

RELATIONSHIP AND APPLICATION OF GENIUS HOUR IN TEACHING 21ST CENTURY LITERATURE FROM THE PHILIPPINES AND THE WORLD ON STUDENTS' LEARNING ACHIEVEMENT

DIANNE BERNADETTE S. PANTE, MPA

bernadettepante@gmail.com

Laguna State Polytechnic University, Philippines

ABSTRACT

This study aims to determine the relationship on the application of Genius Hour in teaching 21st Century Literature from the Philippines and the World and students' learning achievement. Accordingly, this study gathered data from the respondents from the three (3) sections of Science, Technology, Mathematics, and Engineering (STEM) Grade 11 at Laguna State Polytechnic University Santa Cruz Senior High School Department (LSPU-SCC SHS Department), rendering a total of 110 responses.

The main instruments used in this research were the self-made questionnaire and the self-made rubrics. The data gathered using these instruments were statistically treated through Mean, Standard Deviation, Frequency, and Pearson R. This set of information were gathered through the application of Genius Hour, and the responses of the students were taken using the Google Form. Additionally, the researcher utilized the self-made rubric in order to determine students' learning achievement.

Based on the data analyzed, it was revealed that the students have a Very High level of application of their risk assessment, strengths and weaknesses, planning of approach, application of strategies, and reflection in relation to the application of Genius Hour in teaching Literature and Media under the subject 21st Century Literature from the Philippines and the World. Moreover, it also showed that the students also have Very High level of engagement with risk assessment, strengths and weaknesses, planning of approach, application of strategies, and reflection in relation to the application of Genius Hour in teaching in the same topic of the said subject. Further, the study also revealed that as per indicator Over-all Quality of Presentation, students' learning achievement was Satisfactory, and as per indicators Effort, Inquisitiveness, Originality of Idea, and Over-all Learning, students' learning achievement were proven Excellent.

Based on the findings and conclusions drawn from this study, the researcher would like to recommend the following: 1) The teachers may consider the use of Genius Hour in teaching, not only on the subject 21st Century Literature in the Philippines and the World, but also on different subjects considering that Genius Hour is a student-centered teaching pedagogy, and 21st century classrooms are also learner-centered; 2) The teachers and future researchers, considering that this study was conducted only using the online distance learning, may consider adapting the strategies to an in-person classroom setting; 3) Stakeholders may consider the results of the study on their planning given that the students' application of and engagement on Genius Hour both have significance on their learning achievements; 4) Students may refer on this study in order for them to understand their need to wonder, ask questions, be inquisitive, and create their own research is vital for their learning and their future as an individual. This may also help them realize that their competencies are harnessed by different approaches their teachers apply in their class; 5) Future researchers, contrary to how the researcher gathered information on the students' application, may conduct in-person classes and gather data on the level of students' application based on the teacher's assessment and not on the learner's perception; 6) Future researchers may also utilize the variables that were used considering that all indicators and predictors were proven to provide a

satisfying outcome for this study, specifically Application of Strategies, as it was proven to be very strongly significant in students learning achievement; and, 7) Future researchers may use this study as it may serve as data bank for further enrichment of their readings of similar nature and thus may strengthen further the findings of the present research undertaking.

Keywords:

Genius Hour, flipped-classroom, literature, student-centered, learning achievement

INTRODUCTION

Nowadays, learning has become an active process as it focuses more on students who are the actors in a learning milieu unlike before when they were only passively attending classes and listening to teachers who were tasked to discuss everything. With this, a variety of teaching pedagogies have emerged and one of those is Genius Hour. According to Fastiggi (2022), Google was the first to introduce the concept of Genius Hour by allowing its employees to devote 20% of their working hours to side projects. Through Google's Genius Hour policy, several of its services, like Gmail and Google News, exist today. Consequently, in education, this method is also applied and students are allowed to work on their topic of interest and discover information either through collaboration or working alone (Sword, 2021).

This also sought to answer the following:

1. What is the level of students' application of Genius Hour in terms of:
 - 1.1. Risk Assessment;
 - 1.2. Evaluation of Strengths and Weaknesses;
 - 1.3. Planning of Approach;
 - 1.4. Application of Strategies; and,
 - 1.5. Reflection?
2. What is the level of students' engagement on Genius Hour in terms of:
 - 2.1. Risk Assessment;
 - 2.2. Evaluation of Strengths and Weaknesses;
 - 2.3. Planning of Approach;
 - 2.4. Application of Strategies; and,
 - 2.5. Reflection?
3. What is the level of students' learning achievement through using Genius Hour in terms of:
 - 3.1. Effort;
 - 3.2. Inquisitiveness;
 - 3.3. Originality of Idea;
 - 3.4. Overall learning; and,
 - 3.5. Overall quality of presentation?
4. Is there a significant relationship between the application of Genius Hour in teaching 21st Century Literature from the Philippines and the World and students' learning achievement?
5. Is there a significant relationship between the engagement of Genius Hour in teaching 21st Century Literature from the Philippines and the World and students' learning achievement?

