

STUDENT AGENCY AND PORTAL TECHNOLOGY: A CASE FOR GRADE 6 BOYS AS CURRICULUM DESIGNERS

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Abstract

As independent school educators, we have a multitude of resources available to us to enhance our teaching practice and engage students. Most notably, our resources often include cutting-edge technology and highly skilled students. In this action research project, I examined how leveraging student motivation, technical expertise, and experience could enable Grade 6 boys to design curriculum and problem-solve in their Technology class. Using Portal technology, students were tasked with connecting our Gilman community with one of five locations worldwide, researching the country where the Portal existed, and developing a plan for discussion. My research focused on how the invitation to GRADE 6 control the direction of one's learning could impact student agency and energy.

I discovered that the highest level of engagement and energy among the students occurred when they were immersed in designing and facilitating their own Portal lesson plans. Additionally, students grew in their ability to reflect on how they approach problem-solving and how they articulate and address areas in which they need assistance when tackling a problem. From the results of this research project, it is evident that students need more opportunity to design curriculum and set goals for their own learning. In my work with the boys throughout this project, I strove to help them understand new imaginings about themselves and imbue them with self-esteem and creativity. Challenging the boys to create their own projects for learning and to undertake the tasks embedded in curriculum design helped them develop skills needed beyond the classroom and fostered deeper relational connections between the student and teacher.

Glossary

Portal: Shared Studio Portals are shipping containers painted gold that are equipped with large scale video conferencing software and a screen, allowing for users to virtually interact on a life-size scale. This new tool for 21st century education “brings communities together in immersive spaces to talk, dance, play, and collaborate as if in the same room” (Shared Studios Education, 2019, para. 3).

Problem-solving: A student’s capacity to define what they want to research and share for a lesson in the *Portal* and identify the necessary resources to create and complete their lesson.

Student/learner agency: This is defined as “the capacity and the freedom of the learners to exercise choice regarding what is to be learned and to co-create how that learning is to take place” (Poon, 2018, para. 6). By providing my students with an invitation to design lessons for the Portal and the tools for creating curriculum, the students were able to control goal setting for this class.

Introduction

In my first year of teaching Technology, I was struck by the high-level of competence and varied tech skills that my students maintained. I questioned why the boys were not more actively involved in identifying the tech tools they wanted access to and the acquisition of skills to use them. I believe technology is an area where students should guide the direction of the curriculum. As I started my second year, teaching Grade 6 boys, I wanted more student input into creating the Technology course goals and recommendations on how to achieve the defined student learning outcomes from the boys’ perspective. Exploring student agency within the context of my action research project allowed me to try new pedagogy in the classroom and see what effect it had on overall engagement and learning with the boys.

In the summer of 2019, Gilman School acquired a Shared Studios Portal. This new technology offered an opportunity for the boys to imagine what connections could be made and what topics or activities Gilman students could engage in during a Portal session. My action research project provided an opportunity for students to identify a location of a Portal with which they wanted to connect, research that country location and community culture, and design an activity

for learning within the Portal. I then investigated their engagement and energy for this activity in the classroom.

Action research presented a deliberate process for me to identify what problems lay within the existing curriculum for the Technology course. Engaging in this process, I viewed and approached problems I discovered with a new lens on my own educational practice. Most importantly, the methodology of action research afforded me the opportunity to, just like the boys, refine and improve my problem-solving skills (Mertler, 2017).

Research Question: *How does empowering Grade 6 boys to design their own digital projects affect their engagement and problem-solving skills in a Technology class?*

There were several facets of my research project that had particular relevance and importance for boys. First, I wanted to “talk to boys in their language in a way that honors their pride and masculinity [and] ... use them as consultants and problem-solvers” (Kindlon & Thompson, 1999, p. 247). When confronted with many challenges to prepare boys for their life beyond school, I aimed to use this action research project as a scenario where I would confer with students to partner and create a rich and engaging curriculum. In Michael Reichert’s (2019) book, *How to Raise a Boy*, the author stresses that boys should have opportunities to take responsibility for their own leadership. My action research project provided the boys with an opportunity to lead and problem-solve. My approach shifted the student role from passive learner to that of a consultant providing expertise and direction. By actively soliciting their expertise at the onset of the course to shape the direction of our learning for the year, I highlighted for my students the value that I placed on their own input and learning goals.

Second, embedded in my approach and in the design of this action research project, was the theory of relational teaching. In the global research report published by the IBSC, *For Whom the Boy Toils*, researchers Reichert and Hawley (2013) determined that instructional success hinged on the instructor’s ability to sustain relationships while they figured out the teaching pedagogy that worked for the student. Because my approach to teaching the Technology curriculum with the students was new, it was essential that I build and maintain relationships with the students as we progressed through the action research cycle.

Literature Review

As I endeavored to explore the engagement and development of problem-solving skills that are derived from moving from a teacher-based program to a more learner-centered curriculum in a Grade 6 Technology course, two overarching instructional theories served as the foundation for my action research: constructivism and relational teaching.

