

# INTRODUCING A 'GENIUS HOUR' PROJECT TO ENHANCE COLLABORATION FOR YEAR 6 BOYS

Paul Harrington

Shore Preparatory School, Australia

*It's our job in education to free up time for innovation.*

*It's our job to open their minds to new ideas.*

*It's our job to prepare them for the present and future possibilities.*

*~ AJ Juliani*

## **Abstract**

This action research project involved Year 6 boys at Shore Preparatory School, Sydney who were engaged in a series of sessions where the boys had considerable choice over the content, method and presentation of their learning. The project was designed to leverage a highly motivational educational situation as a vehicle for the boys to learn more about what it really looks like to work collaboratively, and to demonstrate this understanding in their interactions with peers throughout the learning sessions. During the action, the boys researched, experimented and practised in small groups, having to make many decisions and to work collaboratively. The boys' shared understanding of productive collaborative behaviours and regular reflection on their collaborative performance meant that the learning time was both fun and reasonably productive. By the end of the project, it was apparent that using a fun and motivational learning situation where students had considerable personal choice was an appropriate and relevant opportunity for boys to gain a shared understanding of collaborative behaviours and to demonstrate those behaviours during their learning.

## **Introduction**

Is it collaboration or simply group work? Many primary (elementary) school classrooms spend a large proportion of each day with students working in groups of varying sizes. In fact, individual learning is often a rarity in many classrooms. Seating within the classroom is often arranged to facilitate grouping, with the benefits of co-operative learning seen to outweigh any possible negatives. Students are often encouraged to leverage this grouped environment to assist with learning by using "checking with the group first" as a strategy if

unsure how to proceed in a learning situation.

This action research was prompted by an observation that, whilst upper primary students are very comfortable and familiar with working in groups, they sometimes struggle with “higher stakes” collaborative projects (a longer-term project where a grade or similar will be assigned). This raised questions about the need for explicitly outlining or teaching the subskills required for successful collaboration and providing opportunities for students to practise collaboration in a meaningful and motivating context. It was hoped that by implementing such explicit teaching and opportunities for collaboration as my “action,” a raised awareness of the skills of collaboration would be promoted in the boys and that this would eventually transfer or generalise into all group learning interactions.

I considered that the introduction of a weekly “Genius Hour” session would be extremely group-worthy and motivating for the boys, and would be an effective vehicle for the change proposed. Hence, the creation of the research question, “*How might the introduction of ‘Genius Hour’ enhance collaboration for Year 6 boys?*”

Each week there was a set amount of time allocated for the students to work in small groups on their passion projects, where students were challenged to explore something they wanted to learn about. The plan was that they would spend the first few weeks researching the topic before creating a product that would be shared with the class to demonstrate their learning and to hopefully also teach their classmates. Creativity and “thinking outside the box” was encouraged. Throughout the process, the teacher would facilitate the student projects to ensure that they were on task. Self, peer, and teacher assessment on the demonstration of collaborative skills would also form a component of the task assessment.

The proposed “action” would be a motivating task for the Year 6 boys where they would actively engage in developing collaborative skills. For this type of intervention, action research was an appropriate methodology as it focuses on a real-life change to practice to meet an identified need. The action would be flexible and nimble in its implementation and could use a range of qualitative data collection strategies to triangulate findings, which could shape future successful learning opportunities.

## Literature Review

Many recent articles and writers have identified collaborative skills as a key ingredient for the success of our students, both within the context of their formal pre-workforce education, and for success as productive participants in a changing workforce beyond that formal educational setting (Kay, 2010). As educators, it is important that we provide students with opportunities to develop this and other key skills. To this end, Bruniges (2016) notes:

Pedagogy in the 21<sup>st</sup> century has to put the emphasis on the 4Cs – collaboration, critical thinking, creativity and communication. In our fast-changing world, more of the same knowledge and skills will not address the challenges of the future. (para. 4)

In support of the need to adopt pedagogical practices that will enable opportunities for in-class work that allows students to refine and develop these skills, many articles also point to the importance of establishing a classroom environment that is supportive and will enable this type of learning to flourish.

