and once an idea is accepted and never challenged it becomes law. This topic really expanded my mind and allowed me to understand that what we do in class and even outside of class when we have discussion helps further understanding of all things. Without discussion there is no growth. Including the revelation I had on this particular subject, it became even more important when I was asked on a very important standardized test why we should look for our own answers and not just accept previously believed ideas.

This Year 11 UK student had a similar reaction in a critical thinking lesson:

My favourite lesson, was one in which we not only learned how to attack and solve questions which occur in an exam paper, but also how to use the same methods in real life. This lesson taught me how to think outside the box and not accept everything I am told. This lesson was none other than a critical thinking lesson, in which we assess the quality, weight and credibility of evidence. During this lesson we were discussing articles from recent newspapers and magazines, and assessed their credibility. We also looked at the possible reasons why authors may want to misrepresent the truth, and how to identify such misrepresentations as possible bias or vested interest to lie. I enjoyed this lesson because it’s not very often that we are told to challenge what we hear, rather than accept it as fact and learn it parrot fashion. During this lesson, we looked at topics of current importance such as world poverty and war. I think that by enabling us to use our critical thinking skills in everyday life, it reiterated the real importance to me of learning at school, not merely to pass exams, but to achieve a greater and more in-depth global perspective.
This 9th grade US boy tells the story of an English lesson in which a teacher challenged students to think beyond convention:

In 9th grade English class, we read and discussed a poem on the last day of classes. The poem was *Ithka*, which had to do with the book, *The Odyssey*, which we had just completed. The poem taught us many life lessons which we talked about in great detail. The life lesson of enjoying every day or the journey not just the finish was the last idea touched upon by our teacher. It was a very fitting and memorable way to end the year of classes. I’m sure almost every kid in the class will think about that class and discussion at least one time in their life when they realize they are too focused on a goal, and not enjoying the events and experiences which they are going through to reach the goal.

This 11th grader from the US recounted a similar lesson, in which a text served as a springboard for a discussion about life:

In my 11th grade American Literature English class, one day we got off topic and were talking about life and death. We discussed how we wanted to get the most out of life, and the things we most valued. It was a great day in class, and was different from the rest of the days.

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**Centering**

The student respondents reminded us that they are growing adolescents, engaged in the developmental task of defining their distinctive identities. As such, boys seemed to respond especially well to learning opportunities in which they were invited to impose themselves on the subject, relating to it from their personal experience or investing expressive or emotional energy in it. In this sense, they illustrated that learning is a very personal experience, an act of extending themselves—mind, heart, interests, passion—into new realms. Sometimes, teachers crafted assignments designed to reach into boys’ experiences so as to connect curricular lessons to their deepest feelings; other times, they sought to draw out their personal thoughts in more reflective, cerebral ways. Boys appreciated opportunities to make their journey of self-extension explicit and vivid, especially in concrete, tactile and sensual ways. Respondents often mentioned lessons in which they were able to get out of the classroom, move about, have adventures and play, get “hands-on” with their subject. For many, the outdoor education components of their school’s curriculum were occasions for important self-discovery, as well as for bonding with classmates.

**REACHING IN**

Some teachers have obviously discovered that they can elicit great engagement and gratitude when they designed lessons that enabled boys to connect in some personal way with the lesson. We sensed life-altering or defining personal discoveries in these boys’ stories as a result of their lessons. This Year 13 New Zealander, for example, reports an investment of deep feeling in a photography assignment:

Last year, 2007, I was a student in a visual art class. My subject matter was the coastline of Cathedral Cove. This was special for me as it is my home and I have been brought up here in my younger years. I had to go and take photos of the astonishing scenery, which I enjoyed, and use these photos in my art works that I used on my end-of-year portfolio. The teacher
taught me several printmaking methods that I could use to show this wonderful coastline in the style of two famous artists: Tom Judd and Robert Rauschenberg. Together with the help of the teacher and the artists’ techniques I was able to produce a portfolio that got the highest grade, excellence. I was very happy with my end result as it showed how special Cathedral Cove is.

This 12th grader from a US school used the pretext of a History lesson to connect with his father:

For my senior exam in my History class, we were assigned a project to interview a member of the school’s community and get some of their thoughts and opinions about the school. Many students in the class chose to interview teachers, advisors, athletic coaches and alumni. I chose my father. My father graduated from this school and is now still active in the community as a member on the board. For the actual interview, we sat in his office and I had the opportunity to ask him questions, such as: “What values did the school instill in you?”, “Do you think you would have had the same experience at a different school?”, “Has the school changed since you were there and has it been a different type of experience watching the school from a parent’s view?”, “What’s your opinion around the Honor Code?” I got the opportunity to ask my father questions that would have never come up in other every day situations. It was very interesting for me to have this conversation with my dad, especially with this being my senior year, because it gave me some insight into what I would be thinking back on about the school when I am his age. I had to record the whole interview, which lasted around 45 minutes. Then we had to write a transcript of the whole interview. We also had to take the 45 minutes and cut it down to the most important 15 minutes and then report it to the class. We got to put pictures with the interview. It was really interesting to hear everyone else’s interview and all the different opinions of the school from people in our community. This project made a lasting impression on me and will be something that I will think back on as I think of my school.

This Year 10 boy from the UK discovered himself as a poet in response to a teacher’s writing assignment:

Probably my single favourite lesson which I have experienced occurred in year 9, during the middle school. The lesson was an English lesson, and it was a particularly unusual one in that instead of simply sitting down and reading some book and then proceeding to analyse the text in a pompous manner, as was the proceeding in many an English lesson thus far in my school career, the teacher made the bold decision to approach the lesson in a more creative manner. The theme was poetry; the teacher began to talk to us about poetry. He was describing to us a form of poetry which I cannot at this point remember, but whatever it was we were originally discussing the poetic structure and how to approach such work. After doing this the teacher told us to attempt to write a poem of this nature ourselves. Having been given 15 minutes to prepare this task, we were then allowed to read our poems out to the rest of the class voluntarily and then discuss the results. This lesson was particularly beneficial as we were allowed to be more creative in our activities, rather than just being talked to about some topic, and we were best able to acquire a feel for the subject matter. As we were asked to compose our own poems within the guidelines of the teaching, we were best able to understand the topic and appreciate it fully. The creative approach made the
Or this 12th grade US student, describing a literature assignment:

The most memorable moment in my scholastic career came in my junior year English class. I was learning about Ralph Waldo Emerson and in particular his essay, *Self Reliance*. I realized what I wanted to do with my life after learning about Emerson. His message was that the thing that makes you happiest in life is the thing that you are meant to do with your life. That message, coupled with the way that my teacher taught it, resonated with me and I then knew that I was meant to be a video game designer. Because of that English class I was then able to focus both my college search and my life in general. If it wasn’t for my teacher, Emerson, or the school, I would have most likely not known what I wanted to do with my life. But because I was able to find out what makes me happiest in life, I am now able to live my new life as joyously as I can; I certainly owe this new life to my experiences at the school.

Another 12th grader, also from the US, described a similar experience in Philosophy:

I took the Introduction to Philosophy elective course offered at our school during my junior year of high school. The subject highly interested me because it combined general reasoning, practical thinking, and constructive debate to examine and evaluate a wide variety of topics including ethics, epistemology, and skepticism. This course strengthened my intellectual curiosity by bringing up questions that I had often overlooked. I wondered whether humans could ever attain and benefit from absolute freedom and speculated about the detrimental effects of the widespread competition that our capitalist society breeds. I felt that philosophical thought splendidly combined the rationality of Math and Science with the subjectivity and argument presentation present in English and History courses. I enjoyed going to every class and I was thoroughly engaged in every conversation. I felt free to think, discuss, and learn, since factual memorization and number crunching did not limit the scope of my education. The other students in the course were less receptive to the learning material; however, they did not disrupt the class. The single lesson that inspired me most from my study of philosophy was Descartes’ proof of the existence of God. After I learned that Descartes used the rhetoric to fulfill a practical purpose and justify a supernatural existence, I realized that I could similarly use my reasoning and debate skills to justify ideas that I believed. After that lesson, I sought to hone my reasoning skills by rigorously studying philosophy. By the end of the course, I had been exposed to such a wide variety of intellectual viewpoints that I found myself desperately trying to find further examples of philosophical thought. If I knew enough about the many different philosophical opinions, I could formulate my own and more effectively debate those whose opinions were different.

This 7th grader from Canada obviously found a presentation on bullying instructive and personally compelling:

I recall the time, in English class, when we had to make a bullying movie. I was paired up with four of my friends. Our goal was to make a movie to show to the class about how bullying is
bad. We made a sheet that had all of the screen shots and scenes. After we were done, we were allowed to take out a camera from the computer lab. I got really excited because I was always against bullying and this was the time to show to my classmates how bullying was bad. We started filming and it was great. Our movie was about how bystanding was almost as bad as bullying. A student was getting bullied by two people in the hallway while his friend was watching the fight but never stood up for him. An example of this is that if you are watching your friend getting hurt and not standing up for your friend you’re also hurting him. Like I said, I was always against bullying and so I thought this movie might change the way my classmates thought about bullying. Weeks after the movie, I still saw bullying in the hallways, but in my mind I knew that our movie touched some of the bullies’ hearts.

DRAWING OUT

In a closely related way, many teachers in these schools have designed lessons that require boys to self-reflect, to assess themselves within the context of the lesson. This 12th grade US student, for example, described the impact of a writing assignment:

A teacher of “non fiction” writing once said that we should periodically look back at our lives through writing, that we should take the time to write about our lives in order to fully understand them. Non-Fiction Writing is a class that is made up of a series of one page vignettes, which aims to show specific events, the people, atmosphere, and actions as closely as possible. The final project was to be a 10–15 page piece about our own lives, a seemingly daunting task, but one that would turn out to be quite fulfilling. Writing the paper forced me to do exactly what the teacher wanted, and gave me exactly what I needed. During a time when my life is going too fast to keep in focus, when change is hopelessly inevitable, I was able to look back on my life through writing. It helped to facilitate and lubricate the uneasy processes of closure, one which I was, and still am, not looking forward to. But this paper allowed me to harness my angst and uncertainty by forcing me to look back at what my life has been. I know what I did wrong, what I should have done, and what I did do. I know how I want to live my future, because I was able to relive my past. The teacher prescribed just what I needed, and showed the importance of retrospection, through writing, in order to better live the future. We can never know what the future holds, but we can try to form and shape it as much as possible. This paper, this exercise, is one that every human should undergo, one which allows growth for the new, while guarding the old.

Another 12th grade US student also related a writing assignment:

One exercise I participated in that I thoroughly enjoyed was one I did in junior year English class. The assignment was to write about your life; not in any particular order, just write about what has been important to you. The exercise was to write only about what you remember of your life, filtering out the things that have been insignificant. I really liked the exercise because it really showed me what has been important to me, and it was interesting to look back at my life. It was the easiest, yet most significant, 25 pages I have ever written. I occasionally go back and re-read and add things to it. It was a very enjoyable paper to write and I really enjoyed the exercise.
But we heard similar results in other subject areas, like this one told by a 11th grade Canadian boy about an Art class:

I remember one project in my grade 11 visual arts course that completely motivated me to do my best. The subject matter dealt with a self-portrait that defined who we were as individuals. There were no guidelines that we had to follow. We had complete freedom to express ourselves using acrylic paint as a medium. This project really allowed myself to see who I was as an individual under all the layers of pain and oppression. It allowed me to freely channel all my anger and problems into one visual image that defined who I was. Though the end product was great to witness, the process was as well enjoyable. I enjoyed all the feedback and suggestions my art teacher gave me to enhance and strengthen my message. She gave me inspiration, advice, and sources where I could see techniques that could help portray my intended image. That is what I remembered. That was a memorable moment to me because it allowed me to connect to my teacher in a manner that was not based on grades but instead based on who we were as individuals. It was great to relate and be able to express myself openly to a professional who had gone through the exact same stress I was under.

And this 12th grade US student, describing an Economics lesson:

In 12th grade Microeconomics, I did a project in which I projected where I would be in life in 15 years. I gave myself an occupation, a residence, and a lifestyle which I could see myself living at that time. I then mapped out my complete financial status using a Microsoft Excel spreadsheet. I accounted for nearly all of the expenses that I could face as a 30 year old man living on his own. I accounted for salary, taxes, among other things and really set up a financial picture of what my life could look like in 15 years. This project helped me to understand the real world financially, and how much things have to be taken into consideration when spending money and living a certain lifestyle. I got a great grasp of income and expense and the project gave me insight as to what to expect in the future.

Assignments that required boys to internalize the material or the lesson often had profound impact of boy’s self-knowledge. This 11th grader from the US for example, spoke of epiphanies that came from a journaling project:

In the eighth grade, we had to write an autobiography for English. Truth be told, we had been writing it for the entire year; our teacher had us make “journal entries” about our lives as much as we could. When I finally got around to writing the actual autobiography I found that I couldn’t stop. I wrote and wrote, I poured my soul out, my immature, sophomoric eighth grade soul. When the autobiography was completed, it was over thirty pages, thirty pages of garbage, of genius, of me. I hate that paper now, at the time I liked it, now I hate it. When I wrote it, it was good, most certainly, it was good. It showed who I was and what I thought and felt, it was excellent; but now, a few short years later, I hate it, maybe I don’t hate it, but hate the person I was when I wrote it, but regardless of my feelings towards it or me, I was passionate about writing it. I had fun writing it, I laughed about what I’ve done, I cried about what I’ve done, it was passion incarnate. So, in summation, I find that passion brings certain creatures to light, and that we change with the years more than we like to admit. And to think that these epiphanies came from an eighth grade English project.
This 10th grade student from the US shared the story of a similar result from a risk he took in a writing assignment:

In my year at the school there have been things that were engaging and enjoyable assignments throughout the year but one assignment has stuck out specifically for me. The one which I really did enjoy and was engaged in was when I had to write a personal narrative paper for my English class. When first given this assignment I was not too sure if I wanted to write it because of all the interesting subjects I believed that I could possibly get into trouble for if I chose to write about them. Later that night during study hall I absolutely could not think of anything else and chose to write about when I got suspended. This was a risky subject because what had actually happened was not known by anyone except for the people that were involved. When I began writing the paper, I got really into it and wrote four pages without stopping once. I feel like I could connect to the paper and the experience because I had lots of emotions run through me when writing it. In the class the next day I was a little nervous as to how the teacher was going to react when I read it aloud. While reading it I had all the emotions that I felt during the experience run through my body. Everyone in the class including the teacher was very interested in my paper because it seemed exciting. After class my teacher walked by me and told me that it was a very risky subject but that I had presented it well and was honest in the paper, which he appreciated. I later received an A- on that paper. I believe that this was a great class experience for me because I felt a connection to the assignment and this forced me to care about it that much more. This assignment got me involved and engaged in class, the only assignment that has done that all year.

MOBILIZING

We have heard how many teachers believed boys can be mobilized by achieving, by producing more than they expected they could do. In our analysis of student responses we heard this same theme echoed from the boys’ themselves and have considered these stories under two separate themes. In this first, we were struck by how energizing such accomplishments were for boys, how they helped boys define themselves. In this first story, for example, from a 12th grade student at a US school, he wrote of being “proud” and having “accomplished something I did not believe I could do”, as he discovers a new competence and mastery. Reading his story, we imagine his growing confidence and expanded self-definition:

The most memorable experience in a class involved US History AP. Our final project was to write a research paper based solely on primary sources (letters, speeches). I wrote a paper on US politician Henry Clay and why he lost the presidential election of 1844. I didn’t believe I could possibly write a long paper on such an obscure topic, but after uncovering Henry Clay’s letter archives in the Public Library I became intrigued by the subject. I poured over pages and pages of letters, looking back into history and trying to figure out why Clay lost the election. I used very few history books when writing my paper, and my main points/ideas all came from my own conclusions. When I finished the paper I was very proud of my work. I had accomplished something I did not believe that I could do. This was my most memorable academic moment at this school.
For this 12th grade US student, the subject was English but the task was creating an original song. He surprised himself and expressed a sense of “satisfaction”:

In my senior year of high school, my English teacher assigned a creative project to the entire class based on any book we had read in the first semester. I had the option of painting, writing, anything considered “creative”. I was very intrigued by this project, as I had never encountered anything like this before in school. Even though the due date was a month and a half away, I immediately started to brainstorm. I quickly came to the conclusion that I would write a song. On school nights, after swim practice and homework, I would sit down in front of my computer and write a song. I was so intent on writing something that perfectly conveyed my feelings of Brave New World, I would often find myself working well past midnight. Eventually, I set up a schedule on what to do with the song. Monday would be to finish the guitars, Tuesday would be finish the bass, etc. After much work, I presented my song to the class. It was well received, and I gained much satisfaction out of my experience concerning the project.

This Year 8 Australian student discovered a creative talent he is obviously quite proud of in a visual arts course:

Last year (In year 7) term 2, I did ceramics in visual arts. I even found that the planning of finding lots of different designs was fun. But even better was when we were to decide on our design. I remember having conversations with a talented student in my class about what he would do, and came up with some interesting designs. Once I had designed a fairly basic shape with simple patterns we made them. I loved moulding the clay with my hands, shaping and smoothing it, trying to get it perfect. Once I carved in the patterns it was covered with paint-like material and put in the furnace. This was definitely my favorite part of the year. And I still have the pot today.

And, finally, this 8th grader from Canada worked hard in a Music class, tackling methods for the first time and coming away from the exercise with an expanded sense of himself:

In grade 7 Music Appreciation, I really enjoyed making the podcast we were assigned to make by our teacher for the specific class. A podcast is an audio media file. We were paired with one other classmate and given the musical era the teacher gave us. My partner and I were given the 20th Century Classical Era. This project took us around a whole month so we could make it as good as possible. We had many problems but they were solved very quickly because we had extra equipment. But the best part I thought was recording our voices and then hearing them edited and changed with effects. Although the final product wasn’t very good, I still found it one of the greatest activities in grade 7 because this was my very first time doing this type of project. When the whole Music Appreciation class finally listened to all of the podcasts made by this group, I found out that although each group had a different Era given to them, all podcasts were similar to each other. If I had the chance to do this again with a trust-worthy partner, there’s no doubt I’d agree. During this project there were times that we got tense because we were losing time. In the end I felt great because lots of pressure came off me, but I was also sad because I knew it would be quite a long time before I’ll do something similar.
BEING PHYSICAL

The teachers' narratives recounted various strategies that invited boys to use their bodies, to move about and to experience lessons with a physical dimension, where possible. In the boys' stories, we definitely heard an appreciation for lessons that included an opportunity for them to be physical, adding that dimension to their experience of the lesson. Here, for example, in a Physics class, a Year 13 New Zealander related how a teacher had illustrated a lesson by asking boys to run up stairs:

The most motivating class which I have taken during my time here is year 11 IGCSE Physics. There was not one lesson or unit in particular which made it a good class. It was more down to the more relaxed class atmosphere because the teacher was not extremely strict but was entirely capable of controlling the class if we got off track and would steer us back to concentrating on the subject matter at hand. The constant use of practical examples to which we could be relate made it so much easier to learn and therefore minimised the difficulty of understanding physics. One such example was in the middle of the year when he got all of us to run up a flight of stairs while he timed us to demonstrate the principles of work-work=force x distance, and showed that the smaller members of the class could be faster than those of larger mass but that the larger people would still have a much larger energy output than the smaller ones. The use of practical sessions made it so much easier to understand material which seemed rather complex at the time. Learning for me becomes so much easier when you have a teacher who rather than yelling and seeming to expect you to remember every little thing actually attempts to teach to the best of his ability and tries to make sure that you understand what is being taught.

No doubt a similar idea drove this lesson, told to us by a Year 11 boy from the UK:

We were having a double period on Friday afternoon and so everyone was not in the mood for learning. We watched a video about water regulation in the body but many of us were not concentrating and were either sleeping or talking with each other. So, as a result of this lack of concentration, our teacher decided to take us outside and let us run around the building to wake us up. Then, we came back in and he gave each a card and drew a diagram of the kidneys and the brain. He then gave us five minutes to arrange ourselves in the right order, from the diagram on the board, and for half of the class to give a presentation about what would happen if there was too much water in your body and vice versa. I enjoyed this lesson as our teacher made us concentrate by making us run, and then gave us an interactive lesson rather than just listening to a boring video.

Many schools make a point to offer outdoor challenge courses to boys, exactly for this purpose. This account from a student in Year 8 at an Australian school illustrates the many stories we heard from boys about such experiences:

One extremely memorable experience was during the exciting Year 8 camp. It was a five day camp and on the fourth day, we did worthwhile activities such knot tying, abseiling and rock climbing. Rock climbing was a major challenge because it required a lot of physical work and mental motivation to succeed in climbing to the top. Not many people achieved this so climbing to the top was an honourable experience. The first time I attempted this difficult task, I only made it halfway as I didn’t have enough confidence to climb to the top. After
I was safely released down, I felt very miserable and regretful. Just before the camp coordinators were about to pack up the equipment and call it a day, I asked if I could do it again, because I would never be able to sleep at night, thinking I didn’t make it to the cursed top. They luckily agreed, so I thanked them thoroughly. I psyched myself up and prepared myself for the daring climb. I went off to a good start and made it halfway quickly. After that, I found myself in a very uncomfortable position. A few people below me were cheering me on, and I didn’t want to let them down, so I continued climbing. In a blink of an eye, I had made it to the top that had eluded me. I have never felt more cheerful and triumphant in my life. After that moment, I realised that almost everything is possible if you put enough motivation in it.

Another Year 8 Australian boy amplifies the same type of message we heard about camp experiences:

When we reached Waranga Basin we got out, set up tents and started to go for a canoe and sail. This was for the first three days. During the third day we left the basin and started to go to the other camp when we reached our destination. Our first task was to hike to our campsite; it was about a 7 km hike. In our group we had our leader, other boys and me; the hike was very tiring. We didn’t enjoy it very much. But when we finally reached the camp, we started to set up our bivvies. It was late and we had a few games on the dry sand which used to be a lake. It was getting late, so we ate dinner and went to sleep. After we woke up we had an activity where we had to make our own way back, but there was a catch. The catch was that when the hike stared we had checkpoints and we had to find them. Our team leader knew where they all were. He decided to show us how to get there. He did this because in his last group they got lost for hours and he was tired of that, or so he told us. During the last bit of the hike another boy and myself heard a rattle sound or a snake slithering and we were screaming our heads off and ran to our leader. When we got back to the camp it was the end of the day and we were all really tired so we decided to go to sleep. The next day was a half day and then we went home. It was a very tiring time but it was really fun. During camp I learnt a lot of lessons and things I should keep in mind; I hope that in year 10 I will have a chance to go and be a leader and show all I know to my group. When I got home I was very happy. I had an amazing camp and I enjoyed it a lot.

But it seemed to us that this physical dimension to boys’ learning involved much more than boys running about or climbing. As we have already seen, boys like the unusual, even when it is gross. And, as we will see shortly, practical, hands-on experience is often valued. Those dimensions were certainly in play with this Year 11 New Zealander’s story. But the physical elements to the lesson, including smells, also seemed to stand out here:

One fine day, my teacher bought some smelly ice cream containers into the classroom with sharp metal blades. We had been studying eyes and he told us we had to dissect them and then draw labeled diagrams. We collected metal trays and knives and started cutting them. They smelt bad. Once we cut through the tough sclera, black liquid popped out all over one guy’s book. We had a good laugh then carried on. Once we cut around the outside, the lens popped out. It looked like a poached egg submersed in the ciliary muscles and support ligaments. On the inside it was all black because of the choroid which stops light reflecting. We then found the optic nerve located at the back of the eye. All together it was a good hands-on practical.
VISUAL ILLUSTRATIONS

Just as boys like to learn with their bodies and seem to have a special appreciation for movies and other forms of screentime, so they also seemed to enjoy visual illustrations in lessons. While there were clearly many features of his teacher’s pedagogy that explain the success of this 8th grade Canadian boy’s English lesson, as he explains it the visual dimension mattered in particular to him:

One class I really like is English class. English is one of my best subjects and our teacher really puts his time into it. The English teacher we have at our school really motivates us to create texts and a variety of scripts. It’s something I enjoy doing because our teacher makes it very amusing for us. Once in a while we listen to jokes about everyday life’s problems from our teacher. Many times we are demanded to produce humorous scripts that make the whole class laugh. This is one my favorite activities: scriptwriting and plays. One play we did this year that I found really special was the Catcher In The Rye play. I enjoyed working on this play because we were allowed to have an insight about the protagonist of this novel. I really liked being Holden Caulfield because he had a really funny type of personality. I found that our English teacher really let us use profanity in our language so we could be the character. It’s an activity I can appreciate because I don’t have to analyze the book, instead I can act out the scene from the book. I find it more fun to visualize the book; and all of this makes sense because I am a visual learner. When I visualize a book, I understand it more because it makes sense. What I mean is that there are some things that are very hard to believe when Holden says them but when for example you watch a play, and you see those things with your own eyes, you start believing that maybe Holden is right. What made understanding Holden’s character for the play easier for me was the fact that we discussed it without the English teacher in class. Watching different group’s plays really lets me understand the importance of the innocence of children in this world.

With this Year 12 New Zealander, we hear a similar claim to being a visual learner:

Biology, IGCSE, year 12. We went on a bio trip to Goat Island for a study on marine life and ecosystems. It was good because we got to go snorkelling and the teacher let me and a friend borrow the underwater camera and take photos of the fish. It was a good trip because we got to go to the beach and got a day off school. It was also a more effective way of learning in that we got to see things and take things in more visually and much more effectively than in the classroom. Even though everyone was stuffing around and doing no work you could still take more out of it and have fun at the same time. We then had a competition to see who could make the best diagram of the shoreline and we got to work in groups. This worked as it was competitive and we work better in groups, plus we won so we got chocolate and stuff.

Boys’ stories of visual learning were often quite vividly recalled and told with particular detail, as in this story of a Physical Education class told by a Year 13 New Zealander, who attributed a kinesthetic dimensions to his visual experience of the lesson:

When I was in form 6 last year a lesson that I particularly enjoyed was a Physical Education lesson. In this lesson our class was learning about forces, and what would happen to an object such as a ball when a certain force was applied to it. We were taken to the gymnasium where the teacher took out a volleyball and applied top and bottom spin to the ball. When
top spin was applied to the ball it drifted downwards at pace. When bottom (back) spin was applied to the ball it drifted upwards slowly before heading down. During this lesson we also learned about other forces affecting the path of the ball e.g., gravity, up thrust, weight and friction. I remember this lesson well and when this topic came up in the exam I felt as though it was easy to talk about. This is because I feel like I can’t learn when we are expected to copy things from the board or text book. I often get fidgety or bored and cause trouble to amuse myself. So I find that when we actually do something practically or “hands-on” I am able to concentrate and take in what we have learned in the subject. I prefer kinaesthetic learning.

Along similar lines, this 7th grade US student remembered a Math demonstration:

One time in my seventh grade pre-algebra Math class, we went outside to demonstrate what we were learning about velocity. As a class we took a couple of tennis balls and a stopwatch, and one at a time each student threw up one of the balls as high as he could and it was timed from release until it hit the ground. The next day in class we took those times and plugged them into our equation to find out the velocities of our throws. This was a good activity because it was a fun break from sitting in class and taking notes, but I still learned a lot from the exercise.

For this 7th grader from Canada, the concrete and practical aspects of growing food were thrilling in themselves. But in his story we sense the particularly visual pleasure of observing the plants as they grew:

In science it was really cool; we planted some plants to make food like carrots and more. We took a plastic box and put rocks, black earth, organic stuff and then we made holes to put the seeds in and then we watered it about 125 ml every second day and we recorded our data every Science class. Every day was different, one day the earth was moist, the other it was not. Then after a couple of days or so, we started to see the plants growing over the earth. It was amazing how they can grow this fast, and then maybe like a few weeks later we saw some actual fruit and vegetables or whatever we planted. I felt like eating them but they were not really clean so I just said I should forget risking my health for a carrot! This unit was extremely fun, I learned so much and was intrigued each day to know the new results. I will never forget this project or in this case unit, because it was so miraculous and I was with two of my good friends with whom I was able to cooperate very well. Me and my two buddies will always remember this unique experience because it was fun, exciting and it surely was and will always be something about a truly good school activity.