Constructivist teaching is based on the belief that learning occurs when learners are actively involved in knowledge construction, as opposed to passively receiving information (Marlowe & Page, 2005). Research suggests that students learn more when they are intensely involved in their education and asked to think about what they are learning. Traditionally, higher education institutions have employed teacher-centered practices focusing on the one-way transmission of knowledge. Students take the role of passive recipients of knowledge, where information flows from the expert instructor to learner (Almarghani & Mijatovic, 2017). Although information is important, passively accumulating disconnected information is not learning (Marlowe & Page, 2005). Creating a more inclusive classroom that invites students to direct their learning requires that teachers reimagine their role in order to become an expert on facilitating this learning more than an expert on any particular subject. For students to effectively grow their problem-solving and critical thinking skills, they must effectively identify the problem and then formulate and justify a strategy for that problem (Shadle et al., 2012).

Actively participating in the construction of learning objectives can positively impact the student experience (Nixon & Williams, 2014). Giving students a choice about what and how they might learn can engage learners, and the control of those choices can lead to improved student effort, performance, and intrinsic motivation (Dack & Tomlinson, 2014). Further, Richardson (2019) posits that the first step in moving toward more student agency is for teachers and other stakeholders to acknowledge and articulate the fact that learning only occurs at depth when the learner has choice. In moving towards a learner-centered classroom, however, there is a need to balance control between student and teacher in the learning objectives and defining what the expectations are for both parties (Richmond et al., 2019). This is a shift from having the student shoulder responsibility for executing the work in any given course.

The second teaching theory guiding this project is relational teaching. Butler and Shibaz (2014) posit that student motivation for learning has been a primary focus of educational research for decades and that motivation can be examined in conjunction with the teacher's goals for achieving close and caring relationships with students. Further, they found that the quality of relationships that teachers create with students is an important aspect of their competence as teachers. Embedded in my action research project is a priority to focus on, cultivate, and maintain relationships that I have with my students so that our work together will result in the best possible educational outcomes for the boys.

Expanding on this idea of relational teaching as central to motivating and engaging students, researchers in a recent study asked students to examine a syllabus and determine if it was either learner-centered or teacher-centered (Richmond et al., 2019). They found that students perceived the instructor of the learner-centered syllabi as more caring, receptive, happy, creative, enthusiastic, engaged, and as having more rapport with the students. Their findings suggest that designing a course around student-centered goals may affect student perceptions of teacher behaviors and their own ability to connect with that teacher. With specific regard to boys' engagement and learning, conditions boys encounter in schools and in their relationships with teachers enables their success (Reichert & Hawley, 2013). These relationships are cultivated by the effective use of the relational teaching strategies (Nelson, 2016).

This action research project involves investigating the connection between engagement and participation when students are problem-solving. Problem-solving skills consist of several interconnected skills, such as the processing of information, reasoning, planning and decision-making (Klegeris et al., 2018). Through consistent exposure to the problem of designing curriculum, students will consider possible options, and plan and apply what they have learned to define the structure of learning (Wise & McTighe, 2017). Research suggests that college students have exhibited the need for the development of their analytical thinking, problem solving, creativity, and research skills (Almarghani & Mijatovic, 2017). This finding serves as a cautious reminder that my much younger Grade 6 boys required greater levels of sensitivity and encouragement on the part of their teacher to enable this action research project to succeed.

Considerable research indicates that college students are both more likely to persist and to perform at high academic levels when they perceive themselves to be members of a cooperative and supportive learning community (Richmond et al., 2019). This provides some assurance that while navigating the new role of co-designing curriculum with my students, the action research outcomes will be beneficial for both the students and teacher. In addition, research suggests that it can be difficult to monitor and interpret the problem-solving skills of individual students, but as the teacher, I can serve as a role-model to the students in the problem-solving process (Gulacar et al., 2013).

Because the technology we have accessible to our students is an area where most are naturally confident, acknowledging their mastery in this area is imperative. Technology is in fact an area where students have a significant amount of expertise and therefore may be best suited to the role of curriculum designer (Richardson, 2019). Additionally, the problem of defining the curriculum in their own technology courses will serve as a stimulus for students to identify what they need to learn in order to understand or problem-solve (Klegeris & Hurren, 2011). Given our advances in technology, allowing students to take command of their own curriculum has never been easier.

Research Context

This action research project was conducted at Gilman School in Baltimore, Maryland. Gilman was founded in 1897 by Anne Galbraith Carey and the mission has remained focused on educating the entire boy—mind, body, and spirit. Situated in the Roland Park area of Baltimore City, the school serves families from a broad variety of neighborhoods in the greater Baltimore metropolitan area. The school enrolls 1025 students in three divisions: Lower School, Grades Pre-kindergarten through Five; Middle School, Grades Six through Eight; and Upper School, Grades Nine through Twelve.

Working with 17 boys, ages 10-11 years-old in one section of Gilman's Middle School Grade 6 Technology course, I conducted research from September through November 2019. Prior to beginning the action research project, I communicated with the boys' parents about the scope of my research and asserted that the boys would acquire the tech skills embedded in the course

curriculum, while also exploring personal choice. Families were sent digital consent forms to return so that I had approval to work with their sons, including the use of photos and videos for this research project.

