Genius Hour Handbook

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Messiah University is a Christian university of the liberal and applied arts and sciences. Our mission is to educate men and women toward maturity of intellect, character and Christian faith in preparation for lives of service, leadership and reconciliation in church and society.
Thesis Project

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EDME 583 – Gomboc-Hellam
Abstract

This paper explores the research on the benefits of student-centered learning in the 21st century classroom. The idea behind student-centered is not for the teacher to give up total control but to guide students through their learning by identifying student interests and leading students to more critical thinking. Student-centered learning can be implemented in classrooms through Genius Hour which allows students to research, build, create, and/or present anything of their choice with parameters set by the teacher. In October 2019 a faculty meeting at Silver Spring Elementary was held to see what teachers needed to know more about Genius Hour before they started implementing it in their classroom schedules. Based on the information needed from the teachers at Silver Spring, the project that was created was a handbook on how to start implementing Genius Hour in their classrooms. The handbook was designed with activities for the teachers to start using along with videos to introduce the concept of Genius Hour and templates for student journaling and reflection.

Keywords: genius hour, student-centered learning
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The Project Introduction

The project that was created was a handbook for the teachers at Silver Spring Elementary in the Cumberland Valley School District to use to help them get started with implementing Genius Hour into their class schedules. The main components of the handbook include important first steps to get started, sample activities, proof that Genius Hour is beneficial, other places to get ideas and resources to copy and print to keep students on the right track.

The idea of Genius Hour is for students to take control of their learning. They are able to choose what they want to learn more about, learn how to make, and/or who they want to work with. When students come up with an idea, they meet with their teacher who then encourages their desire while also pushing them to think more critically.

Important first steps that educators have used to start Genius Hour in the classroom are also included. These include videos to introduce Genius Hour to students. It also states who and what are good resources to go to for help with Genius Hour concepts. At Silver Spring Elementary specifically, the Explorations teacher offers classes to teach students the importance of Digital Citizenship which helps them learn how to safely navigate the internet and cite evidence. The handbook includes the Exploration teacher’s “Calendy” which is her schedule of opening dates and times that teachers can sign their class up for specific lessons geared around Genius Hour.

The next section of the handbook provides sample activities that could easily be introduced to the students at Silver Spring Elementary to get them thinking more critically about their own interests as well as the District’s curriculum. The activities that were chosen for the handbook are ones that are easily adaptable for any grade level and any subject area. Suggestions of activities that have already been done in the building were also added to the
handbook along with pictures of completed projects to prove that Genius Hour is a beneficial part of a student’s education.

While sample activities were provided there is also a section in the handbook guiding educators to other places to find more ideas for Genius Hour as well as children’s picture books that emphasis the skills students will need and/or gain from partaking in Genius Hour. Other places that were referenced in this handbook include websites, novels, blogs, podcasts and people to follow on Twitter.

Finally, the handbook provides resources that educators can easily access to print off for their classrooms. These resources include a list of safe websites that students can go to for research along with a brief description of each website and a QR code for quick and easy access. Other resources include templates that students can use when conducting research or designing projects to help keep track of their progress as well as their reflections. Student recording templates that have been implemented in the Silver Spring Elementary building were also included.

**Why I Love Genius Hour**

I added Genius Hour in to my fifth grade class schedule in October 2018 after attending a conference with keynote speaker, George Couros. At that point in my career I was in my 11th year teaching and felt as though I was still passionate about teaching. I was wrong. After that presentation there was a fire that was lit inside of me. There was so much MORE that I could be doing with my class. Genius Hour was how I started my change. I introduced the concept with a video and it was the first time my class of 27 students was quiet for an entire 3 minutes and 18 seconds. They were just as captivated as I was.

We started off small by learning how to research with current events. We practiced how to question anything we read by doing more research and how to form our own opinions. From
there they started to learn that even at the young age of 10 or 11 they could make an impact on our school, our community, our world.

Their passions and interests started spilling out of them. With simply 30 minutes a day devoted to their own learning, they were soaring. By the end of the year, students in my class had created clothing drives for the homeless, collected canned goods to give to local shelters at Christmas time, made positive posters for each teacher in the building and gifted them during Random Acts of Kindness Week, organized a Saturday for our class to volunteer at Project Share, a local food pantry in Carlisle, PA. They also researched states because they were interested in knowing how they were different from where we live. They made movies using Stickbots that had an actual plot and theme. They learned how to work cooperatively in groups, how to be independently productive, and how to pick themselves up when their projects failed. Guiding my students to be their best selves and to recognize how they are capable of just about anything is my why to Genius Hour.
The Need for Student-Centered Learning

The U.S. education system was created around an economy and a society that no longer exists. In economies that existed 50 years ago, it was enough to master the “three Rs”: reading, writing, and arithmetic. In the modern “flat world,” the “three Rs” simply are not enough. If today’s students want to be successful in their future, they must also be proficient in the “four Cs”: communicators, creators, critical thinkers, and collaborators (National, 2012).

The need right now in education is for more authentic, relevant student learning to prepare our students for life after school (Katrein, 2016). The answer to this type of learning comes from student-centered learning. Current Director of Learning and Innovation and former teacher for the Centennial School District, AJ Juliani, is an active advocate for student-agency, choice, inquiry, and engagement. Juliani (2018) explained that educators became teachers because they wanted to make a difference. Educators want to be innovative, creative, and make a great impact, but it is easier to fall into a pattern of what has always occurred, instead of answering the question: “What is best for this learner in this situation?” (Juliani, 2018, p. 7) Being innovative is not easy, but needed to prepare students for their future.

Our students need walk out of our classrooms ready for what is next. What is next, is very different for each person, but educators need to provide students the ability to use their prior knowledge and apply it how they need it. Loyens and Gijbels (2008) reiterate that memorization and regurgitation of math facts, historical dates, or pointing out the prepositional phrase in a sentence may help a student participating in the show Jeopardy. For students to be successful in school and in life, it is important for them to activate their prior knowledge and try to relate new information to knowledge they already possess (Loyens & Gijbels, 2008). How can students
Student-centered learning is not a new concept. Constructivism is a learning theory that Jean Piaget and Lev Vygotsky, both psychologists known for their theories on cognitive development, discussed in the late 1800s as a critical component to successful learning. Today the focus on integrating more science, technology, engineering, arts, and math also known as STEAM into our curriculums is the new “buzz” word along with “genius hour,” “passion projects,” and “project-based learning”. Regardless of the term, shifting the educational focus toward student-centered learning rather than traditional teacher-led learning has many benefits for both students and educators.

**Constructivism**

Constructivism is a view of learning that considers the learner as a responsible, active agent in his or her knowledge acquisition process (Loyens & Gijbels, 2008). Constructivism provides the opportunity for students to grow both cognitively and socially. The two major types of constructivism are cognitive or individual constructivism which comes from Piaget’s theory and social constructivism which comes from Vygotsky’s theory (Powell and Kalina, 2009). The opportunity for students to choose their own project that resembles a real-life or authentic situation, while also providing the opportunity for cooperative learning with their peers and ultimately the ability to self-regulate themselves along the way of the project. This ultimate goal combines both cognitive and social constructivism.

Cognitive constructivism focuses on students as individuals and how they construct knowledge (Powell and Kalina, 2009). In an intermediate elementary setting, children fall within Piaget’s third stage of development: The Concrete Operational Stage, which also happens to be a
pivotal growth point for the brain development. This stage occurs between the ages of 7 to 11 years old. Jean Piaget was a French Swiss developmental psychologist who spent many years observing the human developmental process. During this stage, Piaget claimed that children begin to replace intuitive thought, by asking all sorts of questions as they did in the previous preoperational stage, with their own logical reasoning (Powell & Kalina, 2009). Educators should focus more on having students ask questions rather than regurgitate answers.

Lev Vygotsky was a strong believer that social interactions were an integral part of the learning process. His theory on the Zone of Proximal Development focuses on how easiest learning occurs when a child is assisted by other people. The assistance can come in many different forms, with the teacher, with a small group of other students, or with just one other student. Providing opportunities for social constructivism to occur in a classroom are effective because students have a lot to offer one another. When students master completion of projects or activities together, the internalization of knowledge occurs for each individual at a different rate according to their own experience. This reiterates the notion from cognitive constructivism that each child learns at their own pace. Vygotsky believed that internalization occurs more effectively when there is social interaction (Powell & Kalina, 2009).