This 6th grade US boy explained a lesson in which a teacher evidently made a distinctly visual impression:

In sixth grade woodshop my teacher was explaining how to sand wood. He said always sand with the grain. Then he pulled out two rectangular pieces of nearly identical wood. The only difference was the grain direction. On one piece the grain went longways, and on the other, it went across the thickness of the wood perpendicular to the one before. He gave the first piece of wood to the strongest kid in the class, and told him to try to break it. He couldn’t. Then he gave the second piece of wood to some random person in the class, and then told him to break it and it immediately snapped in two pieces, proving his theory about sanding.
This next theme was one of the most frequently found overall in the students’ responses, indicating both that teachers include lots of opportunity for practical, concrete experience in their instruction of boys and that boys themselves enjoy these opportunities. Certainly, as we have seen already, teachers have many different, “practical” strategies to engage boys’ bodies, hearts and minds in their lessons. Boys, in turn, told us that they like doing as they learn and they especially like it when lessons allow them to experience a creative or productive outcome. Many said they liked the concreteness of whatever the lesson produced: something they could look at, touch, even use: something real and useful that was made. But, whether it was making something or simply experiencing a lesson’s practical dimensions, uniting these diverse stories of their engagement with such lessons was boys’ easy engagement and deep appreciation.

This Year 7 boy from Australia is clear about his enjoyment of a lesson on mummification:

It all started when we were moved out of our original classroom because that was the test room for the year twelves. We went to a classroom one hundred meters from our old class. Eventually our whole class got there, and the teacher said, “who would like to be my volunteer?” Straight away I shot my hand up. He chose me and one of my classmates. He stated that we were studying mummification. He told us to pick up an action figure that he had brought from his house. He also handed us a roll of toilet paper and told us to start mummifying the doll. It took me about five minutes to turn a perfectly fine doll into a messy thing wrapped in toilet paper. He said I had done a good job, but should not become a mummifier.

This 12th grader from New Zealand more seriously described the usefulness of “seeing the processes in action” during a Geography lesson:

One of my most motivating and interesting experiences was year 12 Geography camp where we went to a national park and the surrounding areas to study rocks and weathering and fluvial geomorphology. This was especially interesting because I was seeing the processes in action. This I think made me pay more attention to what we were learning, and we also learned how to take our own measurements for river depth and width, etc.

This Year 11 boy from New Zealand did not mince words as he described how helpful and “exciting” it was to witness a reenactment of a History lesson, related by people who had gone through the experience:

One of my teachers had organised a field trip to the museum to visit the World War II section. We were studying the origins of World War II and had just worked with the book which was boring, just copying the work. It was the first time I had been on a field trip and when we got there we were introduced to the area by some people that worked there. We went inside to watch a person act as one of the people that survived World War II. It was good because everyone was silent and listening because it was like a different lesson that was new and exciting. He told us a lot about the experience some of them had to put up with which really got me interested. After the play the museum guide took us for a walk around the exhibition to see the tools and memories and lots of information. It gave me more of a good idea about the topic and makes me want to revisit the museum to have a longer look around and get more
information to help with the topic. I found it a good lesson because the teacher wasn’t just standing in front of us blabbering on and on which would make me fall asleep. It would be good to get out more and study the topic around places that have been known for these topics.

Along these same lines, a French lesson in which students “were able to talk with real French people in a real environment” was exciting to another Year 11 boy from New Zealand:

During our French trip, we were able to talk with real French people in a real environment when we went to a French cafe as part of our curriculum. We were able to engage in conversations with native French speakers, and were very pleased when they were able to understand what we were saying, and vice versa. This gave us a great incentive as we were able to realise how French is useful outside school, and thus we realise that it is just more than a subject at school, but a real, living language. Also, I find it interesting and engaging that our French teacher uses multimedia resources, such as videos and TV extracts, to enrich our French experience. We found the videos exciting and we were able to extract phrases from it. The phrases we didn’t understand, he was able to help us with. In my opinion, French should be constantly supplemented with real French from real people, not just textbook resources. Otherwise it just becomes another subject at school.

This 10th grader from Canada, for a Careers course, shared this about the value of investing real money in a local charity the class had researched:

While in the grade 10 Careers course, we were allowed as a group to research any particular charity. The charity had to be a local, grassroots charity that provided social service to the public. We were to visit the charity, interview the charity and write a report that would ultimately be voted on amongst a number of other charities chosen by other groups. The charity with the most votes was given the opportunity to win $5000 to donate to the charity. We chose the Yonge Street Mission charity after much research and analysis and believed it to be a suitable charity for our research. We contacted the charity, set up an interview and a tour of the area and found out a lot about the charity and its mission, allowing us to learn a new and different perspective of the city and, in particular, that part of the city which it operated in.

This 12th grader from the US was enthusiastic about an Economics course that involved creating a real business:

Last year I took a course called Entrepreneurial Studies that changed my life. Our teacher of this class is a retired Wall Street businessman who decided to teach because it was his dream. The course was split into three different parts. In the first trimester we learned microeconomics. In second trimester we learned about entrepreneurs. The third trimester was what I was looking forward to the whole year. In the third trimester we had to write a business plan and present it to our teacher, the headmaster and the head of the business office. The point of this presentation was not to just write a business plan but to start a company. My teacher pushed us hard that term and by the end of the year I started a company called Crimson Coolers that rents, cleans and stores refrigerators at the school. This was a very good memory for me. The business will not end, however; when I leave it will remain on campus, run by another student.
One senses the same appreciation for the palpable concreteness of the lesson in this 8th grader US student’s History example:

Earlier this week my 8th grade History class and I took a trip to the State House and Court House. This was my second trip to the State House with my government class, but I felt that this trip was much more motivating and exciting. After the general tour of the State House, we were allowed to sit on the house floor, in the seats that just a few hours before were occupied by congressmen from all over the state. We were allowed to have an actual debate on whether or not casinos should be allowed. This debate was extremely motivating because I was able to say to myself, if I am debating here, as a fifteen year old boy, who knows, maybe in a few years I could do this as a real job. This experience really helped me look to the future and helped me to begin to plan and prepare for what is to come in my life.

With this story of a Biology dissection related by an 11th grade Canadian, the visual element is present in vivid detail, as is the hands-on and experiential dimension:

In this unit of Biology, we were exploring the internal systems of mammals, including the cardiovascular, digestive, and nervous systems. Although the entire unit was both challenging and enlightening, I found the section of the unit on the digestive system, more specifically one class focusing primarily on the intestines, of most interest to me. The class began by watching a video tracking the path a molecule of food would take from entering the mouth to leaving the large intestines. Through some kind of fibre optic video camera, we were actually able to see the food travelling through each section of the digestive system in a human. After we had seen this video, it was time to get out our fetal pigs, which had been kept in a formaldehyde solution since we had last used them. With partners, we cut into the belly of the pig to expose the thoracic cavity and then further cut into the abdominal region, exposing both the large and small intestines. This in itself was exhilarating; there was no better way to learn about the digestive tract then to see one fully intact. We explored the system further until our teacher began going around from station to station, giving everyone a pop quiz. Although we had not yet studied the digestive system thoroughly out of our text books, I was amazed to see that I truly had grasped many of the concepts of the system simply by watching the video and dissecting the fetal pig, as was shown in my quiz score. After the quizzes, we were asked to remove the small intestines from our pigs, keeping them as intact as possible. Then, each partner stretched their pig’s intestines as far as possible, without breaking them. The partners with the longest intact pig intestines won one of our teacher’s famous bumper stickers, known for their witty biological phrases, such as “There is no stigma in being a botanist.” As cheesy as they may have been, they encouraged us to work efficiently to try to attain one of these coveted prizes. In summation, this lesson not only taught me a lot about the digestive system of mammals, but also served to be a very enjoyable 80 minutes. This lesson clearly demonstrated the effectiveness of hands-on learning, and will hopefully be used in many years to come.
This 8th grader from Canada’s enthusiasm for his Science lesson was also clear, as was the vividness of his recollection of the lesson:

At the beginning of the year in grade 7 Science we dissected an owl pellet (a little ball of owl regurgitation). Our teacher put us in groups of three to get us interacting with the new kids this year. After adding water to it, to make it malleable, we took out the bones of mice and other creatures found in the pellet. We separated them to make piles of bones for each different creature. We had a chart with pictures of bones so we would be able to identify certain types of bones that belonged to certain types of animals. After figuring out which bone belonged to whom, we glued the bones on a paper plate, in the form of the skeleton of the creature found in the pellet. This took many classes but in the end we learned a lot and got to know the new kids a little bit better. This interesting and fun activity made me look forward to my upcoming year in Science.

In addition to the frequent mention of fetal pig dissections across many of our schools as boys’ highlights, boys at one school often mentioned another Biology lesson, in which they studied pools. These next two stories from 9th grade US students capture the concrete flavor of their learning experience:

The class where I feel the most motivated and engaged is Science. I really enjoy it and like how it is hands-on. We are currently doing a vernal pool study in which we conduct physical and chemical tests on the water such as pH and dissolved oxygen. We also have collected salamanders, tadpoles and other species. We then identify them and release them or bring them back to the lab for further analysis. We have a large fish tank where we can observe the species. We also have collected egg masses which we can watch hatch and grow. I really enjoy Science and I learn best when the material is hands-on.

One class experience that is extremely memorable for me is in my Field Studies class for my ninth grade year. In this class my professor took the class outside to study a vernal pool. This study was very engaging because I was able to witness species first hand and I am able to observe how the species interact and live. When I am in the classroom it is difficult for me to imagine how these species work, but when I am at the vernal pool I can witness how these things are working and living together. At the vernal pool we can also witness how runoff affects the pool. The other day I saw the effects of a nearby parking lot and how the oil spilled off into the pool. It was interesting seeing how something a few hundred yards away could travel and affect something like a vernal pool. Going outside and learning first hand is a very engaging tactic.

**MAKING THINGS**

Building something was a special part of this theme: boys were able, in such lessons, not only to use their hands but also to craft a concrete outcome, one that might reflect their skill and pride. This 12th grader from the US described his concrete effort to build a bridge:

During my senior year, a classmate and I built a balsa wood bridge using a limited amount of balsa, glue, and string. This project was especially interesting to me because of my interest in engineering since I have been a kid. Given my background in constructing K’Nex, I have been
forming ideas on how best to go about building this bridge for a long time. Researching structures and designing and constructing this bridge gave me a chance to put the ideas in my head on paper and into a real bridge. Our bridge used the arch (a popular engineering structure even in Roman times), and a few sets of trusses forming the deck and piers. My partner and I constructed the bridge with accuracy and precision. We cut the strips of balsa to the correct lengths, and used a box-cutter to make grooves in the wood to form the correct abutments. We reinforced the angles with gussets, and used a sufficient amount of glue to secure the connections. We will test the weight capacity of our bridge next week. I believe that we have accomplished our goal of building a bridge that is structurally sound and aesthetically pleasing.

This Year 7 Australian, for example, describing a lesson in a woodworking class where it was his use of machines, guiding and feeling them as they worked his will, that seemed to make the lesson so memorable, sounds just such a note of pride, craft and delight:

My most interesting and engaging subject during my time in year seven has got to be my technology lesson, learning and making a clock. My clock took about a term to make but I’m just going to tell you one lesson which made my day in technology. It was one morning in technology and we were making our clocks. I got my clock and started to use those magnificent machines in the technology room. For that period in technology I was using the sander machine which sands off wood on your project. I was also drilling holes in my clock where the clock magnesium goes in the clock. Just using those machines was a great experience because I had never used anything like it before. In the end, making my clock was a great success and I was proud of it. I will never forget the day using those marvellous machines and making my clock.

Likewise, for this Year 9 Australian in an Art class, it was the feel of the medium, the physical process of creating something concrete from nothing, his pride in the artfulness of the product, that seemed to underlie the specialness of the lesson:

In Art when we were constructing 3D sculptures. We were making a sculpture out of plaster by pouring it into a box with sand in it. First we had to make designs and pictures of possible ideas for our sculpture. Using all sorts of different insects and then mixing them with machines using morphing techniques, such as robot legs, insect eyes, machine antennae, insect body, etc. When we were about to make the sculpture we poured lots of sand into a rectangular tray and flattened it out and made it smooth. We pressed shapes and patterns into the sand and made the shape of an insect crossed with a “crazy invention/machine” for instance a robot that resembles a beetle. You could use all sorts of different items like washers, screws, pieces of wood, nuts, bolts and some other sculpting tools. I particularly enjoyed this experience since the pre-primaries came and drew pictures for us of possible ideas for our invention. They also made their own sculpture while we helped them. They pressed all sorts of shapes into the sand like paint brushes and sticks and wood. We had to help them brush the sand off. When the plaster was dry we took it out of the sand box and brushed away all the sand. Then we got to polish the plaster with boot polish. I really liked this project and was really into the subject at the time of doing it.
There were numerous stories of boys making things, of all sorts. These stories offer a sense of their range and of boys’ enjoyment. From an 8th grade US student, for example:

In 7th Grade English Class, one of our spring projects was filming commercials. We had to develop a product, and film a commercial to advertise our product. This was a lot of fun, and it showed how much work probably went into all of those annoying, however well-made, commercials on TV. My group developed an energy drink, and we filmed a commercial with 3 scenes to advertise it. We didn’t actually develop a new product, we took an existing one and made a new label for it, and put it in our commercial. One of scenes featured a strong and a weak guy lifting weights in the gym, we filmed it in our athletic center. The strong guy gave the weak guy the energy drink, and the weak guy became strong enough to lift the heavy weights the the other guy was lifting. Another scene featured an old lady who could barely walk, and had her purse stolen from her. She drank some of our energy drink, became able to run, and chased down and tackled the crook. This was a great project that was a lot of fun, but still academic because we were graded on our scripts, camera angles, use of props, and dialogue. This was my most memorable English class moment.

In this Year 9 Australian boy’s story, we hear the gratitude many boys expressed for the opportunity to do hands-on, practical work in school:

In Industrial Design and Technology my most memorable lesson was when I was in the workshop in a class and we were just starting out Dove Tail box job. I had been told how to cut a dove tail joint and my teacher was extremely motivating. Because of this I was now able to create great wood work jobs. Once I had finished my job I showed my teacher and I was congratulated because of my good effort and job completion. This class motivates me every time I am in Industrial Design and Technology because I have a great feeling of being able to create something with a good accomplishment. With a great teacher who is very nice and smart and the subject, it made me way more confident because my teacher trusted me to do a good job and allowed me to create an even better job than what I could ever create. This subject is my favourite subject in school and I find it incredibly engaging when doing a job. I feel that Industrial Design and Technology is a great subject and this lesson is very memorable because I created something that actually was good to me and my teacher.

This Year 12 boy from the UK made something more abstract, though it still involved taking a lesson and making something concrete to illustrate it:

My best lesson is one which I believe taught me the subject in a new and interesting way. We were studying the St. Valentine’s Day massacre. The first part of the lesson we studied the topic through the use of worksheets and the use of clips from the film about the topic. However, the most interesting part of the lesson was the second part of the lesson. This is because we then had to relate the information we were given; however we did this not in the usual form but in the form of a storyboard for a film. We had to summarize each of the events we had learnt about and put them into scenes. Each of these scenes had to convey the message of that bit of the story and still allowed our imagination and creative abilities. We
had to convey the story in 8 scenes. I did 9 and I enjoyed it so much that I put a lot of time and effort into the scenes and got a high mark for it. I think it was effective because it was a change from the standard work. I think that made it new and exciting. Furthermore I think it was a good task to do because lots of boys enjoy films and they can really understand how they work and I think that the enjoyment created by both of those things helped people to get into it. I believe that if you can connect with the work more then you can do better with it and you remember it more. The scenes also broke it up into smaller bits with ranging lengths so you could have a variance in scene length and style. This allows the imagination free rein and it helps to take in all the information in creating the piece of work. It was my best lesson because it was fun and informative at the same time.

A 7th grade Canadian made a ramp:

A class project which we performed this year which enhanced my knowledge of the Pythagorean Theorem and scale would have to be the ramp project. We were first given the specifications of the ramp. We had to be sure that it would be sturdy enough to be built to full scale. We were given saws and balsa wood in order to build our ramp. All of the construction was done by ourselves; the teacher would not assist us. We build the ramp out of two identical triangles, identical sticks of wood to join the triangles, and built to a 1:10 scale. It had to be a right angle triangle, and the base angle had to be 30 degrees or less. We were put into groups of three and then we designed the ramp on paper. We determined all of the dimensions using our knowledge of the Pythagorean Theorem and we also made a cross section on the slope in order to withstand weight. The cross section was the trickiest part, but after a few attempts most groups succeeded. What I really enjoyed about the project was that we were free to express ourselves. My group and I finished early so we could decorate the ramp and attach company logos to it. The construction phase took about three classes and then we made and presented a PowerPoint to the class. The PowerPoint was made during two intervals of seventy-five minutes. It consisted of daily logs which we took throughout the project and it also thoroughly explained the Pythagorean Theorem and the reasons for all of our decisions that had to do with the ramp. The PowerPoint was presented on the sixth and final day of the project. All groups contributed to our amassed knowledge on the Pythagorean Theorem. When we had the test, the class average was in the high eighties. I enjoyed this project because we got to learn Math and also got to construct. Since kindergarten, I have loved to build things, which is a hobby I think most thirteen-year-olds share. Projects like this that involve thorough interaction help us learn and I yearn for more projects like these in our classes.

This 7th grade Canadian, along with many of his classmates, told the story of making robots as his highlight:

In grade 7, during Science we started a robotics project. The project was to construct a robot and to construct a program so that the robot will do what is necessary. So I was paired up with two other students in the classroom. We all split the job evenly, so I was to build the program and my other teammates were to build the robot. If I remember correctly, there were three tasks; the first was to get your robot to go the fastest and to stop immediately on the black
The second one was to get the robot to climb up a ramp and to stop at the top. The final one was to get the robot to climb up the ramp then turn around and go back down to a black line where the robot had to stop. So in the beginning we were handed a box with the necessary tools and pieces and allowed to build the robot. It consisted of many different pieces and the main part was the RCX block that took the program and would read the program telling the robot what to do. Then we were given a CD-ROM that we installed into our computer; we had a class lesson on how to use it and from there we had to figure out the necessary things we had to put into the program to complete the tasks given. This took around two to three weeks and was something that was really fun, and I learnt a lot from it. I learnt how to build a robot, I learnt the gears and what type of gears made the robot the fastest, I learnt about what wheels made the robot go faster and slower, which had the most control, which had the least, etc. The programming taught me how to read pictures and use common sense in telling what each did, and in the end our group ended up winning. This was something that was very fun, and something that was a great learning experience. I think that the main reason that I won’t forget this project was because it taught us a lot but at the same time it taught us to work well with other people. Also this project really was straight-forward, there were no hidden secrets or traps. It was really something that we learned. For example, the teacher didn’t teach us anything that we had to learn alone. Instead our teacher taught us everything that we had to learn, and we then had to use what we learned on a project.

And a 6th grader from the US made bottle rockets:

I think that my favorite school experience was launching our bottle rockets in Science class. We built bottle rockets out of plastic bottles and added paper nose cones and wings. Our goal was to make it fly very far. Once our rocket went 126 feet (which is very good) and I felt like I could do anything if I got this rocket to fly far. I was then very motivated and for the next three tests I scored over 100, thanks to hard-earned bonus points.

And, finally, an 8th grader from South Africa described a whole class exercise to build giant scissors:

Last year when I was in Grade 7 we had quite an unbelievable lesson in Design and Technology. We were still learning about pivots and so together as a class we created one giant scissors by connecting together a lot of pieces of cardboard in 3 different places (with split pins), one in the middle and 2 on the ends. I had the job of creating the scissor teeth at the end. In the end the scissors were the size of the entire classroom. Our principal then gave each of us a sweet for our hard efforts.

Social Validation

The boys’ language became especially vivid when describing assignments that required them to present something authoritatively before an audience—most commonly their classmates. Listening to their stories, it seemed there was more to their excitement and investment than worries about how they might look—the public presentation validated their learning, offering them a picture of themselves that they wished to be positive. The power of the social context was even more exciting when boys were members of a team. Our sense was that, in addition to the
positive feedback they received at such times about themselves, boys could also feel part of something and could derive meaning and validation from the contribution they had made to the collective effort. In all such ways, teachers take advantage of boys’ responsiveness to social validation, staging opportunities that range from debates, performances, competitions, role modeling among students and so forth.

PERFORMANCE AND DISPLAY

These examples illustrate the strategy that involves boys presenting in some kind of performance or display, most often before their classmates but sometimes broader audiences. In their stories we hear their excitement and the meaningfulness of the feedback they receive. This Year 10 boy from the UK recalled, with some humor, a public speaking lesson as his most memorable:

We all went into English knowing that we were about to do a short talk on a random subject for about a minute and half. We submitted a subject on a piece of paper and we put them in a hat in the previous lesson. Each student picked one randomly and talked for a minute. The whole class went through with subjects coming up such as pasta, astroturf and pencil cases. Then it came to me with only two people to go. I put my hand in the hat and picked out the subject of Cockroaches. It all turned into a big joke, really, but it did help me with my confidence in getting up there and speaking and it made us feel more independent. Our teacher set us this task to help us with our public speaking and to help us cope with talking under pressure! I was quite fortunate to have not been asked to go earlier as looking at the other people present their speeches helped me see what to do and not to do. I learnt from watching the others not to hesitate and do lots of “ums” and “errs” but to keep steady sentences going and make it understandable for the people listening.

For this 9th grade US student, it was finding the courage to sing in a Spanish lesson:

My most memorable experience occurred during ninth grade honors Spanish. My class had a project to do over break which was to either recite what we did over break in Spanish, or sing an entire spanish song. I was the only person to sing a song. The part I liked about it was the fact that it was fun, memorable, and educational. I never sang the song until that class but I had memorized the lyrics. The song was Don’t Stop Believin’ by Journey. I brought in my iHome and played the background music to that song while I sang. Four months later, I still remember every word and so does nearly every person in that class. Sometimes when I sing that song, I will accidently sing Continua Creyendo instead of Don’t Stop Believin’. That moment got me excited about Spanish for the rest of the year and it is a moment I will never forget.

This Year 9 from Australia wrote of “how good it feels to have other people enjoy what you have made” after sharing in an Art course:

I particularly remember a Graphics Design class we had in year 9. In this class we were able to showcase our stop motion animation movies to other people in the class. Over the course of the term we had taken photos and put them together using the computers. We used potatoes and clay to make a movie based on a topic of our choice. In this lesson we all sat down and the teacher showed us everyone’s movie throughout the class. I enjoyed this lesson because the teacher made it extremely enjoyable and everyone had a chance to show...
everyone else their own movies they had created. In my group we had made a movie based on the idea of a chainsaw massacre with potatoes. It got quite a few laughs throughout the class which made it even more enjoyable for me. This lesson basically gave everyone a chance to show the others what they had done in the whole term. In some cases this was not so much. Our teacher also burnt a DVD disk for everyone in the class. This was so we could show our family and friends back at home. It was really good to be able to take a copy of this home. The teacher had also taken all of our photoshop DVD covers and printed on the CD to personalize them. That was pretty cool. This class motivated me as it allowed me to see the work that I had done over the semester and how my group and I were able to receive a positive response from the people who watched. I found out how fun making movies is from this experience and how good it feels when people enjoy what you have made.

This Year 10 Australian wrote thanks to his teacher for making a Drama lesson “so enjoyable”:

In Year 9 English, our top set class studied drama towards the end of the year. This involved reading *The Taming of the Shrew*, selecting a scene, and performing it for the class. We were allowed and encouraged to add special touches of our own, such as costumes, props and basic settings. My group of 5 undertook a scene which we thought was very relevant to the overall structure of the play, was fun to perform, and also allowed us to be inventive in our style and portrayal of the scene. Being a keen drama student myself, I found this concept wonderful and was eager to participate and get as involved as I could. This included writing a short, add-on script in the style of Shakespeare to help introduce the scene, and also working hard to memorise the lines. Needless to say, our group’s performance was a great success, as were the rest. I’m sure that the entire class very much enjoyed this project, as it provided a welcome relief from the weeks of poem study and short story analysis that we had done, and was also a fun and innovative thing to undertake. Many thanks to our teacher for being so creative and making the drama component of our English course so enjoyable.

There were a number of stories in which teachers used presentations before the class as a way to motivate students to invest themselves in their work. This Year 12 boy from the UK offered a good example of this strategy and students’ reactions to it:

My favourite lesson was a year seven History period. The reason that I chose this was that it was the first time that I was shown that History has real relevance to the modern world. When we entered the classroom we were confronted with an entirely different scene. In front of each desk was a pile of original sources, relating to the deaths of the princes in the Tower. Our teacher told us to read the documents then try to come to our own judgement. At first I found it difficult as this was one of the first times that I had been asked to use sources at all, let alone trying to extract our own interpretation from them. After around 20 minutes we were each asked to come to the front of the class and state the case for our judgement. This part of the lesson was useful for me as well. Up to this point many of us, while having intelligent ideas, had struggled to present them in public. In this situation everyone was forced to engage in public speaking, but on a subject on which they had worked. Finally we staged a debate. Everyone else struggled to disprove my ideas, but this just encouraged me to fight for them. Though I may have been wrong, it showed me the basic principles of any academic work. No theory can be proved without scrutiny.
Many times, such performances were done by assigned teams, so that boys had the added support and incentive of their group. This 7th grade Canadian illustrates the effectiveness of that strategy:

Before the Christmas break we had a project to do in English. Our whole grade had to make up their own play and perform it in front of the whole grade. This project was called the Culture Project. At first I thought this was going to be so boring, hard, and a complete waste of time. But I was wrong, it was very fun and interesting. We were in groups of four, and we had to write a play from scratch. Then we had to memorize the lines we had, and get all of our costume ready and perform it in front of our grade. It was fun because we had to make it ourselves and we had to come up with all the ideas, and we didn’t have to perform someone else’s work. It wasn’t fun to find the costumes because it was hard to find everything. But the rest of our project was fun. The best part was performing. It was really fun to perform because all of our hard work was put to the test. When we went to perform my heart was about to stop because I thought we weren’t ready. But I was wrong because we did a great job in performing. Everyone in my group knew their lines, we had all the costumes, and we didn’t forget to say anything and we didn’t forget any cues. What was also fun about the Culture Project was we got to see what everyone in the grade came up with, and how they would perform. Everyone in the grade did great and we all had a lot of fun and a good time.

Boys generally found these opportunities quite motivating, as these final stories confirm. The first is from a music recital by an 8th grader from Canada:

Certainly the most memorable class experience would be our cabaret jazz concert near the end of the school year. At this event we (the grade 8 band, composed of about 10 highly skilled musicians) played before an audience of approximately 150 people in our main performance hall. We played three songs, which include Take Five, Pirates of the Caribbean, Eye of the Tiger. In one particular song every student was given a 4 bar solo. For those who are unfamiliar to the language of music, this solo is approximately a minute, and is relatively long. This experience was incredibly motivating. I felt a rush of excitement as every note came out. We had worked so hard for this and it felt exciting to show off our skills. Many of my friends were there and congratulated me afterwards on a job well done. This event brought us (the band) together, and strengthened our tight friendship together. If it were not for this activity we would have been an unlikely group of friends. Moreover, the experience enriched my love of music and motivated me to continue this activity. If it were not for this performance, I do not think that my experience with the music program would have been the same, and I would not have made many new friends.

In this story, offered by a 12th grader from South Africa, we hear the incredible power of group validation:

Well, earlier this year we had the Inter-high swimming gala. Our entrance theme was the movie 300, and as the Headboy I had to dress as a Spartan from the movie 300. After our whole excellent entrance people referred to me as Deonidus, because my name is Deon and because I was acting as Leonidus (the main character in 300). Quite some time after that we had an English period. Seeing that I’m in matric we did a film study on the epic movie, Gladiator.
As we all know, *Gladiator* is a movie filled with honour, glory and passion. All of us watching were getting quite energetic and excited about all the action. So after one battle in the movie Maximus, the main soldier in the movie, held up his sword in victory. Everyone in the auditorium was so overwhelmed by passion that they started screaming… Deonidus, Deonidus, Deonidus. I just sat and smiled. It was a pretty memorable day.