The Action

Prior to beginning the year-long Technology course, I surveyed the boys about their overall comfort and skill level with different technologies we routinely use at Gilman. They were then queried about what technologies they would like to try, learn, and use in our class. I introduced the opportunity for them to help shape and direct what activities we would accomplish in our course by pitching a design lesson for use in the Portal. The boys engaged in a design thinking activity to generate ideas around what communities would they want to collaborate with and why.

I worked with students for one class period that met weekly, for eight weeks. To provide an example of the connections that had been facilitated using the Portal, the boys viewed a video that was created by Shared Studios. Additionally, the boys spent class time in the Portal; once to explore the space and technology used to run the connections, and an additional period connecting with a Portal in Rwanda.

The boys then used their iPad in each class to research and document their lesson plan. They were given multiple class sessions to develop their lessons by researching prospective countries to make a connection and brainstorming ideas with their peers. Students used school-provided databases to explore different facets of the country they had identified, such as the culture, geography, and education system, and submitted a lesson plan that outlined the connection city and the basis for our discussion in the Portal. Throughout the process, the boys sought my help in class and contacted me with questions via email and in-person during study hall and office hours. The project was ambitious, and students stretched themselves to consider and dream of new ways to connect in the Portal. Ultimately, I selected one lesson to implement with our class, which was a Portal connection with the Netherlands through which we shared information about food from each of our countries and cultures.

Data Collection

Data collection during my action research project was largely qualitative in nature as I sought to explore student engagement related to problem solving. The collection of qualitative data included a pre-course survey, participant research and writing assignment work samples, individual and group video reflections, semi-structured individual interviews, class photos and videos, student assessment surveys, and my own journal with field notes and reflections.

At the onset of the project, I surveyed students on what skills they wanted to learn in their Grade 6 Technology course. I compiled and coded their responses and shared the resulting data with the class. The data collected from this brief survey provided an overview of student interests and an exemplar as to how the boys shape curriculum. Each boy was challenged to design a lesson for the Gilman Portal and the resulting plans of their work provided data samples. After completing the lessons, I surveyed the boys by conducting interviews with small focus groups of two to three students. This structure allowed me to collect personal experiences, while still providing an arena where students could candidly dialogue about the process. Conversations ensued where students explored different facets of problem-solving and asked questions, providing unique data and reflecting the participatory nature of action research. At the conclusion of the project, I conducted individual interviews about the process of designing a lesson for our class. Students shared their thoughts and commented on aspects of problem-solving they were charged with and experienced in other classes.

Throughout the project, I utilized the "Good Time Journal Activity Log" (see Appendix A), which is a tool to measure engagement and energy from *Designing Your Life* by Burnett and Evands (2016). I asked students to stop at different junctures once per class to rate and record their engagement and energy for the activity they were engaged in. Utilizing the framework from the book, I shared that engagement was being "in the zone" or how they knew "just what to do and how to do it" (Burnett & Evands, p. 45). I then asked the boys to consider how the task they were engaged in "sustained their energy or drained it" (Burnett & Evands, p. 47). Data collected from the flow survey quantitative tool provided a counterpoint by which to compare the boys' narrative statements and videos regarding engagement and energy in the classroom. The range of data collected allowed me to triangulate findings and interpret observations through multiple lenses. Regular meetings with, and support from, the Assistant Head of School and the Director

of Institutional Research & Data Analytics ensured that the data collected accurately represented the students' voices and included negative findings.

Data Analysis

All identifiable student information was removed from the data and student names were coded with letters. I transcribed individual and group video reflections and read through transcripts to identify themes. The initial coding was a mechanism to highlight key information. I reviewed transcripts for a second time, labeled relevant ideas, and formally coded these. Themes that I coded were relevant to my action research project since they were repeated, predicted, students noted issues explicitly, and/or the theme resonated with overarching trends from research on the topic. I then looked for these themes in the interviews that I transcribed.

In the final student interviews, I asked the boys questions related to the themes around student agency and how they were associated and elicited with class activities. Responses from the interviews were divided and summarized into tables to develop conclusions. Data captured from the student flow survey were tabulated in a spreadsheet to serve as a measure of engagement, matched and pivoted with different activities related to the action research.

Triangulation of all data ensured trustworthiness and consistency. Throughout my analysis I strove to identify different kinds of data that had diverse benefits but remained unbiased by checking in with my colleagues and reassessing the relation of data to my research question.

Discussion of Results

As I analysed data related to the impact of problem-solving on student agency when boys were charged with designing their own technology lesson, several themes emerged:

- challenges around the students' ability to identify and define problem-solving tasks in order to create solutions
- the development of self-efficacy
- the co-dependent nature of student enthusiasm and energy

Challenges of Uncertainty Related to Problem-Solving Tasks

During our first class, I asked the boys to identify what they wanted to learn about in Technology during the year. For most students, articulating and imagining their learning goals was neither familiar nor simple. After I compiled, coded, and shared the results of the feedback with the class, students observed great similarities in their own goals for learning. When pressed about their experience defining what they wanted to learn, the majority of the boys shared that they had never been asked to define that information before. This exercise emphasized that the power and the ability to direct the learning goals for the class would be from the vantage point of the students, not the instructor. It also highlighted for me the assistance the boys might need while navigating this new assignment and how I would provide supportive modeling and guidance.