A key practical aspect of students developing collaborative skills is for the educator to recognise the importance of explicitly developing the students' understanding of the key components of successful collaboration. Harvey and Daniels (2015) outline a succinct list of social strategies that will be displayed during successful collaborative learning. Their list of *How Proficient Collaborators Think and Act* provides a very useful launching point for developing a student-created list of what collaboration would look/ sound like in the classroom context. Harvey and Daniels also discuss the inevitability of having students who will most definitely not display the desired behaviours for successful collaboration. One of the challenges for educators, note Harvey and Daniels, is not to teach the desired behaviours, as they suggest most students already have the desired social skills, but rather to encourage and refine the students' motivation to bring those skills into the classroom collaboration.

For this project, the pre-survey, a useful data collection tool employed to establish a baseline of attitudes (Stringer, 2014), clearly identified that there were students who brought generally negative attitudes towards group work to the project. As Harvey and Daniels (2015) suggest, digging into those attitudes within a framework of shared understanding of what successful collaborative work should look like, could provide valuable experiences and opportunities to alter students' attitudes.

An important aspect of this project was that the development of important collaborative skills, both displayed by the students and in their refined understanding of those skills (in a metacognitive sense), was within the motivational context of the project. Lotan (2003) highlighted key design features of a “group-worthy” task and then expanded on each feature with clear explanation and practical examples. One area of note within these explanations is that for group learning tasks to be successful for a diverse range of learners there must be scope for both multiple means of representation as well as multiple means of action and expression. This fits consistently with the Universal Design for Learning principles (Rose & Meyer, 2006) and points to the importance of careful design if collaborative tasks are to achieve academic and social benefits for all students.

Denton (2005) provides support for an important premise of this action research project; that providing academic choice will not only be motivating for students, but will enhance their learning:

Used well, the strategy breathes energy and a sense of purpose into children’s learning. When students have choices in their learning, they become highly engaged and productive. They’re excited about learning and sharing their knowledge. They’re likely to think more deeply and creatively, work with more persistence, and use a range of academic skills and strategies. In addition, research has generally found that children have fewer behaviour problems when they have regular opportunities to make choices in their learning, a finding supported by anecdotal evidence from teachers. (para. 3)

Maiers and Sandvold (2014), and Juliani (2015), outline how the principles of the Google Genius Hour can apply in the classroom as they do in the corporate environment. They suggest that the teacher provides a set amount of time for the students to work on their passion projects. An important feature is the motivation provided when students are able to explore something that they want to learn about. In this action research project, the students spent several sessions researching the topic of their choice, working towards creatively sharing their learning with the class. Groupings were formed, based on shared interest, with areas of interest further refined by negotiation within the group. Throughout the process, the teacher helped to facilitate the collaborative learning groups to ensure that they were on task and working towards deadlines.

It was within this highly motivational setting, prior to the commencement of the Genius Hour sessions, that the students and teacher spent time developing a shared understanding of what successful collaboration would “look and sound like” based on the framework as suggested by Harvey and Daniels (2015). These student-generated list and posters provided an important reference point for discussions and feedback about whether collaboration was evident within the various group interactions.

A goal of every teacher should be to create lifelong learners and it was hoped that building and refining the students’ understanding and application of collaborative learning behaviours, within the context of the autonomy and choice provided by the Genius Hour projects, would be a beneficial step towards that goal.

### **Research Context**

Shore (Sydney Church of England Grammar School) is an independent comprehensive school for boys from Year 3 to Year 12 (approximately 1500 students), with a K – 2 co-educational campus (150 students). The school promotes a Christian understanding of the world, celebrates the pursuit of personal best in a culture of learning and thinking, and challenges all to be responsible citizens with an attitude of service to others.