Finally, another 12th grader from South Africa, who wrote that the strategy motivated him to work “to his full potential”:

In an English class back in grade 9 we once had a drama lesson where we learned to act and wrote as well as played out short skits. Otherwise impromptu tests and unprepared speeches were rather good too in the same subject. The school doesn’t offer drama, but if it did I would be one of the first to sign up. Actually getting up and doing something physically engaging that I was genuinely interested in is the best way for me in particular to learn. We also occasionally had student initiated lessons wherein students taught whatever skill they wished to. The whole lesson was organised by the student for his peers, with no involvement from the teacher whatsoever. but I digress, back to the drama… The task was laid out by the educator and then we were allowed to select groups, and thereafter we organised our skits and performed them. If help was required the educator was on standby for whatsoever topic we wished to enquire about, but otherwise interference was minimal. The groups were also separated so that things didn’t get out of hand and everyone could concentrate on what they needed to do. Groups were selected by the teacher to go up and present, rather than waiting for the students themselves to decide which group would be the first to display their work. It was this kind of work that really engaged my interest and allowed me to actually work to my full potential. Work that is constantly interrupted or goes at a pace that I think is too slow or too quick just gets on my nerves and leaves me unable to concentrate on the work at hand. Thank you for reading to the end, I’ve tried to give my full opinion on how I think work should be, and I hope that I have been of some help.

**DEBATE**

Like performances requiring pure recitation, debating also seemed to motivate boys to productive effort. This 12th grader from the US was quite appreciative of the lesson’s outcomes:

Perhaps one of my most memorable experiences in class took place during my junior year American History course last year. For a final exam, our class was debating several current events issues, and I was assigned to defend remaining in Iraq instead of withdrawing now. As I researched my argument and prepared my closing statement, I realized just how invested in the issue I was. I firmly believed that withdrawal was not the best strategy at that time, and was focusing on conveying my firm belief to my peers. I knew that this issue was one of the toughest arguments to make, and I did not want the opposing side to find weaknesses in my case. I was not only making sure that I knew my facts, but I was also preparing a formal argument and delivering a statement, which incorporated my love for acting into something as simple as a History class. I won the debate and felt that I had succeeded in delivering my position to the audience. I knew that my speech had resonated with everyone and that my closing argument had sealed the victory for our already competent team. I have enjoyed every
opportunity in any subject that focuses on public speaking or making a formal argument. After a full year of intense studying, I was well-prepared to analyze current articles on my own and make a cohesive case for any particular issue. I feel that I have the tools to dissect an issue such as Iraq due to, in large part, my school’s intensive critical thinking activities. By being ready to answer any questions in history class on any given day, I was preparing myself for public speaking and questioning by always having an accurate answer. I was excited about each debate or presentation that I had to make in a class, and I feel that these projects prepared me for being able to think critically in a short amount of time and being able to communicate effectively and convincingly to an audience.

For this 10th grader from the US, a History debate was “exhilarating”:

World War I Guilt Trials in 10th grade History took place over a period of 3 days, with impartial teachers and seniors as judges of which country was most guilty of starting the Great War. The research aspect took two weeks and required that we know each aspect of the causes of war from all countries’ points of view. The competition between teams within a class was especially fierce but friendly, and the opportunity to present one’s arguments, attack others, and craft on-the-spot responses backed by hard data was exhilarating.

For this Year 11 UK boy, an Economics lesson that included debate enabled him to learn and “time did not feel like it dragged on”:

Perhaps my best lesson, which helped my understanding of a topic better than others, was a so called “latte lesson” in Economics. The teacher had asked us to bring in an article from a newspaper or magazine. Once we had chosen our topic we would have to deliver a short summary to the class, which would then hopefully open up a debate between the pupils. The articles were supposed to be on current economic issues. The desks in the class were arranged in a horseshoe shape, allowing everyone to see and communicate with each other. We were also given coffee, tea and biscuits, which added to the already relaxed atmosphere of the lesson, but weren’t particularly necessary. The lesson went on for more than an hour, over which we discussed our topics and our teacher helped back them up with the relevant economic theory from the syllabus. I presented my article for roughly 2 minutes and then allowed the other members of my class to ask questions. My article was on the causes of the recent economic slowdown in the economy, and this allowed me to apply relevant economic theory that I had learnt in lessons. This led on to a debate in which we argued what the possible causes of this slowdown may be. The lesson lasted over an hour, but the time did not feel like it dragged on. The lesson was good as the teacher helped to create an informal atmosphere, which allowed students to feel more at ease with each other and more willing to communicate amongst ourselves and with our teacher. At the same time the teacher did not let our focus drift, making sure what we discussed related back to the subjects which we had previously studied. While the tea and biscuits helped make the lesson more enjoyable they obviously didn’t add to our understanding of what was being discussed. By talking with people in your class and sharing opinions with one another it is far easier to remember what the key points are.
COMPETITION

Not surprisingly, many boys spoke of lessons that included outright competition as most memorable times. In some schools, the competition is quite a dominant theme, as this Year 10 boy from New Zealand attests:

One of the best things about this school is that it is very competitive. The classes are all streamed and then the classes are all numbered off in order of class exam results. Therefore, every person in each year level is rated from the highest academic scorer to the lowest. This competition has helped me in a big way because I will keep on pushing my way forward, and trying to move up classes. Therefore improving academically, and there is no time to stuff around in lessons. In other non-streamed schools, many of the kids stuff around in class all year round, until the exams come, and they haven’t learnt enough over the year to pass the exams. These people will not do as well as the kids from streamed schools like my school, because there is not as much competition. I know this from past experience at my last school that was non-streamed in year 9.

But more commonly, the lessons cited by students were lighter, game-like and specific, as this 8th grade US student offered:

In French in 8th grade, we play a game where the whole group reads from a passage. Each person has one word to say, but if you pronounce the word wrong, you are out of the game. You go around the room pronouncing words and the last person standing wins. It is very competitive with my classmates and me, and sometimes there is a prize for the winner. I felt that my classmates and I were very engaged in the activity, and although we are having some fun, the game also helps us learn to pronounce all the French words.

Boys can get quite excited by these contests, as this story from an 8th grade US student offers:

Last year, my classmates and I were sitting in Latin Alpha when we heard some amazing news. Our teacher came in and told us about a contest, the latin declension contest that would occur after every declension was learned. First it was easy, we had to recite the first declension endings singular and plural. Then we learned the second declension and it became harder. As the declensions progressed the contest grew harder and harder. At the end, we were supposed to recite 5 declensions as fast as we could and whoever was the quickest, would be named champion. There were two heavy favorites in our class, “Mr. Latin” was the heaviest favorite. He had won all the earlier declension-offs and did not look as though he was slowing down. The second favorite was a quiet boy who was a killer Latin student. As all the boys filled into the room, I was quietly saying the declensions in my head as fast as I could. The contest began. Everyone dropped out fast, kids would either forget the declension or they would go too fast and the teacher would not be able to hear what they were saying. This contest had a two round format. The top three declensioners would go to the next round while everyone else would stop. I was sure that the two favorites would be in the finals so there was only one real spot open. It was my turn to go. I quickly rattled off all the declensions in 23.4 seconds, which had put me in second place with only one person remaining. This clinched my spot in the finals. I was pumped. So the finals were set. It was the two students and I in the final. I couldn’t believe I was competing against the two smartest
kids in the class to become the declension-off winner. One of the favorites went first, he said it in a record 11.3 seconds, but the teacher said he went too fast for anyone to hear, so he was out. It was the other favorite boy and I left. He was up next and he did it in an amazing 19.6 seconds. So I was last. There was no pressure because I was the underdog trying to beat the favorites. I started off and I don’t know what got into me, I just rattled off the declensions in 15.3 seconds. I had won the competition! I beat the odds and won the declension-off. I was rewarded with a little candy and a medal. I was so excited, I couldn’t believe I had won.

Boys seemed especially to love it when the competitions involved teams, as this 7th grader from the US suggested in his story:

In English class in the seventh grade. The class was divided into two sections and no student chose teammates. Each group sat in chairs on their side of the room and one player from each team went to the center for every round to compete against the other player. The players stood and waited until an English question was asked and the first person to pick up the object, which was an eraser, was allowed to answer the question. If you picked up the eraser first you had a limit of time to answer the question. I felt especially engaged because it was fun and almost every time I went up for my round I was cheered by my team and I answered most of the questions correctly. I usually beat my opponent to the object and I knew the answers to the questions. This was an experience where I felt engaged because the winning team received bonus points on the next test. It motivated me because I basically had a chance to test my English abilities and view my knowledge of the subject. This class activity is one of many activities that have especially engaged me during my career as a student.

This Year 11 boy from Australia also shared a story of a team competition, this from an outdoor lesson:

The whole year was asked to do a high ropes course where everyone was forced to traverse a course high in the trees. Their lives were in the hands of their fellow peers as they needed to trust the people on the ground to relay them properly. It built teamwork and trust in others and was a great learning experience. Another memorable experience was an entire day dedicated to completing an orienteering course in groups of 4. The prize for winning was a T-shirt and it was hotly contested among all groups. Our group tied for first place and to decide the winner, the group which had collected the greatest volume of rubbish would win. Even then the groups were still tied and it came down to a group which could take the most accurate bearing on a map. Our group came out victorious and it would still have been great fun even if we had not won. It was extremely physically challenging and mentally taxing and also built useful attitudes towards life such as determination, motivation and teamwork.

In an number of the schools, such team competitions are an organized ritual feature of school life, as this 12th grader from South Africa described:

Normally my biggest highlight of the year occurs during a little festival we have called Cultural Week. We have six houses in our school and for this one week, all the houses get involved through competition. My house has won the trophy for best house ever since I was in form 1.
As a result I have made it quite an ambition for myself to uphold the legacy of our house. Every single year I take part in a large number of events (often swamping myself with work!) to make a contribution. My strongest area thus far has been my directing of the form skits and my debating. All of my hard work and effort seem to pay off in the end when I hear my name called out for “Best Debater” and the ultimate pinnacle is the joy that the overall victory brings to the members of my house. I do realise that at the end of the day the only thing that really matters when I apply for university is the marks I attain in my academic career, and I do take it seriously throughout the year. Yet this one period of time is definitely the greatest feeling of euphoria I experience in a year. It feels good that I can make a big contribution to the house and bring my fellow peers something to be proud about!

TEAMWORK

As much as boys love to perform and compete, they also love being part of a group effort in these directions. The value of being part of a group seems to add to the social validation necessary for satisfying maturation and development. This Year 10 boy from New Zealand told this story of a physical competition in gym class, in which he also validated his teacher:

In my year 10 PE class we were told to play a game of touch with a group of about six people in a team. Our teacher told us to do some warm ups. We got into two groups of three and passed it whilst we ran. Then our teacher showed us how to go down and plant the ball in front of the other person. After we completed that we started to play a real game. We started to play but were struggling to catch and pass the ball but our teacher came over and helped us with our ball skills. Then we started to get the hang of it and started to play and co-operate a lot. We got the ball out wide and scored a few tries. Then our teacher blew the whistle and told us to rotate; we were playing a much better team and the rest of my team started to lose their confidence. Then our teacher came over and played with us; he helped out our team a lot. My team rebuilt its confidence and started to play very well. We ended up drawing the game but felt like winners. Why I chose this lesson is because our teacher never gave up on us and helped us a lot.

Whether competition is involved or not, being part of a team during a lesson holds a distinctive value for boys, honing necessary social skills while building individual competence. This Year 11 Australian told a story of a Biology lesson, in which there were both elements of competition and, more prominently, working with his team:

Earlier in the year our Marine Studies class started sailing on the river. On one of these double period sailing sessions the weather was particularly blowy, around 20kts/h. This was one of my first times sailing and my partner and I didn’t know how to sail all too well. To be fair we were possibly the least experienced in the class. We launched our boat with the sails down to avoid capsizing on land, let alone in the water, and started to sail slowly out of the harbour. As soon as we entered the open water, the wind took us flying down the river. I was skippering first and my 85kg partner and I were leaning out of the windward side of the boat to correct its positioning. It was no use, the wind was too strong and we capsized. This happened three times before I realized it was necessary to release the main sheet, or let the sails out to slow down and get the vessel back into a better position. During this time it was
raining and my partner and I quickly headed back in after the session was over for a shower. This experience of schooling was particularly memorable because I hadn’t done anything much like it before. It took me out of my comfort zone and we learned how to overcome the problems through mistakes.

For schools that include experiential education courses, teamwork and related moral values are explicitly at the heart of the lessons. This story from a Year 11 boy from Australia captured these themes well:

Last year, at the end of the year, all Yr 10 students participated in a ten day Venture through beautiful rugged terrain in the most picturesque part of Western Australia. Students bushwalk, and some parts of the journey require working as a team to sail and row. During the journey, everyone is required to work as a team, for instance: bush cooking, where everyone helps by sharing the jobs of cooking, cleaning, and eating! Or the bushwalking itself, where all members have to work hard to keep up the morale of the slower walkers. Another important team effort during the course is working together to build and maintain friendships. Each morning began with bag-packing for the days’ trip, followed by a quick breakfast, and swapping of duties (disinfectant ownership, leadership, navigation, etc). The walks usually lasted eight-ten hours, with lunch typically eaten when we got to the new campsite. Upon reaching the campsite, hootchies were set up, followed by hammocks, and exchange of dirty walking clothes for boardies and a wash in the nearest river. After lounging around and relaxing, dinner preparation began. Afterwards, everyone got together for a group meeting about the things we learned about our environment’s natural and local histories, each other, and our likes and dislikes about Venture that day. One night, after a long walk, our leader told us “it’s all downhill from here, boys.” The next day, however, we discovered that that downhill meant first climbing Mt. Chance. A week into the camp one of the boys was complaining about the lack of technology and civilization; specifically the absence of television. So we all spent the evening creating our own forms of entertainment. The two most popular were the spear and the ‘insect pit,’ our substitute for TV, in which ants faced off beetles, and cockroaches battled with millipedes, and a giant insect that we found was paralysed by a spider. The trip back was filled with awe (or sleep, for some) at civilisation and technology (wow, look at those cars! And that streetlight!). Venture motivated me to work as part of a team, and was possibly the most engaging learning experience of my young life. I can see that I really enjoy helping people. It makes me very happy to help people, and I learned that I am strong. I was able to motivate the people in my group, even when they thought they were in pain. The Venture experience provided me with a practical application for the principles of altruism.

Another Year 11 Australian from the same school echoed these feelings, speaking of being “changed forever” by it:

Year 10 Venture gave boys a chance to utilize and build on their outdoor education skills. Venture is a ten-day hiking trip. Boys were able to learn about the surrounding environment, cooking and survival skills, and all other aspects of a trek in an active and fun environment. Boys built new friendships, and used cooperation, navigation, and problem solving skills in a
real life context. Boys found their inner peace and became healthy in mind and body. I partook in this experience and will be changed forever. An experience I remember was on day eight of the trek. Boys were appointed to groups and assigned to a boat, which was a large rubber ducky. Out of the 16 boys in my Venture group there were five in my boat including my physics teacher who also took part in this experience. We used the boats to cross an inlet and move up a river to where we would be camping for the night. My group made a plan; we would use a tarp as a sail to save our strength for where we would use paddles to move up the river. It worked perfectly, and we arrived at the river mouth with the two other boats that contained tired boys. We dropped the sail and paddled off leaving the other groups in the dust/spray. We arrived early and set up fast where we then waited for the other groups. When the others finally arrived we patted them on the back and helped them get unpacked. Although we were separate boats, when back on land we were one unit.

As part of a team, boys can be emboldened and uplifted. This story from a UK boy in Year 10 illustrates this theme well:

One of my most memorable lessons I gained the most from was a French lesson last year. We were learning vocabulary and were in groups of four. The teacher had told us we had to stand up before the rest of the class and recite vocab using a memorising technique (e.g., a poem, a song, etc.) after learning the vocab for ten minutes with the rest of your group. My group and I had turned the sheet of vocab into a type of song and sang it to the rest of the class. I learned a very good way of memorising vocab in that lesson and I can still remember that vocab today as it was such a good experience. I also learned a lot of other vocab learning techniques from my fellow classmates including using a theme tune from a popular programme or film and fitting the vocab in. We shared our techniques and ideas as a class and benefited greatly for it as almost the entire class scored very highly in the vocab test the following week. I enjoyed the fact that we didn’t do the usual “sit and listen to the teacher” sort of lesson and it was refreshing to have done this activity as a group and a class. This exercise improved our French vocab learning techniques, our actual vocab and our skill of working as a team. It was definitely a good team building exercise and I am very fond of it still. I would recommend this type of learning exercise to everyone.

Teamwork and competition can provide a deeper motivation and elicit personal investment, as another Year 10 boy from the UK explained:

My most inspirational lesson came just before our module 1 Science exams in the Summer term. The lesson was Chemistry, and incidentally the situation arose due to our normal teacher being away. The substitute teacher decided that we should use the lesson usefully to revise for our forthcoming examinations. He divided the class into eight groups of three, and placed eight large sheets of paper on the front desk. On their reverse side was a section of the syllabus on metals, 1/5 of the Chemistry module. One at a time, members from each group went up to the desk and looked at one of the sheets of paper for thirty seconds, trying to remember as much information as possible. Each group was given another sheet, on which we recorded all of our memorised information. By the end of the lesson, each group had a near complete summary of a section of the syllabus on metals—we had revised one fifth of the entire syllabus in half an hour. This lesson was particularly useful for me personally, as
I regularly have trouble finding a method of revision that results in remembering all the information taken in. The lesson showed that revision can be relatively quick and simple, if you work hard enough. I found the lesson inspirational, as the teacher showed that we had managed to take in a great amount of information by going round the class at the end of the lesson and asking each person for a piece of information they had discovered and memorised from the lesson—and every person was able to respond. More importantly, the lesson gave me a new idea for revision, in the form of communal revision.

This Year 12 Australian makes the same point about motivation:

Walking into a normal standard year twelve Accounting class I thought that I had another long and tedious class in front of me. But this time was different. My classmates and I had been set a series of long questions to be completed by the end of the week. It was Wednesday and we had some doubt about completing these tasks. Instead of complaining my mates and I jumped straight into it, helping each other and taking on the challenge. All of us must have got through half the work within a day and a bit, creating a success. Although the motivation was minimal at the start by the end of the productive lesson, most of us were rising above the challenge and highly motivated to finish the task.

PEER LEARNING

Teachers in the participating schools amply noted boys’ responsiveness to each other’s performances and presentations in class. Positioning peers as mutual teachers and learners is explicitly designed into outdoor programs that offer boys the opportunity to learn from each other’s feedback and example, as this story from a Year 11 Australian suggested:

At the end of grade 10 the year group embarked on a 10 day trek through the Australian bush-land as part of our outdoor education program. The year group was divided into groups of 20, and with no contact to the outside world or use of electronic devices it was designed to build strong relationships, create new friendships and learn a great deal about yourself as well as learning new skills that one would never learn otherwise. These goals of the program develop from the hardship and highs of experiencing camp life in the wilderness. The camp involved ten days of walking (around 20 kilometres average) then arriving in the campsite mid-afternoon onward. The boys split into tent partners would set up their tents, maybe have a couple of hours to toil with, and then shortly begin cooking dinner in woks over fires in cooking groups of four. Following the clean-up from dinner the group would sit around a camp fire and discuss the day’s happenings, raise any troubling issues, then plan the next day. After this the group would head to bed and awake the next day to a very basic quick breakfast and then begin the day’s walking. Personally I thoroughly enjoyed the 10 days. I was placed in a group with few people I knew and came out of the program with friendships that would last my whole school life. Boys can learn excellently in the classroom. But for the boy to really learn about himself, his own personality and how he socially interacts, they must have the unforgettable experiences and knowledge gained from outdoor adventure, such as camp life and being immersed into a world with no global contact, with the very basic needs of life and with people you knew little about beforehand.
This 8th grade US boy wrote directly about the help he and his teammates afforded each other as they studied for a language exam:

During 8th grade Latin, the teacher let us work in groups of 3 and 4 to study for the National Latin Exam. Using exams from the past years, we helped each other understand and answer the questions correctly. As I was in the higher level of the class, I had the experience of helping students with a lower level of understanding. I myself benefitted from this teamwork, for I brought myself down from automatic assumptions to the specific basics of the Latin language. Armed with knowledge of the entire class, I participated in the National Latin Exam and managed to return with a perfect score. I believe an important factor in this success was the teamwork and collaboration I had during class.

This 12th grader from a US school recalled a time he was able to learn from classmates in a touching and unexpected way:

One day in 11th grade American Literature AP, we were talking about a poem, and the poem led us onto a very serious topic in life, and just hearing what some of the guys had to say made me see a different side of everyone that everyone hides at school in order to avoid being vulnerable. It was really touching and cool that we all opened up so much and I got to hear from some of the guys who are more quiet.

This 11th grade US student reported a similar experience:

The subject was English my 11th grade year. I was in an AP Literature class and this was my first AP class I had ever taken. The class was discussing a book with our teacher and he was urging us on to contribute to the discussion. At first, many of us were timid because we didn’t want to look stupid in what was almost everyone’s first AP class. However, our teacher did not give up as he kept spurring us on, trying to transform the discussion into a completely student dominated one without his input. We began to take control of the argument slowly. However, by the time the end of the class rolled around, our teacher could have left the room for all I had known because I completely forgot about him and only concentrated on what the students in my class were saying. The experience was the first of its kind for me and shaped how I treated debates in the future in any class. That lesson still contributes to my learning today.

In group learning contexts, boys teach each other. This 12th grader from the US, for example, found his work rate improve as a result of peer feedback:

Currently in English class we are posting our work on a blog website. This gives anyone a chance to read our work and comment on it. Sometimes for homework assignments we have to go and comment on other students’ work, and that has made me want to work harder and it is very interesting. I got comments that made my work better.
This 11th grader from the US was inspired by the challenge and tutoring of classmates:

Just a few short weeks ago, my AP United States History teacher held a review session for the AP exam on a Wednesday night. Due to multiple scheduling conflicts, only three of the thirty or so students in the two AP classes were able to attend. At the time, I was struggling in the class and I was very worried about the upcoming exam. Luckily for me, two of the most intelligent students in the junior class were in attendance. For over an hour the four of us went over key terms and sample essay questions. In this small group I was really able to connect with my teacher, who is clearly one of the most intelligent people I have ever met. We spent five to ten minutes individually on each of the practice essay questions and then shared our ideas about how to thoughtfully answer the question with the group. I was first challenged individually, and then constructively criticized by my teacher and my peers as to how I could more effectively tackle the tough questions. Coming out of the review session with pages of fresh notes, I felt more motivated than ever to put in the effort and do well on the exam. I attribute such a meaningful and motivational experience to the opportunities provided by a small private school where students can have review sessions with the teacher after hours and go in to the Advanced Placement Exam feeling more confident than ever.

And this 7th grader from Canada was quite open to learning from his team members:

I am in grade seven. We did many things in class this year. I really like the Robotics unit in Science class. I really liked how we had to think about what we had to do and how to fix our problems. Working in teams also influenced me to try very hard. Each team member had a job to do; a builder, a programmer and a project manager. It was much more fun to work in groups because working alone is sometimes very dull and boring. This way we can ask questions to each other and come up with better ideas. Personally, I don’t always like working alone because it can be difficult. Our group worked very well with each other, we never had any problems or arguments. If we did have any arguments we would fix them instantly. Our group always helped each other out and we asked each other many questions. Even though I would have preferred to choose our own groups I was happy working with my group. We had two challenges to do. One was to have the fastest speed out of all the groups, the other was to climb a ramp and the team whose robot climbed the highest angle would win the challenge. The challenge where we had to climb a ramp was the harder because we had to do many tests and experiments. Our first test showed us what we needed to fix. Our robot did not get up the ramp because there was no weight in the back of our robot. We had to immediately fix our problem. We had to try many things to finally get it right. We did very good overall. We got a very good mark.

For this Year 8 boy from Australia, peer influence seemed to be key across a number of subjects:

My most inspirational class experience was in Music. I found that when I was listening to the other kids play their instruments or sing their songs, I was highly inspired. I thought that all of the kids worked really hard, and that it definitely showed when they performed. I especially liked one student’s performance; he was so nervous in front of the whole class and even made some wrong notes, but I thought even though he had made some mistakes, I was greatly inspired because of the courage he showed and he didn’t care if the person next to
him laughed, or giggled behind his back, he kept on going. And because of that I was inspired. I also had a fantastic time in Science class when we worked on electricity and the electric currents. The whole class made massive circuits, with wires and batteries. I was really interested, and I found my teacher was great. He explained everything very clearly and was very kind to all of us. Another great class experience I had was in History. After everybody had finished our essay, our teacher gave us all of these fantastic History essay games. Finally I thought that during the whole time in year eight, camp was the best experience probably in my life. Everybody was kind and supportive, we did fantastic activities, like absailing and rock climbing. We went on long walks through dense bush, and sat and ate on a log, suspended over a trickling creek. It was the most calming and funniest time in my life. In one activity in particular I found I showed great courage. I have a massive fear of heights, and I am very proud to say I did a massive absail, and when I was going down I was sweating and shaking. I was going slower then a snail, but what kept me going was all of my supportive friends at the bottom, who cheered and urged me on.

### Self-Completion

Occasions in which boys had overcome obstacles and achieved results beyond their expectations were often cited as memorable learning moments. These experiences of success taught them many lessons, including perseverance and importance of nurturance and support. One senses, in these stories, the uncertain and incomplete nature of boys’ self-concepts and their vulnerability to the feedback they receive about their efforts in school. For some, a teacher’s timely or skillful intervention lifted them to success. For others, meeting the challenge of the work fortified their sense of competence and purpose. For still others, a particular achievement opened up an awareness of a previously undeveloped aptitude, even glimmers of future vocations.

### LIFTED TO SUCCESS

In many cases, the stories boys told us in relation to discovering themselves as students came as the result of a teacher’s efforts or teaching style. These stories usually made a point of acknowledging the teacher’s influence and the difference—especially in self-confidence—the teacher's help made to the boy. This 10th grader from Canada offered a typical example:

This took place in Computer Studies in grade 10. When we began programming, I had difficulty understanding how it worked and how to do it. However, the teacher was very understanding towards me and helped me through the whole way. She never gave up on me even though I kept on having difficulty, and finally, after many morning and lunch extra help sessions, a light finally turned on in my mind and I understood everything. I was able to get a really good score on the big test of that unit, but that is not the point of the story. The thing that is memorable is that she never gave up on me and always believed that I could do it. There is no way that I could’ve understood this confusing and complex unit without her extensive aid. She went the extra mile to help me, and that’s what makes this school so great.
This from a Year 11 boy from New Zealand, as another example:

I started off in a low class; however over the years I have moved up a lot of classes. The thing I found that helped me the most was my favourite subject. Within this subject, which was Graphics, I found that not only was I motivated from the start, but also the teacher taught and disciplined us to a point where we would know when to have a laugh and when to be doing our work. My teacher was funny, but to a point where he would be serious as well. Although he didn’t teach as strictly as others, I found that it is best to be serious but also with a sense of humor. And the students knew when to be quiet and get on with their work. I also found that by working separately I could get on with my work better and more efficiently, and also have a laugh with the class as the teacher made a joke at somebody. I got on with my work, and found that I tend not to like people copying off my work, and putting my ideas onto their sheet. Although it’s not practical to have everyone at a separate desk, my grades in graphics improved to an extent of getting 2nd in class with 93 percent. The teacher also gave students attention with comments like “you have a natural talent and skill in graphics’. These comments as well as good comments from class members, motivated me to a very high point, and this let me focus on my work very well.

This Year 10 boy from the UK expressed a similarly rough time, likewise appreciating the help of his teacher:

At school in year 9 I could not understand the French imperfect tense no matter who explained it to me. My teacher helped me understand it by repeating it slowly and letting me write it down and explaining why things happened and why the verbs changed. This was a good way of teaching me because I could not understand what was happening previously so he taught it to me in a way that corresponded with the way I like to learn. His way of teaching seemed very logical to me and I found it easy to understand and remember. This was particularly good because I remembered how to form it and as a consequence I did well on the imperfect tense in the end of year exam which was especially pleasing as at the beginning of the year I had no idea how to form it and at the end of the year I could confidently form it.

This Year 9 boy from Australia recalled a Music lesson, in which the challenge from his teacher “paid off” and “made me happy”:

I particularly enjoyed an instrumental lesson I had a week ago. It was a single lesson (so it was just my teacher and I) and I am learning the trumpet. I went into the lesson and we did our warm up. Then, he tested me on a couple of blues arpeggios. I had not done these before, but they were easy to construct and could be worked out fairly quickly. Then we talked about improvising, and he showed me some and explained some techniques. He had a jazz “playalong”, and we were taking turns to improvise. I had been doing a lot of practice at home, doing lots of exercises and learning blues scales, major scales, etc. in each key, and it really paid off. I enjoyed playing and my teacher was encouraging. After a bit of improvising we discussed techniques and I asked how I could make my solos better and asked him what he did when he soloed. He told me things and we improvised a bit more. I was let out late but I didn’t mind because it was the end of school. We were not working towards a formal exam or grade, but I wanted to be better at improvisation for the jazz band I am in so that
I can do better improvised solos. I found that this lesson made me happy and made me want to continue playing jazz trumpet and do a lot more practice. It was a very rewarding experience because my practice had paid off and I felt all the work I put in was worth it. I generally feel happy after my music lessons and this was an example of this. The playalong was called *Maiden Voyage* by Jamey Abersold. I think one of the reasons I was so motivated was that I was a little inspired by his playing; he was really good at improvising and I wanted to be able to solo like him. It was a really enjoyable experience for me.