REVIEW OF RELATED LITERATURE

Yan and Wang (2021) cited that accomplishment goal orientations show the specifics of how a student defines a good learning result, such as if they want to learn the material effectively and competently in addition to passing tests and assignments. As a result, accomplishment goals qualitatively alter the focus of study effort and serve as a crucial foundation for students' study habits. To support this, Melo and Lopes (2021) wrote that the effort of giving a common presentation to a class is regardless of the number of students in the class, therefore in that sense, giving a single demonstration to the whole

class is the most effective approach to teach the students and see their efforts on the project. And Yin (2021) also said that students that are really driven to achieve their goals will exert more effort and perseverance.

Teachers who regularly include inquiry and reflection into their lesson plans may be sure that their students are engaged in the material, retaining it, and developing future-ready abilities. Additionally, Cross (2016) mentioned that there are different views about inquisitiveness. Therefore, as educators, we should know that being inquisitive is powerful. Although it is not fully understood or explained, attempts to comprehend it, including research, provide us with helpful insights that can affect our teaching and learning.

Svinicki et al., (2014) wrote that understanding how to learn in class in addition to what to study is really beneficial for students. Any concealed material is believed to have no significant impact on students' over-all learning. Students learn more of the lesson if they are aware of what they should take away from lectures. In line, Parsons (2016) stated that social presence is particularly emphasized in overall learning experiences of students. Thus, this is the most significant factor in students' learning together with teaching presence. Moreover, in a book written by Oxenham (2013), they quoted Froman (1999:189) that students are the core of learning in a student-centered approach, and instructors take on the role of supervisors of the over-all learning process. Then, as cited by Huckle (2019), understanding the difficulties, prior knowledge, and degree of information the audience expects forms the basis of a good overall quality of presentation. In support to this, Juneja (n.d.) stated that the content of a presentation with overall quality should meet the aim, be appropriate for the audience, and be properly arranged.

As described by McIlroy, et.al (2021), versatility, inventive drafting mechanics, and immersive settings are virtues. Uncertain data accuracy, insufficient strength, and unreliable power-speed algorithms are examples of weaknesses. As to why evaluating one's strengths and weaknesses is necessary, knowing what one is good at and what one is weak in is the only way to grow as individuals (Bowen, 2019). To add, each child with learning disabilities, such as those in arithmetic or reading, may have a particular profile of cognitive deficits and strengths. Despite the fact that prior research has partially identified cognitive strengths in connection to learning problems (Toffalini et al., 2017).

Based on what Rovers, et.al (2018) stated in their work about learning strategies, self-made survey-questionnaires are for the learning strategies wherein in-depth approach to learn about students' techniques and to look at how they successfully self-regulate their learning is done. Through this, students constantly participate in active processing and self-monitoring as they are learning. This process is controlled by a continuous balancing act between preserving established study habits and being sufficiently flexible to adjust to changes in the learning environment, assessment requirements, and time constraints.

With the above-mentioned literatures, it is deemed that students' ability to assess the risks that they are taking in their learning plans, determine their strengths and weaknesses, consider their approaches and strategies, and reflect on their learning process are related with how their learning achievements would be in the future. Thus, their progress throughout the learning session was indicated by their efforts and inquisitiveness. Further, learner's capability to come up with new and unique ideas will greatly help their experiences that will lead them to improve their skills in learning and project presentations.

METHODOLOGY

With this study employing a descriptive and quantitative method of research, statistical treatment and analysis tools were needed. Thus, the researcher formulated self-made survey-questionnaire and self-made rubric that were validated by experts in the field. Then, the researcher secured an approval from the University President, Associate Dean, and SHS Chairperson before conducting the study. Upon approval, the researcher introduced to the students the concept of Genius Hour and properly explained its process. Once the students had been appropriately introduced to the said approach, the researcher commenced with its application in teaching 21st Century Literature from the Philippines and the World on the topic Literature and Media: Adaptation of Literary Text. After the specified period of the application of Genius Hour, the researcher disseminated the self-made survey-questionnaire to the students and began assessing students' projects through individual presentations using the self-made rubric. When all information had been collected, the researcher started preparing the data for its interpretation and analysis.

All of the processes in this study were anchored to constructivism, as the reference theory, and with respect to Constructive Alignment, as a framework that will support the results of the paper.