The research participants were my class of 24 Year 6 boys who were particularly enthusiastic about having some input into what they would be learning during their final few months of primary education. They entered the project with mixed perceptions of working collaboratively based on previous experience, but group work is certainly a common feature of our classrooms and all students were comfortable with the format proposed. Spending a large amount of time with the group each day meant that the sessions were relatively simple to schedule.

Based on the IBSC templates provided, a letter explaining the action research project was distributed to be signed by each boy and a parent. The letter specifically sought permission to share interview comments, photographs and video footage in the project’s presentation at the 2017 IBSC Conference. The letter assured anonymity of the participants in the study and explained that boys’ names or identification would not be included in any of these forms of transmission.

Although all 24 boys participated in the collaborative Genius Hour sessions, as only 16 boys

returned the signed consent forms, data was only collected from these 16 authorised participants.

### **The Action**

The first step in the action was to engender general student interest in the project by posting some “What is Genius Hour?” signs around the classroom. When questioned by the students, I advised that all would be revealed in the following week. The launch was a brief outline of the proposed action and an invitation to participate—all students would be involved in the learning sessions, but participation in the research aspects was voluntary. Those who nominated and received permission to participate completed a short survey which provided the first official data on pre-action attitudes and understanding of collaborative skills.

As a class, the boys undertook a review of collaborative skills and activities to foster a shared understanding of what successful collaboration may “look and sound like” (using Harvey’s and Daniel’s ‘*How Proficient Collaborators Think and Act*’ strategies (pp. 57-59):

- Be responsible to the group
- Listen Actively
- Speak Up
- Share the air and encourage others
- Support your views and findings
- Show tolerance and respect
- Reflect and correct

In small groups, the boys then prepared and displayed classroom posters, which outlined these strategies for successful collaboration.

The Genius Hour project was then introduced, suggesting possible topic ideas and setting up groups by negotiation. Assessment guidelines and a rubric were established, which included a social skills component as assessed by teacher, peers and self.

Genius Hour sessions (6 + introductory session) were then held during class time after lunch break. Teacher facilitation included regular reference to “How Proficient Collaborators Think and Act” (Harvey & Daniels, 2015) strategies.

The culmination of the project for the boys was the product-sharing celebration with the entire class. Data regarding post-action attitudes and understanding of collaborative skills

were then collected, again in the form of a short survey.

Unfortunately, as the boys' sharing of their learning took place in late November and the school year finished on December 1, I was unable to share the research findings with the students as comprehensively as would have been ideal.

### **Data Collection**

In conducting an action research project it is vital "to gather information that enables researchers to extend their understanding of the experience and perspective of stakeholders." (Stringer, 2014, p. 101) Stringer notes further that action research differs from "traditional hypothesis-testing research" as the participants (that is, the students in this case) are knowingly engaged in the process, rather than being objectively observed, plus there is no initially hypothesised answer to the research question.

Data collected were acquired using ethical qualitative methods that respected the privacy and anonymity of participants. Pre- and post-action surveys were conducted using a Likert-style scale to allow for comparative analysis of the pre- and post-action data. To ensure the data collected using this method were rigorous and credible, it was important to frame the questions so as not to "inadvertently incorporate our own ideas or views" (Stringer, 2014, p. 102). Laycock (2016) provides practical advice on how to avoid pitfalls, such as biased or leading questions, in the formulation of questions for surveys and interviews.

