

IMPROVING COLLABORATION THROUGH THE FOCUSED TEACHING OF EMPATHY

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Abstract

During the second half of the 2016 academic year, a class of 14 mixed-ability Year 9 boys undertook a Structures module within their Technology programme. Normal lessons were modified to contain a much stronger emphasis on emotional awareness, both as individuals and within the small groups in which the boys worked. Data were collected to monitor the boys' ability to develop interdependence over the course of the unit in an attempt to discover the value of infusing empathetic skills into a curriculum area that depends heavily upon collaborative group work. Coding for, and analysis of, self-awareness/growth mindset, interdependence, and empathetic awareness demonstrated clear links between emotion and action, giving rise to the notion that social and emotional learning could certainly empower boys to achieve more at school, and, more significantly, in real-world decision making later in life.

Introduction

To collaborate is to work jointly with others or together, especially in an intellectual endeavour. In a classroom context, this can be a tall order for junior school boys without specific skill-sets to facilitate understanding between their emotions and their actions. Some boys' inability to empathise, or identify "the thoughts, feelings, or state of another person, or the capacity to understand another person's point of view" (Your Dictionary, 2017), can present further barriers to effective group work.

Interdependence, the condition of being mutually dependent, or reliant upon one another, is central to effective collaboration in most curriculum areas, but especially so in Technology where group project work is often the norm. This is undoubtedly a skill necessary for a successful life and thus it has puzzled me that although some group members work extremely well together, others, who on paper have the academic, organisational and manipulative skills to excel, fail to "fire" as a cohesive unit. With this in mind, the research question that drove my investigation was: *How can developing a culture of empathy foster interdependence within Year 9 Technology learning groups?*

Action research was chosen as the methodology through which I conducted my investigations, being well-suited to this conundrum. Notes Stringer (2014), “The act of observing and reflecting on our own practices can be an enlightening experience, enabling us to see ourselves more clearly and to formulate more effective ways of working that enhance the lives of the people with whom we work” (p.41). Action research does not seek to define why we do certain things, but rather “how we can change our instruction to impact students” (Ferrance, 2000, p. 3). Since I work with mixed-ability boys in my Technology classes, I preferred data gathering methods that required minimal written feedback from the boys.

Literature Review

Sending our students out into the world with the incredible ability to effectively facilitate group work is a 21st century skill crucial to success at university and in the world of work (Alber, 2012). This stance is supported in Buffet and Shriver’s (2013), *An Open Letter To The American People* in which they proclaim:

From the schoolhouse to State House, ‘academic skills’ have been emphasized, tested and reported upon, but another essential aspect of a child’s education – social and emotional learning (SEL) – has been underemphasized or altogether forgotten – with serious consequences to children, schools and communities. (p. 3)

The data from their research highlight the current gap in research and resources and, consequently, the need for further work in this area.

Compelling research by Immordino-Yang and Damasio (2007) highlights connections between emotion, social functioning, and decision making. What is termed “emotional thought” is being substantiated through advances in neuroscience, “highlighting connections between cognitive and emotional functions that have the potential to revolutionize our understanding of learning in the context of schools” (p. 3). Khunyakari, Mehrotra, Chunawala, and Natarajan (2007) find perceptions of teamwork differ between boys and girls, but regardless of this, studies have shown that satisfactory social relations among members of a team enhance a group’s efficiency (Wood & Rhodes, 1992). This has certainly been a key area of focus in my Technology classes where group work dominates many aspects of the Year 9 course. I often find that poor social interaction limits progress, not just for an individual, but as a consequence, for the whole group.

Slovák and Fitzpatrick (2015) advocate that the ability to notice, name, and differentiate subtle changes in emotions is a key goal in developing the emotional awareness of learners. I subscribe to their thinking in that the “practice of internal reflection, leading to continuous exploration of how they and others feel” (p. 8) is a sensible objective in the teaching of emotional awareness. Along these lines, Cheng, Chen, and Decety (2014) describe empathy as the “affective response that stems from the apprehension or comprehension of another’s emotional state or condition” (p. 160), allowing for the understanding of what the other person may be feeling. In addition, Cheng et al. see the experience of empathy as a “powerful interpersonal phenomenon necessary in everyday social interaction” (p. 160). Surely the role of any teaching and learning establishment, therefore, should be to contribute to the development of these skills of citizenship?