RESULT AND DISCUSSION

Table 1. Level of Students' Application of Genius Hour in Terms of Risk Assessment

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. identify the hurdles in the given project.	4.46	0.57	Very High
2. analyze and evaluate the risks that are associated with those hurdles.	4.41	0.69	Very High
3. recognize appropriate ways to control, if not eliminate, such hurdles that were identified.	4.13	0.78	High
4. prevent a long period of time without making any progress in my project.	4.58	0.61	Very High
5. determine how likely such hurdles might occur as I work on my project.	4.31	0.67	Very High
Overall Mean	4.38	Very High Level of Application	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Based on the above-cited information, it could be deduced that there is a Very High Level of Risk Assessment that the students applied while working on their project. Further, this is supported by Vavra (2022) who wrote that High Level Risk Assessments do not delve into specifics about existing countermeasures or weaknesses; they just assume that the event is likely to occur. This is also supported by Vazquez-Cano and Garcia (2015) who mentioned that risk assessment must be based on progress, difficulties, and redirecting the students' progress, thus, a capable student was able to manage these changes in an appropriate manner, minimizing the risks and identifying the factors that may have an impact on their own learning process.

Table 2. Level of the Students' Application of Genius Hour in Terms of Evaluation of Strengths and Weaknesses

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. identify my abilities and capabilities in general.	4.59	0.61	Very High
2. specify how these abilities and capabilities are related to the project I was working on.	4.21	1.00	Very High
3. determine my weaknesses.	4.43	0.67	Very High
4. specify how these weaknesses could hinder my progress.	4.64	0.62	Very High
5. do a pre-test on myself and found out what circumstances could be favorable and unfavorable considering my strengths and weaknesses as I work on the project.	4.47	0.74	Very High
Overall Mean	4.47	Very High Level of Application	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 2 presents the level of the level students' application about Genius Hour in terms of Evaluation of Strengths and Weaknesses. It shows that the statement "*I was able to specify how these weaknesses could hinder my progress*" obtained the highest mean ($M = 4.64$, $SD = 0.62$) and has a verbal interpretation of *Very High* level of application. It also shows that the statement "*I was able to specify how these abilities and capabilities are related to the project I was working on.*" obtained the lowest mean ($M = 4.21$, $SD = 1.00$) and has a verbal interpretation of *Very High* level of application. Thus, it can be gleaned from table 2, that the level of the students' application about Genius Hour in terms of Evaluation of Strengths and Weaknesses is 4.47 with "*Very High*" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that there is a *Very High Level of Evaluation of Strengths and Weaknesses* that the students applied while working on their project. This is considered as a good implication since according to Bowen (2019), evaluating one's strengths and weaknesses is necessary, knowing what one is good at and what one is weak in is the only way to grow as individuals. This signifies that the students were able to hone their individual skills pertaining to the said matter.

Table 3. Level of the Students' Application of Genius Hour in Terms of Planning of Approach

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. comprehend the task that was given to us well	4.36	0.75	Very High
2. determine the expected duration of the project thus I was also able to plan for the time and efforts that I shall dedicate to the said project.	4.53	0.65	Very High
3. distinguish and identify persons or other resources that I would have to consult on this project.	4.37	1.05	High
4. I was able to equate the risks with the actions that I laid to perform for the said activity.	4.68	0.56	Very High
5. I was able to share the plan with my subject teacher and do a consultation on which ones are highly possible to work.	4.42	0.72	Very High
Overall Mean	4.47	Very High Level of Application	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

It shows that the statement “*I was able to equate the risks with the actions that I laid to perform for the said activity*” obtained the highest mean ($M = 4.68$, $SD = 0.56$) and has a verbal interpretation of *Very High* level of application. On the other hand, the statement “*I was able to comprehend the task that was given to us well*” obtained the lowest mean ($M = 4.36$, $SD = 0.75$) and has a verbal interpretation of *Very High* level of application. Therefore, it can be gleaned from table 3 that the level of the students’ application of Genius Hour in terms of Planning of Approach is 4.47 with “*Very High*” as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that there is a *Very High Level of Approach Planning* that the students applied while working on their project. This signifies that the students, as well as the teacher, were able to expound the use of educational planning approaches in different circumstances Dhammei (2022).

Table 4. Level of the Students' Application of Genius Hour in Terms of Application of Strategies

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. set my mind to working on clear goals.	4.37	0.84	Very High
2. I was able to determine the necessary resources that were needed in this project.	4.39	0.69	Very High
3. properly execute the plan that I established and monitor its progress with my subject teacher.	4.45	0.58	Very High
4. adjust necessary aspects that are needed in order to provide the final project.	4.13	0.87	High
5. finalize the project on or before the given deadline.	4.35	0.71	Very High
Overall Mean	4.34	Very High Level of Application	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 4 presents the level of students' application of Genius Hour in terms of Application of Strategies. It shows that the statement "*I was able to properly execute the plan that I established and monitor its progress with my subject teacher*" obtained the highest mean ($M = 4.45$, $SD = 0.58$) and has a verbal interpretation of *Very High* level of application. It also indicates that the statement "*I was able to adjust necessary aspects that are needed in order to provide the final project*" obtained the lowest mean ($M = 4.13$, $SD = 0.87$) with a verbal interpretation of *High* level of application. Thus, it can be gleaned from table 4 that the level of the students' application about Genius Hour in terms of Application of Strategies is 4.34, "*Very High*".