Constructivist learning environments contain several features that promote effective learning, one being project-based learning (Loyen, 2008). With self-regulation the student is responsible for their own planning of how they will begin and complete the project, keep track of their progress through self-observation, and ultimately assess themselves at the end to see how successful they were. Loyens and Gijbels (2008) view the ability to regulate your own learning as the key to successful learning in school and beyond.
For constructivism to be effective, teachers need to recognize that the learning process occurs within each individual student at a different rate by observing students and comprehending their level of difficulty (Powell & Kalina, 2009). Knowing where students are individually both cognitively and socially will allow the teacher to provide the proper guidance for students within their learning paths so that they can be successful.

**Why Educators Shy Away from Student-Centered Learning**

The move from a teacher-centered to student-centered teaching approach means giving up control. Educators are accustomed to being in control; when students become more in control of their learning it can be hard to feel as though management is occurring.

One of the primary reasons why teachers do not want to implement student-centered learning is their fear of students underperforming on state standardized tests. Juliani (2018) admitted he feared his students’ results on standardized tests after implementations of project-based learning would reflect on his teaching ability negatively.

George Couros (2019), a keynote speaker on innovative student learning and engagement, discussed how educators can be reluctant to change toward student-centered learning. Educators not reluctant because it is another educational change but they are worried the change being pushed on them will have no positive effect in the classroom (Couros, 2019). Juliani (2019) wrote:

I’ve heard many of the same types of questions, over and over, when talking about student choice.

- How can you keep students accountable?
- What if they don’t do anything with their time?
• Does it connect to the standards?

• My curriculum is set, how can I do it?

• This doesn’t seem possible in a class of 25 students…

And yet, my 10th grade classes were between 25 and 30 students each. The students kept each other accountable in groups. They went above and beyond anything we had written in our curriculum...and hit more standards than any other project/activity we’d ever done. Why? Because they chose to help create a project they cared about. (Juliani, 2019, paragraph 11).

Another reason Couros heard from teachers about shying away from student-centered learning stems from peer pressure from other staff members within their building or district. “The fear that drives leaders is not always failure. Sometimes, the real fear is success. If something works, other educators in the building would be expected to do it, thus creating more work for everyone” (Couros, 2019, paragraph 4). No matter what stage of life, people are always striving to make their peers see them as an equal. When there is an unbalance whether through failure or success, people tend to get uncomfortable. This can lead educators from trying new things in the classroom that would actually benefit their students.

**Requirements**

As with any new reform for education, educators attend trainings on how to implement the new teaching strategies effectively. Grossman, Dean, Kavanaugh, and Herrmann (2019) conducted a modified Delphi study on experienced teachers who have successfully implemented project-based learning to see what was consistent among them. The results of the Delphi study stated they all similarly focused on four primary goals: Supporting deep disciplinary content learning, engaging students in authentic work, supporting student collaboration, and building an
iterative culture where students are always prototyping, reflecting, redesigning, editing, and trying again. To achieve these four goals, the teachers enacted a repertoire of teaching practices, which are known as the core practices of project-based teaching (see Figure 1).

![Figure 1. The core practices of project-based teaching](image)

With student-centered learning, teachers give up some degree of the classroom. John Larmer (2015) agreed with Grossman et al. (2019) that teachers still have an integral part of the learning process. In Lamar’s blog he stated that educators are still responsible for designing and planning the context of the projects, making sure the project aligns to state standards, building a culture where students can grow independently, manage the individual activities by checking in with students, scaffold student learning by employing instructional strategies to help students reach their goals, assess student learning through the use of formative and summative assessments, and engage and coach as needed (Larmer, 2015).

**Genius Hour**

The concept of Genius Hour started after Google introduced 20 percent time, the practice of allowing employees to spend 20 percent of their work hours on projects arising from their
imaginations and personal passions (Fink, 2019). Google employees created Google Maps and Gmail from this allocation of time. Teachers quickly caught on to the possibility of allowing students to work on something of their choice and soon after the term Genius Hour was coined by educators. Genius Hour gives students the opportunity to explore and dive deep into their interests and passions within a classroom setting.

Just like the concept, the implementation of Genius Hour varies. At the elementary level, many teachers borrow an hour from their allotted reading/language arts time. As AJ Juliani defends, “During Genius Hour, you’re doing a lot of nonfiction reading and research. You’re hitting all the reading, writing, speaking, and listening standards, and all the creating, evaluating, and synthesizing standards” (as cited in Fink, 2019, p. 38). Genius Hour has also been incorporated as a form of enrichment by educators.

Providing opportunities for students to work on projects of their choice promotes intrinsic motivation. They use their prior knowledge as a foundation to build their expertise in something of their interest. Students start to feel more in control of their learning and understand they are the ones responsible for it.

**Science, Technology, Engineering, Arts, and Math**

Science, technology, engineering, arts, and math (STEAM) is a national reform in education and curriculum in the United States that helps to prepare students for the global economy of the 21st century (Talijaard, 2016). STEAM revolves around the idea that it is the “interpretation of Science and Technology through Engineering and the Arts, all based in Mathematical elements” (Talijaard, 2016).
STEAM curriculums have become more prevalent in elementary schools, especially in their library settings with the addition of makerspace. Within a makerspace curriculum, students are able to problem solve and collaborate together to make something. That something can range from a story to robots to even a solution to a world problem all depending on the guidance of the school librarian. Abram (2015) stated that humans are an amazingly creative species, and the limits of human imagination fundamentally knows no boundaries. With this in mind, the limits of libraries are not in books or websites. Libraries are places where people can dream with their eyes open (p. 10).

The need for more STEAM opportunities at the elementary level is necessary due to research that discovered that females have less positive attitudes toward STEAM disciplines compared to their male counterparts (Richard, Guzey, & Moore, 2018). With more exposure to topics that surround science and engineering their anxiety and lack of interest can begin to dissipate.

21st Century Four Cs of Education

In an age where standardized tests have become the core to determine a school’s success, educators need to create a learning environment where our students can become innovators of the future. Twenty-first century skills in curriculum is necessary to prepare our youth for their future by allowing them the opportunity of creativity and the power of technology to learn in unique ways (Alismail & McGuire, 2015).

The Four Cs of Education—critical thinking, communication, collaboration, and creativity—home in on what students need to be exposed to in education to be successful outside of school. Curriculum should be centered on the construction of knowledge and encourage students to produce the information that has value or meaning to them to develop new skills
The Four Cs are integral to dynamic learning, and every dynamic learning experience should include at least one of the Four Cs (Bell, 2019).

One way to incorporate 21st century skills is to incorporate problem-based learning. Students are allowed to investigate problems of their choice, provide their own explanations, generate ideas, analyze data, and make judgments to find the appropriate solution (Alismail & McGuire, 2015).

![The Four Cs](https://salccelearn.org/edtk3304/the-4-cs)

Figure 2. The 4 Cs. Source: Adapted from “The 4 Cs,” Teaching With Technology. Retrieved from https://salccelearn.org/edtk3304/the-4-cs/

The 4 Cs provide students the chance to solve a problem of their interest hits all four components of the communication, collaboration, critical thinking, and creativity while also having students working on a variety of the Common Core English Language Arts Standards (see Figure 2).

**Standard-Based Projects**

The Common Core State Standards (CCSS) no longer just focus on reading, writing, and arithmetic, but now encourage the expansion of critical thinking and social skills to help students
master learning. The use of technology and project-based learning allows for the integration of cognitive learning and skills which can help students obtain a deeper understanding of the subject while also allowing them to try and solve complex problems in the real world (Alismail & McGuire, 2015).

Educators are working diligently to provide their students with the tools necessary to be prepared for college or work after school. The word that drifts through virtually every conversation between educators to do this is rigor. In a culture of rigor, students should have rich learning experiences that move up the pyramid of the revised Bloom’s taxonomy to the level of creation and sharing (Vigil & Mieliwocki, 2015). This can be done by educators looking at current curriculum content and tweaking it to where students are able to make meaningful and personalized connections to promote intrinsic motivation to learn.