Tomkins (1962, 1963) suggested that emotion was the basis of human motivation and that the seat of emotion was in the face. Since then, more than 30 studies have replicated this universal recognition. A review of these studies by Matsumoto (2001) concludes that better reading of facial expressions and emotions can “aid the development of rapport, trust and collegiality” (p. 1), leading to better cooperation and negotiation. Further research by Dimberg (n.d.) indicates that humans are wired to read each other’s bodies through a process called “resonance.” According to Neidenthal (2016), we are all programmed to observe each other, so we can more appropriately interact, empathize, gauge and assert our boundaries. This is surely the key to effective collaboration.

Roman Krznaric (2014) believes that almost anyone can learn to develop empathy. Most individuals do not tap into their full empathetic potential in everyday life, but literature is an ideal starting point to develop empathy, particularly with adolescents. Further endorsed by Reichert and Hawley (2010) as a way to voice reflective practice and allow freedom of speech relating to one’s self, I intended to explore this avenue as part of my action.

Whilst historically, there may have been some debate as to whether empathy is innate or can be learned, the literature suggests that at the very least there is a possibility of enhancing most students’ empathetic awareness. The work of Dweck (2012) regarding “growth mindset” is particularly enlightening in this respect. Other organisations, such as the MIND Research Institute (2017), are at the forefront of initiatives to develop tools that enhance areas of expertise beyond the academic. The idea that emotions have a powerful influence on cognition has been further endorsed by Graesser, D’Mello, and Strain (2016).

Social awareness (showing understanding and empathy for others) is one of five key aspects of social and emotional learning as evidenced in *The Missing Piece: A National Teacher Survey on How Social and Emotional Learning Can Empower Children and Transform Schools* (Bridgeland, Bruce, & Hariharan, 2013). The ability to take the perspective of, and empathize with, others from diverse backgrounds and cultures, and to understand social and ethical norms of behaviour, closely aligns with my own philosophies regarding this action research. Indeed, the effects upon school climate, bullying, student well-being, and academic performance, whilst not central to my research, are worthy bi-products of Social and Emotional Learning (SEL). The impact goes far beyond the classroom; Duhigg (2016) outlines the importance of collaboration in the modern working environment. Observations are made through multiple examples of how group dynamics can be analysed to try to identify the key to an effective group. Duhigg goes on to describe “group norms” as traditions, behavioural standards, and unwritten rules that govern how we function when we gather, attributing “social sensitivity” and “equality in distribution of conversational turn-taking” (Duhigg, 2016, para 29), to group success. Indeed, evidence suggests that, “Achievement effects of cooperative learning depend on social cohesion and the quality of group interactions” (Slavin, 2014, p. 788). Such norms, I believe, are an essential foundation from which to develop enhanced empathetic skills in boys.

As an educator, there is much to reflect upon from the literature reviewed above, but what stands apart from anything else is the fact that there are certainly benefits from the development of a culture of empathy, both at school and in the modern workplace.

Research Context

Lindisfarne College is a 500-strong, state-integrated boarding and day school for boys in Years 7 to 13, located in Hawke’s Bay, New Zealand. Here, the vision is to build outstanding character in young men so that they may go on to live lives of success and significance. We address this through the College mission statement, shared by all teaching staff: to inspire and instil in our boys the aspiration to be the best that they can be in each of our four cornerstones: the Academic, Sport, Culture and Christian dimensions. Boys of all faiths and abilities are welcome, but our special character is entrenched in the Christian faith and a Presbyterian Heritage.

The participants in my action research were a mixed-ability group of 14 boys from Year 9 to whom I taught Technology three times a week for an hour at a time. I selected them as I felt

they had the most to gain from the action as they regularly engaged in collaborative work as part of their technological programme of study. My relationship with them blossomed over the course of the year as they came to appreciate my research process.

Both the boys and their parents/guardians signed a consent letter, which provided information about the action research. This authorised the use of photographic, video and audio evidence, whilst also guaranteeing anonymity of participants. Additionally, many parents/guardians were primed verbally during a parents' interview evening at the start of Term Three, 2016.

The Action

My intervention strategy involved empathy development and consolidation activities, and I maintained an open mind with regard to weekly findings and observations. Rather than adopt the unquestioning approach of a teacher with a tried and tested scheme of work, usually the norm, for the sake of expediency in a busy school year, I followed advice that Robert Frost eloquently describes in *The Road Not Taken*. Indeed, during this action, "I took the one less travelled by, / And that has made all the difference" (lines 4-5).