Based on the afore-mentioned data, it could be concluded that there is a *Very High Level* of strategies that the students applied while working on their project. This signifies that the students were able to implement techniques and look on how they was able to successfully regulate their self-learning, as cited by Rovers, et.al (2018).

Table 5 presents the level of the level students' application about Genius Hour in terms of Application of Strategies. It shows that the statement "*I was able to acknowledge what is lacking and what needs improvement in my project and how I work on tasks*" obtained the highest mean ($M = 4.68$, $SD = 0.57$) and has a verbal interpretation of *Very High* level of application. It also indicates that the statement "*I was able to think back on the process that I had been through and analyze how things went on.*" Obtained the lowest mean ($M = 4.45$, $SD = 0.67$) and has a verbal interpretation of *Very High* level of application. Thus, it can be gleaned from table 5, that the level of the students' application about Genius Hour in terms of Application of Strategies is 4.57 with "*Very High*" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that there is a *Very High Level* of reflection that the students applied while working on their project. This entails that these reflective activities tasked to the students were able to be part of their intrinsic observational learning process (van der Loo, et. al, 2019). Further, it also reflects that these students were able to acquire deliberate analysis of the type of task and learning objectives relevant to the project assigned to them (Kawai, 2021).

Table 5. Level of the Students' Application of Genius Hour in Terms of Reflection

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. think back on the process that I had been through and analyze how things went on.	4.45	0.67	Very High
2. identify the important questions that made a great impact on the realization of my project.	4.48	0.66	Very High
3. acknowledge what is lacking and what needs improvement in my project and how I work on tasks.	4.68	0.57	Very High
4. assess the peak points of my project wherein my abilities and capabilities were put to better use.	4.64	0.62	Very High
5. inculcate in my mind the learnings I got from this activity and from the piece of literature that was assigned to us.	4.60	0.59	Very High
Overall Mean	4.57	Very High Level of Application	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Level of Students' Engagement with Genius Hour

In this study, the students' engagement with Genius Hour refers to risk assessment; evaluation of strengths and weaknesses; planning of approach; application of strategies; and reflection.

The level of students' engagement with Genius Hour as perceived by the students were revealed in the following table, which shows the statement, mean, standard deviation and verbal interpretation.

Table 6 reveals the level students' engagement with Genius Hour in terms of Risk Assessment. It shows that the statement "*Risk Assessment helped me to be aware of the legalities and copyrights of the materials I was using for my project*" obtained the highest mean ($M = 4.58$, $SD = 0.61$) with a verbal interpretation of *Very High* level of engagement. It also shows that the statement "*Risk Assessment helped me to determine whether I have to come up with contingency plan.*" Obtained the lowest mean ($M = 4.31$, $SD = 0.67$) and has a verbal interpretation of *Very High* level of engagement. Therefore, it can be gleaned from table 6, that level of students' engagement with Genius Hour in terms of Risk Assessment is 4.38 with "*Very High*" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that the students highly perceive Risk Assessment as a vital part of their project. This shows that the students are capable and are able to manage the changes in the pedagogies while tackling them in appropriate manner and minimizing the risks whilst identifying the factors that might have impacted their learning process (Vazquez-Cano and Garcia, 2015).

Table 6. Level Students' Engagement with Genius Hour in Terms of Risk Assessment

Statement	Mean (x)	Standard Deviation	Verbal Interpretation
1. become more aware of the possible hazards in working on this project.	4.46	0.57	Very High
2. identify who else might be affected by the project I am working on aside from myself.	4.41	0.69	Very High
3. determine whether I have to come up with contingency plan.	4.13	0.78	High
4. be aware of the legalities and copyrights of the materials I was using for my project.	4.58	0.61	Very High
5. in bringing about possible hurdles that I have to overcome while working on this project.	4.31	0.67	Very High
Overall Mean	4.38	Very High Level of Engagement	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 7 reveals the level of students' engagement with Genius Hour in terms of Evaluation of Strengths and Weaknesses. It shows that the statement "*Evaluation of Strengths and Weaknesses aided me in realizing what part of myself has to be improved while working on this project*" obtained the highest mean ($M=4.64$, $SD\ 0.62$) and has a verbal interpretation of *Very High* level of engagement. It also shows that the statement "*Evaluation of Strengths and Weaknesses aided me in understanding others more when my assistance was solicited for their projects/when I worked with them.*" obtained the lowest mean ($M=4.21$, $SD=1.00$) and has a verbal interpretation of *Very High* level of engagement. Therefore, it can be gleaned from table 7, that the level of students' engagement with Genius Hour in terms of Evaluation of Strengths and Weaknesses is 4.47 with "*Very High*" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that the students has a very high engagement with evaluation of their strengths and weakness as a vital part of their project. This entails that, as what Flippo, et. al (2018) cited, the students are aware that their cognitive strengths and weaknesses in reading comprehension can take complementarities between higher order thinking skills and their reading comprehension process.