Whilst the pre- and post-surveys provided vital data for analysis, the nature of this action research project required data to be collected throughout the project, using a number of methods. This ongoing collection (and analysis) of data provided important information to make necessary changes throughout the project. The "action" was designed to be flexible and nimble in its implementation and to use a range of qualitative data collection strategies to triangulate findings and to adjust the action accordingly. In a primary-school environment, where the class teacher spends several hours each day with the same class of students, the use of simple strategies such as "exit tickets," verbal or written, can provide simple but effective feedback for the teacher. Exit tickets, or similar variations, were used at the conclusion of each session. These were typically a reflection on how the group had collaborated, using a shared understanding of what successful collaboration would "look and sound like" (Harvey & Daniels, 2015, p.57)

Other methods used to collect data included semi-structured interviews and teacher

observation, which included anecdotal notes, photos and videos. One technique used with visual media, as suggested by Stringer (2014), was to use “photo elicitation” where a still image or video was taken during a session and the participants were later asked to “describe or comment [on] ... events in which they have participated” (p. 117). Several participant groups used video as a means of recording and presenting their learning, and in some cases, the off-camera dialogue between participants (in the raw footage before editing) provided an anecdotal example of the collaboration skills being displayed.

Students also participated in several sessions of a secure online chat and the transcripts of these were used as data. A post-project interview was conducted to ensure validity of results and to confirm that student voice was accurately represented; ideally this process could have been more comprehensive.

### **Data Analysis**

In keeping with the transparent and open nature of the relationship between the participants and the researcher, prior to the initial formal collection of data, terminology around the collaborative skills being examined was discussed with the boys to ensure a shared understanding. One of the informal observations to come out of this discussion was that the boys appeared to clearly differentiate between co-operative and collaborative tasks. In many primary-age classrooms, group work is the norm and even seating plans encourage this social style of learning. Students at our school are actively encouraged to use strategies such as, “ask 3 before me” and “3BFT” (brain, browse, buddy, teacher) to work with each other and to enhance their learning. Several of the more academically able students expressed negative attitudes towards completing tasks collaboratively when it was considered “high stakes.” Some comments from these boys included, “I would rather do it all myself” and, “I have to end up redoing some of the (others’) parts.”

After this discussion, boys completed a pre-project survey of attitudes. This survey was presented as a series of positive behaviour statements; for example, “Group members show tolerance, receiving others’ ideas respectfully,” which were based on Harvey and Daniel’s (2015) suggestions as to how proficient collaborators think and act. Students responded using a Likert-style scale (Strongly Agree to Strongly Disagree) to each statement, based on their prior experience of working collaboratively. Students also responded to the additional statement, “I enjoy working on collaborative tasks.”



To summarise, the results of this initial survey across all the questions, showed the students had a range of attitudes based on their prior experience. Most responses were clustered around the centre, with very few strongly agreeing or strongly disagreeing with any statement.

In searching for common themes emerging from the initial survey, two statements where the majority of responses were clearly positive were, “Group members are open to reviewing their progress and making changes to plans as required” and, “I enjoy working collaboratively on group tasks.” Two statements where the majority of responses were clearly negative were, “All group members offer their viewpoint and don’t get steamrolled” and, “Group members speak up and use appropriate tone and voice level.”

After further class discussion, the first collaborative task for each group was to design and produce a classroom poster that promoted good collaborative behaviours. The production of these posters provided useful, and perhaps unexpected, insight into the students’ understanding of how to think and act collaboratively. Many groups were able to distil the essence of the more formal statements (as per survey and discussion) into more “catchy” and relevant phrasing, demonstrating a clear comprehension. But could they “walk the talk”?

The vehicle for this action research project was a Genius Hour (passion) project that students completed over several sessions. It was made clear to all students that the aim of the project, as well as the knowledge and skills around their chosen topic, was to develop skills and knowledge in working collaboratively. The students were clearly enthusiastic about having both choice in their learning topic and more flexibility in how they would approach and present their findings. It was hoped that this motivation would carry across to the clear demonstration of collaborative behaviours within the group interactions. The student-produced posters were clearly displayed around the classroom and provided an easy reference for the teacher to suggest any modifications to group dynamics, as well as a quick point for student feedback after each session.