As the boys worked on their project to design a lesson to use in the Portal, they often needed clarification on the parameters of the assignment and reminders for what important elements would constitute the lesson. Their enthusiasm for the project was high, and they gradually sought more assistance from me to finalize their lessons. While they worked independently on the development of a lesson for the Portal, they had to draft a research plan. Many boys shared that it was challenging to “access” and “sift through all of the information” while researching. Some students also worried that their lesson would be “boring” and lack cohesion. As a result of these expressed challenges, I had the boys share lessons with each other so that examples were available from peers that could help them home in on a theme for their own lesson plan. Peer-to-peer feedback kept the focus of this task on the students. Despite the challenges that were presented in the task of designing a lesson plan, the boys shared that they enjoyed the opportunity to create a lesson. Student C noted, “There was a lot more freedom because you could pick and you could choose what you wanted to do and what you wanted to discover.”

Teacher Support Enhanced Self-Efficacy

A stated goal within my action research project was to listen and genuinely connect with the boys. Fundamental to the boys doing their best work was my ability to be a relational teacher. I sought to encourage students to navigate new challenges with coaching. Relational teaching created an atmosphere in our class that welcomed and encouraged student questions. I made

myself available to provide guidance in and outside of the classroom in an effort to stimulate exploration.

In a discussion of issues in education, educator and author Will Richardson (2020) shared that learners have little freedom within the framework of school, where almost everything about the what, where, and when of learning, is decided for them. From the start, notes Richardson, we take away their agency. In this project, I gave the boys significant opportunities to choose their own goals and pathways to achievement. As this learning process was new for them, however, they still required my assistance and support. Over the duration of the project, I observed students becoming more confident in their ability to identify problems while building independence in creating solutions.

The boys also routinely met with me and emailed me questions. Their inquiries ranged from needing more guidance for creating their Portal lesson to how they could access online resources for research when off-campus. In examining the trends in student queries, I interpreted these exchanges as indications of what technological and research skills students lacked and needed, which helped me demonstrate the type of instruction from which they could most benefit. For example, when the boys encountered a setback accessing databases or accidentally deleting their Google docs, it was apparent they needed brief tutorials on remedies for these mishaps. I demonstrated how to change iPad settings and use the screencast feature. After students enabled the feature, I routinely received video snippets from the students capturing their experiences. They were empowered to use the tool and built a connection with me around my recognition of their needs.

Student Energy and Project Duration Affected Engagement

In general, the results of student self-rated energy and engagement during each class session covaried (Figure 1). The highest rated levels of both energy and engagement were noted when the class was in the Portal for a student-designed connection with the Netherlands. The boys consistently rated their enthusiasm and energy higher when engaged in self-directed planning for their own learning or actively “doing” in our class. When reflecting on his experience, Student A shared, “I like doing more than sitting in a class. It just feels different. I like doing

things.” Several students offered that they were routinely more actively engaged in non-core classes such as art, design and woodworking, and music. Student B said, “We do a lot of making in our classes that are not our main classes.”

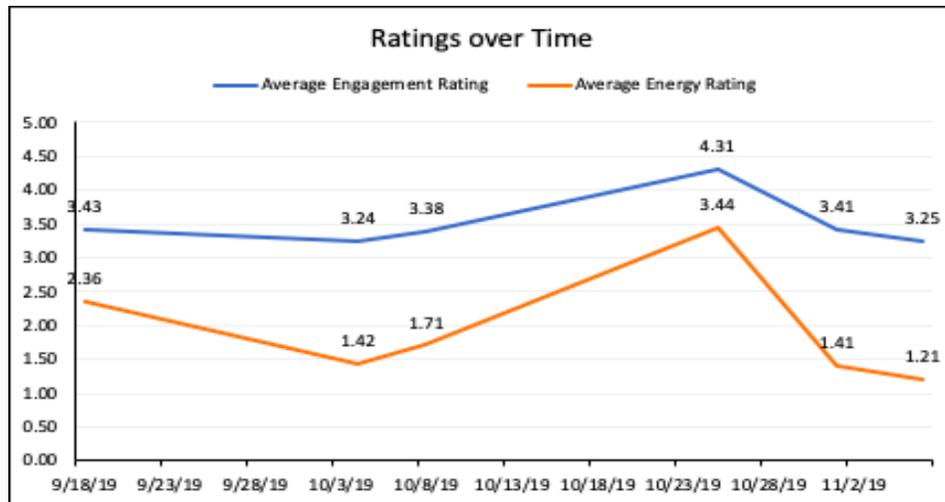


Figure 1: Engagement and energy levels throughout project duration.

The energy the boys expressed for a task generally lagged behind their engagement for the activity. When asked about this slight difference, they offered two ideas. The first was because our class met each day at 8:30 a.m. when they were “tired” or “not fully awake.” This caused me to think about how we might re-examine the school schedule and take into consideration how energy levels vary in our students throughout the day.