Table 7. Level of the Students' Engagement with Genius Hour in Terms of Evaluation of Strengths and Weaknesses

Statement Evaluation of Strengths and Weaknesses aided me...	Mean (x)	Standard Deviation	Verbal Interpretation
1. in becoming more self-aware, especially when working on my project.	4.59	0.61	Very High
2. in understanding others more when my assistance was solicited for their projects/when I worked with them.	4.21	1.00	Very High
3. in determining the aspects of myself and the project that I should focus on.	4.43	0.67	Very High
4. in realizing what part of myself has to be improved while working on this project.	4.64	0.62	Very High
5. in appreciating my skills and incapacabilities more than before.	4.47	0.74	Very High
Overall Mean	4.47	Very High Level of Engagement	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 8. Level of the Students' Engagement with Genius Hour in terms of Planning of Approach

Statement I was able to ...	Mean (x)	Standard Deviation	Verbal Interpretation
1. boost my project performance and success rates.	4.36	0.75	Very High
2. work on the project cost-efficiently.	4.53	0.65	Very High
3. communicate with the persons that helped me in the completion of the project.	4.37	1.05	Very High
4. ensure that the resources I was using will not go to waste.	4.68	0.56	Very High
5. track project goals and outcomes easily.	4.42	0.72	Very High
Overall Mean	4.47	Very High Level of Engagement	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 8 presents the level of the level students' engagement with Genius Hour in terms of Planning of Approach. It shows that the statement "*I was able to ensure that the resources I was using will not go to waste.*" obtained the highest mean ($M = 4.68$, $SD = 0.56$) and has a verbal interpretation of *Very High* level of engagement. It also shows that the statement "*I was able to boost my project performance and success rates.*" obtained the lowest mean ($M = 4.36$, $SD = 0.75$) and has a verbal interpretation of *Very High* level of engagement. Thus, it can be gleaned from table 8, that the level of the

students' engagement with Genius Hour in terms of Planning of Approach is 4.47 with "Very High" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that the students has a very high engagement with how they plan their approach as a vital part of their project. This shows that despite the varying skills of the students, they can cooperate with a common goal and understand the information that are presented to them. Through working together, they was able to learn a suitable approach for their task at hand (Jenkin, 2015).

Table 9. Level of the Students' Engagement with Genius Hour in Terms of Application of Strategies

Statement Application of Strategies aided me...	Mean (x)	Standard Deviation	Verbal Interpretation
1. in the alignment of my project timeline and goals.	4.37	0.84	Very High
2. in rationally thinking about the processes, I have to go through for my project.	4.39	0.69	Very High
3. in working proactively towards the completion of my project.	4.45	0.58	Very High
4. in ensuring that my objectives are clear therefore I did not feel overly anxious about my project.	4.13	0.87	High
5. in progressively executing the processes in the creation of my project.	4.35	0.71	Very High
Overall Mean	4.34	Very High Level of Engagement	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Table 9 presents the level of the level students' engagement with Genius Hour in terms of Application of Strategies. It shows that the statement "Application of Strategies aided me in working proactively towards the completion of my project" obtained the highest mean ($M = 4.45$, $SD = 0.58$) and has a verbal interpretation of *Very High* level of engagement. It also indicates that the statement "Application of Strategies aided me in ensuring that my objectives are clear therefore I did not feel overly anxious about my project" obtained the lowest mean ($M = 4.13$, $SD = 0.87$) and has a verbal interpretation of *High* level of engagement. Therefore, it can be gleaned from table 9, that the level of students' engagement with Genius Hour in terms of Application of Strategies is 4.34 with "Very High" as verbal interpretation.

Based on the afore-mentioned data, it could be concluded that the students have a very high engagement with the application of strategies as a vital part of their project. This entails that Huang's (2016) study on how the strategies change based on the learning context is also applicable in the said learning milieu that was applied by the researcher wherein the students deemed that they needed to determine their strategies and specify actual methods on how to apply them.