Like the other boys, this Year 9 student from the UK began his Maths lesson feeling overwhelmed and unsure of himself; at the end, as a result of his teacher’s skill, he “came out of the lesson with a smile on my face”:

My favourite lesson ever was a Maths lesson in year 9 during the last term, where we learnt the sine and cosine rule. As we entered the room the teacher greeted us and made us sit down and get our books out quickly so we were ready to concentrate on what the teacher was going to say. The teacher started off by telling us what she was going to teach us. At first I thought we would never get through that amount of work and be able to understand it fully. But I was wrong and I did understand it completely. She then started to explain the sine rule on the white board and step by step took us through it. She went quite quickly but she was explaining it in a very clear and concise way which meant I could keep up and understand. The teacher did a couple of examples on the board then asked us to do some questions in our books quickly. She asked a boy to come to the front and do the question on the board. This livened the lesson up and was getting more people involved. I think this was one of the reasons I enjoyed the lesson, because the teacher involved the pupils. We then moved on to the cosine rule where the teacher taught it to us in a very similar way. We got through so much work in this lesson and I really felt I understood everything clearly. I came out of the lesson with a smile on my face knowing I had learnt something.

These stories of overcoming doubt and previous experiences of failure were quite moving. This 11th grader from a US school, for example:

In fifth form English class, the teacher told me at the beginning of the year that I would become a better writer. I did not believe him; however, he proved himself correct. Throughout the year my grades steadily improved. Then, we began reading F. Scott Fitzgerald’s *The Great Gatsby*. I was engaged throughout the entire novel. I specifically remember comments that I made in class that were productive and helpful. Then the time came where we had to write a paper about the novel. The paper was not only easy to write, but I also received an “A”. It was an extremely exciting and proud moment in my academic career, and I will never forget receiving my first “A” on a paper.

This 10th grader, also from the US, relishing the feedback of a teacher:

A memorable moment that occurred was not when I was in a class. It was this year in tenth grade, I was walking to my Math class and ran into Mr. A. He asked me how I was doing in my classes and I told him things are going pretty well. He then told me how much my grades had improved and told me that I was in the running for the Most Improved Student award.
This came as a shock to me because I knew I was doing better, but not to the point where I was. It just showed me that all my hard work is starting to pay off, and I know what I am capable of accomplishing in the future. There have been many highlights this year, but this has to be the most memorable of them all.

This boy’s story, as an 11th grader from the US, did not involve so concrete a success, but rather seemed to reflect his appreciation of an attitude as a student that he learned from his teacher:

I had just finished taking an excruciatingly difficult test in my AP World History class, and so I planned to sleep during my next class. This seemed, and still does, a justifiable action on my part. It was simply a cause-and-effect deal. I couldn’t care less at the time about how “one should always strive to learn” or any of that “junk” at the time. And so I walked into my next class—AP Calculus AB—with my head hanging down freely and feet shuffling. Taking my normal seat located in the very front row, I dropped my back pack on the ground next to me and leaned my head against my arm on the desk. I quickly began to fall asleep, not caring if the teacher, a mere foot or two away from my drooping head, would notice my not so appropriate act. To this day I do not know if he noticed, for he never commented on it. Instead he simply started the class discussion as he normally does. I stress my use of the word “discussion” here in place of the word “lecture” which would normally be used. Although calculus was and is my favorite subject, I wasn’t too excited at the time. Still, I soon found myself raising my hand quickly several times whether it be for giving the answer or asking a question. That particular day happened to be the day we discovered several of the many purposes of the antiderivative. Again, I use the word “discover” because, despite the fact that what we learnt had already been known for over a century, the way the teacher taught it to us made us feel like we were discovering it for ourselves. No sheet that simply listed the uses of the antiderivative, no formula memorizing simply for the sake of memorizing, we learnt in an effort to understand. I felt a feeling that I don’t feel often—the desire to learn beyond the curriculum, beyond the textbook, beyond what was currently known by man. Sadly, the last of those three I could not achieve, yet that did not keep me from trying. That day, that class, that desire is something I hope I never forget.

Along similar lines, this Year 9 Australian learned an important lesson about work from his teacher’s honesty:

When I was studying for an upcoming Maths test I didn’t do much book work. Expecting to pass the test easy I did not do my homework either. When I handed in my Maths work my teacher marked it in front of me, I got a five out of ten. When I got my test back I just managed a pass. I hated myself for that and when I asked my teacher how I almost failed he told me that I had not done the homework. Revision is one of the most important part of Maths, preparing for a test is crucial if you want to pass. I know that now better than ever and will do my homework every night possible, mum and dad had always told me that to succeed in life you need a proper education. Don’t become a ditch digger, get a job, work hard and make a living.
MEETING THE CHALLENGE ON ONE’S OWN

In many instances, however, the boys told stories that did not depend on a teacher’s help but reflected rather their triumph over difficult tasks or their own self-doubt. In such stories, we hear a convergence of the adolescent with the boy, and the recognition of this important developmental fact on the part of discerning teachers in their orchestration of opportunities for boys to discover their own competence. This 7th grader from the US, for example, challenged by “the biggest paper I had to write”, discovered something about his own ability through his hard work and achievement:

A time when I felt especially motivated was when we had to write a five page myth paper for 7th Grade English. We had been studying Greek and Roman myths. Our myth had to be modeled after a Greek or Roman myth, so there had to be a moral and the Gods were involved. So it wouldn’t be Hercules re-written, we had to come up with our own idea and plot line. It was the biggest paper I had to write at that time. The paper was a challenge for me because most of the papers I had written were one or two pages. I enjoyed the subject matter though, so it was not extremely difficult. Another element of this paper that I had trouble with was the editing. I find proof-reading and editing a challenge. Also we are not allowed to use certain words, such as thing, get, pretty, etc. I worked hard on this paper though and I managed to do well despite the paper being fairly hard for me. One advantage for me was my vocabulary. I think that I have a large vocabulary for my age and I used that to my advantage. So with a combination of hard work, careful editing, and an above average vocabulary I managed to attain an A- on the myth.

Boys’ pride in themselves as a result of achieving was the common outcome of these stories, as illustrated by this 12th grade US Engineering student:

My most memorable in class experience occurred yesterday in my 12th grade engineering course. For most of the fourth quarter of this course we have been working in groups of two building a bridge from forty pieces of balsa wood. My partner and I had finished the bridge deck successfully, but didn’t realize until yesterday that we had just 3 days to complete the top portion of the bridge. We quickly made the decision to abandon our original time-consuming plan and decided to create a bow bridge from curved pieces of balsa, like others in the class had already done. When we expressed our idea to the teacher he told us that it was impossible because he had already dismembered the device to curve the wood. My partner and I met the challenge and went through the tools in the wood shop room and assembled our very own device to curve the wood. In the same class period, we attached the balsa wood. We worked extra time today in school to attach the bowed bridge top to our existing deck. Today, our teacher expressed his approval of how we overcame his challenge and now says that, although it is not so aesthetically pleasing, is the bridge most likely to work in the class.
This 10th grade US student practically jumped off the page with pride in his accomplishment as a Latin student:

When I was in my Latin 3 Honors class one day after taking the National Latin Exam, our teacher was announcing names of those who had won various medals and awards. The whole time I was thinking, “Please, not a silver”. So she slowly announced the people who qualified for the bronze medals, then the silvers, and as she neared the end of the list, she had not said my name. As she went through the four students in my class who qualified for the *suma cum laude* award, my heart was racing and all I could do was hope for the best. Finally she got to the last gold medal and the last award announced my name. I jumped out of my chair with a shout because I was so overjoyed, knowing my parents would be too, that I had gotten one of the top awards for taking the National Latin Exam.

Somewhat more subdued but equally proud was this Year 8 Australian:

One class moment that was really memorable to me was Friday the fourteenth of March 2008. It was second last period and we were getting our religious assignments back. Our teacher said that we all did very well in the exam and there were a few that stood out beyond the crowd. When he gave us our tests back, I was a little nervous. The reason I was really excited about this period was that I spent a lot of time on this. The other reason I was excited about this period was that we were learning about the Dead Sea scrolls in class, we were to watch a video about the discovery. I found it quite fascinating and interesting. In the period the teacher was in a happy mood and we made a couple of jokes and then got on with it. The best part of the period though was getting my mark back. I got 98% as my mark. Overall I enjoyed this period because of the teacher and how he was in a happy mood, the class was fun and also productive. The best part was getting my mark back. I will remember this class for a long time.

This 10th grader from the US captures the vulnerability many students feel as they receive their evaluations:

It occurred during Biology class. The big test was to be returned to us. It seemed as though for the past week I had put my body and blood into studying for this. Every question seemed to get progressively tougher and tougher as the test went on. As the minutes wound down in the test, my hands began to sweat profusely and the muscles in my hand began to cramp as well. Every answer was thought out for at least a whole minute. Problem by problem, I felt like a detective, analyzing each question and initiating a plan. When I had completed the last problem, I was relieved to hand the test in to my teacher and leave the classroom, able to take my mind off things. When our teacher handed the tests back to us with our final grade, I was anxious. I was dependent on this grade for a respectable mid-trimester grade. It was handed back to me and there was too much anticipation for me to handle. I left the test face down for a few minutes, trying to think positively. I soon gained the nerve to flip over the large packet and doing so, the corners of my mouth touched my ears, as I was ecstatic with my final grade. An “A”! This was almost more than I had hoped for on my test. Out of 50 questions, I answered only two of them wrong. This resulted in a 96% overall score. When I discovered what my grade was, it gave me loads of confidence and allowed me to know
what I was capable of doing. From this experience, I learned that studying for your schoolwork pays off in a large way. It was as good a educational experience as I had ever had because I had put my heart into studying for the big exam and it paid off in a big way.

Not all of the stories were about smooth successes, at least not the first time out. This boy, an 11th grader from the US, was particularly proud of how he had grown as a student:

My experience in Honors Physics in 9th grade was the first time I had taken an honors course. The year started well and I felt confident in the material that we were covering. The night before our first test, I studied hard and felt like I was prepared. After receiving our test scores, I was stunned that I had made a 55%. This was the first time that I had ever failed a test in my life. However, this experience made me realize the need to utilize the help of my teachers and other resources available to me to enhance my learning ability. I made a B in the course in the first semester, but after I became accustomed to the advanced style of learning, I made a steady A to A- grade throughout the second semester.

Marks and grades certainly mattered to the respondents, especially as they helped them to gauge the level of their success. But a number of these stories were about other sorts of products resultant from hard work and diligent application. This 11th grade US student, in an independent study course, for example:

This year as an independent study my Math teacher and I worked to understand an Erdos proof. Erdos proved that between any number “n” and “2n” there exists a prime number. At first glance I saw the four page proof and put it down. I was ready to walk away, but after 4 hours of work I understood it all. The most wonderful thing about it was that the culmination of the proof was a proof of contradiction that ended up saying that “30 >31.” After 4 hours the wrap-up was a statement that any second grade student would understand. This experience showed me that even if at first glance something looks like it would be impossible to understand, with determination and help it is possible to achieve great academic feats.

And this 12th grader from the US, recalling an Art lesson of four years earlier:

In my freshman year English class, we were studying The Odyssey and we were asked to make some sort of art-orientated presentation describing a part of the story. My friend and I began making a “bust” of Odysseus before he had slain the suitors. It was a long project, two months of crafting, painting, sculpting, and forming this piece of art. Needless to say, neither my friend nor I had any artistic talent in our body, and the level of sophistication was somewhat less than average. Nevertheless, we put our heads together and finished with what we believed to be an accurate sculpture of Odysseus. His body may have been square, his bow might have been rubber, and the arrow may have been the size of his head, but we were content with our work. We presented him to our class, and received an A for the project. My friend and I were both pleased with our work, and enjoyed thoroughly our artistic triumph. Four years later, in the fall of my senior year, I returned to my English classroom with the same teacher I had in freshman year, and the first thing he said the entire year to our class was “Would you like to introduce your friend?” I had no idea what he was talking about, but
I then looked up, and there on the shelf was our Odysseus, four years later, and with a significant amount of paint missing. His face was chipped, the arrow was gone years ago; however he still stood looking down at me, and every day when I leave my class I am able to look up at him and know that even a work that may be considered below average by some, can be considered worthy of being permanently rested on a shelf.

**PERSONAL REALIZATION**

For a number of boys, certain school lessons made them aware of personal qualities—strengths and limitations—of which they not been fully aware. Again, how teachers skillfully assist boys in the critical developmental work of forming a sense of self underlies these stories. What we hear throughout these stories is of a teacher, sometimes quite foreground but often in the background, helping boys discover who and how they are. This 12th grade Chemistry student from the US, for example, seemed to discover something true about himself:

In Chemistry in my Junior year, we were learning conversion equations for single displacement, double displacement, dispersion, and combustion. They came so easily to me. The teacher would show us how to do it on the board and give us one to do afterward. Most of the time I got it. It was comical to me because no one else in the class was understanding them and knew what to do. For me it was just “plug and chug” (putting numbers where they are supposed to be in the equations and plugging them into a calculator to get your answer). It felt good to know what I was doing.

This Canadian discovered himself as a poet:

In Grade 7 English, I learned a lot about poems by listening to and writing different kinds of poems. Our teachers showed us the rules and regulations of these poems, and let us write them. When we were done we shared our poems, and those gave us some more ideas for better poems. At the end, we made a book full of all the poems we wrote all year. Poems made me realize that poems aren’t just words on a page. They have stories beyond their words that let the reader imagine. One mere sentence can mean so much more that it appears to be. I used to think that poems are little stories that rhyme. I used to spend so much time thinking how I should rhyme this word with that word when really, I should’ve been writing about what’s in my head and express my thoughts that don’t have to rhyme. To me, I thought poems were the most boring things ever. They were like listening to someone sing a horrible song in monotone with no music. I understand now that poems are the complete opposite of what I thought they were. The subjects that I wrote about were simply what I had in my mind. It was as if I was putting my daydreams on a page and calling them poems. It allowed me to use my imagination and let my thoughts fly onto a page as the form of poems. I’ve learned that poems can change your world with words. They let you say things that you wouldn’t say in stories in a million years. You can write a poem about anything, from the glistening moon, to a blade of grass among billions. When you read a poem, you forget your past, and your present becomes what you’re reading. You can hear it, see it, feel it, and maybe even taste or smell it. You finish the poem and that poem becomes your past, and you become a whole new person. We wrote all kind of poems like found poetry, haikus, Dylan Thomas portraits, Ezra Pound Couplets, Concrete Poetry, Opposite Poems, Senses Poems,
Form Poems and Persona Poems. These were all very fun poems because they had interesting rules and they really make you think.

Another 7th grade Canadian boy had a similar reaction to a poetry lesson:

This year in Grade Seven English class, poetry has influenced me a lot in the past few weeks in many ways. It makes me think deeper and more thoughtfully than I usually do. I enjoy poetry quite a lot because it allows me to explore my thoughts and develop them as fully as possible in a way that other people can see and hopefully understand. I choose my poems and what I write is randomly based on what I am thinking at the moment and on my mood. If I am in a good mood I will try and write something light hearted and funny, if I am in a sad or unhappy mood I will write my poems about something more serious and gray. In poetry I can let out feelings easily and efficiently through writing. Our English teacher makes poetry feel good and interesting by adding humor and fun into the mixture. He as well gives us different styles to work on and then he told us to write a booklet full of all of the poems we had written over the past weeks including a cover page, a table of contents, and an introduction and conclusion. The project was really amusing and interesting; it opened my eyes to how nice poetry could be. Our teacher showed us different styles of poetry by examples and work other students and he had done. The class had become a place where we could all share our ideas and write about them. Our teacher gave us many suggestions on how to improve our writing and gave us guidelines on what and what not to do. In our poetry classes everyone wrote works of art through poetry and our teacher encouraged us all to continue and to work harder.

This Year 8 boy from Australia relished the opportunity to write fiction:

The lesson I am talking about happened around term four, in year 7 English. It was the first time we were writing stories in English for the year—or in any subject for that matter—and I was overjoyed. Writing stories was my favourite thing to do and my English teacher for that year had a certain impact on my will to pursue writing. I remember the teacher writing up some topics on the whiteboard, and we had to choose one and write a 700 word story on whichever topic we chose. The topic I chose was a good one. It was called “Welcome to my Nightmare.” And of course I couldn’t restrict my writing to 700 words, so when I handed in a 15 page, 9000 word story with the heading: “Welcome to my Nightmare” I was excited about what I wrote, and the praise I received for the story led me to thinking about writing a real story. Of course soon enough we got another story to write from that same teacher. And that first experience of writing led me to go back to that teacher the next year, continuing my ambition of writing stories.

This 12th grader from the US discovered his own love of classical texts and history:

To prepare us for the next year of AP Latin, our teacher had provided us with several important pieces of prose work and speeches. Having finished our book, we had begun working on assorted Cicero speeches to prepare us for the prose we would encounter in Vergil. Though challenging for students who were more used to textbook sentences than full letters, the Cicero works were thrilling to work with. Our teacher told the stories behind the
letters Cicero wrote while in various provinces, and behind the Pro Milone defense he provided when Milo killed a rival man. We heard the stories of Cataline and his conspiracy to destroy the Roman state, leading me to examine and independently translate his Cataline Orations (helpful, as our exam contained a sight passage of the first Cataline Oration). This class sparked my interest in Roman law and in some of the darker histories of Rome.

Yet another 12th grade US student saw “the world differently” as a result of a Philosophy lesson:

A moment in my educational experience that stands out in my mind took place in my Philosophy and Religion class, during my senior year of high school. In this class I was assigned to learn about and present the Jainism religion as a research presentation and paper. I thoroughly enjoyed this experience because it provoked personal questions which I previously had not thought about. In this religion they believe that all beings are equal and should be treated as such. They believe that killing even an insect is as terrible as killing a person. This forced me to think about my relationship with other living and nonliving things around me, and whether I agree with these views. This mode of thought has changed my life because I have a greater understanding and respect for all things around me. I am not a Jain as a result of this project but I do see the world differently, and I do agree with some of their beliefs. This opportunity has personally benefited me greatly, and I mark this as one of my most memorable moments in my academic career.

And this 10th grader from South Africa was clearly inspired by a religion lesson:

Divinity, Grade 10. I have found at the start of this year, a new appreciation for the divinity lessons at my school. This is known as a lazy subject to some of the less-appreciating groups of the school and at a certain stage, to myself as well. We tended to shut down before class; the idea of focused religious study doesn’t usually spark too much interest. In my case I found the one-sided opinion particularly annoying, not so much the material covered. I am not a Christian, but I have large interest in the beliefs of other people and enjoy learning about them. So in the lesson in question, our school priest decided to cover the prophecies and end-of-the-world visions seen by the writers of the books in the bible. This immediately struck my interest. As we went through various scripture stories, I found myself fascinated and the craving for more came over me. After class I strolled over to my next lesson, lost in thought, my imagination running wild. As I got home that day, I went straight to my computer and followed my interest further.

These stories by boys of their favorite lessons sound a surprising note, in light of the literature and popular myth about boys’ disengagement from schooling. Throughout these various themes we hear of highly savvy teachers, fine-tuning their lessons to boys’ interests and attitudes, and of turned-on, grateful boys who are completing themselves in accomplishment and discovery. Obviously, these are not boys who do not care to learn or who merely suffer their schooling. Underlying the learning contexts boys selected to relate to us, we hear of lessons delivered in just such a way, usually involving some transitive quality, that boys’ minds and hearts are captured and engaged. In the following section, we will amplify our notion of transitivity, to include not just teaching techniques and strategies but the relationship a boy has with his teacher itself. ■
Central to the boys’ narratives of their schooling was the importance of relationship— with each other, with their teachers—testimony that supports Chu’s (2000) conclusion from her research that boys are “relationship-ready” when conditions allow. Boys were not asked by us to talk about their teachers or to identify characteristics of teachers that were effective with them. That they included detailed references to specific teachers and to qualities of their relationships with these teachers so often is remarkable testimony to the power of the personal in boys’ lives. In fact, it seemed impossible for boys not to personalize their answers to our survey, so completely interconnected did their teachers and their lessons seem. The warmth and consistency of these students’ accounts stands in some contrast to publicized claims that boys are as disconnected and disengaged from teachers as they can be from schools.

As with other instructional elements we have catalogued, students described a transitive quality in their positive relationships with teachers. Reflecting upon her sons’ conflicts with teachers, Carol Gilligan (2005) discussed a cultural tendency to deny boys’ “voices”, to be unable or unwilling to hear what boys actually think and feel about schooling. She wrote:

Voice and relationship are interdependent. Having a voice, speaking for oneself, representing oneself, saying what one knows, speaking from experience—these human capacities flourish or whither depending on the relational climate (2005, p. xii).

One of Gilligan’s students, Miriam Raider-Roth, a former teacher and now Education professor at the University of Cincinnati in the US, has written about her research on teachers’ relationships with their students. She speaks of the “relational learner” as the “learning self” which is “constructed and developed within the relationships of school” (2005, p. 21). To the extent that knowledge is built first in social relationships and then “gradually moves to sources in the self” (2005, p.25), a boy’s relationships with teachers who support his thoughts and feelings are essential to his learning and maturation. Yet, as Gilligan found in her experience with her sons and Raider-Roth found in research specifically with male students, teaching boys in too many schools is a “relationship puzzle” (2008). There are powerful yet often unconscious “forces of relational disconnection” operating in many teachers’ attitudes toward their male students (p. 445–6).

It is against this backdrop of puzzle and disconnection that our student results most surprised us. Boys in our study told stories of seeking, finding and submitting themselves to the care of mentors; their emotional resonance with their teachers was a powerful theme in our data. Many students wrote that they respond well to a highly structured, demanding, “no-nonsense” teacher, especially when they found that teacher to be fair and to want the best for them; others praised the teacher who was kind, a “friend”. Still others expressed a deep faith in the mastery of their teachers and gave themselves over to learning from them. In each and every case, however the relationship was nuanced by particular needs and personalities, the boys who told stories about relationships with their teachers revealed a fundamental quality of trusting them and, based upon that trust,
respecting them as mentors and teachers. In our study, then, boys confirmed what Gilligan (2005) has asserted about learning in general: “...trust, the core of relationship, and truth, which is at the core of education, are inseparable (p. xi).” The teachers reflected in our survey responses earn boys' trust by their care, the accuracy of their pedagogical efforts on boys' behalf and their attention to their relationships with their students. The lesson from this finding is clear: once trust is established and maintained, boys can give themselves to their teachers’ instruction, following their rules and permitting themselves to accept the gifts of education they offer.

Schools and classrooms also offer boys opportunities for relationship with each other, as well as with teachers. In addition to their nuanced, emotional and often intense relationship with their teachers, boys expressed the thrill of digging into a project with a partner or a team and learning as much about themselves in relation to others as about the subject. They could also be quite touched by lessons that appealed to their social conscience and moral responsibility, revealing their strong connections to their communities and to the world in general. Though we did receive such stories about their relationships with peers and with their broader worlds, in this section we wish to focus on the variety of themes having to do with boys’ relationships with their teachers and the transitive function these relationships seem to serve to facilitate boys’ learning.

Finally, a brief word about the qualities of teachers who succeed in building such trusted relationships with boys. From boys’ stories, the evidence suggests that it is very much as Raider-Roth (2005) has written: successful learning is a social process, built upon relationships that embody qualities of trust and mutual respect.

Understanding this intersection of students’ capacity to trust what they know and their capacity to trust those around them is of utmost importance for teachers and researchers as we consider and create learning environments in which students can build robust relationships (p. 14).

As we consider strategies to improve boys’ schooling, our results strongly endorse this dynamic of teachers’ relationships with their males students as fundamentally transitive to the success of their learning process. And, judging from boys’ comments in which they mention female teachers with the same gratitude and appreciation as their male teachers, we must conclude that male and female teachers are equally able to build such relationships with boys. Throughout the stories we now turn to, we hear all sorts of teachers—young, veteran, male, female—accomplishing the kind of relationships that work with boys.

# Reading the Teacher

At the outset, we were struck by boys’ perceptiveness, their attuned hearts, their abilities to fathom their teachers. Many boys told stories that detailed their careful study of their teachers: their awareness of their styles, personalities, preferences and moods. Perhaps teachers generally recognize the extent to which their students read them; for the boys in our sample, it seemed that this reading set the tone of the relationship, sometimes even of schooling itself. This 10th grade boy, for example, related an unhappy experience with his teacher’s bad mood, one that obviously still sat with him and influenced his answer to our prompt, however long after:

One time I was in class, a couple of weeks before the exam. I noticed that the teacher was in a particularly bad mood, and I asked him about it but he didn’t say anything. He kept on
yelling about random things and was unnecessarily hostile. The class got to a problem about
sin and cosines. I made a comment that the teacher did not even hear. However, after hearing
a little laughter, he turned around, and said “Who said that?” Not even knowing or caring
what the comment was about, he sent me to the dean’s office, where he proceeded to give
me a detention.

For most of the boys in our sample, however, the stories were happier, about teachers whose moods
were observed more commonly as felicitous and welcoming. This Year 12 boy from New Zealand,
for example:

My 4th form Maths stands out as a memorable experience. The teacher created personal links
with the students by telling stories of his life in a comic way to do with sport and his education;
he did it in a light mood which made everyone relaxed at the start of the lesson and also made
us tune in to his lessons more. I think male teachers can also have more influence on boys my
age because it is easy to relate to us because they were once in our situation.

Humor and good humor were often read by boys as “relaxed” and helpful, as this Year 10 boy from
the UK suggested:

I am really bad at Maths and I am in the bottom set. We had a lesson which really helped me
with the topic which we were studying. We worked together as a class in a more relaxed
environment than with other lessons where we were unable to talk to our neighbours for
help, or ask some very basic questions. One thing which really made a difference was that the
teacher never made me feel like I was bad at Maths even when I got the question completely
wrong. He didn’t give off the same arrogance as some of the other teachers I have. There was
a really good atmosphere in the class. We were laughing and joking but learning at the same
time, so when I left the lesson I felt like I had actually improved my Maths as well as having
a good time with my teacher and friends.

Even emotionally sensitive subjects could be tackled, it seemed, in the right atmosphere, one
characterized by humor, personal sharing and some light-heartedness. This Year 9 boy from the
UK told a story about a sex education class he particularly enjoyed:

The one of the most memorable lessons I’ve had was one of my PSHE lessons in year 9. I
thought his teaching approach to the subject was spot on, because PSHE is usually an
uncomfortable subject and not one I would fully discuss with an adult; let alone a teacher. But
instead of everything being awkward, he successfully lightened up the mood of the class with
a number of jokes and would take the mick out of certain members of the class. He would tell
us stories of his childhood and occasionally take the mick out of himself in the process. By
doing this, he created a light mood and made us more comfortable around him, in turn
making us open up to him. He would also make us aware of his seriousness when it came to
certain subjects, making us realise how dangerous the matter was. I think that the obvious
difference between humour and seriousness helped me to understand the severity of the
matter as well as helping me to learn about the subject. For instance we learnt how to put a
condom on a model penis. I’d never done anything like this before and I think the slight shock
of the activity really helped me to remember the lesson and everything taught. Considering
that my memory is appalling. He also used slideshows on the computer to teach us the consequences, and showed us videos which I think helped a lot.

Setting the right tone with boys at the outset seemed a prominent theme. Here, for example, is a story from a 7th grade US boy:

My sixth grade Math class stands out to me. I was in Advanced Math and normally that would be really hard. But the teacher made it interesting and fun. Before class, he would say, “And before I start off class, I’d like to say good morning, gentlemen.” And if we said, “Good morning Mr. A” in a dreary voice, he would say that it sounded like we hadn’t had our wheaties that morning. He would link gumbo to Math. He could link anything to Math.

And this, from an 11th grader US student:

When I first walked into English class in my junior year I was greeted by my new teacher with the correct way to handshake. I knew that this class would better me and build my character. To this day every discussion and class is uplifting and offers many ways for the mind to think. I am grateful that I was able to know this teacher and will take many of his lessons to heart.