Not all students will create the same projects because not all students learn the same way. Educators expect all students to achieve the same standards, how they arrive at mastery of these standards may vary. Personalized learning pathways allow students to pursue topics of interest as they work toward mastery of standards (Vigil & Mieliwocki, 2015). In Figure 3, the rubric was designed for assessing student-centered projects and linked the criteria to the Common Core State Standards English Language Arts standards which can be used for Grades 3-5. Educators can simply use this rubric for whichever English Language Arts standard they are focusing on within their curriculum and connect their student projects for a grade, if desired.
Positive Behavior

In an effective classroom once educators and learners develop trust, honesty, and openness with each other both teaching and learning becomes effortless. Students are free and feel comfortable to discuss their ideas or concepts without inhibitions or fear (Powell & Kalina, 2009). Providing a comfortable learning environment will promote student engagement and prevent disruptive behaviors.

Within the construct of project-based learning is the concept of working together: collaboration or also known as cooperative learning. Cooperative learning plays a significant role in helping students acquire knowledge. It enables student discussions that are indicative for students of their level of prior knowledge (Loyens & Gijbels, 2008). Allowing the opportunity for students to teach each other allows the student teacher to effectively portray their thought
process in “kid” terms, which then allows the student “learner” to hear the thought processes in another way other than the teacher’s. Learning that builds on what students already know leads to an increase in not only retention, but in the interest and motivation as well (Loyens & Gijbels, 2008).

**Benefits With Co-Teaching**

The educational concept behind co-teaching is when a regular education teacher and a special education teacher share responsibility for planning, delivering, and evaluating instruction for a group of students, some whom have exceptional needs (Friend, Reising and Cook, 1993). Together these two teachers can implement student-centered learning by getting to know each individual learner’s strengths and weaknesses and creating a pathway that will guide them to learn at their own pace. Friend, Reising, and Cook (1993) go on to explain that in co-teaching, the teachers *strive to create* a classroom community in which all students are valued members, and they develop innovative teaching strategies that would not be possible if only one teacher was present.

George Couros (2019) wrote

…When an educator is struggling in their craft, seldom do we hear the word “low” used to describe them. We often say they need to be coached up and given additional support and training. We focus our resources, both fiscal and human, on identifying where they need support, and we provide it with fidelity. We monitor and give feedback, and we make adjustments as needed. They are expected to become better educators as a result of this focused, intentional support and training. But once a student has been perceived to be “low,” it becomes a point of no return. Too often, that label becomes the ceiling for that
With student-centered learning, the curriculum is different for each learner allowing students to choose tasks within their interest as well as their comfort-zone. Curriculum tells educators what to teach: Differentiation tells educators how to teach the curriculum. Thus, if we elect to teach a standards-based curriculum, differentiation simply suggests ways we can make that curriculum work best for varied learners (Walker, 2015).

Conclusion

Educators, especially at the elementary level, need to start shifting their focus toward student-centered learning to help prepare today’s students for their future. Student-centered learning can be achieved by providing the opportunity of student-choice within each curriculum, more chances for peer collaboration with learning tasks, and self-assessment. Once students begin to feel invested in their own learning, their learning, motivation, and behaviors will all improve.
References


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The 4 C’s. (n.d.). Retrieved from https://salccelearn.org/edtk3304/the-4-cs/


Participants

Participants in this project included 12 Silver Spring Elementary staff members. 4 staff members who teach third grade, 3 staff members who teach fourth grade, 2 staff members who teach fifth grade, 2 staff members who are the school instructional specialists, and the building principal. 8 of the participants were female and 4 were male. The staff members range in teaching experience from 0-20 years experience. All participants were volunteers.

Handbook Guidelines

The Genius Hour handbook was designed with 12 participants in mind. First, a look into their daily academic schedules was reviewed to determine possible time frames where they could implement 30 minutes of Genius Hour daily or 60 minutes of Genius Hour in one day per week. Next, advice from what has been personally observed over the last year in the classroom during Genius Hour was given along with picture documentation of what Genius Hour can “look” like along with projects that were created. Consideration of being presented with another new teaching aspect was given, therefore example projects that have successfully been implemented in the classroom were added. In addition to project ideas, templates for teachers and students were added to the handbook at the end for easy copying access.

In-service Presentation

The project was first presented to the 12 Silver Spring Elementary staff members on October 11, 2019 as a presentation during the Cumberland Valley School District Act 80 Day In-service. Voluntary participation was announced for teachers who teach third, fourth, or fifth grade along with the school instructional specialists. At the presentation, the draft of the project was presented to show staff members what was going to be available to them as well as to give them ideas to get started with Genius Hour in their classrooms right away. A shared Google drive, 3-5 Genius Hour, was created for the 12 participants with the draft presentation for them to
view at their convenience along with other templates to help them get started. There was also
time for the staff to state what they wanted more research on for the final project.

**Developments**

From the meeting in October, staff members declared they wanted more information on
how to create Google Docs and how to conference with their students and promote higher-order
thinking/questioning rather than just approving everything on their students’ “Passion Projects”.
Using the app, Record it!, a video was made to walk students and teachers step-by-step through
the process on how to create a Google Doc from an iPad as well as how to share the document to
those who would need access to it. With student permission, a live video was recorded of a
student/teacher conference about a student’s Passion Project using the Project Proposal template
that was also introduced at the meeting. Both videos were added to the 3-5 Genius Hour shared
Google drive.

The Silver Spring Elementary Exploration’s teacher has since made herself available for
the fifth grade Genius Hour time slot from 1:20 p.m. to 1:50 p.m. on school cycle days 3, 5 and 6
to help assist fifth grade students with their interests. Some of the participants in the other grade
levels have taken the time to sign up for openings with the Exploration’s teacher using her
Calendy schedule to have their class take extra technology lessons ranging from how to use their
Google drive to how to code.

**Reviews**

With the time for Genius Hour given to students, some fifth graders have taken the
initiative to use their 30 minutes each day to assist other teachers within the building. Two fifth
grade boys go down to Meredith Vancosky’s first grade classroom in the building and help her
students during her math lessons. Mrs. Vancosky sent the following email to the entire Silver
Spring Elementary staff on Friday, November 8, 2019: “I love my fifth grade helpers. I
recommend it to everyone. My students really enjoy working with the two fifth grade boys that come to my class every day. The students are responsible, polite, and very helpful. I have the fifth graders work one-on-one, with a small group, or they wander around the classroom helping students working independently. I really want to thank Mrs. Reid for coming up with this program. Snaps for Mrs. Reid!!!”
What I Have Learned

The biggest impact that this project has had on me is seeing how much my peers respect me and have taken the initiative to start Genius Hour. I first introduced my project to 12 of my co-workers during our Act 80 day on October 11, 2019. My original intention was to create a handbook for only our grades 3-5 staff, therefore they are who I first presented the idea to. At that point I had a brief draft of the handbook along with the table of contents as to what I was going to include. From that meeting, I could tell that my fellow peers were interested in starting Genius Hour. I didn’t want them to wait until my final project was completed so at the meeting I created a shared Google Drive for us and immediately started uploading templates, resources, my draft handbook, and videos that they could access at their convenience. Their dedication had a ripple effect and the rest of the staff caught on to what I was providing for the grades 3-5 staff.

When I had my final presentation on November 14th, it was considered an “optional” faculty meeting however, 27 staff members showed up. I had only made 20 copies of my handbook and had to reorder more. The support they all showed me was immeasurable.

My expectations for my students through Genius Hour are to internally learn how much they have to offer. How when you are interested in a topic, you should learn all that there is about it then find a way to present everything you learned to your peers. That inside all of us, there is a leader. The greatest thing I have learned from this thesis project is all of these expectations about myself. Without realizing it, I conducted my own Genius Hour project. My big question to my students is always, “How can you leave your mark?” I believe that I have left my mark with Silver Spring Elementary. From here on out, educators within our building have resources at their fingertips to help their students become empowered with their own learning.
Reid’s Handbook on Implementing Genius Hour

Goal: Empower students to dictate their own learning
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Why Genius Hour?

The need right now in education is for more authentic learning. The answer to this type of learning comes from student-centered learning. People get into teaching because they want to make a difference. They want to be innovative, creative, and make a great impact but it’s easier to fall into a pattern of what has always been done, instead of answering the question: "What is best for this learner in this situation?"