The boys also shared that they felt the project went on too long. When asked to tell me more about this assertion, they reflected that though they liked the project at the onset, it felt as if it should have been completed in less time than we spent on it. One student even added, “I don’t think that this is something teachers can even do something about, but I was just finished with the project and didn’t want to do it anymore.” This emergent theme made me consider how students today value and measure time and whether that is in concert with how their teachers measure time and account for pacing when planning lessons.

Conclusions

While choice remained a singular motivating factor in the boys’ enthusiasm during this project, making final selections of the country where they would connect in the Portal proved

challenging. This issue prompted me to question how often students are offered choice and the capacity to design their own learning goals. The results of this action research project led me to conclude that ultimately choice was a positive factor in increasing student motivation. So: How can choice be offered more deliberately and routinely by teachers?

Teachers may fear that focusing on student voice and choice in determining course goals could be confusing or disorderly in the classroom and possibly thwart the students' ability to achieve learning goals. Teachers may also believe that students cannot exercise choice in regard to curricular content because it will not result in real or traditional learning measured by an assessment. This project showcased that not only were students highly engaged in the material about which they were learning, but they also grew in the confidence and knowledge that they could achieve the goal they set for themselves. This finding should be motivating to teachers to involve their students as problem-solvers, managers, and decision-makers in their own learning.

As a librarian, I also took note of two information literacy challenges that surfaced in the action research cycle. First, the challenge of designing questions persists. Questions guide all research and forge a path for students. Questions are an innate reflection of student curiosity. In this project it was critical for the boys to leverage their own curiosity and become confident in prioritizing their questions. In general, our students are required to provide answers, not questions, in the classroom although questions are the hinge to new discoveries, the joy of inquiry, and innovation. This research strengthened my belief that teachers should strive for balance between the level of question asking and question answering to help students build their questioning skills.

Second, accessing and sorting through information was a challenge for the boys. Locating and reading through information to determine what was important and relevant often alluded the students, and they routinely asked for help in this area. I realized that the boys need more formal instruction and guidance on how to scan and skim pages and data, then pause to do deeper reading. As teachers, we are not only required to help students with content as experts, but have a responsibility to help students with broad based skills such as reading and writing.

Finally, close listening helped me to safely elicit from the students an articulation of what they needed and how best to provide instruction that would help them become more knowledgeable, increase their skill set (both soft and hard skills), and gain confidence in their ability to design their own learning. Future considerations for teachers based on the outcomes of this project might be to include formal mechanisms through which students can get help with their questions. The boys would be able to practice articulating their questions, concerns, or areas of need, and further take responsibility for growing their skill set and learning. Having a safe environment in which asking questions and revealing what we do not know will help foster the relationship between teacher and student.

Reflection

Boys depend on their teachers for guidance, and to do that they have to be vulnerable. In this action research project, I found that the feeling of uncertainty around what the students could plan for in their own learning and how they would accomplish this task forced them into this place of vulnerability. With care and the knowledge of my role as a relational teacher, I ensured the students they could count on me for help while growing their independence and voice. This project emphatically raised my own awareness and imperative to be a good steward of each boy who I teach and to help them grow in their confidence, awareness, and assurance so I can capably support their development.

The process of engaging in this action research project benefitted my own teaching practice. With each culminating session of our Technology class and the boys' development, I thought about how I could adapt and change my teaching strategies in a responsive and reflective way based on their achievements and challenges. I feel empowered to relinquish more traditional teaching practices such as providing a topic overview through lecture and allow for more exploration and peer-to-peer assistance. I also know that my students and I feel more at ease with some uncertainty. Buoyed by what I experienced in the classroom and the affirmation of the students' positive experience learning in this new way, I know that I can help affect change in the teaching practices and curriculum approaches we currently employ in our Middle School.

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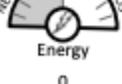
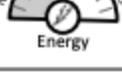
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APPENDIX A:

Good Time Journal – Activity Log

		
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APPENDIX B: PORTAL LESSON PLAN ASSIGNMENT:

Designing a Lesson for the Gilman Shared Studios Portal Pages Project for Technology Class

Ms. Nichols & Ms. Ward

Objectives:

- Each student will design a lesson for use with the Gilman Shared Studio Portal. See Page 2 for specific steps for designing your lesson for the class.
- To research the country you choose you will need to access the Walter Lord Library - [Online Resources page](#) of the Gilman Website, select the database:
- [CultureGrams](#)* accessing the database from home will require you to sign-in using your Gilman email (**without** the @students.gilman.edu) as your username and ID#+Hounds as the password
- Use the citation feature within CultureGrams to document your source. Copy the citation and paste it at the end of the document.
- Submit the final product to Canvas.

Portal Lesson Plan for Technology Class

Step 1: Select a location that you would like to connect with for your Portal lesson from the following locations:

- Tampico, Mexico (K-12 School)
- Amman, Jordan (Technology Hub)
- Andover, Massachusetts (K-12 School)
- San Pedro Sula, Honduras (University)

- Wageningen, Netherlands (Public Park)

Step 2: Research the Location using the Database CultureGrams and share what you have learned about this place in a few sentences. For example: What is the climate? What is the population? What does education look like in this location? What are some of the sports and recreational activities that the residents play?