This 12th grader from the US, for whom “something clicked on that first day”:

As a student, I am always looking for something new and exciting in the classroom—something to break up the drone of going to class every day. On the first day of school in my Junior year, I stepped into my AP American Literature class without many expectations. The teacher walked in, and I had only seen him in passing in the hallways before; he’d always seemed uptight, yet very serene looking at the same time. After introducing himself, he told us his expectations for the course. He didn’t want us to “play the game of school,” where the student tries his hardest to do what’s necessary to earn a certain grade. Instead, he suggested that we each strive to come up with creative thoughts and push the boundaries of our writing skills—the grades would be a bonus. He explained that the class would be run in a seminar setting, with each student contributing to the discussion of the assigned reading, responding to the thoughts of our peers and not just the teacher’s questions. Something clicked on that first day because ever since I have been able to go into class not expecting to earn a grade, but rather to learn. Not only has it made each day more enjoyable, but I find that I am much more engaged in my classes. While it wasn’t a lesson in the traditional sense of the word, something about the way he told us his expectations unlocked my mind.

And this from a Year 12 student from the UK, for whom the highlight was his teacher’s ability to create a “relaxed and matey atmosphere”:

It was History, in year 9, I think. We entered the classroom and the teacher was good natured and funny. Jokes were cracked and much banter was present. Then he turned on a video stating, “For the first lesson we’ll watch this and then talk about it.” We watched the video which was on the battle of Austerlitz and Napoleon’s victory there. It was brief, fast paced and very informative. Once he turned it off we wrote a few pages of notes that he put up on the board. We then discussed the event and recounted what happened and why, as a form.
This was very effective as we went through what we had written down, linking it to what we had just seen in the film, which really consolidated what we knew. We were due to write an essay on it so then we began to plan what could be said in sentence form, summarising points in a single line. After that, everyone in the class who had been engaging with and listening to the teacher was able to recount exactly what happened and why. I would say it worked really well as we got a sort of relaxing time watching the video then immediately recounted what we had seen, keeping it fresh in our minds and putting it in our long term memories as well. It set us in good stead for when we came to revise for the exams as well. What helped was that the teacher created a very relaxed and matey atmosphere by coming across as the good guy, funny and easy going, rather than the bad guy, the strict and harsh teacher who gives lots of homework without proper explanation.

Boys read the nuances of teachers’ personalities and their investments in their roles. This 10th grade student from Canada, for example, cued to his teachers’ level of interest in the subject:

The classes that I enjoyed the most was when I could tell the teacher was interested in the subject and was trying to show us what was so important or interesting. Since the teacher was interested he made us interested, and the class listened. The other key factor in this class was that the teacher was always kind; he never used force to make us respect him. Therefore we were always quiet.

This Year 10 boy from an Australian school wrote of his teacher’s “positive and encouraging voice”:

The most memorable class experience was my first class with my Year 9 Maths teacher. Immediately after 2 minutes of his speech, I immediately knew that I was going in for a really interesting, engaging and motivating year for Maths. In fact, in the first three topics my mark was raised from a B to B+ and then to an A. The teacher had a very positive and encouraging voice which made an excellent teacher. He then gave us a small test in which we were supposed to write about what we looked for during the semester. This test was particularly good as it gave the teacher and us an idea about what we should aim for in the semester.

This Year 10 boy in the UK astutely observed the way a teacher created a “fun and relaxed” atmosphere and then skillfully lifted the boys to what felt like “an adult discussion”:

In year 9 English our teacher spent a whole lesson reading to us and discussing the play we read. His classroom contains no desks and we did no writing. I think we all learnt far more from being creative and inspired by the ideas and the characters he put forward. This one lesson extended our vocabulary and use of English and also inspired us to write creatively ourselves. The teacher managed to create a fun and relaxed atmosphere by his humour and antics, and managed to involve the whole class in the discussion by asking questions about the play, making us think about what it really meant and letting everyone voice their opinions. After people discussed the play he helped them extend their ideas by making parallels between the play and the world today. I think he taught on a level that gave ideas and stimulation to both the stronger and weaker members of the class, giving some a good understanding of the play and the language used and others more metaphorical ideas about the meaning of the play, cleverly combining a teaching style that benefited everyone. By just
sitting and discussing the play I think people felt it was less like a English lesson and more like an adult discussion and this created a good atmosphere for learning.

Boys, in particular, seemed to read whether the teacher “cared” about them. Year 10 boy’s story from Australia exemplified this theme:

The school experience that was the most memorable for me was in Year 9. I very much enjoyed a Mathematics course. The teacher was very intriguing, and he made the “feel” of the classroom much more lifted. Many people enjoyed being taught by him, and even the students who were not particularly interested in Mathematics took this course. He manages to get everyone going. At the end of the course, where all other teachers were cramming us with information for exams, this teacher organised a revision contest. The class was split into seven or so groups with a relay competition to beat all other groups in answering questions and walking (running actually). During the course, the teacher taught us many things that we didn’t know. And we remembered it. The pace of his teaching was perfect for every one of the students in the class. Each class, he would speak to us for the first half of the period and while we were working during the second half, he would help each and every one of us, making sure we didn’t fall behind and if we were behind, teach us until we “got it”. He was readily available during lunchtimes, either in his office or in the library. He would teach us if we asked during then. I learned much during the time he was teaching me, and I would very much like him to teach me again. Of my three and a half years in this school, he has only taught me once. He is the very best teacher around.

- Drawing Attention

How teachers capture their students’ attention was an art that boys thoroughly appreciated. Some teachers manage a sort of personal spectacle, especially using their own physical presences to create energy and invite good fun. We heard stories of this particular New Zealand teacher’s style from quite a number of his students, represented by this Year 10 boy:

An especially memorable experience for me was in my 3rd form. I had a teacher who took me for Latin. We were learning a grammar note, and he got up in front of the class and said in front of everyone, “Ego, me, mi, mihi, me. Tu, te tui, tibi, te” (What we were learning at the time). As he said this he moved his fists in a punching motion. Then he got all of us to stand up and do this. The way we all did this helped me lots as it was much easier to remember and was very enjoyable. I also found this very funny to see a full grown man stand up in front of the class and do this. He got us to do this at home and that also helped me to remember. This lesson was one of my favourites of the year.

This method was so memorable, in fact, that we had several boys cite it as their example even years later, as this Year 11 New Zealander attested:

Two years ago in Latin the teacher made a song up to describe what the Latin translations for the English words were. It would have been a boring lesson otherwise but the song made it fun and interesting. It was the way that the teacher sang the song that made it funny and memorable. He was only saying ten different Latin words but he put on a funny voice and did
a little dance which made it really funny and interesting. Even though this lesson was over
two years ago I can still remember it really well and still remember it as a fun and effective
learning period. I have since dropped Latin but I can still remember that particular lesson and
what we were being taught even though I don’t remember anything else about Latin. This
fun style of teaching was used by this teacher quite a lot and I learned a lot that year and got
good exam marks.

There seemed to be various strategies of leaping, bouncing and jumping onto desks, as in this Year
10 Australian boy’s story:

I remember in Year 7, being in our Personal Development class and we were talking about
bullying. Our teacher was the most motivating person I have ever come across. He jumped up
on top of the table and began to role play a bullying event. It was funny and motivating. He
then wrapped up the scene with an impassioned plea to treat others as you would like to be
treated. This saying and class have stayed firmly in my head since its occurrence.

Diverting expressions of physicality seemed to be a consistent feature of memorable lessons. Here is
another Year 10 Australian, describing an arm wrestling moment that took place two years’ earlier:

My most memorable school moment was in Year 8 Maths. Year 8 Maths was a memorable
class for me because I was in a very friendly class and I had a good teacher. The moment
which stands out in my memory is the Arm Wrestle between Mr. A. and a student. Leading
up to the Arm Wrestle our class was being very loud and not working. Mr. A. noticed this and
set a reward for working hard and quietly. The reward was that he would arm wrestle the
strongest member of our class. As our class put our heads down and got to work I felt very
motivated because of the reward. I worked very hard that lesson and learnt a lot of new skills.
The arm wrestle between Mr. A and the boy was a very entertaining event and I can still
remember it vividly today.

But a vigorous style, in general, seemed to be effective, as this vivid description from a Year 12
New Zealander suggested:

I was sitting through another seemingly typical, but by no means boring, History lesson. Then
all of a sudden, some audacious fellow of mine dares raises his hand, and contradicts the
statement just made by our animated master, a Lord Kitchener look-alike. A largely heated
debate ensues, the topic: Israel vs. Palestine: The Holocaust. The comical figure at the head of
classroom is in his element; he encourages criticisms, he craves our perspectives, and soon
has the class divided. I am not exactly a debater, but my own thoughts are developing rapidly.
I too put up my hand and propose an idea, shooting down several others. I am rewarded with
an enthusiastic “YESSSS!!!” as Lord Kitchener sinks to the floor, throwing a few punches in
triumph (as my suggestion coincides with his own). I proceed to take the lead of whatever
side of the classroom I had originally agreed with, and eventually everyone is engaged in the
discussion. The ideas flow and by the time the bell rings, we have covered the subject from
nearly every possible angle, and our understanding is much better off for it.
This Year 13 boy from New Zealand would concur, judging from his favorite Maths lesson:

The class was year 13 Mathematics with statistics. It was particularly memorable because the teacher used extraordinary facials and motivated you with his expression, passion and enthusiasm. He discussed statistics in a way that could be applied to 17 year olds, which was fun and also practical.

- **Incorporating Humor**

In similar fashion, boys appreciated teachers’ invitation to amusement and humor. Just as boys appreciated light-hearted moments in their lessons, they valued teachers who seemed to them to grasp the delight and wonder of their lives. This boy, in Year 12 in New Zealand, spoke of his English teacher’s “hilarious spin” on Shakespeare and other literati:

Mr. D. was a teacher to whom I related well and he made learning a breeze. He took me for both fourth and fifth form English and he so descriptively taught me about the symbolism in the theatre and the complexities of poetry, and also built my general knowledge with class discussions about global warming and resource depletion. His sense of humour lifted the mood in the class and made learning surprisingly fun. Often teaching boys in a subject like English must be challenging as we don’t always want to hear about Shakespeare and Wilfred Owen, but when a hilarious spin is put on the texts we study it can be really enjoyable. In particular one lesson that is particularly memorable was in 5th form when we were studying poetry. To get more in touch with nature Mr. D. made us go out into the school grounds and hug trees. This peculiar event actually evoked our emotional side and we wrote some splendid poetry.

This Year 8 Australian wrote of the “weird and wonderful” way his History teacher introduced the study of history:

The most memorable lesson I had was my first history lesson when I was in year 7. Mr. B. introduced us to History, but did it in a bizarre fashion. I was engaged the whole time. It was a very amusing lesson. He went on to describe some of the many “weird and wonderful” things that happened in history and the class had a discussion about what they knew about history. The teacher was very comfortable in speaking in front of the class. He knew how kids’ minds worked and used that to his advantage. As well as History, he had many funny stories about any subject that he was taught or happened when he was teaching. This really interested me because I am very interested in History, but what made this lesson stand out was the way in which he was describing the history and got everyone in the class involved. In that first lesson, he gained all of the classes’ respect and the good humour and discussions mixed with a bit of seriousness continued throughout the semester.

A teacher’s grasp of the humor in each situation worked reliably well, it seemed, to capture and command boys’ attention, as this Year 11 student from New Zealand wrote:

Last year, in year 10 Geography, my teacher taught my class in a way I felt very beneficial and also very enjoyable. Geography, not being a very exciting subject, was turned very interesting
Mr. A. made nearly everyone in my class interested in Geography. He would stand at the front of our class and instead of just getting the students to look through the work he dictated it to us at the front of the class, drew diagrams and also asked questions to the students. This made us all pay attention and if someone wasn’t then he would make fun of them in a playful way by telling a joke—nothing offensive. I think humor is one of the best way to get students’ attention, not too much, just the occasional funny line. This was a very effective way of keeping everyone’s attention and with the dictating it really helped us to understand the topic and helped us in getting our work done. He motivated us to do work and nearly all of the students in my class took Geography the next year.

Finding moments in their lessons that allowed for humor was a particular skill boys appreciated in their teachers. This 12th grade US student found his Physics teacher, for example, able to make room in his lesson for “Boppo the Clown”:

When I think back to my sophomore year, this class always sticks out the most in my mind. My teacher took every chance to make the class as interesting as possible. If I had to choose one instance of this that was truly memorable, I’d have to say it was when he taught us about velocity. Instead of using some boring problem like a ball on a ramp, he had us figure out if brakes on a bus gave out at something like 50 mph. and it went off a cliff at a 64 degree angles, where would Boppo the Physics Clown have to be standing in order to make the impact a whole lot funnier? While it was still a physics problem, and it still required all the same math, he always seemed to find a way of presenting the material that made it engrossing and entertaining.

Getting the balance right between clowning around and learning is another measure boys use to evaluate their teachers, as this 11th grade US student suggests:

In my junior year, my teacher was able to keep the classes interesting and funny while at the same time teaching the material in a way that was easy to learn and understand. In my opinion, the ability to make class interesting combined with good teaching is what makes a teacher a truly effective teacher. Some teachers are too lenient and, while funny or entertaining, they often do not teach the information well enough and as a result students do not learn or perform as well. On the other hand, some teachers may constantly teach and lecture, but their classes are so boring that the content is hard to learn. Mr. A. is one of the funniest people I have met in my life and constantly has a joke or a comeback in any situation. His sense of humor combined with his teaching ability enabled his students to learn the information for the course and have fun doing it.

This 8th grade boy from South Africa made essentially the same point:

My most memorable class experience was two weeks ago, believe it or not! Since it was two weeks ago it was in grade 8, and the subject was music theory/music. All the lessons with my music theory teacher are always fun and interesting but my particularly favourite lesson was an amazing, exciting and overall interesting and involved lesson. This lesson was full of fun which I think is extremely important in a lesson. If a teacher cracks a joke or two and/or makes
a lesson fun, he/she will capture the students attention and by the end of the day the student will have had fun and, most importantly, learnt something. The other thing my teacher did was ask questions on our topic. He asked every boy at least three questions and in doing this involved the whole class which I think is of vital importance!

### Offering to Mentor

One of the more common themes when boys spoke of their relationships with teachers was that of mentoring: of boys finding in their teacher someone who could, patiently and pointedly, bring them along in their learning. These were stories of great kindness and appreciation, gratitude, the sense of lives being changed in relationships. Sometimes the stories were of seemingly little moments, as with this Year 10 boy from New Zealand:

> My Technology teacher in year 10 took us for a lesson one day that made me understand what I was doing. We were building our wooden boxes. I went up to him and asked him for help. I didn’t understand how to glue my box together and make sure that when I left it to dry that it didn’t fall apart. I glued it together and then he showed me what to do. I went and got all the tools I needed and then I got on with the job. The next day when I got back to school I went and got my box to find that it was exactly what I was hoping it would turn out to be.

There was almost always the sense in these stories of boys’ feeling recognized by the teacher, singled out in some particular way, as this 8th grade student from the US described:

> In sixth grade during the spring, I was confronted by Ms. D. She came to talk to me about an opportunity to do the lights for the upcoming play. She told me that I had a lot of potential and she wanted me to pursue stage crew. After the play was over she noticed that I was very good at noticing mistakes, so offered me the job as head of stage crew. Over the next 3 plays, I took this role and under her direction I was able to do this with great enthusiasm and with great skill. In the fourth and final play that I would be able to do in middle school, she told me that I should act in the musical due to my voice and acting skills. I didn’t think that it was a good idea, but she motivated me and said that I would be great in the play. I made one of the lead parts and now it is opening night, and I would not have had all of the experience and good times I have not had without her help and encouragement.

This 12th grade student from the US described the same feeling of being seen:

> During my Math class in my Junior year, it was Pre-Calculus Accelerated, and my teacher was going through the daily routine of working troubling problems on the board from the homework. After he finished one of the problems and moved onto the next one, he noticed that I was still using my calculator and working on the previous problem. After he was done showing the next problem, he came over and asked to make sure I understood everything. This was one of the moments that sticks out to me the most because it shows the individual care that the teacher has for each student to thoroughly understand how to do every problem.
In the case of this 7th grade Canadian, this sense of being seen, known, was even more personal:

In French class, which we usually have 3–4 times a week, I had a very encouraging experience brought on by our French teacher. I was doing poorly in this subject, because I didn’t really understand the subject matter. My grandfather was very ill and in the ICU, so that affected my performance. My teacher asked me to come to his desk after class, and he asked me what the problem was. I told him that his explanations were not clear, and that I was having a hard time keeping up. He said, “Is anyone in your family ill?” and I replied, “Yes, my grandfather.” He started talking about my potential. He said that if I understood, I could have a much better mark in the subject. He said that if you are having any problems, that I should go talk to him. I appreciated this so much because I never had any problems with school, until now. He said I could be without a doubt an honor student. I told him I would do my best to take a more active role in his classes, and speak up if I had any questions. He also gave me a couple of websites that I could use for reference. This was a very encouraging experience because I never thought my teacher would give me advice that was so useful. This moment was important to me because my teacher showed that he had faith in me. He showed that I could become at least ten times better in his subject, which was extremely motivating. An example of his teaching was when we were work on sentence structure. The classroom was getting a little chaotic but I still had a couple questions to ask. He made sure that the room was quiet, so I could ask my questions. In the process, he sent out a couple of peers for showing disrespect to me and himself, which was very humbling.

There were often stories of boys who had struggled with some aspect of schooling prior to their mentoring relationship, explaining their tone of gratitude for the mentor’s help. This story by a Year 9 Australian student illustrates these stories:

A History lesson I had would probably be the most memorable lesson in my schooling career. We were taught the simple, effective, no fluff way to write an essay. In all the other lessons I’d ever had on essay writing they had been very unclear and had not explained the simple outline for an essay. The teacher in this lesson taught it in a very easy to understand manner. If you were not doing it correctly he told you “no, that’s not how it’s done” instead of “that’s nice Billy, good essay” as other teachers usually do. It’s good when a teacher just tells it “like it is” as it greatly benefits your learning. The lesson plan went as follows. We had collected notes over a number of days and by now we had at least a page of bullet points. The teacher asked us to organise the bullet points into topic sentences that we would utilise in our essay. Once we had all the bullet points arranged into categories we wrote our introduction in which he made us repeat the question and then list our topic sentences in the order they would appear. Following that we began single paragraphs at a time. In these paragraphs he stopped us from using highly evocative or descriptive words as they were not necessary, especially in a History essay. He basically told us to cut all the fluff that we shove in around our words. For each topic sentence he made us refer back to the question so we were constantly reminding ourselves of the argument we were trying to present. The skills I took from this lesson have immensely helped my schooling career so far and will continue to do so.
This Year 10 boy from Australia sounded the same note:

The lesson/lessons which have been the most enjoyable and motivational have been my Visual Arts periods during year 9 and 10. One lesson in particular which is still a source of inspiration and motivation to me occurred in the last week of term four in year nine. I was a bit behind in my Anatomy unit and I needed to come in at lunch to complete the task. I enjoy Art, but at the time I didn’t think I could draw very well, so I wasn’t looking forward to trying. My teacher believed differently, so noticing me sitting at my desk with a blank expression on my face, she came over and marked out a simple, faint outline for the image I was drawing and then said, “Imagine your eye is the pencil.” I completed the work and it was one of the best pieces of work I’ve ever done. This incident gave me a massive boost in confidence towards not only Art but all my other subjects.

As did another Australian boy, this one in Year 9:

I was constantly having trouble in a certain Maths topic in year 7. The topic was Algebra. I couldn’t get my head around it. The more I tried, the more I just couldn’t get it. After a couple of lessons an extra Maths helper for our class came in and I asked her how to work out these equations. She went through it slowly and I started to understand it a bit better. She wrote in my book her working out and I started to understand it even better. Then with the next couple of problems I did the same working out she did and I started to get them right. I felt extra motivated to continue with my work as I felt great about understanding what we were doing. It made me continue on and I finished with 48 out of 50 in the test. It was from that lesson that I stopped having problems with Algebra.

## Demonstrating Mastery

Many students registered their appreciation of their teachers’ command of the subjects they taught as well as their masterful delivery. In these accounts boys voiced the combination of safety and inspiration they experience when they feel in the capable hands of teachers who may be, as in this Year 8 Australian boy’s words, “the best teacher”:

Every lesson with my Japanese teacher. It is especially interesting and memorable because not only does he do his best to engage and interact with the students (and succeeding!) but he also does whatever he can do to help you better understand the Japanese language, and it’s things like this which get me extremely motivated and turn on my thirst for knowledge and feeds it as well. Japanese is also especially memorable because in my own opinion I have the best teacher. Every lesson is structured and set out differently, sometimes he does a lot of bookwork and words/meaning but then he uses the laptop for a Japanese-English dictionary. He uses interactive websites like Quizlet and Wikispaces, which not only better helps him for creating a lesson with easy-to-access material but also makes it easier for myself because I’m a technology fanatic and just enjoy using computers. This has also been effective because in my last Japanese test I scored 54/55. The techniques he uses are just immersing the children in the language. He uses a lot of Japanese and just absolutely drowns everyone in it, then explains everything he just said, and then he gets you to repeat it until it’s perfect and you understand. Very effective.
As this 8th grade Canadian boy related, a teacher’s grasp of his subject can be read by boys through many acts of pedagogy and in many different kinds of interactions. It is the sum total of these, often, that enables boys to “believe” in their teachers:

I find that my favorite learning activity in school was the first class of Science with Mr. A. It was a great class and was fun to listen to him because he made the activities in the class very fun. He was a very interesting teacher and kept everyone’s attention because he would make jokes during the class to loosen the tension and to regain everyone’s focus. A more particular part of this class that I enjoyed a lot was the Physics part of the course that we started after Christmas. My favorite class was the class when we studied forces. He was using an example of throwing a bullet at a window to shooting a bullet at the window with a gun. This demonstrated the difference in force that the bullet in a gun would have compared to a bullet that is just manually thrown at the window. He also talked about throwing a bowling ball at a window compared to a pencil, and explained that the bowling ball would probably go straight through the window whereas the pencil would hit the window and fall. Although Physics was my favorite subject I still enjoyed doing activities in some of the other subjects such as evolution. This part of the year was very interesting because we did certain things that required us to do activities that included rocks and we looked at different specimens of rock and we had to analyze them and write down which rock we thought it was according to a sheet of paper that had the characteristics of certain rocks on it. He is also a great teacher because he explains very well what he is teaching us, and if we need to ask him something because we don’t understand he is always there to explain it a second time. An example of this is when I didn’t understand how to do the radio metric dating that we studied at the beginning of the year and when I was studying for my end of year exams and I didn’t understand it. I went to ask him for my help and he took out his papers and started showing me exactly what it is that I didn’t understand.

When teachers know their subjects and exhibit their enthusiasm and understanding of it, boys seemed to become interested as well, even in the most mundane subjects, as this 10th grade South African attested:

In Geography our teacher showed us all the rocks around the school. This showed us the culture and heritage of our school and of our part of our country. The way he also showed us the rocks, by breaking them up, was a very interesting way. He also engaged us by asking us many questions which gave us the opportunity to think for ourselves and easily remember the work we did. We also discovered what happened around the area of our school a long time ago. Our teacher used expression in his voice which captivated the class and helped them to understand what was happening in the lesson. When we got back to the class he drew good images on the board of the rocks. The diagrams were very descriptive and were very helpful in learning about the different kinds of rocks. He also made many jokes that made the class very relaxed and in a good mood. He was also very interactive with the class which helped us learn more. He was also very creative in how he explained the work. The rocks were very interesting, which got me motivated to study them in more depth.
When boys feel in capable hands, they can become quite motivated to learn, as this 11th grader from the US stated:

In my Science class sophomore year. The name of the class was Energy. My teacher is easily the smartest man on campus, sometimes in class it was hard for him to get points across because he was so smart. Towards the end of the year everyone in the class was so intrigued with what he was teaching. I have never seen so many students in one class that were actually excited to come to class every day. Late in the spring our entire class period was fun. Everyone in the room became great friends because the class size was so small. Earlier in the year, the experiments and tests were so hard that our entire class got together every night in the library to work on Energy homework. Although the information in the class was still difficult, the whole class grew a liking for the material. If the class were co-ed or any larger, there would have been a completely different atmosphere but instead everything came together to form a perfect class and class size.

In these stories, it was sometimes less about an ongoing relationship and more about the impressive mastery of the subject and the skillful pedagogy demonstrated by the teacher, as with this Year 10 Australian boy's story about a substitute teacher:

Last year when I was in year 9, my Science teacher was sick and wasn’t at school. The replacement teacher was a scientist too. I’m personally not very good at Science, but when the substitute teacher came in, he made us get out our books and write notes from the board about "Metals." In all my classes regarding science, I’m awake but just don’t pay attention, but in this lesson I was wide awake. He made this lesson fun, funny, great, and many people in the class like me gained a lot out of it. This teacher explained how metals decompose, and the elements which are made to protect it. The teacher explained how these elements protect the metal from rain, to prevent rusting. He would ask us what chemicals decompose the protective layers, and if you got it wrong, you would have to write out the chemical equation until you understood and got it right. I was very fascinated about what I had learnt, because I didn’t understand what chemicals decompose the protective layers of metals. This teacher clearly outlined how, why, and what the effect these elements had on the protective layer. When our teacher came back, he asked us a couple of questions on metals, and most of the class answered the questions correctly, and gave the correct formulas on how the metal decomposes, and the chemicals which decompose the protective layers. This substitute teacher made this lesson so interesting and engaging that it changed my perspective of science. I’m now starting to enjoy some aspects about science which I didn’t like before.

Or this 10th grade Canadian student, with regard to his History teacher:

Although my interests are in the sciences and political sciences, I love History. I know you shouldn’t judge the way a teacher plans the curriculum, sometimes it can be really bad. My past experiences in History have been like this. However when I came to this school, I found one teacher who used simulations for History which definitely keep you involved and is of course a lot of fun. I thought senior History would be a drag after this. I was mistaken—never been so happy to be mistaken either. I got a teacher who taught History the way it should be taught: like a storyteller. That's how history has been passed on for years—why it stopped,
I don’t know. He would speak like a true storyteller, as if around a campfire. Taking notes would become automatic, the surroundings would just disappear, and you would be sitting in the middle of the action. Wars, politically tense times, speeches, movements, and times of human achievement. Not only that, but in class discussions, you would leave with a practical understanding of history; nothing glorified or undervalued either. It was a pleasure, and the class would moan everytime it was time to go, eager to hear the next thing. In all subjects at our school, I find the teachers are extremely dedicated and passionate about their subjects and their students. I think that’s all it takes to make a lesson incredible. If the students see that the teacher isn’t excited about it, they won’t be either.

And this 11th grader from South Africa:

Science in grade 10 was a very interesting year, we learnt our school work hard but also had periods which had nothing to do with school where we learnt directly for later life. My teacher was a good teacher in that he involved the whole class and because some find science boring he added a little history and put the stuff we were learning into our own life context. He showed a lot of pictures and explained how certain concepts evolved into the way we look at things today, involving the history of man and other subjects as well. I can’t remember any specific lessons which stand out but I remember a series of lessons where we studied the structure of atoms and the periodic table. He made us our own notes, describing in detail exactly what we needed to know and how important it was. Our notes were self-explanatory so if you wished you could work on and finish homework days before it was even assigned. If you had questions, no matter how abstract, he would always give his answer and if he didn’t know he would go and research to find the answers.

Offering Inspiration

In addition to boys’ responsiveness to teachers’ mastery of their subject areas, we also heard many stories of students who were inspired by teachers’ passion and enthusiasm. In these cases, it seemed that the students reacted as much to teachers’ emotional investment in the subject as in their mastery of it. For example, in this Year 11 Australian’s story of a History teacher, he describes the “transfer” of her emotional energy to him:

The particular class experience that is most memorable for me is the moment that I walked into M6 where my first year 10 American History lesson took place. From the moment I walked into that classroom I was filled with excitement and passion for History. It was like nothing I had ever experienced. My teacher loves history and is so enthusiastic about it. Her love of history instantly transferred over to me. I was fascinated and captivated by it. It was the first time I put a genuine effort into anything academic. From this point on I had learnt to put work into everything especially History. This was definitely the changing point in my schooling.