Table 10 presents the level of the level students' engagement with Genius Hour in terms of Reflection. It shows that the statement "Reflection helped me identify and appreciate positive experiences while working on the project" obtained the highest mean ($M = 4.68$, $SD = 0.57$) and has a verbal interpretation of *Very High* level of engagement. It also indicates that statement "Reflection helped me develop my skills and review their effectiveness on certain projects assigned to students." obtained the lowest mean ($M = 4.45$, $SD = 0.67$) and has a verbal interpretation of *Very High* level of engagement.

Thus, it can be gleaned from table 10, that the level students' engagement with Genius Hour in terms of Reflection is 4.57 with "Very High" as verbal interpretation. Based on the afore-mentioned data, it could be concluded that the students have a very high engagement with Reflection as a vital part of their project. This shows that the claim of Slepcevic-Zach & Stock (2016) that students should be encouraged to reflect on, assess, and, if required, regulate their own learning behavior had been applicable to this study.

Table 10. Level of Students' Engagement with Genius Hour in Terms of Reflection

Statement Reflection helped me...	Mean (x)	Standard Deviation	Verbal Interpretation
1. develop my skills and review their effectiveness on certain projects assigned to students.	4.45	0.67	Very High
2. understand what I did and why I did some steps and decide which is more efficient.	4.48	0.66	Very High
3. identify and appreciate positive experiences while working on the project.	4.68	0.57	Very High
4. process and learn from the challenging experiences I had while working on the project.	4.64	0.62	Very High
5. build stronger connections between all my learning experience from the first until the last part of working on the project.	4.60	0.59	Very High
Overall Mean	4.57	Very Highly Level of Engagement	
Legend:			
4.20 – 5.00 Very High			
3.40 – 4.19 High			
2.60 – 3.39 Moderate			
1.80 – 2.59 Low			
1.00 – 1.79 Very Low			

Level of Students' Learning Achievement Through Using Genius Hour

In this study, the level of students' learning achievement through using Genius Hour refers to Effort; Inquisitiveness; Originality of Idea; Overall learning; and, Overall quality of presentation.

The level of students' learning achievement through using Genius Hour refers as performed by the students were revealed in the following table, which shows the raw score, frequency, percentage, mean, standard deviation and verbal interpretation.

The table 11 shows the level of Students' Learning Achievement through Using Genius Hour in terms of Effort.

It was found out that most of the respondents belong to bracket 21-25, which represented by one hundred two (102) or (92.73%), followed by 16-20.99 which comprises of eight (8) or (7.27%), and no student got a score from the score ranges 11-15.99, 6-10.99 and 1-5.99. Therefore, it can be gleaned from table 11, that the level of Students' Learning Achievement through using Genius Hour in terms of Effort is has a mean of 24.63 and a standard deviation of 1.30 with "Excellent" as verbal interpretation. Based on the data that were deduced, it could be said that in total, the students were *Excellent* in exerting Effort for their projects. Thus, Hsia, et.al's (2022) study that claimed that students think more critically and improve their skills when given a more student-focused approach was applied supported the results of this study.

Table 11. Level of Students' Learning Achievement Through Using Genius Hour in Terms of Effort

Raw Score	Frequency (f)	Percentage (%)	Verbal Interpretation
21 -25	102	92.73	Excellent
16 – 20.99	8	7.27	Satisfactory
11 – 15.99	0	0.00	Fair
6 – 10.99	0	0.00	Good
1 – 5.99	0	0.00	Poor
	N=110	100%	

Mean =24.63 SD=1.30

Table 12 shows the level of Students' Learning Achievement through Using Genius Hour in terms of Inquisitiveness.

It was found out that most of the respondents belong to bracket 21-25, which represented by one hundred five (105) or (95.45%), followed by 16-20.99 which comprises of five (5) students or (4.55%), and no student got a score from the score ranges 11-15.99, 6-10.99 and 1-5.99. Therefore, it can be gleaned from table 12, that the level of Students' Learning Achievement through using Genius Hour in terms of Inquisitiveness has a mean of 24.77 and a standard deviation of 1.04 with “*Excellent*” as verbal interpretation. Based on the data that were deduced, it could be said that in total, the students were *Excellent* in being inquisitive for their projects. This shows that their interest is positively correlated with the information that they gained throughout the timeline of their outputs (Schijndel, et.al, 2018).