### **Discussion of Results**

Teacher observations, particularly during the first few sessions, indicated that students were quite aware of collaborative behaviours and were able to correct and coach their peers appropriately, typically with reference to the posters displayed in classroom. At the end of each session, as a form of quick feedback, students were asked to comment on how well their

group had performed on a particular “behaviour”; one of the statements from the initial survey. Responses were by a simple show of hands and again in the Likert scale from strongly agree to strongly disagree. Without exception during this quick feedback, students agreed with the statement more than in the initial survey.

At the conclusion of the final presentation sessions, students were asked to comment on what they had found valuable (or otherwise) about the learning experience. This feedback was overwhelmingly positive and included comments such as: “I learned what other kids could do.”; “I liked the team aspect of Genius Hour.”; “What I learned was that you didn’t have to stick with the same idea.”; “I learnt that teamwork is valuable.”; “You have to be flexible if the rest of your group doesn’t agree with you.”; “I learned that you don’t always get your own way.”; and, “You have to work together to do well.”

The final data collection method was the post-project survey, identical to the pre-project with the exception that students were asked specifically to comment on the behaviours of their group during the project sessions. In searching for common themes emerging from this survey, in comparison to the initial survey, it was clear that the students more strongly agreed with all statements; that is, that group members had successfully displayed the desired behaviours. Responses were positive to all statements—there were no apparent areas of negativity as noted in the initial survey.

The results indicated the following learning outcomes for the boys involved in this project:

### **Being Responsible to the Group**

With the motivation provided by student choice and a clear, shared understanding of what successful collaboration would involve, students embraced their responsibilities to the group. This was observed in numerous interactions and completion of tasks throughout the project. Whether it was to visit a hardware store over a weekend to purchase supplies, to bring the correct equipment to class, to conduct research and practice between sessions or to assist a group member to perfect a newly acquired skill, the boys were engaged in the process and took their responsibilities seriously. Whilst it may be an example of extrinsic motivation, it was also observed that on the few occasions when a group member did not meet assigned deadlines, and hence the group’s progress was delayed, group members (respectfully!) communicated their displeasure.

### **Respecting All Views and Listening to Peers**

Through teacher observation, student comments, and the responses to the final survey, it was clear that students were respectful of the contributions of all group members and were open to changing ideas or direction based on the range of ideas generated within the group.

### **Confidence by All Students to Contribute to the Group**

As with any diverse group of students, strong and confident personalities can tend to dominate within a group task, sometimes with force of personality, a loud voice and a tendency to drown out the less assertive students. This was clearly evident in the responses to the initial survey, where the statement, “Group members speak up and use appropriate tone and voice level,” was responded to negatively, in terms of the boys’ attitudes. With frequent reference to the shared understanding of what successful collaboration entailed, all students within the groups felt equal and their contributions were valued. This was also clearly conveyed in the more positive attitude towards this in the final survey.

### **Conclusion**

In summary, analysis of the data collected indicated that this was a successful learning experience for the students in terms of improving their understanding and practical demonstration of appropriate collaborative behaviours. The students were motivated by the Genius Hour concept, with its flexibility and freedom, and their enthusiasm was successfully leveraged to promote a deeper understanding of how proficient collaborators think and act.

One positive and practical outcome of this successful action research project is that the school has, for the first time in 2017, made specific timetabling allowance each week for students to pursue a passion project outside the regular curriculum. It is currently being trialed across all Year 6 classes.

Future research could look at how to best ensure the extension of these attitudes and behaviours to a range of collaborative learning tasks, and to seek the best model for the explicit teaching and learning of these vital skills.

### **Reflection Statement**

This project was a unique opportunity to explore some new ideas and practice which would impact on student learning plus extend the repertoire of understandings and strategies available to me as an educator. With disengagement by boys in the learning process being a

frequently noted feature of our schools, this was an opportunity to test whether allowing greater choice in their personal learning would be as motivating for the boys in my situation as it had been noted in current research. On the presumption that the boys would be energised by this control over their learning, it was seen as an ideal situation to focus on a key 21<sup>st</sup> century skill – collaboration. Whilst these preliminary findings cannot be generalised, the strong suggestion is that boys may definitely be engaged by having more personal choice in their learning, and that a motivated learning situation is an ideal opportunity to improve the boys' general capabilities.