Being innovative is not easy, but it’s what is needed right now to prepare students for their future. For students to be successful in school and in life, it is important for them to activate their prior knowledge and try to relate new information to knowledge they already possess. How? Students need to be given the opportunity to be in charge of their learning in all areas of the classroom. The best (and easiest) way to start providing this type of learning is with implementing Genius Hour in your classroom. From there you will see how your students are capable of so much more and will eventually become empowered with their learning.

Below is a chart from A.J. Juliani, a former teacher and current Director of Technology and Innovation in the Centennial School District in Warminster, PA, stating the differences between engaged environments and empowered environments. There is nothing wrong with an engaged classroom, however you can see where an empowered classroom can take students- anywhere!

<table>
<thead>
<tr>
<th>Engaged Environments</th>
<th>Empowered Environments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attentive and committed to our curriculum</td>
<td>Attentive and committed to their interests</td>
</tr>
<tr>
<td>&quot;preparing for jobs&quot;</td>
<td>&quot;preparing themselves for anything&quot;</td>
</tr>
<tr>
<td>Teachings working to &quot;making it interesting&quot;</td>
<td>Teachers working on &quot;tapping into their interests&quot;</td>
</tr>
<tr>
<td>You must learn ________</td>
<td>What do you want to learn?</td>
</tr>
<tr>
<td>Giving choice</td>
<td>Inspired possibilities</td>
</tr>
<tr>
<td>Following the beaten path</td>
<td>Making your own path</td>
</tr>
<tr>
<td>Taking an assessment</td>
<td>Assessing your own learning</td>
</tr>
<tr>
<td>Consuming</td>
<td>Creating</td>
</tr>
<tr>
<td>Differentiated instruction</td>
<td>Personalized learning</td>
</tr>
</tbody>
</table>

Figure 1. Empowered environments verses engaged environments. Adapted from "Empowered Students Verses Engaged Students (What's the Difference?)." Retrieved October 21, 2019 from http://ajjuliani.com/empowered-students-vs-engaged-students/
Advice for Genius Hour:

• Get out of their way! Don’t crush dreams, ask about them and help guide students to success.

• Don’t underestimate what your students are capable of- keep high expectations for ALL students

• Expect your first attempt (even year) to flop but don’t give up! Reflect and change.

• It can be a lot to prepare for beforehand but it’s 100% worth it in the end.

• Expect it to be loud, messy, and chaotic.

• Share everything they do on Seesaw!

• Once you get to see individual student interests through their projects in Genius Hour, find ways to incorporate their interests into other parts of your curriculum.

“Genius Hour is an inquiry-driven, passion-based classroom strategy designed to excite and engage students through the unrestrained joy of learning.” (Genius Hour Guide, 2016).

Pictured here is what Genius Hour can look like. Groups are all doing different things. You’ll see a group of boys creating a working zip line while one stops his project to watch the progress and another isn’t distracted but busily working on his own project. Embrace the chaos!
Examples of how 5th grade has Implemented Genius Hour into our daily schedule:

*5th grade asked to take 25-30 minutes from our **ELA block** to for STEAM/project-based learning time due to writing being taken out of the PSSAs. This then shortened our “Shared Reading/Writing” block to only 45-50 minutes. This time is more focused on the Shared Reading unless we are doing a major writing. If the focus is on Shared Reading, the Writing is done during Guided Reading as a center. If the focus is on a major writing, the reading concepts are hit heavy during Guided Reading both at centers and at “teacher” time.

*WIN time- If you are worried about starting Genius Hour with an entire class, then WIN time would be the best option to start this. Provide multiple choices of activities.

*Guided Reading- Call one station “Genius Hour” and give them the options to work on projects of their choice within your rotations.
  - Decide if you want students to do individual projects during this time or with others in their guided reading group. Having them work with someone not in their guided reading group could get tricky but it’s possible. You would just have to be flexible.
  - You could introduce and go over expectations as an entire group or during your small group time.
  - 5th grade
    - Shared Reading/Writing 9:55-10:45
    - WIN 10:45-11:15
    - Guided Reading 11:15-11:45
    - STEAM 1:20-1:45

Possible Time Frames per Grade Level:

- **3rd Grade Schedule**
  - Shared Reading/Writing 9:15-10:15
  - WIN 10:15-10:45
  - Guided Reading 10:45-11:15
  - Options:
    - 25-30 minutes from ELA block everyday
    - One day of 60 minutes from ELA block dedicated to project-based learning
    - WIN with students who don’t get pulled out
    - As a guided reading station

- **4th Grade Schedule**
  - Shared Reading/Writing 12:40-1:20
  - Guided Reading 1:20-1:50
  - WIN 1:50-2:20
  - ELA 2:20-2:35
  - Options
    - 25-30 minutes from ELA block everyday
    - One day of 60 minutes from ELA block dedicated to project-based learning
    - WIN with students who don’t get pulled out
    - As a guided reading station
Important first steps:

1. Introduce Genius Hour with this video-
   https://www.youtube.com/watch?v=NMFQUtHsWhc

2. Decide your schedule and what you will allow them to do during Genius Hour. Options (Introduce one or two at a time then eventually allowing all of it to be choices for them).
   a. **Passion Projects**- If students already have an idea of something they want to learn more about
      i. Ss should fill out a Project Proposal first (template is in the 3-5 Genius Hour shared Google drive and pages 21-22)
      ii. Video on how to conference with students on their Project Proposal- 
          https://drive.google.com/drive/u/0/folders/0AD3rTGQnl2AmUk9PV
      iii. Based on their project (community service or project-based) give them a planning/reflecting packet to guide their project
   b. **Coding** at www.code.org- get login information and QR codes from Ms. Strome
   c. **STEM Activities**- can buy off Teachers Pay Teachers
   d. **Enrichment Activities** – create a folder of projects allow them to choose
   e. **Current Events**- create or use template on page 37 or 38
   f. **Class project**- decide on a cause that you could all work on together

3. Decide how you will go over digital citizenship with your students.
   a. Ms. Strome can help teach these lessons if you sign up with her through her calandy
      i. How to use the internet safely
      ii. What your expectations are for when using iPads
      iii. Discuss cyberbullying
      iv. How to cite information properly
   b. Or you can visit this site for some great activities to do whole group lessons https://www.commonsense.org/education/articles/10-fun-digital-citizenship-videos-for-k-5-classrooms

4. Decide how you want to check-in with students- they will all be at different places throughout their projects.
   a. Do you want them filling out a form to map out their ideas and meet with you first before beginning (project proposal)?
   b. Can they just do as they please?
   c. Do they need to finish a task before starting a new one or can they quit after they have started?

5. Teach them how to use their Google Drive (Ms. Strome can help with this, too)
   a. Google Docs and Slides allows them to share their projects with each other and you so that information can be accessed if one student is out. You also have direct access which is a way you can check in whenever you want.
   b. Video on how to create and share a Google Doc from student iPads https://drive.google.com/drive/u/0/folders/0AD3rTGQnl2AmUk9PV
Projects to Get You Started

Individual or small group activities:
- **Current events** - individual or pairs (templates are in the 3-5 Genius Hour shared Google drive and on pages 37 and 38)
  - Have students pick an article that describes a problem in the world, after learning about it from the Newsela article, have them research more on it then figure out solutions to the problem.
  - Present their findings and solutions
  - You do not have to use [www.newsela.org](http://www.newsela.org) but it is a great resource, any non-fiction articles are good for research
  - Ss can complete through Google or on a hardcopy by providing them a print out
- **Research project** - individual or pairs
  - Ss research anything they want to know more about or how to do
  - They present their findings
  - Provide a resource for Ss to keep track of their progress
    - See Project Design Packets on p. 23-28
    - See Community Service Packets on p. 29-34
  - Have them create their presentation through Google Slides or Docs so that they can share with each other and you
  - [www.smore.com](http://www.smore.com) is a great option as well. They just won’t be able to share anything with you until it’s done
    - Contact Dr. Parks for login information for Smore
- **Green screen** - Individual, small groups
  - Would have to borrow the black iPads from Ms. Strome but students can create their own movies.
- [www.code.org](http://www.code.org) - Ms. Strome should have created their accounts
- **Podcasts** - 1-3 people
  - Pick a topic of what they want to talk about, outline possible show ideas, and use iPads to record!
- **Enrichment projects** - varies
  - Laminate a couple of copies of projects you have done in the past or even with small groups, put them all in one big binder/folder and allow them to pick and choose.
    - Even if they have done the project before, they will more than likely do it better the second time and gain better understanding!