Table 12. Level of Students' Learning Achievement Through Using Genius Hour in terms of Inquisitiveness

Raw Score	Frequency (f)	Percentage (%)	Verbal Interpretation
21 -25	105	95.45	Excellent
16 – 20.99	5	4.55	Satisfactory
11 – 15.99	0	0.00	Fair
6 – 10.99	0	0.00	Good
1 – 5.99	0	0.00	Poor
	N=110	100%	

Mean =24.77 SD=1.04

Table 13 shoes the Level of Students' Learning Achievement Through Using Genius Hour in terms of Originality of Idea:

It was found out that most of the respondents belong to brackets 21-25 and 16-20.99, which are represented by fifty (55) students or (50%), while no student got a score from the score ranges 11-15.99, 6-10 and 1-5.99. Therefore, it can be gleaned from table 13, that the level of Students' Learning Achievement through using Genius Hour in terms of Originality of Idea has a mean of 22.5 and a standard deviation of 2.51 with “*Excellent*” as verbal interpretation. Based on the data that were deduced, it could be said that in total, the students were *Excellent* in being original with their ideas for their projects and being novel with their insights as learners. As this is part of which are sought from learners (Tessema, 2012), the reading that were conducted by the students have also affected their learnings. Thus, they are also able to exhibit more original ideas for their requirement.

Table 13. Level of Students' Learning Achievement Through Using Genius Hour in terms of Originality of Idea

Raw Score	Frequency (f)	Percentage (%)	Verbal Interpretation
21 -25	55	50.00	Excellent
16 – 20.99	55	50.00	Satisfactory
11 – 15.99	0	0.00	Fair
6 – 10.99	0	0.00	Good
1 – 5.99	0	0.00	Poor
	N=110	100%	

Mean =22.5 SD=2.51

Table 14 shoes the Level of Students' Learning Achievement Through Using Genius Hour in terms of Overall Learning:

Table 14. Level of Students' Learning Achievement Through Using Genius Hour in terms of Overall Learning

Raw Score	Frequency (f)	Percentage (%)	Verbal Interpretation
13 -15	104	94.55	Excellent
10 – 12.99	6	5.45	Satisfactory
7 – 9.99	0	0.00	Fair
4 – 6.99	0	0.00	Good
1 – 3.99	0	0.00	Poor
	N=110	100%	

Mean =14.73 SD=1.14

It was found out that most of the respondents belong to bracket 13-15, which represented by one hundred four (104) or (95.55%), followed by 10-12.99 which comprises of six (6) students or (5.45%), and no student got a score from the score ranges 7-9.99, 4-6.99, and 1-3.99. Therefore, it can be gleaned from table 14, that the level of Students' Learning Achievement through using Genius Hour in terms of Overall Learning has a mean of 14.73 and a standard deviation of 1.14 with "Excellent" as verbal interpretation. Based on the data that were deduced, it could be said that in total, the students were *Excellent* in their over-all learning on the conduct of their projects. This could be backed up by the claim of Ng & Lam on 2020 wherein they stated that different kinds of flip-learning approaches (Genius Hour included), propagate the over-all course effectivity as well as the over-all learning of the students.

It was found out that most of the respondents belong to bracket 7-8.99, which represented by fifty-five (55) or (50.00%), followed by 9-10 which comprises of thirty-seven (37) students or (33.64%). Then, the score range of 5-6.99 which is represented by eighteen (18) students or (16.36%), and no student got a score from the score ranges 3-4.99 and 1-2.99. Therefore, it can be gleaned from table 11, that the level of Students' Learning Achievement through using Genius Hour in terms of Quality of Presentation has a mean of 8.18 and a standard deviation of 1.68 with "Satisfactory" as verbal interpretation.

Table 15. Level of Students' Learning Achievement Through Using Genius Hour in terms of Overall Quality of Presentation

Raw Score	Frequency (f)	Percentage (%)	Verbal Interpretation
9 -10	37	33.64	Excellent
7 – 8.99	55	50.00	Satisfactory
5 – 6.99	18	16.36	Fair
3 – 4.99	0	0.00	Good
1 – 2.99	0	0.00	Poor
	N=110	100%	

Mean =8.18 SD=1.68

Based on the data that were deduced, it could be said that in total, the students were *Satisfactory* in showcasing an over-all quality of presentation for their projects. Thus, Shauki & Benzie (2017) were credible for claiming that the students were challenged when they were tasked to ensure the quality of their presentations. This is a factor in learning that is uneasy to achieve considering that the projects were done through collaboration, and so, different ideas were presented, and a variety of ways of presentation were applied on their projects. It is also required for teachers to provide feedback on the process of the projects of the students (Ginkel, et.al, 2016) however, since Genius Hour was applied and all outputs were only rated at the end of the semester, feedback was only given at the end of the course when the projects were already presented. With consideration of this findings, providing feedback regularly prior to the submission of the projects—perhaps on drafts—was considered greatly.

Relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement

Table 16 shows the significant relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement which predicts significantly as manifested by lower probability values in its indicator at 0.05 level of significance. Further, the positive values for *r* indicates direct relationship. Thus, the table shows *that there is significant relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement*. Moreover, it could be interpreted that Application of Strategies is very strongly significant in students learning achievement which is backed up by Jenkin's (2015) study citing that on determining academic accomplishment, the relationship between chronotype and learning strategy was proved important.