Step 3: In a new paragraph share what might you want to discuss or explore as Gilman students with the community that you connect with. What do you want to learn about or what questions will you ask when you are connected through the Portal? How is Baltimore similar or different from this place you have researched? These objectives and points for discussion you have planned will be the final paragraph in your pages project.

Step 4: For this assignment make sure that you include resources that you used to research the country. See the example below and remember that CultureGrams has a citation feature you may use for this purpose.

Works Cited

"Jordan: History." CultureGrams Online Edition, ProQuest, 2019,
online.culturegrams.com/world/world_country_sections.php?&contid=3&wmn=Asia&cn
Afghanistan&sname=History&snid=2&cid=1. Accessed 13 September 2019.

Pages Project Rubric

Topic	Score
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I. Paragraphs (5 points)

A. Introduces the Place that you have chosen for your Lesson.

B. (*Paragraph 1*) Gives a summary of what you learned about the country in your own words that is at least 3 sentences long.

C. (*Paragraph 2*) Shares ideas and objectives for what the class will discuss with the group that we connect with in the Portal and what Gilman students will learn.

II. MLA Formatting (10 points)

A. Document Setup:

a. 1" margins on all sides

B. Font:

a. 12 point font

b. Font has serifs (like Times New Roman)

C. Alignment and spacing:

a. Header should be at the top right of your first page (name, teacher, period, date)

b. Spacing should be single.

c. Work Cited should be on the next page. Works cited title should be centered (but your sources should be on the left side)

III. Submission (5 points)

Submit as a PDF to Canvas.

APPENDIX C: EXAMPLES OF STUDENT RESEARCH AND LESSON PLANS

Student A

Ms.Ward

Pd.2

9/27/19

Portal Project Destination: San Pedro Sula, Honduras

Honduras is located in Central America. Honduras is just about the size of Tennessee. It is bordered by both the Pacific and Atlantic Ocean. 9,182,766 is the population size of Honduras. San Pedro Sula is the second largest city in Honduras. The largest city is Tegucigalpa. Spanish is the official language of Honduras, most of the citizens speak it. The national food dish of Honduras is translated as a mountain of food. Or as they say it in Honduras plato típico. Plato típico is a large plate of beef, plantains, beans, cabbage, fresh cream, and tortillas. The typical meal in Honduras is rice, beans, tortillas, and some kind of grilled meat.

I think during the lesson with San Pedro Sula we should trade foods. We can talk about the sports and events going on in their country. We can also talk about the sports and events going on in our country. When we trade foods we should get the plato típico. This way we will be able to try their national dish. Plato típico is a dish in multiple countries. There is a version that is special to Honduras though. The people in San Pedro Sula will get American hamburgers. This is a very popular dish in the United States. We will each have each others most popular dish from their country. We can talk in both Spanish and English since Spanish is the national language of Honduras, and English is the national language of the USA. This would be a fun lesson and I would be excited to try it out.^[P]_[SEP]

Works Cited

"Honduras." CultureGrams Online Edition, ProQuest, 2019,
online.culturegrams.com/world/world_country.php?contid=10&wmn=North_America&cid=70&cn=Honduras. Accessed 01 October 2019

10-1-19

Ms.Ward

By: Student B

Period 2

Portal Project

The Netherlands are about 6 hours in front of Baltimore so we could call at 8:00 AM and they will be at about 2:00 PM, so they will be eating lunch while we eat breakfast. The capital is Amsterdam. The Netherlands borders Belgium and Germany and they also border the North Sea. The population of the Netherlands is about 17 million. The official language of the Netherlands is Dutch. The currency of the Netherlands is the Euro. Netherlands is a small country in Western Europe, not even bigger than West Virginia. The people in the Netherlands built lots of canals and dams because if they didn't the North Sea would have flooded the Netherlands. People in the Netherlands are very tall and scientists believe this is because of a strong and healthy diet. The tulips that people grow in the Netherlands are a good source of money and tourism for the Dutch. Many people in the Netherlands ride bikes or motorbikes to travel around the city. The government of the Netherlands is a Monarchy and the current king is Willem-Alexander. The Netherlands have been ruled by many different countries because they cannot defend themselves. Some of the countries that have owned them include the Vikings, Celtic tribes, the Spanish, and Napoleon's France. Only in 1814 did the people in the Netherlands claim independence over France and created the Kingdom of the Netherlands with Belgium and Luxembourg. Then in 1839 Netherlands became independent and broke off from the Kingdom of the Netherlands.

I think it would be cool if we were eating. A table would be pushed close to the screen on both sides so it would look like we were eating at the same table. The kids from Gilman might be the portal club or our technology class. The kids from Gilman will come around 8:00 (they will miss part of first period) and the people from the Netherlands would come around 2:00 so we will be eating Dutch breakfast and they will be eating American lunch. The food options for them will be a stuffed turkey like the ones we eat on Thanksgiving, they will also get an assortment of sides from Thanksgiving like sweet potatoes with melted marshmallows on it or

cranberry sauce, if any of them are vegetarian then they can have pizza, and for dessert they can have an apple pie. We will eat some fresh grilled halibut for the main course, veal croquettes and Gouda cheese on crackers for appetizers, almond bitterkoekjes, sweet oliebolle, and crullers for dessert.