Whole class activities:
- **Collections or Community Service**
  - Decide on an area of need within our school, community, neighborhood, etc. (ex. batteries, crayons, donations for a cause)
  - Create committees so everyone has a voice
    - Let them go! Assist as needed but push for students go out of the comfort zones, teach them how to talk on the phone or to adults
Proof Genius Hour is Worth It:

Passion Projects

Socks for Souls - donations for the homeless

Creating movies with stick bots

STEM Project - Build a tiny house

Enrichment - Fall Fraction Frenzy

Whole Group - RAK Posters

Passion Project - Volunteer at Project Share
Projects Correlated with PA Core Standards:

*Through Genius Hour students not only learn how to research, collaborate with others, and present their projects, they learn how to do all of it efficiently. Because of this, you’ll see that their “academic” projects will get better, too.

*As the teacher, you’ll also start to pick up on what types of projects your student are interested in and then can adapt your curriculum to interest them.

Examples of what I have done:

- **Social Studies and Persuasive Writing**: see example on pgs. 10-12 with rubric
  - Ss had to write a persuasive speech as to why others in the class should join them on their exploration to the New World
    - They got to choose which settlement they wanted to persuade their classmates to go to from the three settlements we learned about: Roanoke, Jamestown, or Plymouth.
    - Everyone in the group had to speak a part of the speech and it had to flow as though they were one person.
    - They were encouraged to create authentic props from the time period.
    - Each speech video was uploaded to Seesaw - they then voted on which speech was the most persuasive and asked their parents to vote as well.
  - What they learned:
    - More information about one of the first English settlements.
    - How to give speeches off of memorization.
    - How to make note cards rather than always reading off of their paper/visual word for word.
    - How to use props to hide their notecards.
    - How to work with others.

- **Informational Writing**
  - Any research project
  - Newsela current events
  - Any type of current event

- **Science and Writing**
  - Ss create videos explaining the Foss Focus Questions at the end of each unit or investigation using pictures/video evidence from their experiments.

~Don’t forget to post student work to Seesaw~
Settlement Persuasive Speech

Background: You have just returned to England from your settlement in the New World (Roanoke/Jamestown) and have been chosen by Queen Elizabeth I/King James to be its leader under one condition- you need to persuade at least 100 other people in England to join you on your adventure.

Or

You are tired of King James’ rule on your religion and you want to break free of it. You keep hearing about all of these explorations to the New World and want to run away and start a new settlement there (Plymouth). However, the ships are really large and need at least 100 people to man them properly to make the trip across the Atlantic Ocean.

Goal: You will need to create a persuasive speech that you will give at the next town hall meeting to try and get your 100 followers. You may use any props that you want to get their attention and “hook” them in.

Format: Your speech will need to have all the components of a strong persuasive:
- Hook
- Claim
- 2-3 REALLY GOOD reasons why they should follow you
- 2-3 examples for each reason
- Conclusion

Presentation: Each group member will be responsible for saying a part of the speech. It should be rehearsed and flawless. You may use props and index cards to help you with the speech but no reading off paper or iPads. Try to not act silly (giggling, looking around) and be serious to really get our attention! The speech should be between 1-3 minutes long. Time yourselves and make sure it fits within that frame. If it’s less than a minute, you didn’t add enough details, if it’s longer than 3 minutes you’ll lose your audience’s interest.

Grading: Your presentation and speech (I will need a copy- either nicely handwritten, typed, or Google Doc) will be graded using the 5th Grade Persuasive Writing Rubric, therefore grammar and spelling will count.

Due Date: ____________________________

W.5.1. - Write opinion pieces on topics or texts supporting a point of view with reasons and information.

Unit EQ: How do effective authors of persuasive writing use the writing process to control the message by addressing the needs of the audience and building a reasoned and logical case to support a clear position?

8.3.5. D- Examine patterns of conflict and cooperation among groups and organizations that impacted the history and development of the United States.

EQ: What challenges faced the first English colonies?
# Settlement Persuasive Speeches Rubric

## Persuasive Writing

### W.5.1- Opinion/Argument Standards

<table>
<thead>
<tr>
<th>Component</th>
<th>Example</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>“Hooked” the audience with a fact, question, or situation which led to the group’s claim and preliminary reasons to get the audience to listen to their speech</td>
<td>3 points</td>
</tr>
<tr>
<td></td>
<td>Began with an opinion that may not support the group’s purpose. Opinion supported purpose but did not “hook” the audience. Reasons why are not included.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>An opinion is not included. Supporting reasons are not included.</td>
<td>1 point</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Organizational text structure of paragraphs are in an order that best suits the purpose of swaying the audience’s opinion.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>Reasons are written in an illogical order. OR There is no structure to the text- reasons and evidence are not written in paragraphs or sections.</td>
<td>1 point</td>
</tr>
<tr>
<td><strong>Topic</strong></td>
<td>Gave reasons to support the opinion that were parallel and did not overlap and included evidence (from credible sources) such as examples, details, dates, and quotes to support their claim.</td>
<td>3 points</td>
</tr>
<tr>
<td></td>
<td>Explained the claim with some reasons from credible sources, but never fully develops the topic.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>Has limited or no development of the claim. OR Didn’t use information from credible sources. OR Used information that is false.</td>
<td>1 point</td>
</tr>
<tr>
<td><strong>Transition Words</strong></td>
<td>Connects ideas and categorizes information using words, phrases, and clauses naturally.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>Uses some words, phrases, and/or clauses to connect ideas. May be unnatural in spots. OR The writer did not use words, phrases, and/or clauses to connect ideas.</td>
<td>1 point</td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td>Wrote a conclusion which connected back to and highlighted what the speech was mostly about, not just the preceding paragraph.</td>
<td>3 points</td>
</tr>
<tr>
<td></td>
<td>Wrote a concluding statement or section that does not restate the original opinion.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>Did not write a concluding statement. OR Simply wrote “The End”.</td>
<td>1 point</td>
</tr>
</tbody>
</table>

## Writing Process

### W.5.5

<table>
<thead>
<tr>
<th>Component</th>
<th>Example</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Writing Process</strong></td>
<td>Final copy is neat and improved. It is clear the group took time revising and editing their piece, and they had clear knowledge of what these stages required.</td>
<td>3 points</td>
</tr>
<tr>
<td></td>
<td>Final copy is slightly improved. There is some evidence of revising and editing, but there could have been more time spent on these stages.</td>
<td>2 points</td>
</tr>
<tr>
<td></td>
<td>Final copy is no different than the draft. There is no evidence of any revising or editing and there are mistakes throughout the speech.</td>
<td>1 point</td>
</tr>
</tbody>
</table>

## Language Conventions
L.5.1  | Uses complete sentences with appropriate grammar (subject/verb agreement)  
(3 points)  | Mostly uses complete sentences and appropriate grammar  
(subject/verb agreement)  
(2 points)  | Seldom uses complete sentences and appropriate grammar  
(subject/verb agreement)  
(1 point)
L.5.2  | Consistently uses correct capitalization.  
(0-1 mistakes)  
(3 points)  | Mostly uses correct capitalization.  
(2-3 mistakes)  
(2 points)  | Frequently uses incorrect capitalization.  
(More than 3 mistakes)  
(1 point)
L.5.2  | Consistently uses correct punctuation.  
(0-1 mistakes)  
(3 points)  | Mostly uses correct punctuation.  
(2-3 mistakes)  
(2 points)  | Frequently uses incorrect punctuation.  
(More than 3 mistakes)  
(1 point)
L.5.2  | Consistently spells grade-appropriate words correctly, consulting references as needed.  
(0-1 mistakes)  
(3 points)  | Mostly spells grade-appropriate words correctly, consulting references as needed.  
(2-3 mistakes)  
(3 points)  | Many mistakes in spelling of grade-appropriate words, with little evidence of references used.  
(More than 3 mistakes)  
(1 point)
L.5.3  | Consistently chooses words and phrases that appeal to the audience.  
(3 points)  | Mostly chooses words and phrases that appeal to the audience.  
(2 points)  | Does not choose words and phrases that appeal to the audience.  
(1 point)