The structures-based bridge challenge presented to this group, the culmination of an integrated theoretical, C.A.D. practical, and newly designed social and emotional skills centred programme, strongly focused on the benefits to be gained through collaboration within small, randomly chosen working groups. Group size was deliberately set at three to invoke the need for boys to negotiate decisions, including: allocation of tasks; distribution of responsibility; choice of structural design; and aesthetic enhancement. The potential to destructively test the bridge outcome in a class "showdown" provided a "boy-focused" hook. This was obviously the aspect of the project that would speak volumes about individual and group credibility, with bragging rights capable of delivering absolute exultation!

For six weeks, the theme of empathy was delivered in the first lesson of each week through practical tasks, quizzes, literature study, competition, video, and discussion. Due to this recurring organizational structure, the boys rapidly accepted these empathy lessons as the norm and were then able to utilize these skills during their subsequent group work. From start to finish, this action lasted for two complete terms of the four-term year.

Data Collection

"Problems do not exist in isolation but are part of a complex network of events, activities, perceptions, beliefs, values, routines and rules" (Stringer, 2014, p. 103). This is a statement that I certainly subscribe to, and one which provides overwhelming justification for the

collection of a wide range of qualitative data and their subsequent coding into a number of categories. This methodology is designed to unveil some of the initial and developmental subjective thinking within my research cohort.

I instigated three distinct phases of qualitative data gathering:

- (i) initial baseline data collected through discussion of opinion, establishment of class norms, and the writing of transcripts or notes from unstructured team challenges
- (ii) (ii) developmental knowledge data collection, from literature reflections, empathetic awareness submissions, multi-session “Quizlet” team challenges, and compass point activities
- (iii) (iii) reflective interviews, team and individual PowerPoint submissions, exit card data, and video transcript from group activities and interviews

As a back-up to the above, I compared baseline quantitative data obtained through the “Reading the Mind in the Eyes Test” with the results from the same test given post-action. A questionnaire, containing mainly semi-structured and open-ended questions, was also administered at the start and end of the action to pick-up any evolution in participant mindset missed through interview or ad-hoc video. Dichotomous questions were restricted to those necessary to contextualize the richer semi-structured questions in this exercise. I gathered this quantitative data from the whole group.

My focus upon qualitative data and the rich variety of its yield allowed flexibility in my investigations and the subsequent identification of coding for the actions and activities undertaken.

Data Analysis

As sole interpreter of my data, I carefully read and coded transcripts and information from all sources; those which had been predetermined at the start of the process and those that had revealed themselves throughout the action stages. An open mind as to the perspectives and attitudes of the participants was essential at this stage to help clarify the nature of the problem in terms that “make sense” (Stringer, 2014, p. 101).

After coding the data, I recognized three overriding themes: growth-mindset / self-awareness, empathetic awareness, and interdependence. Whilst these categories all had relevance to my action research question, later analysis looked more closely at interactions between the categories in an attempt to determine if there should be any hierarchical consideration in my findings.

The wide range of data sources utilized throughout this research allowed triangulation of results, which facilitated in-built reliability, validating the themes under which the data were grouped. The social and emotional learning that I was attempting to isolate in order to study its impact upon interdependence within Year 9 Technology group work was, at this “look” stage, further validated by preserving the boys’ voices in full transcripts. This avoided falling into the traditional trap of quantifying data by numeric methods in which individual voices may be lost in rounding to majority conclusions.

Discussion of Results

Throughout my action research analysis, I heeded Stringer, who advocates the use of frameworks of analysis to “delve beneath the surface of events” (2014, p. 148), a strategy that certainly assisted in providing rich understandings. Investigation of how the development of a culture of empathy might foster interdependence within Year 9 Technology learning groups involved the extraction of eleven coded data elements, which were categorised into three themes: growth mind-set / self-awareness; interdependence; and empathetic awareness. My pre-conceived intention to code for “cultural change” was revised during the process, based upon my emerging findings, and changed to a focus on “social interaction.” This was largely due to data patterns leading me towards a previously unimagined hypothesis: that “having fun” through social interaction was a major factor in the development of interdependence within this group of boys.

Trust Leads to Interdependence

One of the early compass point exercises identified a common “worry” amongst six of the twelve boys, their greatest fear being that they “would be left to do all the work” in their respective groups of three. Boy I needed to know, in the early stages, “about their work and if they do it or not and how well they work with others without being silly.” Feedback via video transcript and questionnaire responses suggested that essentially they all wanted to engage and do well with the project, but had worries about exposing themselves to interdependence. In effect they had not yet built trust within their peer groups.