We can talk about how different it is to live in the Netherlands than the USA. Also we could talk about the fact that the people in the Netherlands bike more than they drive and the history of the Netherlands (which is very fascinating) the history of the USA. They could show us how the Dutch could make the food that we are eating and the different techniques used to make that food and vice versa.

Works Cited

- "Netherlands." CultureGrams Online Edition, ProQuest, 2019, [online.culturegrams.com/world/world_country.php?&contid=5&wmn=Europe&cn=Netherlands &cid=111](https://online.culturegrams.com/world/world_country.php?&contid=5&wmn=Europe&cn=Netherlands&cid=111). Accessed 23 September 2019.
- National Geographic. Netherlands. 2015. <https://kids.nationalgeographic.com/explore/countries/netherlands>. Accessed 10/1/19
- Fuller, Bree. "The World Cup of Food Netherlands: Zest FOOD." *Illawarra Mercury*, Jun 23, 2010, pp. 45. *ProQuest*, <https://search-proquest-com.gilman.idm.oclc.org/docview/507207143?accountid=5756>.
- Eerden, Hanneke. "Celebrating Christmas with a Taste of the Netherlands." *La Prensa San Diego*, Dec 16, 2011, pp. 10. ProQuest, <https://search-proquest-com.gilman.idm.oclc.org/docview/914260598?accountid=5756>.
- "Creamy Gouda Good in Slices, Sauces: QUESTION: What are some Uses for Gouda Cheese? -- Clara Prill, Taylor." *Detroit Free Press*, Sep 20, 2012. *ProQuest*, <https://search-proquest-com.gilman.idm.oclc.org/docview/1041211841?accountid=5756>.

Student C

Ms.Ward

Period 2

October 1

Netherlands Portal Project Planner

The place that I chose to visit in the Portal is the Netherlands, I have never been to the Netherlands so I think it will be a good place for me to research in the Portal.

The Netherlands has a colder climate than here in the United States. The average temperature is around 33 degrees in some spots, but others spots it can get way warmer. The population in the Netherlands is around 17 million people. The population in the U.S is about 325 million, so the Netherlands has way less people than we do here. In the Netherlands, education is a very high importance to the people that live there. Kids start going to school at two or three years old but real school begins when you turn 5. You go to school for the same amount of time you go to it here. After “Primary School” you head off to college. People in the Netherlands then have jobs that they do after college to make money. Some fun facts are:

There are over 600 museums in the Netherlands

Christmas gift giving takes place on December 6 for Saint Nicholas Day instead of December 25 which is Christmas for us.

For my connection I would like to discuss a lot with the person and community in the Portal. I would like to talk about what their favorite thing to do is or what their favorite museum is to go to since there are a lot of museums. I would want to learn how people greet each other there and if it is any different than here in the U.S. I would also like to know what foods they eat and if they have ever tried foods that we eat. Baltimore and the Netherlands both have some sightseeing areas, so maybe I could ask them if they have seen anything that was interesting. Maybe they have traveled around the world, so I can ask them where they have gone. I have a lot to talk with them about, so I am excited for the Portal visit.

Works Cited

"Netherlands." CultureGrams Online Edition, ProQuest, 2019,
online.culturegrams.com/world/world_country.php?cid=111&cn=Netherlands. Accessed
27 September 2019.

APPENDIX D: EXAMPLE OF STUDENT SURVEY POST CLASS PORTAL CONNECTION



Netherlands Portal Session Feedback

Please take some time to provide feedback on the Portal session with the Netherlands on Friday October 25th.

1. Describe your experience in the Portal session with the Netherlands focusing on 1) what you learned, 2) what you enjoyed, and 3) what may be improved for the next session.

2. While connecting with the Netherlands in the Portal, you learned something new.

Yes

No

3. You would be interested in connecting with more countries where students in our Technology class plan the lesson for the session.