<table>
<thead>
<tr>
<th>Standard</th>
<th>Group Score</th>
<th>Mastery</th>
<th>Near Mastery</th>
<th>Remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.5.1</td>
<td>13-12</td>
<td>11-10</td>
<td>9-0</td>
<td></td>
</tr>
<tr>
<td>W.5.5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>L.5.1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>L.5.2</td>
<td>9-8</td>
<td>7-6</td>
<td>5-0</td>
<td></td>
</tr>
<tr>
<td>L.5.3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 6 Social Studies Standards

<table>
<thead>
<tr>
<th>8.3.5.B</th>
<th>Illustrate concepts and knowledge of historical documents, artifacts and places critical to United States and World history.</th>
<th>Mastery</th>
<th>Near Mastery</th>
<th>Remediation</th>
</tr>
</thead>
</table>
|         | Three or more concepts effectively used or spoken about to describe their settlement.  
(3 points)  | Two concepts effectively used or spoken about to describe their settlement  
(2 points)  | One or no concepts used or spoken about to describe their settlement.  
(1 point) |
| 8.3.5.D | Examine patterns of conflict and cooperation among groups and organizations that impacted the history and development of the United States. | Three or more connections based on the text or what was discussed.  
(3 points)  | Two connections based on the text or what was discussed.  
(2 points)  | One connection based on the text or what was discussed.  
(1 point) |

Projects from Other Teachers Around the Country:
This I Believe

**Age Level and/or Subject**
6th grade ELA

**Overview of Lesson/Project/Activity**
I found this lesson online. It is called “This I Believe” and it is a great essay writing unit. The lesson plan guides you and the students through the process of writing a This I Believe statement. For example, I believe in courage or empathy, or caring. Students pick what belief they want to write about and then tell how and why that is important to them.

**Student Outcomes**
This is one of my favorite units all year. I love seeing all the ideas and essays students come up with and it helps me get to know them even more and they get to know each other. Really gives me a look inside to what is important to them. I try to share the completed essays with their parents and you can submit them for publication to the website. This is a great essay to pair with a novel such as Wonder or The Cay.

**How Are Students Assessed?**
Through mini writer workshops such as pre-planning, revision, and their final essay.

**Any further information? (Links, related resources, etc.)**
www.thisibelieve.org and then click the educators tab.

Be the Teacher
Connected Standards
Speaking and Listening

Overview of Lesson/Project/Activity

As review for an upcoming assessment, student work with their groups to correctly answer problems. When they are ready, they take turns teaching the class through the process of answering the problems. I usually use a study guide format. 1. Assign groups a problem set. (1 problem for each student in the group) 2. Each group member needs to complete the set individually. (5-10 minutes) 3. Groups collaborate to make sure that their answers are correct and fix them if they are not. (5-10 minutes) 4. Groups decide which team member is doing what. (Speaker, Writer, Response Team) for each problem. Everyone does the Speaker and Writer jobs one time. (2-5 minutes *limit this time to minimize bickering) 5. Each team presents their information to the class using the document camera and answers questions when needed. 6. Students who are not presenting are responsible for following along with the presenter on their own papers. 7. When everyone has presented, take any last questions and clear up any confusion that students may have. 8. Assess students as soon as your schedule allows.

Student Outcomes

Students will own their learning. Students will be excited and feel ready to take their assessment. Students will collaborate with their peers.

How Are Students Assessed?

Groups are scored using a check/plus/minus system. To earn the plus, they must collaborate effectively with their group, answer the problem correctly, present their information in an effective and concise manner, and effectively answer any questions that their peers ask.
Give Me 5

Age Level and/or Subject
K-12

Overview of Lesson/Project/Activity

From Paul Solarz's, *Learn Like a Pirate*, students are given the privilege to interrupt learning with a “Give Me 5” (traditionally and solely used by the teacher)

Student Outcomes

Through the use of this tool, students are given multiple opportunities throughout the school year to practice leadership skills and/or to show ownership of their learning and their classroom community.

Appropriate Examples of "Give Me Five"

- Letting others and the teacher know when it is or almost is time to transition.
- Polite suggestions for how to improve the class's behavior at a given time.
- Making a suggestion to improve the task they are working on.
- To ask the whole class a question when no one in your group knows the answer.
- Offering to demonstrate a skill that others might need in the future.

How Are Students Assessed?

Students aren’t officially assessed but are guided on how to use this power respectfully throughout the school year.

Any further information? (Links, related resources, etc.)

*Learn Like a Pirate* by Paul Solarz

Movie Making-Documentary
Age Level and/or Subject
Grades 3-5

Connected Standards (if applicable)
Informational Reading & Writing, Listening, Speaking, Use of technology, research

Overview of Lesson/Project/Activity

Students were given choice to brainstorm movie topics. We voted on top 6 ideas. Students formed groups based on interest. Mini lessons on documentary film making, the movie making process (ideas, storyboarding, location scouting, question writing, filming-camera angles, lighting, sound, and post-production editing). Students chose roles and began work. Over the next several weeks, they completed filming and editing to prepare for our Premiere Party, including parents, administrators, and some other students.

Student Outcomes

A small-group created original short film about a student-chosen topic

How Are Students Assessed?

Using co-created rubrics for collaboration, good use of time, and completion of a finished project on time. Peer review between groups provided formative feedback, as well as teacher conferencing (small group and individual as needed).

Any further information? (Links, related resources, etc.)
Movie Making: Unleash Student Voice from Karen Kraeger
https://www.slideshare.net/kakraeger/movie-making-unleash-student-voice
Inquiry/Research Social Science

Age Level and/or Subject
3rd Grade Social Science; Geography

Connected Standards (if applicable)

Multiple ELA Standards as well as Inquiry Skills: SS.IS.1.3-5. Develop essential questions and explain the importance of the questions to self and others. SS.IS.2.3-5. Create supporting questions to help answer essential questions in an inquiry. SS.IS.3.3-5. Determine sources representing multiple points of view that will assist in answering essential questions. Geographic Representations: Spatial Views of the World SS.G.1.3: Locate major landforms and bodies of water on a map or other representation. SS.G.2.3. Compare how people modify and adapt to the environment and culture in our community to other places. SS.G.3.3. Show how the consumption of products connects people to distant places.

Overview of Lesson/Project/Activity

Through the lens of inquiry, we will use this essential question: How does the study of geography help us understand how people around the world live their daily lives?

Student Outcomes

Students will learn how to research and synthesize information to communicate what they have learned with a chosen audience.

How Are Students Assessed?

Students will share what they have learned with a chosen audience. They will also answer the essential question and write a self-reflection on themselves as a 3rd grade learner.

Any further information? (Links, related resources, etc.):
https://docs.google.com/document/d/1OlvtGHpe9_gjM0SJkTHOegMxAPIFKLb8lgH5aHnY6WE/edit?usp=sharing

Other Places You Can Get Resources
Twitter - Who to follow? Start small then build your Personal Learning Network (PLN)

- **Any of our teachers or teachers within our District.** I always get great ideas from @MrBiggsCV, @ShankMrs, @mward33, @MissKRafferty and @chadrunkle17

- **Others I met through Keystone Technology Institute:** @jessicanaziri, @RedcayResources, @keystonespa, @GirlsinTech

- **Famous authors on Innovation:** @gcouros, @ajjuliani, @KatieNovakUDL, @burgessdave

- **Famous Institutions focused on Innovation:** @edutopia and @teachingchannel

Books on Student-Centered Learning

- *The Innovator’s Mindset* and *Innovate Inside the Box* by George Couros

- *The PBL Playbook: A Step-by-Step Guide to Actually Doing Project-Based Learning, Empower: What Happens When Students Own Their Learning, and Launch: Using Design Thinking to Boost Creativity and Bring Out the Maker in Every Student* by A.J. Juliani

- *Personal & Authentic: Designing Learning Experiences That Impact a Lifetime* by Tom Murray

Blogs

- George Couros - [https://georgecouros.ca/blog/](https://georgecouros.ca/blog/)

Podcasts

- 10 Minute Teacher with Vicki Davis
- The Google Teacher Tribe Podcast with Matt Miller and Kasey Bell
- Flipped Learning Radio Worldwide
- The Creative Classroom featuring John Spencer
- The House of #Edtech Podcast
- Just for fun - Angela Watson’s Truth for Teachers Podcast

**Picture Books to Promote Project-Based Learning**
*Rosie Revere, Engineer* by Andrea Beaty (I have in my classroom for you to borrow)

*Going Places* by Peter Reynolds and Paul Reynolds

*When Marian Sang* by Pam Munoz Ryan

*The Most Magnificent Thing* by Ashley Spires

*What Do You Do With an Idea?* by Kobi Yamada

*Q is for Question: An ABC book of Philosophy* by Tiffany Poirer

*It’s Okay to Make Mistakes* by Todd Parr

*The Dot* by Peter Reynolds (I have in my classroom for you to borrow)

*Iggy Peck, Architect* by Andrea Beaty
Resources to Print for Students
Team up with your parents and teacher to help set some guidelines before you begin.