In this story from a 12th grader from the US, we hear his eagerness for a class field trip based upon his teachers’ enthusiasm for the subject:

Each year, there is a junior class field trip to Gettysburg. This trip was particularly engaging because of my fifth form American History teacher. He always brought an unmatchable
enthusiasm to the classroom, and the possibility to see and interact with him “in his element” at a place of monumental importance in American history was a very exciting event. Although we had a guide, our teacher constantly chipped in his remarks about the battle (and many times took lead of the group). He showed us how the Union won the battle, and brought the textbook and the summer reading (*The Killer Angels*) alive with an in-depth analysis. He was an expert on the subject, and students paid attention to him because he knew every detail about the battle and the war. I remember vividly the history, stories, and places I learned about the battle because of the passion and attention to detail my teacher brought to the battlefield. Although I felt a little hurried because there is so much history in Gettysburg to cover in one day, the experience was really gratifying because my teacher was able to bring relevance to the subject. The field trip, however, did reflect much of the class: many times we covered material quickly, but never without truly understanding the material. Through my teacher’s class, I learned a tremendous amount about US history and this has helped me define who I am in our society.

This Year 13 New Zealand student was also quite clear about the importance of his teacher’s emotional investment:

> For me what makes a good teacher is one who is enthusiastic about their subject. I felt my teacher in this course really engaged the class with his passion for the subject. He was easily the best teacher that I have had, and my grades (along with the rest of the class) were very high as a result. He also gave out lots of handouts, instead of us writing notes. This worked well as it allowed the class to listen while he was talking, rather then having to scribble down notes and only paying slight attention. It also meant everyone had detailed notes on the entire subject, and it was easy to catch up if we happened to miss a lesson.

This Year 10 Australian spoke of his teacher’s “eagerness for us to learn” as “infectious”:

> In Grade 8, I had a teacher for German called Mr. A. He was very young, but is the teacher that I remember most. He taught me this language for the year of 2006, and was extremely enthusiastic about his subject. His eagerness for us to learn was infectious, and actually made the class, which was full of kids who didn’t really like learning languages, interested and engaged. He was always willing to answer any peculiar questions we had about the language, and because he was always in the mood for a long talk about the finer points of German, he really motivated me to study it further. He really kick-started my language learning, and has made me want to continue my languages after I leave school. He is especially memorable for me because he was able to switch between detailed conversations with the more interested students to a subject that would interest the other boys, whilst still managing to relate this to the topic in some way. He gained the trust of our class through this, which is probably why the class was so willing to learn from him.

This Year 9 Australian, obviously not a Maths student, spoke of his teacher’s passion helping to make a “boring and pointless” subject more “enjoyable”:

> I would have to say that a memorable class experience for me is my year 8 Maths class. It wasn’t the subject itself that made the class enjoyable, but rather the way that it was taught.
Our Maths teacher made the subject more enjoyable. I could tell by the way he made Maths to be such an exciting thing that is so useful, that he had a passion for the subject. Even some of the students that normally disliked Maths enjoyed being in that class. And it isn’t a skill most teachers have, to make something that can be found boring and pointless into an enjoyable experience. We played games in the class using Maths, like roulette with smarties. It was a lot of fun but we were at the same time learning about chance and luck. And we played dice games that also evolved our skills to know when you should take a risk and when you should be happy where you are. He used a lot of examples that related to what could happen in real life. That made the class that little bit more enjoyable. And on top of that, the teacher always came to teach with a smile on his face and he never yelled at us or got us in trouble. He was encouraging, which actually made us stop mucking around and work harder, because we didn’t want to disappoint him, and we had earned his trust. At the end of the year, everyone in the class had achieved a mark higher than what they would have expected, because they had enjoyed the class. When you enjoy the class, you don’t think that you are doing so much work and you become more passionate about it and can achieve much more than you think you can.

This Year 10 boy from the UK shared the same notion, describing the effect of his teacher’s enthusiasm vividly:

It was a Friday afternoon when all I could think about was the weekend. With important exams around the corner we had to complete the syllabus by the end of the lesson. The rest of the class were in an impatient mood and I believed that it would be very difficult for the teacher to control them. However my history teacher inspired the class with a passionate speech about a major battle in the First World War. The students, including myself, changed from an unruly rabble into a class impassioned by historical events. My teacher taught us about the immense loss of life at the Battle of the Somme and we also discussed the problems with General Haig’s tactics and whether Haig deserved the epithet the “butcher of the Somme.” I believe that my teacher kick-started my passion for History, which since that lesson has been my favourite subject. In my opinion, it is vital for teachers to show excitement and a true passion for their subject. This is what my teacher did, and if a group of teenagers can be motivated through this method, it shows that this is the only way that teaching should be carried out, with a passion for the subject being integral to good teaching.

This beautiful story, told by a 9th grade US student, described a budding History student responding to the care and passion of his teacher:

In eighth grade I had a history teacher named Mr. D. One could tell he was very passionate about History because he would often disregard required texts and simply talk to us about History. His talks demonstrated his admirable grasp on History, as he would often describe things to students in more of a narrative than a simple recitation of facts or dates. In fact, instead of reading in a single textbook, he would give us photocopies of articles from magazines or periodicals that he had read himself. He encouraged us to thoroughly read, mark, and annotate these articles with our own thoughts. For instance, if we found something that confused us, he urged us to place a question mark beside that passage. For ideas or concepts that we thought were key to the article, he encouraged us to put an
This more understated story, by a Year 10 New Zealand boy, describes a similar emotional outcome—this student uses the word “rapture” to describe the teacher’s effect:

Every Tuesday our teacher takes 4A and 4B to the library and has a group discussion about the poems we are studying. A few weeks ago we were studying a poem by William Wordsworth, and our teacher brought in an “expert” on the poet. This teacher spent the lesson talking to us about Romantic poets, and what they write about. He also spoke a lot about philosophy, which I found very intriguing. He spoke about how the poet related his ideas to nature, and how the Romantic poets saw Nature as almost holy. The entire class was in rapture and he explained all his ideas concisely and involved all the students, asking questions to those who were holding back a little. I found the lesson extremely helpful and it gave me good insight on the structure of Wordsworth’s poems.

And this even more understated story, by an 8th grade US student, uses the word “intrigued” but talks of a lasting effect:

Last year in Math class, Algebra 1 A, I had Mr. A as my teacher. One day in class, we were discussing quadratic equations. He saw that we understood the material, and took the opportunity to teach us more advanced material. That day, we discussed cubic equations and inverse equations. Most of the people in the class were not actually interested in Math, but he intrigued everyone with the new material. The next day, we further discussed the material and did practice problems. Even though we had only done it for two days, we completed the problems correctly. Since those two days, I have loved Math, and I now learn Math independently. Even though I do not have him as a teacher anymore, he is still interested in my studies, and I sometimes go to him for help with my Math.

One gets the sense, in this story by an 11th grader from the US, that even when boys are not so impressed by their teachers’ abilities they can be moved when exposed to their passions:

Freshman year I was in English class when the class discussion trailed off from a current book we were reading to religion. My teacher whom I thought was not very intelligent, began to go off on the topic. My classmates chimed in on the discussion and soon it became a debate. The belief as to whether God is real or not. It wasn’t so much the topic of God, but how my
teacher spoke to us. I was astounded when I listened to him speak of something that he obviously had interest in. The discussion ended where we began, but how my teacher was so enthusiastic and open to it amazed me.

In this 12th grade US boy’s story, we can imagine the moment he described which took place in a Philosophy class:

My experience took place in Philosophy and Religion class during senior year. It was raining that day and the sound was drifting in through the window. My teacher paused in the middle of a sentence and waited as the rain fell outside. She told us all to close our eyes and sit there just breathing and listening to the rain. For ten minutes there was silence in the class as all twelve of us meditated in peace. It was an excursion that showed me her harmony of nature and the peace of just being.

For similar reasons, this 10th grade US student who had some criticism about a course he was taking was appreciative of his teacher:

What I believe to be the most engaging classroom experience in my life at the school was my 9th grade Physics class. The class was a fundamentals course; it avoided complex mathematical issues, and focused more on the application of the physics in real world situations. Normally, this seemingly watered-down version of a topic which interests me would be aggravating; however, the class was my favorite up to this point for various reasons. Firstly, the real-world aspect was very intriguing to me. This was key, because it was not just a lesson out of a book every single day, but a variety of interesting demonstrations, examples, labs, and experiments that greatly augmented the interest and focus of myself, and of my fellow students. Secondly, the teacher really knew his subject, and had a blatant love and passion for it. It is valuable, as a student, to have a teacher who loves what he does and is engaged, as opposed to one who just reads material from a text. He incorporated the right amount of discipline into the course, but left room for interesting digressions, conversations, and debates about the materials and related subjects. The combination of these benefits proved to make Physics the best class in which I have participated at this school.

Friendly Style

Many boys responded to our question about memorable lessons with general comments about their teachers’ human accessibility, their openness to substantive, friendly relationships that allowed some measure of professionally-boundaried mutuality. We could imagine, with adolescent males, in particular, how important such gestures of respect and acknowledgement could be, as this 10th grader from a US school suggested:

I’d say one of the most interesting experiences I’ve had has been the relationships with the teachers. I’ve gotten to know some of these teachers extremely well, and I’d like to think that they’re a lot like family to me. It’s a unique blend of personal in the professional that helps to make the extreme workload more and more doable. I’m sure it’s also true in the professional world that getting to know your co-workers and executives can help to make any work you do into less of a chore, and more of a passion.
For this Year 12 boy from New Zealand, the teacher’s willingness to “become friends” brought out his “highest potential”:

Art Design grade 11. Our teacher related to the class very efficiently by coming down to our level and becoming friends with the class. This made the learning environment very good and let us work to our highest potential. Constantly throughout the year she would talk to us as a friend rather than an authority figure. This made her have huge respect among the class and make the pupils want to learn and finish there work.

This 11th grader from the US came to the same conclusion about what sort of relationship provided the most motivation for him:

As a sophomore last year, I took a World History course. The teacher was phenomenal in the way he presented the material and his enthusiasm for the subject. Because he was young, he could connect with all of the guys in the class and was really able to motivate everyone in the room. Throughout the year, it became increasingly obvious that this man was more than a teacher to me, he was a friend with whom I could talk about anything from history to music. In early February last year, this teacher took a group of about ten guys (myself included) on a non-academic trip to New York because he wanted us to experience what it was like. Honestly, that trip was one of the best times I’ve ever had because of the camaraderie and fun we all shared. This teacher really inspired me to work in his class, and I was able to discover a love for History. His efforts paid off, as I ended up with an A+ in the class.

For this 10th grade US boy, the close, personal relationship possible within his school was a revelation:

My French teach one day took us outside and we took a walk through out our campus. While going through we identified everything we saw and said them in French. Then she took us early to lunch and we just sat and talked in French while eating, and I feel that this created a student-teacher connection that I have never seen nor been a part of. The fact that a teacher can talk frankly with a student and be on their level and not above them causes a student to respect them and listen to them more in the classroom setting.

In certain subjects, a “friendlier” tone seemed to work better. This 8th grader from Canada was one of several who shared stories about their teachers’ approach to sex education:

My favorite school activity was the sex education class. It was very interesting and educational at the same time. The teacher took serious matter and made us learn it in a very amusing fashion. We wrote a series of questions and sent them up to the front, then our Science teacher read them and answered with wit and seriousness combined. In this class, I not only learned much but was amused and had my own personal questions answered. Questions I would never dream to ask my own parents. As a young teenager, I much appreciated this course since questions were answered and confusion left me. First and foremost this class was very amusing and interesting; secondly it was in Science class, the only interesting class in my opinion. The teacher accomplished his goal of instructing us with the use of amusement and our minds. This class should be continued since it is amusing and informing, and the instructor was very capable and funny.
Another classmate shared a very detailed, lengthy story about the same class:

My favorite class was the beginning of Sex Education in Science class with Mr. A. It was interesting because of the way the various classes on this topic were ordered was insanely perfect. The first class of Sex Education was like a dream come true for my peers and me. It was last period on a Thursday, the day before Friday. We usually have gym after 4th period until 4:30 which is completely absurd because it takes time away from you, but today was a no-show for gym and we ended at 2:45 which was basically better than Friday to us. I gathered all my Evolution and rock cycle books and materials from my locker and walked down to the Biology Lab where my class is usually held. The day was passing by very slowly for me because I had some heavy duty classes before. My 1st, 2nd, and 3rd periods were French, English, and Math. In chronological order we had to do a test on a French novel on our computers which took very long for French, and we had to do a whole essay on a novel the class was working on in English. Math came along and surprisingly there was a test that took up the whole period. I think I did well. It was finally lunch and I was ecstatic for the long break until 4th period Science. The school serves us multiple lunches every week for each day. Personally, I love the lunches, but sadly on this particular day it was not what I have been expecting. Everybody was feeling the same thing for lunch, even the teachers. Fish sticks. They were serving fish sticks which were dry and made your throat feel like cement. I ate lunch and headed outside for a little football which was another highlight of my days. We sadly found out it was pouring rain outside. Lightning was being struck every 20 seconds. What a day it was. My friend and I went upstairs to the library and read Guinness World Book of Records which was not satisfying as much as I was expecting. The librarian told us it was class time and I was dreading to go. Another class observing rocks and how the Earth started would kill me right now. This is where I begin. I walk into the Biology Lab and place my books onto my desk. In the Biology Lab there are rows of long desks that fit two people. We were always seated with another student, but if you were a chitter-chatter like some kids you were seated alone. I was seated at the front desk. The student I sat next to was my friend, but particularly quiet. Half the class was seated and the other half stood up. We were waiting for the teacher to enter the room. When he walked in everybody was seated and he had a slight smirk on his face. I thought maybe it was pop quiz time. He had sheets of paper in his hand. We’re wondering what he’s doing. He smiles and says “Guess what we’re learning today in class?” The light bulb above my head was glistening. I’m thinking no, he wouldn’t. Everybody starts to whisper to each other and then it turns into a silent peak. We all wait for a couple seconds. He opens his mouth and slowly says the word “Sex.” I’m thinking yes, he did and there’s a huge smile on my face. At that moment the window next to me started to shine. The sun was stuck in my eye. The rain stopped! I looked back at my teacher and he handed each of us a piece of paper to ask 3 questions about sex. It was the best school experience of my life. The whole class we discussed everybody’s not-so-anonymous questions which was even more appealing. When class ended, I couldn’t wait until tomorrow’s Science class.

But, reinforcing our overall understanding of the transitive nature of boys’ relationships with teachers, many stories sounded a more general note, like this 8th grader from South Africa:

Last year in 2007 I was in one of my favorite lessons of the day and one that I looked forward two for the whole day. This particular year I enjoyed it more than usual because I had formed
a special relationship with the teacher and he was like a friend to me. I enjoyed these because the subject biology was introduced and the certain experiments I enjoyed. I don’t know what made these lessons so special to me, it just felt so good. I enjoyed it because the classroom was more spacious and the technology was much more than what was in our other classes, and there where so many interesting things in the class and I hope in the future I will have many more like this.

Or, this story from an Year 11 Australian:

It was during Year 7. Coming from Year 6, I wasn’t the strongest mathematician but this all changed when I met my first Senior School teacher. In Maths in Year 7, we covered many new subjects such as pythagoras, algebra, equations, geometry, etc. Having an approachable teacher made all the difference. He had a wonderful relationship with his students; joking around with them, asking them how their weekend was, but he also worked us hard and was strict when he needed to be. I excelled because of him, not only in Maths but it changed my whole view on things. Having such a caring teacher who talked to students more as a friend than a teacher and helped them through difficulties made it much easier.

### Structured, Authoritative Style

Although many boys responded positively to teachers who conveyed a welcoming friendliness, there were at least as many whose memorable experiences grew out of relationships with teachers whose classrooms were more structured, firmly directing and demanding. We were struck by the importance from this fact of schools offering both sorts of teaching styles to boys. These were not stories about teachers who were merely harsh, but rather about teachers who were commanding and whose expectations were unyielding. Certain boys reported finding it easier to place themselves in such teachers’ hands and to allow themselves to be marshaled to greater effort and achievement than might have been the case with less directive teachers, as seen in the following American senior’s reflection:

The most engaging activity that I have participated in my 13 years has been the junior year advanced American History course, in particular, the preparation I went through as I approached the American History AP examination. Aside from the class being the most engaging and interesting class I have ever encountered, it was so memorable because of the teacher. I was terrified of the man but at the same time he was one of my favorite teachers because he knew me so well. He knew my limits and he knew when I was or was not trying, and did not hesitate to point it out, often in front of the class. What set this class apart also was the relationship that not only I but everyone forged with him. It’s the only class that I have had a Friday night study session for (until nine o’clock, I must mention), and yet I was not upset in any way, because the time with him in the classroom was so engaging and interesting. He would shout at the top of his lungs and make heartfelt exclamations about George Washington, while never hesitating to pull out a picture or two and slam it on the front desk. He would even grab your tie (I have had at least one ripped apart by him) and throw it behind your back or slam your binder into the ground if he thought you were slacking, or sometimes just to get a point across. Overall, the experience was so memorable because of the person behind it, the teacher.
More often, boys told stories of teachers whose strong guidance and authoritative pedagogy served a similar purpose. In this Year 13 New Zealander’s example, when his teacher would ask a question, “He wouldn’t just give us the answer, he would coach us the eventual answer”:

The lessons that I remember is my year 11 IGCSE Chemistry class. Our teacher was well knowledgeable which was good if you had questions that roamed outside the syllabus, but where still relevant to the topic. A typical lesson with this particular teacher would be for him to write up notes on the white board and get us to copy it down. The notes were always relevant and not too long so we wouldn’t lose interest. After we had completed copying down his notes he would then take us through them, making sure that everyone understood. He would do this by using examples of everyday things that we would all understand. After he had explained his notes in full and let us ask questions, he would then give us examples of questions that we would be expected to answer in an exam. He would roam around the class answering questions that the students asked. When he answered our questions he wouldn’t just give us the answer, he would coach us the eventual answer. Afterwards when everyone had completed the work set he would go through the answers and ask if anyone had real difficulty with any of the questions. If someone did he would go through it on the board and make us copy out the model answer if we got it wrong. He would also give us test and homework sheets which he would mark. He record all results, and posted them on the wall. This was important and made a competition among the pairs. If anyone struggled he would go out of his way, often in his own time, to help them.

Not letting boys slack off was a common element in these stories, as this Year 11 boy from New Zealand illustrated:

One time in English we were given a book to study. I wasn’t to keen on reading it because the name of it sounded pretty boring, Winterdance. So when my English teacher gave it to me I was pretty pissed off because I’ve never really been into books. She told us to read a chapter one night and she told us that we would be tested on it the next day. I thought I better read the book so I gave it a shot. The next day in English she gave us a test on the first chapter of the book. I thought it would be pretty sweet because I read the book. The test was harder than I expected; she was asking us really stupid questions on the minor details of the text that I hardly noticed. I was on the verge of failing the test. All the people who failed had to come back after school and I did not want that to happen to me so I decided that I might as well read all of the book. Because I didn’t want to fail the test I thought I had better read the text in more depth. As the nights went by I read more chapters and I got a lot more interested in the book, as a result I read ahead and even re-read some of the chapters so I understood them better. When the test came along I passed easily and because I knew the text so well my essays were a lot better. When it came to exam time I was very confident because I knew the book and I ended up with with a really good exam mark. This made me happy and I enjoyed English a lot more because I could do well in the subject. This book was memorable and my teacher’s unique way of getting us into the book worked well for me.

Teachers exercised their command of their classrooms not just in their personal interactions with boys but also in highly structured lessons that took boys step by step through a detailed learning process. This Year 12 boy from the UK offered a good example:
My best lesson was a Biology lesson a couple of years ago. Our teacher wrote up notes on the board and the class copied them down. After each section of notes the teacher wrote up he waited for everyone to finish copying it down. He then went through and described the process in detail. While explaining the processes he picked people at random from the class to predict what they thought would happen next. After going through the material we were quizzed again at random about the material we covered. He then put on a short video on what we had covered that day. He then handed out some past paper questions on the same topic and we worked through them in silence. While we were working through the questions, anyone who was unsure put up his hand and the teacher came over; however he did not give the answer. Instead he gave hints about the answer. Finally he went through the questions with the class and again picked people at random to answer the questions. Writing the notes helped us solidify the information we were learning about. It is easier in my opinion to learn from notes which you have written down. The explanations he gave helped us understand what was going on. Waiting for everyone to finish meant that if the teacher went on to explain the notes no one would get left behind. The random questions to people meant that everyone had to stay on their toes and listen to what was going on. It also meant that we had to keep on thinking back to the material we had learned before, therefore helping us to memorise the information. Doing the past papers helped us on exam technique and practice. Working in silence meant that we were not distracted by people next to us and that the work was our own. Finally he gave us hints so we had to think through the question and the knowledge we had gained to work out the answer.

Usually, the lessons in these stories were not only highly structured but also ranged through a variety of pedagogies, moving swiftly and maintaining attention. Another Year 12 UK student’s story about a Spanish lesson is a good example:

In year 12, one lesson that provided me with a sense of motivation particularly for my coming AS examination was a Spanish lesson lasting two periods. The lesson was split up in two parts in order to give the pupils significant preparation and insight into examination technique. In the first part, we started off working through with worksheets which were extremely useful. These worksheets provided notes on adjectives and verb conjugation in Spanish, for instance. The worksheets also had exercises which challenged our knowledge and were useful in ensuring that we remembered the key points. Furthermore, we noted any new or important vocabulary. In addition to the worksheets, boys in pairs spent 10 minutes each with the Spanish oral teacher throughout the double period. This was exceptionally useful to immerse the pupils in the language and to provide helpful assistance for our coming oral examination. During the ten minute oral session boys discussed topical issues in Spanish including, for instance, the opening of Heathrow’s Terminal 5. Also, we read out loud Spanish articles regarding the topic from the website El Pais. In the second half of the lesson, following working through the worksheets, the class, excluding the boys who went for their conversations with the oral teacher, watching an authentic Spanish film. The film, although it had dialogue that was quite difficult in understanding at times, was nonetheless valuable. This is because it made us think and recall vocabulary we learnt over the year and stimulated a greater understanding. In addition, from time to time, the teacher paused the film, questioning us on what we understood and making sure we were receptive to new
information whilst also reinforcing our prior knowledge of the language and culture. Overall, the lesson was particularly motivating and provided a base for my commencing of revision.

This Year 10 boy from Australia sounded similar themes:

In year 9 I had a very good German teacher. He was very motivational, he gave us vocab tests often and taught us the majority of our German grammar. He was humorous in all his classes but serious when it was required. For some reason my German profited greatly. A normal class would go something like this: The teacher would write a few sentences up on the board and expect us to complete them. He would then go around the class and answer all our questions, and he would encourage us to underline words we didn’t understand and to learn them. Once every three weeks we’d have a vocab test with a week’s notice, and because of this teacher my average mark for those tests was 95%.

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### Personal Disclosure and Modeling

Understanding the human exchange that operated for boys in their relationships with teachers, many of the teachers in boys’ stories exhibited an awareness of themselves in the relationship and had obviously learned how to use themselves, strategically, to further the goals of instruction. One common strategy along these lines was for teachers simply to talk about themselves, to let their students know them as people. Often, the disclosures facilitated the learning by modeling some value or lesson; in any case, they invited boys into a more personal, and thus more powerful, bond with their teachers. This story, from a US 10th grader, is a good example of how such disclosures could be effective:

One day in Chinese class, our teacher decided to tell us the story of her childhood in China. It was possibly the most interesting class I have ever had. Since she grew up in China during the Cultural Revolution, she had many stories to tell us and I probably learned more in that class than I did over the entire course of a history class. Later I did realize how much she had left out of the story, mostly the terrible toll it took on her family, but it did not detract one bit from how informative it was. If anything it added.

This story, from a 10th grade US student, described the impact of a teacher whose life offered a brave alternative course:

The story that stands out most in my mind does not have to do with a specific lesson out of a book or a certain project. The moment that stands out most for me occurred this year in Mr. A’s English 4 class. New to the school, not much was known about this teacher who transferred from a rival school. The first few weeks went by cautiously as the students tried to feel out who this person really was. At the start of class one day, the discussion turned to issue of applying to college and taking a streamlined path of life. Mr. A. proceeded to tell us his story, which has inspired me to think outside the box and shy away from conformity. Finishing high school in three years, he lived what should have been his senior year in Alaska. The following years, he went on to play collegiate football at the University of Washington. From college, his path took him to such opportunities as coaching football in Japan, studying at Harvard and Columbia, fly-fishing in the clear streams of Idaho and now on to our school. Moving forward,
I fear that I will go to college, get a job and settle down without experiencing life he has. I look at his story to tell myself that there is more than one route to take.

This 8th grade Canadian told of also learning a life lesson, from a teacher who he perceived as “real”:

One day in grade 8, I was in English class and it was then that I experienced my favorite learning experience. It just so happens that the teacher of that class was also my favorite teacher. He was my favorite teacher because he was real. He always said what was on his mind and never held anything back because it might be insulting or inappropriate. The thing that I loved the most about what that teacher offered to the class was the discussions. In class we would talk about anything that came up in the world: wars, politics, behavior, cultures, life, etc. Anyway, back to my favorite English class. It was during that class that we discussed about how governments control the population with terror. The thing that I remember the most about that class was when the teacher brought up the topic about killer bees coming to Northern America. He told us that in the early 2000s, the government warned the population that there was going to be a killer bee infestation. He then said that he had never seen a killer bee in his whole life and that just because the government says something, it doesn’t mean that it’s always the truth. I found this really awakening and truthful. I never had any other teachers like him that were so open and straightforward. I think that he was the perfect teacher because I find that teenagers will only be interested in a class if the teacher is interesting. That is exactly what this teacher did, he made the class interesting and fun (it wasn’t any of that fake fun either, the type were they tell you to do an exercise that supposed to be fun for 4 years olds and still really isn’t even fun for the 4 year olds). It was the real actual stuff; the class would be laughing every class and it felt good. In conclusion, the teacher wasn’t fake, he was entertaining, real and inspiring.

In this 12th grade American’s story, we can hear how much the student absorbed of his teacher’s personal experience, how those details were as pertinent to his forming worldview as any of the more formal lessons:

The September of my freshman year I began Biology. Being a very information oriented class with much memorization required, the homework load was hefty, with nightly assignments involving reading and making note cards, including Latin roots and their definitions, as well as the definitions of the words themselves. Biology was a challenging class for me and required a great deal of my time, leading to many late nights. However, when the bell for first period rang, I never dreaded the beginning of Bio. Though the class was designed to teach us biology, science was only half of the material. We learned about so much more than plants and animals. I believe our teacher tried to come off as a grump so that his students would not joke around with him, but in reality he was one of the most good-humored individuals I have ever met, and took quite a bit of flack. We learned some history of the area. We learned about electro fishing and how our teacher had a license to electrocute fish so that they were stunned and floated to the surface for ten minutes so that they could be analyzed. We learned a little about his experiences as a firefighter, and we even learned why Frosties don’t melt and what happens to them when left in a hot car over the course of a week or more. We even learned about his involvement in the Model T Ford club of which he was a member and which he served as a board member. Amazingly, our teacher was somehow able to tie
the stories into something we were learning. Biology was a wonderful experience despite the
difficulty of the course, and the life lessons and interesting facts that I learned, accompanied
with the science aspect of biology, helped me to better understand life and its meaning.

Reciprocating Care

Just as boys registered which teachers helped them to achieve and learn, and which teachers cared
about them and were willing to mentor them, so they also viewed the relationship reciprocally and
offered back qualities of regard, affection and commitment to them. They wanted to give not just
their effort and achievement, but perhaps also to make some contribution to their teachers’ lives.
There were several affecting stories of boys taking their teachers to heart, of a regard that sounded
as though it might last a lifetime. From a 10th grade US boy:

One experience that really stood out to me this year was doing my Biology project on Lasik
surgery in 10th grade Science. It was not the actually work experience, although that was a
great experience, but it was the fact that I was doing this project to help my teacher make the
decision on whether she wanted LASIK surgery or not. To hear her say that she has to have
LASIK surgery after reading the project was a highlight this year. Just to see her face light up
and to know that my project was good enough for her to make the decision was
heartwarming. Being able to convince her through this project, regardless of all the possible
side effects she was hearing about in the news, made me feel like I have made a real
difference and change.