Yes

No

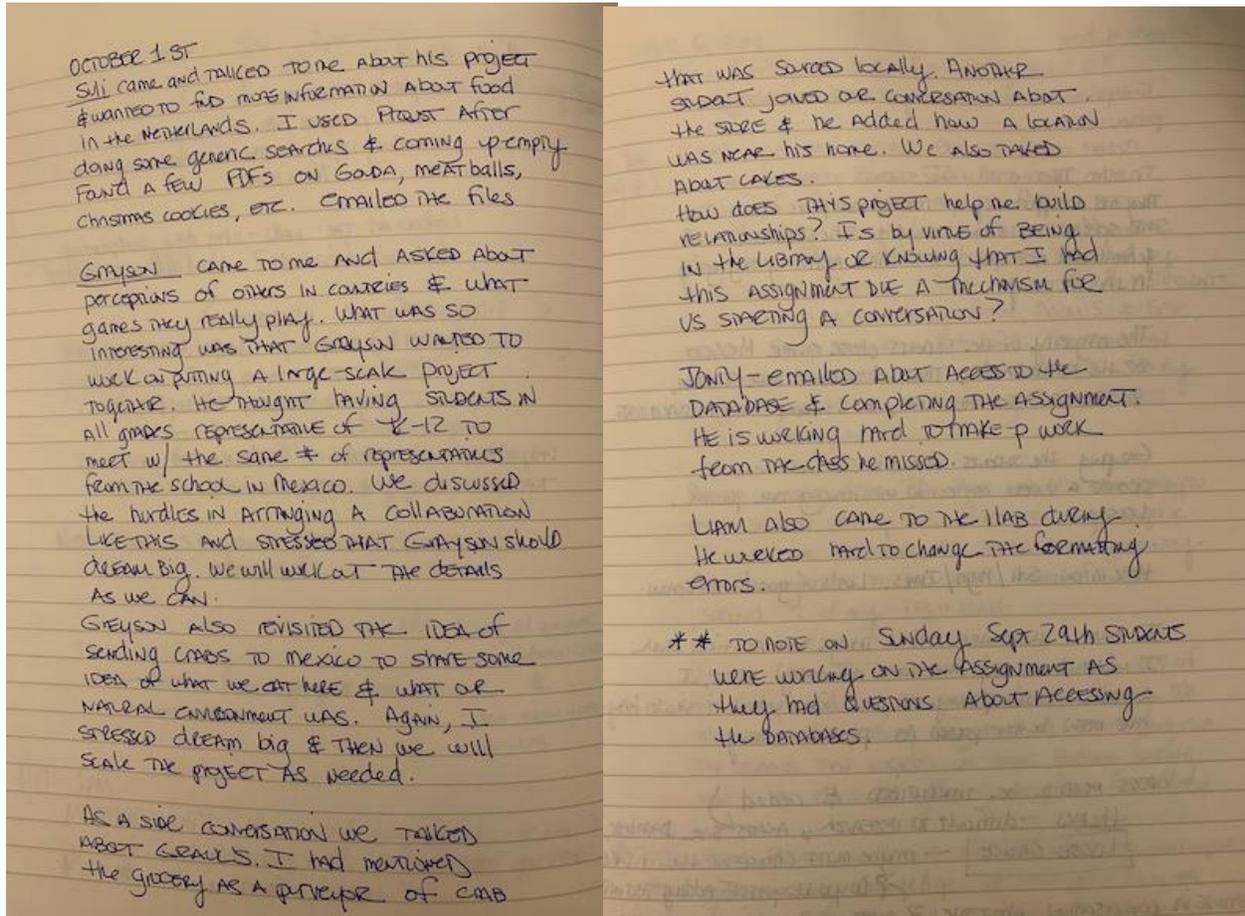
4. Overall, how would you rate your enthusiasm for the Portal session? * *Mark only one oval.*

1 2 3 4 5

5. Overall, how would you rate your energy while in the session? * *Mark only one oval.*

-5 -3 0 3 5

APPENDIX E: EXAMPLES OF JOURNAL NOTES



10/26/19

The meaning of the poem connection was so enlightening. We were all excited at least prepared that way.

ROBBIE WAS THERE BY CHANCE TO SET UP THE CONNECTION. PAW & HIS FAMILY WERE THERE, AUNTIE (7 y.o. daughter) & (11 yo. son). IT WAS A HOLIDAY IN THE NETHERLANDS SO EVERYONE WAS OUT IN THE PARK & MANY PEOPLE WANDERED IN.

WHAT WAS SO INTERESTING & EMPATHY BUILDING WAS THAT PAW & HIS FAMILY OPENED THE FOOD ITEMS THAT WE SENT & ~~WERE~~ ASKED US ABOUT THEM. THEY THEN SHARED & TASTED THE ITEMS. THIS INCLUDED MARSHMELLOWS (A HIT!) AND PEPPERMINT (NOT).

PAW & HIS FAMILY BROUGHT TWO KINDS OF SWEETS THAT THEY PUT ON BREAD SOMETHING LIKE CRUSHED COOKIES & THE OTHER WAS SPRINKLES. SOME OF THE BOYS MADE THE CONNECTION THAT IT WAS LIKE FAIRY BREAD OR UNICORN BREAD.

↑
J.A. per friends
IN AUSTRALIA

OBSERVATIONS

- hard to get started
- did not know exactly what to use as the seed for discussion yet we had prepared
- looking at some student's reaction I was wondering how many had heard a family speak another language & was a translator
- Some students used Spanish(?)
- food was a big hit
- students were engaged when sharing something in common.
 - Food
 - Sports
 - School Day
 - Birthday parties
- no noticeable differences between what students saw & heard ^{in relation to} their location in the poem
- session went longer than expected which was great. students did not want it to end.

J.A.
Home Rooms

WERE ABLE TO MAKE HOME ROOMS USE THE ESTABLISHED CONNECTION & FOOD. 8th grade SEEMED VERY COMFORTABLE - VERY CONCISANT

WHAT IS THE OPTIMAL AGE?