I want to learn more about:

My BIG QUESTION is:

I know that this project is something that I will stick with because:

This is what I already know about this topic:

Here are the materials that I plan to use:

I will work on this project both at school AND at home:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

I understand that I do not get to work on Genius Hour if all my schoolwork is not complete:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
This is what I will need for my presentation:


My presentation will be in the following format:


This project is approved!

This project needs some clarification before you begin!

Teacher Signature: ___________________________
Parent Signature: ___________________________
Student Signature: ___________________________

Parents: Please understand that if your child is missing work in any subject area they will forfeit their Genius Hour time for the week, thus making this project something that may have to be worked on at home if your child is missing work, they will work on that while other students are working in Genius Hour sessions.

Project Due Date: ___________________________
Names of designers: __________________________________________

Project Design Planning, Reflection, and Conclusion Packet

Directions: For any project where you are designing or planning something brand new you will need to work through a process similar to what engineers do every day!

*Don’t forget to take pictures of your progress- these can be used in your final presentation and help you reflect back on everything you learned/did along the way!

Fair use: https://www.amazon.com/Canon-Frame-Digital-Camera-24-105mm/dp/B01KUR6S9Y
~Project~

**Project:** In 1-2 sentences describe what you plan to do and why you want to do it.

**What:** In 1-2 sentences explain what your project needs to do to be successful.

**How:** In 1-2 sentences describe how you plan to learn about your project

~Plan~
Your first step before beginning to create anything is to design and plan what you’ll need! You can draw blueprints of your design or write out in steps what you plan to do and don’t forget your materials!

**Materials:**

---

**Design:** You can draw or write what your project will physically look like.

---

**Steps:** How will you actually create your project?

---

**~Data~**

Next, you will test your project to see what worked and what didn’t work.

**Test 1 Results:**
Test 2 Results:

Test 3 Results:

Reflection: In 1-2 sentences describe whether your project was successful or not.

~Redesign~

Changes: In 1-2 sentences describe what you decided to change and how.
Retest: Were the changes of the project effective?

~Conclusion~

What did you learn?
What would you do differently?

Was your project successful?

Names in group: ____________________________________________

Community Service Packet

Directions: For a community service project you will need to keep track of
all the progress you’ve made - use this packet for that!

*Don’t forget to take pictures of your progress - these can be used in your final presentation and help you reflect back on everything you learned/did along the way!

~Project~

Project: In 1-2 sentences describe what you plan to do and why you want to do it.
What: In 1-2 sentences explain what your project needs to be successful.

How: In 1-2 sentences describe how you plan to learn about your project

~Plan~

Your first step before starting a community service project is to plan out what will need to be done and by who (split group up into committees).

Materials:

Committees:
Who will do what?

~Notes~

Use these pages to keep track of anything/everything you’ve done. This could include phone calls you’ve made, meetings you’ve held, things you’ve had to make (posters, boxes, videos, etc.).
~Conclusion~

What did you learn?

What would you do differently?
Was your project successful?

Name______________________

Safe Websites for Research

<table>
<thead>
<tr>
<th>Website Name</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.safesearchkids.com/google">www.safesearchkids.com/google</a></td>
<td>Search engine commonly used for online inquires.</td>
</tr>
<tr>
<td><a href="https://www.kiddle.co">https://www.kiddle.co</a></td>
<td>A kid’s encyclopedia search engine.</td>
</tr>
<tr>
<td><a href="http://en.childrenslibrary.org/">http://en.childrenslibrary.org/</a></td>
<td>Has helpful sections like literature, biography, science &amp; math, society &amp;</td>
</tr>
<tr>
<td></td>
<td>government to choose from.</td>
</tr>
<tr>
<td>Website</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td><a href="http://www.kids.nationalgeographic.com">www.kids.nationalgeographic.com</a></td>
<td>For research on animals and nature.</td>
</tr>
</tbody>
</table>
| [www.brainpop.com](http://www.brainpop.com) | Our school has a subscription for this.  
Username: silverspringel  
Password: eagles |
| [https://www.worldbookonline.com/wb/Login](https://www.worldbookonline.com/wb/Login) | Can read info to you.  There are 2 different versions: Kid’s version – K-3. Student version 4<sup>th</sup>-8<sup>th</sup> grade.  
Spanish version also available.  
You will need to register first then will be able to login with your Google account information. |
| [https://www.wonderopolis.org](https://www.wonderopolis.org) | It has a kid friendly search engine that will help students find articles & videos on their chosen topic. |
| Destiny | SS Library Catalog - Students can search by top & choose the Website tab to see |
online resources. The Website tab is in the upper right corner next to the Titles tab.

Never use Wikipedia because anyone can update information on the site, therefore it could be inaccurate.

Always remember to cross-check your research. Use multiple resources to make sure your information is accurate.

Name: _________________________     Date___________________     #_____

Current Events

Directions: Locate an article from a newspaper, magazine, news documentary or trustworthy website which details an important event happening in the world. Fill in the graphic organizer first to help guide your summary us details/evidence from the article. One or two sentences is not enough to earn full credit! Whenever possible, please attach a copy of the current events article to your report. You may type this up using Google Docs and share with me as an option, too! If you need more room, you can use the back or attach a separate sheet of paper.

Topic Covered_______________________________________________________________

Date of Article/Newspaper_____________________________________________________

Type of Source (Newspaper, Magazine, TV, Website, etc.)_________________________

Article/Program Title___________________________________________________________________________________________

Write a short summary about the event. Who, What, When, Where, Why, How?
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

* Need teacher permission first.
What is your opinion of/reaction to this event? Explain.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Research one of your questions from above.</strong></td>
<td><strong>Use at least 2 different sources to validate your answer.</strong></td>
</tr>
<tr>
<td><strong>4. Answer multiple choice questions.</strong></td>
<td><strong>Test taking skills: underline important words in the questions, read all your answer choices, if you aren’t sure which answer is correct eliminate a choice you know isn’t correct.</strong></td>
</tr>
</tbody>
</table>
| **5. Write a paragraph about what you read.** | **Write a summary of the article including the author’s purpose for writing the article and the main idea of the piece.**

If the article provides Pro/Con View Points compare the two pieces and explain who made their point better and why. |
| **6. Create a presentation.** | **What app do you want to use to show your answers/questions/responses to the above questions? What visual(s) would be great to help us understand your Current Event?** |
## PRESENTATION RUBRIC for PBL: for grades 3-5: PA Core ELA Standards Aligned