Interestingly, during the interviews conducted later in the scheme of work, earlier overwhelming feelings of concern that other boys in the group would hinder their progress had disappeared completely. Despite my own feelings, based upon previous teaching of this group, which predicted that upwards of eight boys had the potential to stray from the task in hand, only one boy did this on a semi-regular basis. Boy D admitted that, “I’m worried that I

might slack off, but I try harder because there are other people involved.” Clearly, from interview comments, there was a general acceptance of each individual’s strengths and weaknesses, but these were mitigated by the boys during their interactions, and thus did not impact upon the function of the groups. Comments from the boys in this regard included, “He’s doing the measuring and all that stuff, and I’m doing the creative stuff” (Boy D), and, “We depend on him because he’s very good hands-on and he’s very precise” (Boy F regarding Boy K). Trust was clearly being built, based upon shared experiences and problem solving over a period of time.

Sense of Community Leads to Interdependence

Six of the twelve boys admitted difficulty in “putting myself in their shoes” during the pre-project survey; this acknowledgement of difficulty with empathy motivated many of my planned class activities that were designed to build empathetic awareness. Despite such concerns, comments such as, “We all love building and we are all good mates,” and, “We can work together because we are all farmers” (Boy H), came through strongly. Boy L saw “humour, having a good time and getting stuck in” as strengths within his particular group.

The incorporation of “Quizlet” provided teamwork, collaboration, interdependence, challenge and fun. I now intend to keep this activity as a part of my regular teacher’s toolkit to bond boys into small communities, whilst at the same time serving to reinforce subject knowledge. For self-awareness / growth mind-set and true interdependence, this internet-based “live” quiz proved to be a surprisingly effective and compulsive (for the boys) method of teaching. Boys who were often independent workers sought ratification from group members in order to avoid collective failure. A low ability student, Boy E, immediately wanted to spearhead the social interaction in his group and was fully engaged. Time would reveal that his impetuosity, once self-evaluated in real time through the effect of his actions upon the collective, would be self-modified to benefit the group. Furthermore, Boy D, normally unresponsive to academic work, was fully engaged with the subject matter, primarily to enhance his social standing, while Boy B, another low ability student who normally would shy away from asking for help, was compelled to act in a way that gave his team the best chance of winning, by accepting advice and suggestions from his peers, all highly desirable learning outcomes.

Fun Social Interaction Leads to Interdependence

Certainly, fun, along with the competitive edge provided by this soft skills- focused program, proved an ideal way to encourage collaboration and the formation of relationships. Begging me to keep going at the end of the lesson, the boys would have “played” all day, given the chance. The program does not allow one student to dominate the answers, as the result is failure of the team. Instead, correct answers are distributed amongst the players. Crucially, the group did not see the activity as revision. Boy L shouted, “C’mon boys, focus.” Much video footage indicated communal learning and true interdependence.

Through repeated interventions that served to promote empathetic awareness, interdependence, and a growth mind-set, analysis of my findings highlights the fact that I had initially overlooked the “glue” that bonded these attributes together, that of fun, laughter, and enjoyment. At the outset, I, as do many teachers, tended to frown at excessive noise and flamboyant interaction in the classroom. It was only through my gradual acceptance of this that the boys were allowed to fully benefit from relationship-forging activities. Boy E was very excited about “working with the bros,” while Boy B was keen to “have a good time with the group,” and Boy D valued “having fun and a good yarn with the boys.” By far, the common theme coming through was that these boys valued the camaraderie and potential for fun that a group technological construction challenge would bring, whilst nine of the twelve boys also expressed the desire to give the project their best shot through effective collaboration.

Of my three groups of boys undertaking structures-based project work this year, this particular class with whom I applied a much more social and emotional learning focus, developed a much better cohesiveness within their working groups. Immordino-Yang (2016) claims that, “Students who feel no meaningful emotional connection to the material they learn will have a harder time both remembering it and applying it” (p. 2). There was no surprise then that these boys achieved far better grades in this unit’s end of year examination than they did in the mid-year examinations for a unit of work that did not have a social and emotional component in the scheme.

Introducing a culture of empathy in my learning groups led to interdependence built upon trust, sense of community, and opportunities for fun social interaction. Thus, I think that I have partly answered my research question in the affirmative, whilst acknowledging that

there is still much investigation to do regarding these potential building blocks, through future action research cycles, to effectively navigate the way ahead.