For this 12th grade US student, the contribution was less personal though it seemed his teacher’s
appreciation mattered deeply:

In junior year Honors Biology class last year, I stayed after class to help my teacher prepare the
electrophoresis gel for the next day’s laboratory experiment. I explained to her that I had the
ability to stay because of a free period immediately after the class, allowing ample time for
me to aid her in any way. The lab took place the next day, and the transition into the lab for
my classmates was noticeably eased by my added effort the day before, since the equipment
was already in place, ready for use. Almost all groups were able to finish the experiments, and
the data collected seemed at the time to be valid and conclusive. Because of the time required
for the staining process to occur, I decided to stay further and help my teacher stain the DNA
samples in the gel. The process took less than half the time required if she alone was to stain
all of the samples. After taking a cursory glance at the samples, we deemed together that the
lab had been a success for each lab group and that each of the gels had confirmed the
general hypothesis for the lab. Smiling at each other because of this resounding success, she
congratulated me for our lab success and thanked me for my assistance. I had spent the extra
time in the lab room because I enjoyed Biology, this experiment in particular, but my
explanation was met only with further thanks. I did not feel that I had done anything
extraordinary or worthy of her lauds because I was merely acting on my own principles. The
experience has stuck with me through the months since then, and I feel that it is one of the
best student-teacher relationships that I have ever had due to further references to that
morning several weeks later when discussing college recommendations. I continued to excel in
the class because of my devotion to the course and my teacher. I was proud to nominate her
for a teacher award and was the first to rise for a standing ovation when she earned the school's student appreciation award. These awards exemplify the personal achievements that she guided us through, making me give her the title “class mom” because of her efforts in purveying her knowledge to each student in the grade, whether they were in her class or not. My personal experience was just one of many such instances.

This 11th grade US student described rooting for his teacher in a context completely outside of the school:

I had the best teacher I have ever had last year in 10th grade. Mr. A. taught English. I had become very comfortable with him throughout the year and his class was the first that I have ever been excited about going to. My roommate and I heard one weekend that Mr. A. was going to be in a bike race downtown. We decided to pay him a little visit by painting our chests in red paint then writing things in white. For example, I wrote on my chest “Mr. A. is my home dog”. Looking back at that I realize how I couldn’t have done that at any other school because I wouldn’t be able to make that type of relationship with many other teachers.

From virtually every school, we heard stories of the venerable veteran, the teacher who had taught generations and whose dedication to students was legend. This story, from an 11th grade US boy, told of how a school of boys gave back to one such teacher:

This is a school of strong tradition and community, and it always has been. This year, however, one of our traditions sadly came to an end. Mr. D., the teacher of both ninth grade World History and junior AP United States History, retired after decades of teaching. About six or seven years ago, in recognition of his outstanding skills in the classroom, his desire to instill good character in his students, and his witty humor, his classes began the “Mr. D. Chant.” This is essentially the unified chanting of his name by his students after one of his corny comments. However, the chant is more than a fun way to gain a short break during class. Mr. D. has devoted his entire life to the betterment of America’s youth. He teaches history with a passion, is unrelenting in instilling honor and integrity in his students, and tries his utmost to encourage intellectual curiosity. The tradition of the “Mr. D. Chant” continued to this year, which would be his last year teaching before retirement, and our class organized a series of all-school chants in his honor. It culminated in a chant in May in which literally over one hundred people swarmed into his classroom and yelled at the top of their lungs for over seven minutes. We even tweaked the tune of the chant to match The Star Spangled Banner, his favorite song. It continued on into the library. Students were standing on tables and bookcases, chanting “Mr. D.! Mr. D.! Mr. D.!” Two students were filming this event, and it made its way to youtube.com. I returned to his room minutes later for class, and he was crying. He loves the school and all for which it stands to a degree I may never fully comprehend, and he has established a very close relationship with his students that he will never forget.

Such stories as this and the others grouped in this theme remind us that teaching and learning are, always, occasions when people work together with both hearts and minds. As such, boys are open and vulnerable to the influence and personalities of their teachers, in ways that seem parallel to their openness to all of the other elements to schools, classrooms and lessons. In this selection of
lessons that were memorable, boys highlighted how they were affected by the teacher; such influence, we must recognize, is not accidental or even unconscious. Rather, good teachers recognize the heart-to-heart nature of the enterprise and attune themselves to boys’ relational frequencies. The many master teachers described by boys in these stories seize hold of the possibilities to be found in this fact and play the instrument of their selves with great precision and sensitivity. There are, obviously, a wide variety of strategies teachers can employ in this vein—they must, simply, be aware that it is their person, as much as the subject matter, that defines the pedagogy. How they approach boys—with humor, kindness, mastery, authority, etc.—can invite them into a learning relationship, or not. ■
Both teachers and students were asked to recount memorably effective lessons, but in doing so both groups—especially the students—made pointed reference to deadening and unproductive practices in order to underscore the comparative value of lessons they favored. While both teachers and boys identified subject matter they found intrinsically engaging, there were far more accounts of specific pedagogical approaches determining the heightened level of engagement and mastery. With respect both to teaching practices deemed ineffective and those deemed effective, there was a strong correspondence in the teacher and student submissions.

It is perhaps unsurprising that the practices teachers reported as especially effective should also have been found to be so by the boys. Perhaps one of the strongest findings of this study is that boys tend to elicit the pedagogy they need. Responses to ineffective teaching—disengagement, inattention, disruption, unsatisfactory performance—are intolerable to a conscientious teacher, so that adjustments to course content, to pedagogy, and to teachers’ relational style are made until student responses improve. Seen this way, student behavior tends over time to elicit comparatively effective teaching approaches; resistant behavior eliciting change, positively responsive behavior reinforcing improved practice. From this observation, it would follow that to the extent there are identifiable preferences in how boys learn—whether innate or socially constructed—these too would elicit effective responses from teachers over time. Consciously or not, teachers of boys will tend to modify practice in ways tailored to boys’ learning. Intentionally or not, they may find themselves “experts” on teaching boys.

As indicated in Chapter One, there is a mounting public consensus that a longstanding, normative resistance to standard schooling on the part of boys has intensified to a critical point. Crisis may well be an apt designation for schoolboys considered statistically in aggregate populations, whether nationally, in school systems, or in a particular school. Yet nothing could appear farther from educational crisis than the kinds of learning and responsiveness reported by both teachers and boys here in their accounts of effective practice. Indeed if a pattern or patterns can be identified in the effective practices reported, and if such practices can be replicated in other school settings, there would appear to be a clear direction forward to address this critical concern.

Chapters Three and Four document a striking convergence in the faculty and student accounts of what comprises effective teaching of boys. The boys’ responses illustrate the claims made in all thirteen categories of effective practice reported by the teachers. There is a mutual endorsement of active learning, of getting up from one’s seat and moving, of manipulating objects manually, of creating things that work or delight, of standing up to speak, of being responsible for the learning of others, of collaborating in teams, of competing with other teams of classmates to be more persuasive, to build a more effective product, to be first to complete a task successfully. There is mutual endorsement of being asked to solve problems to which there are no pre-established
solutions, of being invited to devise one's own method, of being invited to consider not just an object under study but how one's own understanding of that object is formed. There is a mutual endorsement of the deepening understanding and empathic boost boys get from being asked to assume the role of another character, of the adrenal boost of being required to perform, recite, persuade, exhort. There is mutual endorsement of a variety of classroom experiences in which an emotional climate is established where it feels comfortable and safe to address boys' most profound and sensitive personal concerns: the nature and meaning of their masculinity, their character, their social place, and their personal prospects. Finally there is mutual endorsement of scholastic experiences that take boys out of standard classroom routines or out of the classroom altogether: experiences that intentionally surprise boys and set them to work or to thinking in unfamiliar circumstances, experiences that invite intellectual and physical risk-taking.

The common feature of the effective practices reported by boys and teachers appears to be the incorporation into an instructional setting of stimulation and challenges that dissolve whatever standing resistance to schooling a particular boy may carry with him to class. Indeed for many of the reporting students schooling at its best is continuous with their lives at their best. In their accounts of favorite lessons boys do not report feeling caged in classroom settings until released by the bell, nor do they grudgingly acknowledge a mere overlapping of their interests with school's mandated curricular requirements. In the boys' accounts of being emotionally and intellectually engaged, they convey a sense of being transported, exploring new territory, feeling newly effective, interested, and powerful. Experienced this way school is not an institution or an imposition of any kind; it is simply the locus of engagement in which the boy can be more fully himself at school.

The kind of engagement and self-realization reported by teachers and boys are not, on the evidence of this study, a simple reduction of schooling to what boys find diverting or merely fun. Again, while the lessons selected by teachers as effective obviously and visibly engaged the boys, that very quality of engagement was transitive to the mastery of both rudimentary and especially challenging course content. Even by the most conventional standards, the effective lessons reported resulted in straightforward advancement of learning and mastery.

Despite the great common ground between boys and teachers about what composes effective teaching and learning, student and teacher reports, in some respects, differed both in tone and substance. These divergences may be due in part to the students' assured anonymity in composing their responses. The divergent responses also reflect a structural asymmetry in the teacher-student relationship—specifically, that in a typical instructional setting there is one principal transmitter (the teacher) and multiple receptors (students). Teachers plan and deliver their lessons to a single collective, the “class,” albeit aware of and sensitive to the distinctive personalities that compose the collective. Each individual student, however, registers separate, subjective impressions of both instructor and class business. In other words, in a class of one teacher and twenty students, one teacher's impression of effectiveness is corroborated, uncorroborated, or countered by twenty receptors, each of whom, as our respondents reminded us, is uniquely endowed with personality, learning needs and quite fully involved in a personal relationship with his teacher.

Both teachers and students were asked to recount specific instances of effective teaching/learning. They were not asked to single out individuals or to name them in their accounts, yet to a considerable—and often touching—extent the students did. In nearly a thousand teacher reports,
one boy was identified by name, and no more than a handful were identified by any particular characteristic. By contrast, boys freely named and described personal attributes of their teachers. As the previous chapter demonstrates so clearly, the boys tended to be extremely sensitive to the quality of their relationship to their teacher. This awareness and sensitivity to relationship appeared to the researchers linked an even more general tendency of the boys to register appreciation of instruction to the extent it touched something deeply personal in their lives. Appreciation of individual teachers tended to be expressed by boys who felt their teachers seemed to know them especially well, teachers who unexpectedly extended themselves in helpful ways. Sometimes the appreciation lay in a boy’s recognition of his teacher’s fairness in assessing work. Boys also singled out teachers for admirable mastery of their subjects and for their passion in presenting them. Both “nurturing” teachers and “taskmasters” were singled out for praise and gratitude, the common feature of the boys’ responses being that the teacher knew them, saw them as they were, acknowledged the distinctive presence of each in some way. As in the many points where student and teacher assessments converged, the boys’ appreciative response to individual teachers appeared to lie in the fact that an agent of school-life had penetrated the more urgent and consequential sphere of a boy’s “real life.”

In addition to these more general observations, the researchers noted that boys in certain schools tended to make more personal observations and to express more appreciation than did those in other schools. Similarly, without a prompt of any kind, boys in certain schools made it a point to appreciate their school’s overall approach to their instruction. A rich vein of further inquiry might be to study the conditions underlying this pronounced boy-teacher and boy-school regard and, perhaps more consequentially, the relationship between such conditions and demonstrable learning and mastery.
CHAPTER SEVEN

Suggestions for Teachers

Clear Contours: Active Learning

It is hard to imagine a more promising data field for teachers seeking to do better by the boys they teach than to review a broad inventory of practices deemed to be effective with boys. In doing so practicing teachers are likely to find certain of their own favored approaches affirmed, while perhaps seeing the promise of other approaches they have not previously considered. This kind of inventory also invites the reviewer to examine what might be boy-specific in the practices reported.

As summarized in the previous chapter, there are clear contours to the effective practices reviewed in this study. These include requiring boys to be physically active, to create products, to take roles, to be responsible for classmates’ learning, to collaborate, and to compete. Taken together the categories of effective practice compose a kind of invitation to boys to meet challenges, negotiate successful outcomes in a field of uncertainty, and explore new experiential territory. Moreover, the invitation, as expressed in the tone and substance of the teacher submissions, is extended with warmth, enthusiasm and, where appropriate, a playful lightheartedness.

Competition and Collaboration

Collaboration and competition figured more prominently than any other single feature in the lessons submitted for this study, most often in conjunction with one another. In many successful lessons boys in pairs or teams were challenged to create a product or to solve a problem. Their efforts were competitive in that results and solutions were judged and ranked by a designated evaluator or jury. In some cases the competition lay in striving to solve the problem first; in other instances the competitive element lay in meeting or surpassing a standard, such as how far or straight a spring-driven vehicle could go, how high the model rocket could fly. Teachers who incorporated collaborative and competitive elements in their lessons testified warmly as to their efficacy—and not at all to their incompatibility. Given the mildness—or in some cases even the non-existence—of the competitive awards offered, it might fairly be concluded that the competitive element in most lessons served principally as a spur to spirited collaboration. The kinds of intra-classroom competition devised in the reported lessons was seen by the presiding teachers only to enhance mastery of tasks and fellowship, not to create affective dissonance, a climate in which winners gloat and losers are stigmatized and ashamed.
Immediacy

There were numerous references in both the narrated lessons and in the teachers’ assessments of the lessons’ appropriateness for boys to the effect that “boys are easily distracted” and “boys have short attention spans.” Some of the teachers supported this claim by citing experience teaching girls or teaching mixed classes. In response to this perceived tendency to inattention in boys, two distinctive instructional approaches were reported as especially effective. The first might be summarized as lessons divided into clearly articulated, short segments in which a variety of highly specific tasks were to be achieved in a tightly prescribed time frame. This kind of lesson, which also tended to involve considerable movement from station to station, task to task, was reportedly effective in nearly every scholastic discipline, from science lab work, to humanities, to physical education. The second approach found to engage the full attention of distractible boys was to create a situation in which they would be immediately accountable. The methods teachers devised to achieve this attentive accountability were typically playful and called for movement or some kind of performance or recitation on the boys’ parts. An example is the foreign language class reviewing vocabulary and grammatical usage in which boys leave their desks, form a circle, and the instructor tosses a ball to a boy in the circle—along with a challenge to recall and recite a specific term. Credit is awarded for correct responses, after which the boy reciting tosses the ball to a classmate who is in turn challenged to recall and recite. Another teacher conducts vocabulary drills by periodically staging what he calls “line-ups.” In the course of class business during which students are seated at their desks, the teacher suddenly announces a “line up” of boys who share some random characteristic, such as being oldest siblings or who own a certain kind of pet. The boys who fall into the announced category then line up before the class and field a series of rapid fire questions, an energizing break in routine the boys not only apparently enjoy, but which the teacher reports also sharpens their focus and deepens their retention.

Indeed there is a quality of immediacy, of boys being placed on the spot to recite or perform or produce or choose, that runs through many of the reportedly successful lessons. Learning and mastery clearly require more than discharging tasks immediately on demand; opportunities for quiet and unhurried reflection also play a critical part in learning. Nevertheless, it is instructive that an international sampling of teachers whose students span six grade levels and who represent all scholastic disciplines would indicate this quality of immediacy in effective instruction.

This particular finding is consonant with the foundational assumptions of non-scholastic programs such as Outward Bound and other wilderness challenge enterprises in which participants are placed in a variety of circumstances in which they must act—step backwards off a cliff face and begin rappelling down, slip one’s kayak into churning white water—with no further deliberation. The founder of the American Outward Bound program, Josh Miner has made the case (Miner & Boldt, 2003) that the act-now immediacy of dramatic outdoor challenges has been effective in overcoming a wide range of motivational scholastic difficulties in school-age participants. There is an apparent transitivity to scholastic mastery in facing and then meeting a challenge for which there is no option to delay, deny or retreat. The scholastic lessons incorporating this element of immediate delivery are for the most part less dramatic than those of Outward Bound, but they nonetheless point to the efficacy of immediacy and action as a factor in focusing and motivating boys.
The Relational Dimension

As indicated in Chapters Five and Six, the clearest divergence in the student and teacher accounts of effective lessons appeared in the students’ tendency to locate the transformative, positive dimension of the experience in their relationship to their teachers. No single “type” of teacher was celebrated; appreciation was extended to a broad range of qualities: caring, accessibility, rigor, fairness, funniness, trust, command of subject. More than anything else, boys expressed an appreciation that teachers had somehow extended themselves to the extent that the boys felt seen and known. This acknowledgement, or trust, central to many boys’ accounts of favored lessons, suggests that teachers’ capacity to offer a relational dimension to their teaching practice is itself transitive to desired learning outcomes. Though our data do not permit us to generalize so broadly, with Chu, Gilligan, Raider-Roth and others we have come into agreement with the central premise that, perhaps especially for boys, the learning self is a relational one.

This observation is supported by the experience of clinical psychologists and other counselors who maintain that constructive therapy must be preceded by the establishment of a trusting relationship between client and therapist; indeed, evidence suggests that the particular therapeutic approach is secondary to the establish of this alliance. There are both subtle and profound implications of this observation for teaching practice, particularly in sorting out which kinds of activities and exchanges contribute to relationship and which kinds contribute to scholastic achievement. In drawing such distinctions, some kinds of classroom business—off-subject digressions, certain personal disclosures, humorous outbursts—might be considered less as instructional lapses than as foundational, transitive relationship-building. In any case, supporting this human dimension to teacher’s role, helping teachers to prize and to manage the relational demands of their classes, seems of the highest priority in effective work with boys.
CHAPTER EIGHT
Implications for Schools

This study was carried out against the backdrop of a critical need for better understanding in boys’ learning and development. Chapter One reviewed the controversy surrounding the critical state of boys’ education and the polemics generated, on one hand, by advocates for boys who maintain contemporary schooling is poorly designed to meet boys’ distinctive learning and development needs and, on the other hand, by feminist advocates for gender equity who do not acknowledge gender-specific learning needs and who believe the “crisis” atmosphere is part of an overall backlash effort against the women’s movement and an effort to recenter boys at girls’ expense. The controversy has generated a great deal of heat but little light; at the time of writing there is no sign that these polemics, nor the gender politics in which they are grounded, are moving toward any clear resolution.

This study was not conceived with any intention of resolving such polemics, but with a hope perhaps of informing them. For this hope, we have taken a theory-building, rather than hypothesis-testing, stance. Our stance rests upon a deep and well-studied faith in teachers’ efforts to reach their students; from many years in schools, we have witnessed the commitment of good teachers to adapting their pedagogy to the cues, requests and needs of their students. In light of the critical need for effective strategies to engage boys in learning, we hope this study can harvest stories, from both boys and their teachers, of successful efforts to engage them in learning and from these stories begin to define a better theory of boys’ education. Specifically, we hoped to identify and illustrate classroom practices in which boys can clearly be seen to thrive, ones that might be replicated in other classrooms. Facing a class of boys day in and day out, being confronted not just by their responsiveness to the lesson in the moment but by their achievement in concrete assessments over time, we felt, is a most powerful catalyst for good teaching. As we have seen, there is so much that we can learn from actual boys and real teaching practices. And, from a school principal’s or teacher’s standpoint, it matters above all that we be practical and concrete.

By design the study assumed no innate or “essentialist” male learning capacities—or that such capacities do not exist. These are questions, we feel, that will be better resolved with advances in neuroscience and, for now, we tend to share the caution of scientists like Hinton and Fisher (2008) and note their confidence in the “plasticity” of the human mind. It has certainly been our experience as educators that knowledge and skills develop best when assiduously cultivated. Nor, by design, did we begin with any assumption that boys’ schools best serve boys’ learning. For this present study, we selected our sample of schools simply because we expected to find teaching practices well-honed to boys’ needs in such schools, dedicated as they are to boys in particular.
Finally, there was no prior assumption that the practices reported by participating teachers would not be equally effective with girls or in mixed classes.

It is the hope of this study that our findings might influence not just teaching practices but schools themselves. Even though the lessons elicited by the survey specifically focus on classroom strategies, it was clear to us that the schools themselves had much to do with the lessons teachers produced and students experienced. At the very least, as institutions dedicated to boys’ education, we expected to find an encouragement of thoughtful approaches to classroom practices in these schools. We were thus interested in the culture of the schools, particularly in the various ideas about boys’ development and boys’ education held by faculty. What has been well-established from research about the influence of how gender is understood on teachers’ attitudes and approaches to students, whether male or female, is that this understanding is always contextual, situated within historical and cultural communities.

To this end, in addition to gathering stories of effective lessons, we also collected what teachers thought about why their lessons worked well with boys. We wanted to bring these ideas to light and be able to consider them across the full international range of our sample of schools in order to assess what teachers had concluded from their experience with boys at the level of educational theory. We knew that reflective teachers form ideas from their involvement in boys’ education and we wished to describe those ideas. In our experience, making these ideas more visible and subject to evaluation is important because a conscious awareness of these theories, particularly with respect to the influence of gender on learning, often escapes even the most dedicated teachers. Rarely do schools as a whole engage in such discussion, critique or conscious sharing. Even the most historic schools, it seems, have been relatively inarticulate about what they do with boys and why they do it. Yet, it is patently clear that how they conceive of their students as male learners influences teachers’ pedagogical approach on many levels.

Thus, in our survey we asked teachers why they thought their lessons had been successful. After they had described their successful lesson, we asked: “Is there something about this practice or activity that you believe is specially pitched to boys’ learning, engagement and achievement”? Again, responses were varied and quite thoughtful, sometimes remarkably detailed. In general, we found three general themes in teachers’ answers to this question, with great thought and richness within each theme. It was clear from the detail and complexity of their answers that teachers were describing a phenomenon with which they were quite familiar, one that had many facets and distinctions in their eye as a result of close observation and intimate association. These were professionals, in other words, who have truly been deeply engaged with boys’ learning. In this final section of our report, we describe these themes to give readers an appreciation for the close association between the lessons reported previously and the ideas teachers have about them. We hope by doing so to encourage other schools to consider their own curriculum for boys’ education and the embedded assumptions and ideas underlying it.
Reluctant to be Gender-Specific

Although they represent a distinct minority of the viewpoints expressed overall, several teachers were reluctant to generalize about the gender specificity of the lessons they reported. Some, for example, sounded a curt denial that the lessons had anything to do with boys or gender. Along these lines, in his answer to our question one Australian teacher replied: “No, I would teach this, and have taught this, to both genders. I don’t feel that this is looked at differently from either boys or girls.” Another Australian expressed a similar conclusion: “This activity may well work effectively with girls as well as they no doubt share many attitudes and characteristics with boys as learners.” In some cases teachers professed that they were adamantly opposed to gender stereotypes, as this US teacher suggested:

Conventional wisdom would probably emphasize the role of competition in this strategy. It certainly did have a galvanizing effect on this group of boys. But I would aver that female students are at least as keenly competitive about grades as boys.

A Canadian sounded a similar note:

I am wary of my BELIEFS regarding gender differences and how such biases might imbue my teaching of boys (or girls). After all, at varying times in history both men and women have been considered a “civilising” factor while the other was considered the source of chaos. Not even a half century ago, prominent US colleges went co-ed with one of the arguments being that the presence of women would tame some of the wildness of young men. Now, we’re at the point where the segregation of the sexes is touted in the news as a way to advance a sense of decorum and focus among male students. (The spate of stories about the “boy crisis” was a popular theme in 2006–2007 in the US, at least.) So, as the Romans would have said: nunc huc, nunc illuc.

Another US teacher was concerned about the same possibility of stereotyping, but this time against boys:

No. I don’t think that differentiating what appeal to or work well with boys as opposed to girls is good educational thinking, at least for 17-year-olds. I object to the attempt to appeal to generic “boys’ interests” or abilities or proclivities, though that may be helpful at time with middle-school boys, and even 14- and 15-year-olds. God help us if we put boys in boxes and generalize about their damned “learning styles.” English teachers need to stretch boys’ interests constantly, since the general culture is unlikely to do so.

As was this teacher from New Zealand:

Let me state here once and for all—I do not subscribe to the view that boys and girls are different intellectually and that girls are either brighter or learn faster than boys. That widely held misconception is demeaning to males and is sexist. Some girls, to quote Piaget’s theory, learn in a slightly different manner from boys between the ages of 14 and roughly 17, especially when it comes to the processing of abstract ideas but that’s as far as it goes for me. The more people buy into this idea of inherent differences in the learning processes between the sexes, the more the myth will self perpetuate. Some girls may well be better at presenting
pretty projects and some boys better at cramming for examinations but, what of it? In my opinion, neither is “better” than the other in terms of actually LEARNING.

In these cases, we heard echoes of the politicization of theories about gender and teachers’ sensitivity to being fair to both boys and girls, as well as their familiarity with the theoretical limitations of essentialist claims regarding gender differences and their prescriptions for teaching. These teachers were committed, first and foremost, to thinking “outside the box” of conventional stereotypes.

Other teachers who sounded a reluctance to label their practice gender-specific were focused on the “fit” between their students and their teaching, rather than on their gendered learning needs specifically, as with this Canadian teacher:

I acknowledge that boys have different learning styles to girls for example, but I don’t tailor my lessons to cater specifically for gender differences, I tailor them to meet the specific student’s needs from a cultural, linguistic and academic perspective. This may very well inadvertently include strategies that are associated with teaching and learning of boys but this is not something that I consciously set out to do. I look at the individual as having more learning variables than just those relating to gender.

Many in this group, in fact, acknowledged that their lessons might work as well for girls as they did for boys, only in different ways. This teacher from New Zealand, for example, who has taught both boys and girls:

Having done similar projects in a girls’ school I can say that in both environments the activity is successful but with the following differences: firstly for boys the marks and prizes are crucial (the competitive element); secondly, girls are usually happier working in pairs or groups while the boys prefer individual models.

This US teacher also had taught the same lesson to girls and boys and had had success with each, along different lines:

I have taught in a co-ed school and I have used this very activity with similar success, although it clearly is met with more enthusiasm in an all boys’ environment. The desire to establish themselves with their classmates, and to simply compete is fundamental to our kids, and the very act of keeping score plays right into their mindset. Good-natured competition enhances the classroom atmosphere, and arguably the simple act of physically moving around and getting off their chairs is attractive to a testosterone laden ninth grader. Placing a weaker student with a stronger one often helps with their confidence and self-esteem. In all candor, I didn’t dream up the activity with the thought of aiming it at boys, and therefore I can’t empirically conclude its success. Yet I’m telling you that it works within our school and within my particular classroom.

Such reluctance to generalize beyond their own experience characterized many of the responses in this group. Yet despite this reluctance, teachers were quite clear about their experience, as we heard with this US teacher who designed a lesson specifically to challenge conventional masculine stereotypes:

I have never thought of this as a boys’ activity, although I do think it is particularly useful for boys. The prevailing stereotype holds that boys tend to be more competitive and less
cooperative. This activity fosters working together. To reach an agreement, boys have to listen to others’ opinions, think about compromise, and work toward a common goal. So often, we set these boys against each other on the theory that competition breeds excellence, and perhaps it does. But I worry that they miss out on chances to learn about team work, at least off the athletic field. Most of the boys will eventually work as a part of a team in a workplace. I hope we can prepare them for that challenge.

Designing their lessons to fit their students, teachers naturally responded to what they observed of their particular characteristics and interests, including how these were influenced by gender. This New Zealand teacher, for example:

I think it works for everybody but certainly boys and especially those with a shorter attention span seem to thrive in an environment where they keep moving forwards in gradual steps and have their previous learning reinforced every day.

Or this Australian teacher:

This activity and sequence of lessons could be pitched at any gender, not specifically boys. But the method of delivery and careful planning of the modifications is vitally important in maintaining boys’ motivation. They tend to lose interest very easily and can either give up when they don’t achieve success or become disruptive if the task is too easy. Also, by maintaining my enthusiasm and providing regular feedback and encouragement I am trying to keep them on task more consistently as well as helping them achieve some level of success.

And this teacher from the US:

I think that this lesson would be an effective one with girls as well as boys, but the fact that Cicero and King were both men who showed leadership and courage during dangerous and troubled times may make the lesson especially engaging to boys.

Finally, this Australian teacher expressed the same point, that while the lesson in entrepreneurship would likely work with either gender, it had worked well with boys for reasons that were particular to boys’ lives.

While the same activity would also work with girls, it is particularly effective with boys because it is geared to both their interests (e.g., money, human nature) and learning dispositions (e.g., competition, movement, humour). Factors such as real world connection, application of past knowledge to new situations and intellectual challenge are less “boy” specific and more related to effective learning experiences generally.

Overall, we found this theme voiced by teachers who were generally reluctant to have their careful work with boys entangled in murky or sweeping generalizations about boys. Where they would generalize, they would typically make disclaimers and be sure to base their comments on their own observations.
Categorically Gender-Specific

A second group were more confident that their lessons had worked precisely because they were aimed at some absolute characteristic of boys, such as their “love of competition” or “need for activity”. In this group, we heard echoes of that line of developmental thought which holds that boys are one way, girls another, a gender differences approach that is variously based upon biological or psychological effects. There were, in fact, quite a few traits ascribed to boys by this group’s teachers. Most common among them was competition, as suggested by this teacher from New Zealand:

I believe that boys tend to rise to competitive learning and that is what really engages them into this type of activity. They want to come out on top and perhaps have bragging rights over others. They are not so interested in being the best at expanding brackets but rather being able to say they won the relay race. The questions are just a means to an end for them but from a learning point of view they are engaged and need to understand the material in order to succeed.