<table>
<thead>
<tr>
<th></th>
<th>Remediation (1)</th>
<th>Near Mastery (2)</th>
<th>Mastery (3)</th>
<th>Above Standard</th>
</tr>
</thead>
</table>
| **Explanation of Ideas & Information**  
CC.1.2.5.1          | • uses inappropriate facts and irrelevant details to support main ideas         | • chooses some facts and details that support main ideas, but there may not be enough, or some are irrelevant | • chooses appropriate facts and relevant, descriptive details to support main ideas and themes | ✓              |
| **Organization**   | • does not include everything required in presentation  
W.5.5  
• presents ideas in an order that does not make sense  
• does not plan timing of presentation well; it is too short or too long | • includes almost everything required in presentation  
• tries to present ideas in an order, but it doesn’t always make sense  
• presents for the right length of time, but some parts may be too short or too long | • includes everything required in presentation  
• presents ideas in an order that makes sense  
• organizes time well; no part of the presentation is rushed, too short or too long |               |
| **Eyes & Body**    | • does not look at audience; reads notes  
L.5.1  
• fidgets or slouches a lot | • makes some eye contact, but reads notes or slides most of the time  
• fidgets or slouches a little | • keeps eye contact with audience most of the time; only glances at notes or slides  
• has a confident posture |               |
| **Voice**          | • speaks too quietly or not clearly  
L.5.1  
• does not speak appropriately for the situation (may be too informal or use slang) | • speaks loudly and clearly most of the time  
• speaks appropriately for the situation most of the time | • speaks loudly and clearly  
• speaks appropriately for the situation, using formal English when appropriate |               |
| **Presentation Aids**  
CC.1.2.5.A          | • does not use audio/visual aids or media  
• uses inappropriate or distracting audio/visual aids or media | • uses audio/visual aids or media, but they sometimes distract from the presentation, or do not add to ideas and themes | • uses well-produced audio/visual aids or media to add to main ideas and themes |               |
| **Response to Audience Questions**  
CC.1.2.5.H          | • does not answer audience questions | • answers some audience questions, but not clearly or completely | • answers audience questions clearly and completely |               |
| **Participation in Team Presentations** | • Not all team members participate; only one or two speak | • All team members participate, but not equally | • All team members participate for about the same length of time, and are able to answer questions |               |
## Creativity & Innovation Rubric for PBL
(for grades 3-5; CCSS ELA aligned)

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>Below Standard</th>
<th>Approaching Standard</th>
<th>At Standard</th>
<th>Above Standard</th>
</tr>
</thead>
</table>
| **Launching the Project**
**Define the Creative Challenge** | I may just “follow directions” without understanding why something needs to be created
I still need to learn how to think about what people might need or like when they use or see what is created | I know that something needs to be created but cannot give detailed reasons why
I have a basic idea of what people might need or like when they use or see what is created | I understand the reasons why something needs to be created
I understand the needs and interests of the people who will use or see what is created | ✔ |
| **Building Knowledge, Understanding, and Skills**
**Identify Sources of Information** | I use only the usual sources of information (website, book, article) | I find one or two sources of information that are unusual | I find unusual ways to get information | |
| **Developing and Revising Ideas and Products**
**Generate and Select Ideas** | I think of ideas for the product that are not new or original
I pick an idea without deciding which one is best
I still need to learn how to improve on the idea
I still need to learn how to use feedback from others to improve written products | I think of some new ideas for the product
I quickly decide which idea is best
I might think about how to improve on the idea, but might not
I use some feedback to make small changes in written products | I think of many new ideas for the product
I carefully decide which idea is best
I ask new questions and think about how to improve on the idea
I use feedback from others to improve written products (CC ELA 3-5.W.5) | |
| **Presenting Products and Answers to Driving Question**
**Present Work to Users/Target Audience** | I present ideas and products in just the regular ways (show PowerPoint slides, read notes, have no audience involvement) | I try to add some interesting touches to visual aids but they may not add much, or they may be distracting
I try to involve the audience actively in the presentation but it is very quick or does not work well | I create visual aids that are interesting to see and hear
I involve the audience actively in the presentation (ask them questions, have them do an activity) | |
# COLLABORATION RUBRIC for PBL: Individual Performance (for grades 3-5; CCSS ELA aligned)

<table>
<thead>
<tr>
<th></th>
<th>Below Standard</th>
<th>Approaching Standard</th>
<th>At Standard</th>
<th>Above Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Takes Responsibility</strong></td>
<td>I need to prepare for and join team discussions</td>
<td>I am usually prepared for and join team discussions</td>
<td>I am prepared for work with the team; I have studied required material and use it to explore ideas in discussions (CC 3-5.SL.1a)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>I need reminders to do project work</td>
<td>I do some project work, but sometimes need to be reminded</td>
<td>I do project work without having to be reminded</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My project work is not done on time</td>
<td>I complete most project work on time</td>
<td>I complete project work on time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I need to learn how to use feedback from others</td>
<td>I sometimes use feedback from others</td>
<td>I use feedback from others to improve my work</td>
<td></td>
</tr>
<tr>
<td><strong>Helps the Team</strong></td>
<td>I need to cooperate with my team and help the team solve problems</td>
<td>I cooperate with the team but do not help it solve problems</td>
<td>I help the team solve problems and manage conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I need to learn how to help make discussions effective</td>
<td>I usually help make discussions effective, but do not always follow the rules, ask enough questions, or express ideas clearly</td>
<td>I help make discussions effective by following agreed-upon rules, asking and answering questions, clearly expressing ideas (CC 3-5.SL.1b,c,d)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I need to learn how to give useful feedback to others</td>
<td>I give feedback to others, but it may not always be helpful</td>
<td>I give helpful feedback to others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I need to learn to offer to help others if they need it</td>
<td>I sometimes offer to help others if they need it</td>
<td>I offer to help others do their work if needed</td>
<td></td>
</tr>
<tr>
<td><strong>Respects Others</strong></td>
<td>I am sometimes impolite or unkind to teammates (may interrupt, ignore others’ ideas, hurt feelings)</td>
<td>I am usually polite and kind to teammates</td>
<td>I am polite and kind to teammates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I need to learn how to listen to other points of view and disagree kindly</td>
<td>I usually listen to other points of view and disagree kindly</td>
<td>I listen to other points of view and disagree kindly</td>
<td></td>
</tr>
</tbody>
</table>

*Source: PBLworks*
## CRITICAL THINKING RUBRIC for PBL: for grades 3-5; CCSS ELA aligned

<table>
<thead>
<tr>
<th>Critical Thinking Opportunity &amp; Phases of a Project</th>
<th>Below Standard</th>
<th>Approaching Standard</th>
<th>At Standard</th>
<th>Above Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Launching the Project:</strong> Analyze Driving Question and Begin Inquiry</td>
<td>I cannot explain what I would need to know to be able to answer the Driving Question.</td>
<td>I can identify a few things I would need to know to be able to answer the Driving Question.</td>
<td>I can explain what I would need to know to be able to answer the Driving Question.</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Building Knowledge, Understanding, and Skills:</strong> Gather and Evaluate Information</td>
<td>I still need to learn how to use information from different sources to help answer the Driving Question.</td>
<td>I can use information from different sources to help answer the Driving Question, but I may have trouble putting it together.</td>
<td>I can use information from different sources to help answer the Driving Question (CC 3-5.RI.7, W.7).</td>
<td></td>
</tr>
<tr>
<td><strong>Developing and Revising Ideas and Products:</strong> Use Evidence and Criteria</td>
<td>I still need to learn how to identify the reasons and evidence an author or speaker uses to support a point.</td>
<td>I can identify some of the reasons and evidence an author or speaker uses to support a point.</td>
<td>I can explain how an author or speaker uses reasons and evidence to support a point that helps me answer the Driving Question (CC 3-5.RI.8, SL.3).</td>
<td></td>
</tr>
<tr>
<td><strong>Presenting Products and Answers to Driving Question: Justify Choices</strong></td>
<td>I still need to learn how to explain my ideas in an order that makes sense.</td>
<td>I can explain my ideas, but some might be in the wrong order.</td>
<td>I can explain my ideas in an order that makes sense (CC 3-5.SL.4).</td>
<td></td>
</tr>
</tbody>
</table>

- **Evaluation Criteria:**
  - Below Standard: Needs significant improvement.
  - Approaching Standard: Improvements are needed.
  - At Standard: Standards are met.
  - Above Standard: Above standard.

- **CCSS ELA aligned:**
  - **RI.7**: Integrate information presented in diverse media or formats (e.g., visually, quantitatively) as well as in words.
  - **W.7**: Integrate supporting facts and relevant details into an effective speech or presentation.
  - **RI.8**: Assess the warrant of claims and the establishment of credibility.
  - **SL.4**: Adapt talk to a variety of audiences and purposes.