I felt fully supported by my teaching colleagues, the school executive and the IBSC team including my fellow research cohort participants. I also felt confident in the knowledge that I was being given “permission to fail,” with no particular requirements associated with the investment being made, both financially and in other resources. I was also confident in the process and communication available from the outset that the various deadlines set for completion of tasks were all working towards having the raw bulk of the final report in place, ready to refine and collate. I plan to adopt this methodology for longer-term assigned tasks for my students as it is an empowering way to break a substantial final expectation into achievable chunks.

Trish was an incredibly friendly, motivating, dedicated and knowledgeable IBSC Team Advisor and leader, clearly more devoted to the collaborative communication process than I was; and she was communicating with a cohort of 17 researchers!

One hurdle which presented during this project, and which is a salutary warning particularly for southern hemisphere potential research participants, is that with the academic year for independent schools often concluding in late November/early December there was a considerable rush to get the student participation in the “action” satisfactorily completed. What seemed like plenty of time from the balmy days in Vancouver in late June quickly became a race with the realisation that to fit approximately eight weekly sessions, along with the usual end-of-year disruptions, would require starting by mid Term 3; late August. Although it was a valuable and motivating learning experience for the boys, as it was outside the regular curriculum content it was not deemed appropriate to devote more than the one weekly session to the project. With a project that focused more closely on core curriculum, it would have been possible to condense the sessions into a much shorter overall timespan. The

slightly unfortunate aspect of this timing is that I was unable to spend as much time as planned ensuring that student voice was accurately reflected in the research findings. For a northern hemisphere researcher, even though clearly the start of the project could not be until the 2016/2017 academic year commenced, the school weeks with students through December and even into the New Year would have been invaluable.

### References

- Bruniges, M. (2016). *21st Century teaching and learning*. Retrieved from <http://www.dec.nsw.gov.au/about-us/key-people/secretarys-update/21st-century-teaching-learning..>
- Burgess, D. (2012). *Teach like a pirate: Increase student engagement, boost your creativity, and transform your life as an educator*. San Diego, CA: Dave Burgess Consulting.
- Denton, P. (2005). *Academic choice*. Retrieved from <https://www.responsiveclassroom.org/academic-choice/>
- Harvey, S. & Daniels, H. (2015). *Comprehension & Collaboration*. Portsmouth, NH: Heinemann.
- Juliani, A. J. (2015). *Inquiry and innovation in the classroom: Using 20% time, genius hour, and PBL to drive student success*. New York: Routledge.
- Kay, K. (2010). Foreword: 21st century skills: Why they matter, what they are, and how we get there. In J. Bellanca & R. Brandt (Eds.), *21st Century skills: Rethinking how students learn* (pp. xiii-xxxi). Bloomington, IN: Learning Tree.
- Krebs, D. & Zvi, G. (2016). *The Genius Hour guidebook: Fostering passion, wonder, and inquiry in the classroom*. New York, NY: Routledge.
- Laycock, D. (2016, June). *Guide for data collection*. PowerPoint presentation at the meeting of the IBSC Action Research Program, Vancouver, Canada.
- Lotan, Rachel A. (2003). Group-worthy tasks. *Educational Leadership*, 60(6), 72-75.
- Maiers, A., & Sandvold, A. (2014). *The passion-driven classroom: A framework for teaching and learning*. Abingdon, Oxon: Routledge.
- Rose, D. H. & Meyer, A. (Eds.). (2006). *A practical reader in universal design for learning*.

Cambridge, MA: Harvard Education Press.

Stringer, E. (2014) *Action research* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.