Conclusion

Researchers Tomasello, Carpenter, Call, Behne, and Moll (2005) propose that the “crucial difference between human cognition and that of other species is the ability to participate with others in collaborative activities with shared goals and intentions” (p. 675). This was a central theme in my action research, my goal being that through the enhancement of empathetic awareness, my boys will have learnt that interdependence within groups is a positive attribute, rather than something to be feared. It was rather satisfying, therefore, to conclude that my interventions, in what was a traditional scheme of work, resulted in an acceptance by group members that all boys have strengths and weaknesses. Camaraderie and mutual acceptance of these, combined with elements of fun and openness between peers and fellow group members, allowed boys to have that essential emotional connection with the work at hand. The empathy that existed in this group as a result of this action research, was an outcome that is highly desirable in schools, not least for its effects upon school climate, bullying, student well-being, and academic performance, each a worthy bi-product of social and emotional learning.

To foster interdependence and hence underpin the process of collaboration in my classroom, (a low stakes training ground for potential success in the wider world), it is clear to me now that boys’ ability to show empathy requires a significant focus, rather than being a hit or miss by-product of a general education. The implications for this in educational circles are significant, requiring curriculum designers to take heed of the potential benefits that this sort of research is suggesting. There appears to be an increasing ground-swell of acknowledgement through current research initiatives such as that being carried out for CASEL on Social and Emotional Learning (SEL), the work of Petr Slovak and that of Mary Helen Immordino-Yang, that make connections between emotion, social functioning, and decision making. The idea that, “Emotions have a powerful influence on cognition,” (D’Mello, 2016, p. 3), should be addressed in the curriculum, our pedagogy, and the culture of every school. It is certainly encouraging that this is being adopted in an increasing number of district and state educational goals (USA) and elsewhere in the world.

As with all action research, the investigations highlighted in this report are only the first cycle of what promises to be an enduring and potentially very rewarding study. My own

investigations, interventions, and conclusions are based solely on a small group of Year 9 Technology students in a mixed-ability grouping. Further cycles with other groups would certainly allow further triangulation of my summations. Similar intervention in other curriculum areas would add to the strength of my findings, as would analysis of any change brought about by this intervention, performed at a future date in the educational life of the original participants. Indeed, there is much work to be done in this emerging and important area of research.

Reflection Statement

I think that many teachers tend to be organisational fanatics; certainly, they like to manage and plan a learning environment right down to the last possible risk of ever being out of control of the class. This was me! Fun can be had and learning can be flexible, but only on my terms. With this in mind, being open to spontaneity and allowing myself to be a fly on the wall, soaking up the atmosphere and observing boys' interactions, was a novel experience. With hindsight though, this was a real game-changer. After spending weeks actively building empathetic awareness and engaging in collaborative tasks, it was time to take off the "trainer wheels" and see if they could manage on their own.

Boys need to know where the line in the sand is, and I think that they normally do, so to encourage them to be boisterous in their team-building, to advocate competition using such tools as Quizlet, and to condone 15 boys standing on a plank trying desperately to destroy another team's bridge was not really an unwise or unsafe action. Having fun turned out to be a major factor in building relationships. Shared experiences, whether positive or negative, were a source of bonding.

I have learnt that you can encourage and to a large extent teach empathetic skills, but also that there must be a suitable forum for these skills to naturally develop. I will certainly be looking to provide this in my future teaching.

Acknowledgements

Above the library in my previous school is a motto in Greek, which translates to "Learning is Lifelong." I firmly believe this and wish to thank the IBSC, Ken McLeod, (Lindisfarne College Rector), Lindisfarne College Board of Trustees, "Team Laura" (especially Laura Sabo), Dave Rennie, (my mentor), Bev Harrison (my critical friend), and 9REH (2016), for their part in facilitating this journey of self-discovery.

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Appendix A: Pre-Project Survey

Pre-Project Survey

1. Were you pleased or disappointed when I picked your team members?

Disappointed

Pleased

2. What made you feel this way?

.....
.....

3. Which of the following do you see as possible problems when working in your group on this project?

I find it hard to put myself in their shoes

I like to be in charge

I like to be told what to do

I don't work well with some of the people in my group

4. What things do you think will slow your group down?

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.....

5. What do you see as the strengths within your group?

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.....
.....

6. If you could have chosen your own group, which two boys would you have put yourself with?

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7. What makes you think that this would be the best group for you? (what qualities do they have that you would be looking for?)

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.....