Perhaps related to their belief in boys’ need for competition, some teachers found boys to be naturally drawn to themes of battle, as this South African teacher found from his poetry lesson.

I feel that the war poems activity is especially suited to boys as they learn better when they are not passive observers. They need to be actively engaged in lessons as they are often restless in class and the negative energy can therefore be channeled in a positive direction. This has a positive effect as far as class behaviour is concerned.

Other teachers found boys drawn to danger, as this New Zealand teacher maintained:

Boys are not afraid of things that have an element of danger. They want to see it for themselves, not just be told about it. They like things big and dramatic. They always want to assist or do the demonstration for themselves and experience the moment for themselves. However they are also aware that information is transferable and will accept that the experimental work they can do themselves is part of a bigger pattern. It is indeed fortunate if the bigger picture can be observed on video. However either one on its own is not enough.

Still others noted boys’ interests in their own male bodies, as this Canadian teacher:

Grade Nine boys find the whole topic of farting hilarious. Both of my classes were delighted/shocked, and more importantly (no pun intended) moved to see what examining a common social faux pas could lead to. In end of year interviews, half a dozen boys referred to that discussion as being particularly memorable—and not because of the subject matter, but what it revealed about us naked apes.

Many teachers also wrote of boys’ love of the visual and for being active and moving around, as this US teacher found:

Simply put, boys love movies. This, in itself, should not be a cause of dismay among English teachers, but an opportunity for curricular innovation. The key, however, is not merely to play into the typical passive relationship between film and spectator, but to transform the
students’ relationship to visual media through active analysis of the cinematic language. At first, they tend to be resistant to the change because they are used to watching films without having to think deeply about what’s going on; however, once they become comfortable with reading films in addition to merely watching them, the majority comment that the experience has enhanced and transformed their understanding of the art of filmmaking. In addition, the unit is specifically aimed to make use of boys’ natural predilection for active participation, teamwork, and performance.

There were many statements about boys’ learning styles made by teachers who held this view of gender differences. Here, for example, another New Zealand teacher describes a range of strategies her lesson employed that were designed to accommodate boys’ learning preferences:

The lesson was broken up into 10–15 minute activities, as the boys prefer short bursts of activities than a whole lesson activity. Even though all activities were about the same topic, it allowed them to learn in different ways. The referring to the map produced in the previous lesson gave them confidence to answer questions in class. Also the word boxes were a major success as normally boys don’t like/want to write paragraphs and they always ask how long should it be instead of focussing on the quality of writing. Placing the key words in a box gave the boys a challenge (also an important aspect) to make sure they had incorporated all the words and gave them more opportunity to ensure they had a quality answer. Also time limits are good as again it is a challenge to get the work done before time is up. (Have to be careful with this though as a few might take the challenge of finishing rather than producing good work).

Respondents, in fact, wove many separate beliefs about boys’ interests into their explanations for their lesson’s success, exemplified by this Australian teacher’s account:

The practical and problem solving aspects of this project had particular appeal for boys. The final outcome gave them a strong motivation to engage in reading and writing activities that many of them usually found irksome. They had a real reason to find out information, and organise and record it. They enjoyed working as a team and had a sense of purpose and pride in what they did. They liked having an overall structure and tasks that were broken down into manageable parts. *The Odyssey* was a good choice, as it was an adventure story with mainly male characters. The Greek conventions of male actors and masks were useful in a boys’ school. They could relate to the roguish character of Ulysses and that role gave a good opportunity for one of the boys to display leadership qualities. This was also an opportunity for boys to be creative and perform in an artistic production, without losing credibility with their peers. The nature of the story meant that they would appear manly, which was important in a traditional boys’ school. Most of them actually enjoyed taking part in a theatrical production and appreciated the confidence that they gained in front of an audience.

Similarly, this US teacher talked about his woodworking lesson’s appeal to boys:

The entire woodworking program fits boys’ learning incredibly well. It is as much like a sport as anything could be, in an academic situation. I believe a project that is designed to allow students to measure their own progress is essential. In working with wood, specifically
making a carving or a series of dovetails, each boy has the immediate feedback of his effort. If the pieces fit together perfectly or if a gap exists, it is wholly transparent. As well, it challenges each boy to be in the moment, which helps focus attention. Using a saw or chisel is dangerous activity and quite literally, a boy is attempting to use the saw or chisel to follow a line he has drawn. The work generates a desire to perfect the movements that have been demonstrated. Tangential to the hand/tool skills (I hope) students develop, boys in my program work in a different classroom environment where moving around the room, talking to one another and teaching each other is encouraged and expected. Much of a boy’s school day requires one to sit and listen and more often than not, be talked at. Woodworking requires that students take action. I’m quite proud that there is an enormous amount of focused activity in my class. As well, since I use so many sport analogies in my teaching, I feel boys are comfortable to ask for help and/or clarification. In my own experience, boys tend to be more relaxed and open to coaching when they can move around, seek out help from one another and see me working in the room alongside them. I’ve found that teaching students to hold tools allows an easier opportunity to work with them, rather than teach at them.

This New Zealand teacher’s lesson was also quite elaborately constructed to fit his ideas about boys’ particular learning preferences:

Firstly, the hands-on nature of the activity is particularly engaging for boys as a large majority are kinaesthetic learners. The discussing, graphing and calculation involved with topics all assist boys in achieving a base understanding; however, for many it is not until they can see a demonstration or (even better) test equipment or complete measurements for themselves that they really come to understand the intricacies of a topic. The exercise allows boys to test their calculations (e.g., rather than just checking the answers in the back of the book) and using experiment adds another element to this exercise. The boys see the activity as meaningful and challenging rather than just another set of hoops to jump through—the boys can see the outcome of their calculation (successful or otherwise). Secondly, boys are not always willing to work in groups without prompting and guidance. As this task cannot be completed without the students working effectively as a group, skills that are necessary for working cooperatively and effectively can be practised under the guidance of a teacher. Thirdly, the competitive nature of the exercise particularly appeals to boys. By having different scenarios the risk of copying or colluding is greatly minimised which also means boys must depend on and be a useful contributor to their group (they can not get the answers off someone else). The boys enjoy competing against their peers and thrive on friendly rivalry. Fourthly, the boys enjoy the military setting. Having strict guidelines always works well with boys and once the parameters of the exercise are set, they are happier to set to work, rather than debate protocol. The setting of the exercise also seems to increase the importance of it to the boys: it is not just like another practical exercise. It also allows the boys an understanding of how a high-stakes job like the military functions that near enough is not always good enough. Fifthly, this exercise allows the boys to undertake risks in a controlled situation. By giving two options, one of which is a harder calculation, which the students are usually less likely to succeed in completing, enables students a choice. Interestingly enough for not a lot of gain (only 1 bonus point) the majority of boys are more likely to take the harder option even if they are more likely to fail. This risk taking is endemic in boys’ lives and
allowing them to test the outcomes of risks in a safe environment may help to assist them in more difficult situations. Additionally boys are not always good at factoring in outside elements into their consideration—both in real life and experiment. In this activity, they must take other factor into account—such as will the ball hit the ceiling and therefore will its trajectory change?

Finally, this Canadian teacher also tailored the lesson to a variety of qualities considered particular to boys:

Autonomy, the hands-on nature of the project and the selection of models contribute to the boys buying into the topic. Most boys love to build and even the boys with minimal skills soon become proud of something they have built with their own hands. Much of our studies in modern times have become centred on reading and writing. While this assignment has ample opportunity for these pursuits, activities are combined with building that seems to really appeal to the students. There is also the social nature of the activity that allows boys to interact with one another while working on a combined goal. There is a tribe aspect to the project and satisfaction at having done a good job in tandem with another; almost like a team game victory.

This theme of boys’ categorical difference from girls appeared to guide teachers in constructing lessons tailored to the characteristics they believed constitute boys. There were characteristics, such as visual interest or physicality, that were frequently mentioned by teachers; there was also, however, a wonderful range of characteristics mentioned overall. Teachers in this group were obviously also keen observers of boys in their classes and were formulating theories about all they observed.

**Experientially Gender-Specific**

Finally, the largest group of teachers sounded a more descriptive and practical note, answering the question by describing what they have experienced in their work with boys and limiting their conclusions to those drawn from this experience. Many of their comments, in fact, stated explicitly that they did not know whether the lessons might also work with girls; what mattered was that they had worked with the students in their classroom. In their claims, reflecting years of relationally-sensitive teaching, we were struck by how often their pedagogy was thoroughly informed by gender. The boy-ness of their students, that is, seemed to be a defining characteristic, leading them to conclusions quite parallel to those of the second group.

Yet these teachers were more typically modest about the scope of their claims, as we can hear in this US teacher:

Although I have no expertise in knowing how to teach boys, I can conclude, based on class discussions, student comments, and reactions to various practices what works and what does not. I have continuously observed that when new learning involves activities where the boys can stand, move around, and share ideas they produce work of better quality and enjoy demonstrating what they know.
This teacher from the UK, as another example, was somewhat hesitant to claim boy-specificity to his lesson, even though its results compelled him to do so.

I am aware that it is difficult to discuss boys’ learning without tripping over gender stereotypes and that there will inevitably be boys for whom certain statements of generalisation are not relevant. Indeed, some of the claims I will make in this section do not apply to some of the boys with whom I worked on this very activity. At the same time, I believe that there are aspects of the “consequences” task which are specifically geared to motivating boys in a way that most other methods of teaching the past historic tense are not. Here I will discuss: how the stories were geared specifically to boys; how the task enabled us to use sources other than literary texts; and to what extent the performance aspect of the task is an exploitable tool for maximising boys’ learning.

The boys enjoyed the “consequences” task chiefly because of the stories they produced. I had tailored the first few words of each line so that boys could write stories based on a boy meeting a girl resulting in a conversation and then in a consequence which they were able to decide. The narratives also formed typical monologues which one often overhears from the older age groups in a boys’ school on a Monday morning after an eventful weekend. Without (necessarily) realising it, the boys were creating gossip. In addition, the incoherence of the narrative despite the obvious intentions behind the individual storylines lent the activity an air of fun and of comedy. I felt it was important from the outset in teaching the past historic that the boys did not only encounter it in classical literature. Although it was introduced to them via an excerpt from Voltaire’s *Candide* and the aim of teaching them the tense is to give them access to literature, I required a teaching method which would really engage them. This stemmed from my instinct that the majority of my class, and of boys in general, would not be as focussed on practising the past historic if it were constantly presented to them as part of a literary text. This is admittedly a generalisation: two or three of the boys in my class are avid readers and are looking forward to studying texts. Nevertheless, I feel that the “consequences” task was able to attract the attention of more boys. Finally, I introduced the performance part of the task (where pupils read out their stories) because it is an aspect of lessons which I have found to be very successful with boys in the past. There is a tendency with boys, more than with girls I have taught, to exhibit in front of their classmates and it is a useful tendency to harness. It can work either with role plays or with reading aloud written texts, as here. I was careful to ask for volunteers as this avoids the embarrassment of less outgoing pupils. However, I found and I generally find that after one or two of the braver boys had read aloud, most wanted to follow. In short, the task was geared towards boys because of the wording of the story, the chance to study the past historic outside of literature, and the opportunity for performance.

This teacher from New Zealand spoke about his Art lesson:

In my experience boys particularly respond to a situation in which their imagination is encouraged. This activity presented to the students a chance to do this, and the darkened room and the sitting close together on the floor broke down the usual arrangements and relationships of the classroom. After some initial reluctance experienced by the whole class, the situation and the reading of one of the original experiences of a raft survivor, all students seemed willing to contribute to the discussion about the conditions on the raft and then
to talk through the concepts leading up to an understanding of the Romantic Art movement. Boys like to have structure and to know exactly what is going to happen in the lesson but within this controlled structure they respond positively to any chance to loosen their creative and imaginative skills, especially if the situation is novel.

Another art teacher from New Zealand, who had also taught girls, came to conclusions about the impact of gender on the lesson:

I think the “real world” involvement probably has a greater appeal to the boys. I have made a similar trip with a class of girls, and their engagement was surprisingly a much shorter length of time. The boys were fascinating with what they were seeing, as if it had opened a whole new world to them they had not known existed within a part of the city they all knew. This understanding of why artworks are made, who enjoys them, who dismisses them, who purchases them, why they are so valuable, became very apparent to the students in the gallery, like a light bulb going off, they got what it was all about, why they are studying the History of Art.

This US teacher, writing about his school’s field day, was likewise careful to restrict his conclusions to actual observations about boys’ involvement in the day:

These seventh grade boys truly get to be themselves: playful, active, competitive, and curious in a myriad of ways. If directed properly by a teacher, each boy in the class will find a way to contribute to the group’s outcome. Much of their academic lives are individual in nature. They read independently, study alone, usually write essays by themselves, and take tests without the help of others. The Field Day is counter to this individuality. When one boy builds a chariot, he is doing it for fourteen others, and they share pride in the output. This might not be unique to boys, but they certainly do not want to let a classmate down or disappoint a friend. The real beauty of this day is that the kids work even harder than they normally do. Their enthusiasm for this event is unmatched by any other assessment or lesson throughout the entire course. It is one of the few times at our school when the boys get to have unabashed fun around the curriculum.

Another US teacher made similarly astute observations about his students’ needs as boys, with typical care and modesty:

While it may not be a uniquely boy trait, there are often a number of students in this course who have a preference and tendency to hide whenever possible. Clearly there can be some profoundly unhappy boys at the start of this activity. It is critically important to note here that I have yet to find a boy who takes more than a few sessions to warm up to this task. As I write problem numbers on the board and boys are scrambling around for a partner or a problem, one can almost count on a shout of “who has an extra marker” just before a marker is thrown across the room to the student in need. While the option to hide is taken away by the physical demand to approach the board and display one’s thoughts, each time we post up every student in the group is drawn into the performance and revels in his highs and lows as well as in those of his peers.
Likewise, this Australian science teacher described observations she has made in her classes and from which she has hit upon lessons that work with boys:

The entire unit is designed with the students in mind. The unit allows for the hands-on practical work that students enjoy, for student generated inquiry, and for the interests of boys of this age group. The immediate nature of the results of the experiments appeals to the attention span of 11 year old boys; it would not be as successful if we were tracking changes over a period of weeks or months. Also, using materials the boys can access at home allows them to replicate the experiments for family or friends. The experiments result in chemicals changing colour, bubbling, frothing, and hissing, and these appeal to boys of this age group. At 11, boys are interested in “crazy professors” and “strange potions”. The experiments play on this, and use the reactions to draw the boys in and engage them in learning. After witnessing these changes, the boys want to know why the changes happened. They want answers to their questions. This makes the theory behind the experiments interesting and fun. It also limits information to a need to know basis, and the boys don’t feel overwhelmed by scientific jargon before it has value or meaning. Also, due to the structure, boys feel that they are solving a problem, answering a question, and therefore learning about the theory becomes purposeful. They also want to solve the problem, and therefore, they are motivated to achieve. They are not motivated by the end grade, they are motivated to solve the problem and to discover which mystery substance is which.

This US teacher, writing about the relevance of a lesson in social psychology, also spoke of her awareness of gender’s effects on her students:

Empathy is a significant element of emotional intelligence. Often boys receive less practice and have less experience in acknowledging the feelings of others, of understanding the world from someone else’s perspective. While they certainly retain this capacity, it is very helpful to give them the opportunity to “flex this muscle”. So much of success and ability to lead in the 21st century will be dependent on this aspect of their emotional intelligence.

One more US teacher, writing about his observations of boys in an English class:

I would only add that boys do need to be willing to take risks in order to emotionally engage in intellectual pursuits. It is far easier for a boy to learn the craft of a 5-paragraph essay and make each era’s essay fit into that mold than it is to write a period piece editorial. It is easier for a boy to maintain a perceived persona, well crafted and nurtured in the hallways and fields on campus than it is to play Alexander Hamilton in a debate. I have found that the boys who take on a drawl in playing the role of a Southern planter or an obnoxiously officious tone when playing a Governor is usually rewarded handsomely for their efforts by their peers. Once breached, the comfortable, safe role is shed in successive debates by students regardless of their reputation. We can laugh and joke about the risks they took after the performance. We take the time to talk about the strategies employed and what the desired effect was for the audience. Perhaps most importantly we talk openly about presentations in the real world. We will discuss the importance of knowing one’s audience and what a student may have done differently if it were a hostile audience or a board room. With that baseline established, we will regularly critique and praise visiting speakers to the school. If the boys liked or disliked a speaker we will analyze why. Was the issue the subject, the presentation or perhaps the
apparent lack of awareness of the audience’s proclivities? This allows the boys to speak openly about what, specifically, they like or dislike in a speaker. These tendencies, once exposed, are more likely to find their way into a boy’s repertoire on the stage. We speak openly about how a speaker can organize his notes in order to maximize eye contact with an audience even if a speech is not memorized. We speak about what to do if an opponent makes a serious gaffe or how to handle a question to which a boy has no clear answer and feels the creeping despair of panic. In short, boys can make tangible how the assessment in history class may be used in a “real life” work situation. While I believe this is beneficial to students of either gender, boys seem particularly receptive to this style of learning. Beyond this the previously mentioned recognized awareness of what Gardner calls “multiple intelligences” is particularly helpful to young men as they make sense of their place and role across the myriad measures of their skills in a school year.

Finally, this Australian teacher’s answer represented a group who, quite familiar with broader theories about boys’ learning, were still careful to match these theories to their own observations of boys in their classes:

Developmentally, boys speak 4000 words to every 12,000 words spoken by girls and as writing and reading skills often follow oral language skills this places boys at a disadvantage in accessing literacy tasks. Compounding this is the research that indicates over 30% of all boys have auditory processing difficulties affecting listening and spelling skills. Successful literacy programs need to recognize the unique nature of boys emotionally, linguistically and cognitively and provide activities that build up skills in traditional deficit areas. This is geared toward boys that have a weakness in literacy and writing skills. It assists boys with a key micro skill that can be transferred across the curriculum in report writing. The emphasis on foregrounding or topic sentences, depending whether one comes from a functional or Latinate grammatical approach, particularly assists boys that are hesitant writers. As the research often indicates that boys only value activities that are assessed as it gives them a purpose, the boys can clearly see the “assessable” value and the links between assessment and the development of this micro skill. The clear structure to the activity is slanted towards boys who often appear to need sequence and structure to their learning. The logical sequence of activities ensure that there is a related logical order of dependency of activities. The activity is broken down into visible steps that take the student from a totally scaffolded task to become an independent learner. By working through such activities with boys we are making explicit the language resources needed to foreground the reader what they can expect to see in the next part of the text. These language resources make the text flow logically and cohesively through the various stages. With a clear understanding of these resources, students are much more likely to produce the kind of text expected of them. Involving the ICTs through examining a website, using highlighters for colour coding and hands-on activities offers boys a range of methods of engagements other than auditory. This directly links in with the research that 30% of boys have auditory processing difficulties and need to be catered for in the classroom. The focus in the activity on developing oral language through jigsaw and paired activities is also to directly address the language deficit experienced by many boys. By allowing boys opportunity to use oral language in a specialized field it is extending their skills in this area.
In this theme, then, we hear elaborate ideas from very thoughtful observers of boys' learning. Where teachers in the first group were especially careful not to stereotype and teachers in the second group were more comfortable wielding ideas about boys' natures, this group's answers seemed more experimental, more committed to building a theory detailed to the boys in their classrooms. This theme seemed the most common to teachers we have encountered and to represent, perhaps, the most accurate reflection of the state of the art—or science—in the field of boys' pedagogy. Loathe to pass along one generation's prejudice about gender to a new generation that so obviously faces a different social landscape, teachers in this group are nonetheless struck by how significant boyhood and masculinity are as influences on their students' learning. They adapt their lessons to their observations in the careful, experiential dance we have described in this report simply because to do so makes the lessons more effective.

**Classrooms for Boys**

Finally, as a corollary to their observations about their lessons' effectiveness with boys, many teachers volunteered comments on the single sex context of their classrooms. That is, without any prompting, some teachers felt compelled to mention the dedicated nature of schools in which their lessons take place. Again, these claims about the single sex nature of their lessons' impact were made in practical terms, based upon observation and experience. This US teacher, for example, was not sure his lesson was particular to boys but felt its success was determined by the single gender nature of his classroom:

> Not to boys in particular, but I do think it would be more effective in a single-sex classroom. The boys are less likely to make excuses for why they were wrong than figure out why they were wrong. They will be quicker to question or test other convictions as well.

Likewise, another US teacher wrote of finding the same lesson more successful in a single sex classroom than it had been in a co-ed setting:

> This assignment is much more effective in the all-boys' environment than it was in my previous co-ed teaching experiences. The boys have far fewer reservations about speaking in front of the class when there is not social anxiety, competitiveness, nor any of the other drama/stress that comes with co-ed teenage interaction. When the social competitiveness is removed from the classroom, students are free to express themselves in ways that more closely represent their true ability and voice. As mentioned prior, this assignment also calls on their sense of "brotherhood" and "duty" to look out for each other that is ever present in a boy's school. Whether it is their partner or partners who are counting on them, or their classmates who have worked hard on their projects and expect the same from them, the boys seem to come through for each other more often then not. They are less likely to let each other down than their teacher.

Often, when teachers commented on the lesson's success being related to the single sex nature of the school, it had to do with trust and safety, as this US teacher observed:

> My school is an all boys' school, and I am convinced that the level of discussion we have could not occur nearly as easily in a coeducational environment. My expectation for the presentations
is that they will cause a peer to be sucked into a discussion or opinion and suddenly find himself struggling to explain a value system that slipped up on him in his talking. I want students to play with words, adjust cases to find that particular weak area of a peer’s argument, or challenge directly someone else’s firm belief. To do that, there has to be unquestioned trust between students, and an understanding that we are all learning. There has to be a sense that no one is trying to impress anyone else, and that getting trapped by one’s own words is not “looking stupid”, but rather is a discovery of an inconsistency that all in the class can appreciate and avoid in the future. The active process of the discussion, the slight competitive feel of planning how to best entrap fellow students, the joy of weaving a case web—these are all elements that seem to appeal to boys. They are balanced with the foundation, brotherhood and respect that an all-boys’ school can engender.

From this and other teachers, it was clear that many believed that boys would be affected by the presence of girls in their classrooms in ways that would mitigate their safety, freedom to take risks and to make mistakes, as this US teacher suggested:

In a sense, the unit runs counter to what one might expect out of boys because it requires them to be empathetic to others, in some cases others whom they have been brought up to distrust or dislike. I think the unit works though because of the trust level that has been established by February of the school year. Working with classes of no more than 16 boys, and having them participate from day one in a discussion format helps them to gain some confidence that their thoughts and opinions will be valued rather than scoffed at. The absence of girls plays a major role in this trust being established too, as the guys have no reason to posture like they sometimes do when girls are present. They seem much more willing to admit what is on their hearts and in their minds when their masculinity is not required to be on overt display.

Sometimes, the reasons cited for single sex classes’ utility had to do with the content of the lesson, as with this teacher from South Africa:

Often boys are not given appropriate avenues to explore, in a non-threatening way, some of the areas of mental health, which have a big impact on them—anxiety, depression, etc. The boys were really grateful to have the opportunity to engage in something which was purely designed to be of benefit to them on a personal/spiritual, if you like, level. No judgements, no competition. They found that in itself to be refreshing.

When the lessons cited were in the area of health education, in fact, arrangements other than single sex classes seemed unimaginable, as in the example of this US teacher:

Issues of male health can be difficult to teach in co-ed situations so to have an all male audience eliminates some of the fear of looking or sounding “dumb”. I feel there is much more open dialogue taking place than would be possible in a co-ed setting. The boys are always curious about this issue and there are lots of questions that arise that the boys feel free to express because of our all male environment.
Almost always, the boys’ school context was deemed important by teachers because it allowed a focus on the particular interests and needs of boys, as this Australian teacher exemplified:

Since boys typically enjoy hands-on learning activities, the opportunity to debate, the freedom of expression that story writing allows, the application of standards and rubrics to intellectual tasks, the course does seem to tap into things that work well with boys—to have their work judged by their peers, to debate the merits and flaws of others’ work. None of these remarks suggest that the same course would not work as well for girls or in a girls’ school, but it has succeeded beyond my expectations in this boys’ school environment. And it is often more volatile and exciting than the graduate level seminars (co-ed) with which I work in the summer, especially in the setting of an all boys’ school. Because the class is all boys, they are even more willing to offer constructive criticism.

Thus, for a group of teachers it was the absence of girls and the dedication to boys that facilitated the lessons they found successful. When they listed reasons for their lessons’ success, without prompting they referenced this singular focus on boys as contributing to the safety and mutual understanding they felt were its key constituents.

Conclusion

We can now return to the questions we discussed at the beginning of this chapter, with the perspective afforded by these teachers’ thoughts on the subjects. Do the patterns revealed in these teacher and student accounts of effective teaching indicate a distinctively male response to certain kinds of instructional stimuli? Are there clearly identifiable best-for-boys approaches?

We have to say, as many of our teacher respondents did, that there are very few lessons cited in this study to which at least some girls would not respond positively and productively. So the better question might be: is there a decidedly male appeal to the kinds of lessons reported as successful in this study? On this question, it is our impression that if the lessons reported under their respective categories were formulated as a general curriculum for working with boys, it is easy to imagine that it would be embraced by teachers, while teachers working with girls would find many elements foreign, even odd, to their experience with their students. There is an unmistakable for-boys cast to the lessons reported here.

To what extent does this for-boys cast merely represent intergenerational gendering, fitting boys into traditional molds? As we have seen in the responses about their lessons’ effectiveness, many teachers are especially careful on this score, not wishing to fit boys or girls into any conventional pigeonhole; yet, most of our respondents have been compelled in their hands-on work to discover lessons that fit the realities of boys’ lives and are informed by how they learn and behave. Given the mounting contemporary concern about boys’ underachievement in school, professional testimony as to what works with boys has been too rarely sought and is badly needed. The important consideration is that these insights clearly offer some immediate guidance for how boys everywhere can become more deeply engaged and productive in school.

What are the implications of this study for teaching boys? The researchers’ previous experience conducting intensive audits of the condition of boys in other schools as part of another project, revealed how keenly interested in these questions those working with boys are. In the design of those
audits, teachers were asked to submit a “best lesson” and to speculate on its overall effectiveness as well as its possibly specific appropriateness for boys. These accounts were completely continuous with the accounts included in this study, but in the audited schools, the contributing teachers also convened as a whole and in smaller, mixed-discipline groups to discuss and amplify their preferred lessons. These sessions in which teachers aired their approaches with their colleagues were animated, probing and, in the teachers’ assessment, extremely stimulating. There was a professed eagerness on the part of teachers to refine certain of their own ideas and approaches and to adapt others, or perhaps elements of others, in their own classrooms. Similarly stimulating discussion was generated by teacher consideration of the specific boy-appropriateness of various favored practices. Some teachers had thought deeply about what they believed or had found distinctive in boy behavior and what such behavior implied for teaching strategy. Others admitted to having directed their efforts into presenting the most effective lessons they could devise, with little thought to their specific boy-applicability. In the course of these exchanges, the schools in which the audits were conducted reported a heightened interest on the teachers’ part in better understanding the masculine dimension of their students, an interest both in research findings and also in continuing to observe and to share their own observations in their respective schools.

Obviously, we recommend that schools encourage such discussions and provide forum for teachers to make their observations, experiences and conclusions more conscious, as the best possible way to both cultivate and harvest the wealth of good ideas circulating in their cultures. On a more general level, whatever dissonance, confusion, and hostility may hover in the air as stakeholders assert new and competing claims about the nature and needs of boys and girls and the essential or trivial differences between them with respect to how they learn and how they should be taught, few could reasonably argue with the proposition that many boys are not thriving in the contemporary educational complex. Nor could one possibly argue there is no room or reason to improve. Albert Einstein has famously defined insanity as “doing the same thing over and over and expecting different results.” Einstein might also have considered a corollary: that it is equally insane to do the same thing over and over and blame unsatisfactory results. The effective instruction of boys does not require deep immersion in imponderables or tortured theorizing. Boys—some boys, in some settings—are effectively taught every day of the school year. The teachers responsible are easily located, seen, and heard from. Many of them, as this study has shown, are willing and eager to share what for their colleagues and for boys throughout the world is very good and welcome news.
References