Table 16. Relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement

Application of Genius Hour in Teaching 21 st Century Literature from the Philippines and the World	Students' Learning Achievement	r	Degree	p
Risk Assessment	Effort	0.520662*	Moderate	0.000
	Inquisitiveness	0.520662*	Moderate	0.000
	Originality of Idea	0.520662*	Moderate	0.000
	Overall learning	0.520662*	Moderate	0.000
	Overall quality of presentation	0.520662*	Moderate	0.000
Evaluation of Strengths and Weaknesses	Effort	0.608375*	Strong	0.000
	Inquisitiveness	0.608375*	Strong	0.000
	Originality of Idea	0.608375*	Strong	0.000
	Overall learning	0.608375*	Strong	0.000
	Overall quality of presentation	0.608375*	Strong	0.000
Planning of Approach	Effort	0.653973*	Strong	0.000
	Inquisitiveness	0.653973*	Strong	0.000
	Originality of Idea	0.653973*	Strong	0.000
	Overall learning	0.653973*	Strong	0.000
	Overall quality of presentation	0.653973*	Strong	0.000
Application of Strategies	Effort	1*	Very Strong	0.000
	Inquisitiveness	1*	Very Strong	0.000
	Originality of Idea	1*	Very Strong	0.000
	Overall learning	1*	Very Strong	0.000
	Overall quality of presentation	1*	Very Strong	0.000
Reflection	Effort	0.580563*	Moderate	0.000
	Inquisitiveness	0.580563*	Moderate	0.000
	Originality of Idea	0.580563*	Moderate	0.000
	Overall learning	0.580563*	Moderate	0.000
	Overall quality of presentation	0.580563*	Moderate	0.000

***significant at 0.05**

ns-not significant

As per Jenkins (2015), the data above entails that the learning approach that was developed should consider the aforementioned because students with varying levels of skills and experience can cooperate to achieve a common goal—understanding the information presented to them—by working together, and the learning approach developed can also allow for greater flexibility in tolerating different learning styles. This is essential for encouraging effective learning among an increasingly diverse student body.

Table 17. Relationship between Engagement with Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement

Engagement of Genius Hour in Teaching 21 st Century Literature from the Philippines and the World	Students' Learning Achievement	r	Degree	p
Risk Assessment	Effort	1*	Very High	0.000
	Inquisitiveness	0.591518*	Moderate	0.000
	Originality of Idea	0.450077*	Moderate	0.000
	Overall learning	0.520662*	Moderate	0.000
	Overall quality of presentation	0.441185*	Moderate	0.000
Evaluation of Strengths and Weaknesses	Effort	0.591518*	Moderate	0.000
	Inquisitiveness	1*	Very High	0.000
	Originality of Idea	0.498183	Moderate	0.000
	Overall learning	0.608375*	Moderate	0.000
	Overall quality of presentation	0.65061*	Moderate	0.000
Planning of Approach	Effort	0.450077*	Moderate	0.000
	Inquisitiveness	0.498183*	Moderate	0.000
	Originality of Idea	1	Very High	0.000
	Overall learning	0.653973*	Moderate	0.000
	Overall quality of presentation	0.4587*	Moderate	0.000
Application of Strategies	Effort	0.520662*	Moderate	0.000
	Inquisitiveness	0.608375*	Moderate	0.000
	Originality of Idea	0.653973*	Moderate	0.000
	Overall learning	1*	Very High	0.000
	Overall quality of presentation	0.580563*	Moderate	0.000
Reflection	Effort	0.441185*	Moderate	0.000
	Inquisitiveness	0.65061*	Moderate	0.000
	Originality of Idea	0.4587*	Moderate	0.000
	Overall learning	0.580563*	Moderate	0.000
	Overall quality of presentation	1*	Very High	0.000

Table 17, shows the significant relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement which predicts significantly as manifested by lower probability values in its indicator at 0.05 level of significance. Further, the positive values for r indicates direct relationship. Further, it shows that *there is a significant relationship between the Application of Genius Hour in Teaching 21st Century Literature from the Philippines and the World and the Students' Learning Achievement*. Moreover, it could be interpreted from the table that students' engagement in terms of their Inquisitiveness as they evaluate their strengths and weaknesses has a total positive correlation, as well as students' engagement in terms of the Originality of their Ideas as they plan their approach in making their projects. In line, the study of Whitehouse, et.al (2018) confirms that inquisitiveness is essential in the growth of learners. Additionally, Ng & Lam (2020) found that being able to plan approaches supplements the fact that these methods

propagate the over-all course effectiveness, and that it is equally proportional to the outcome of over-all learning experience of the students.

CONCLUSION

In view of the aforementioned findings, the study had drawn the following conclusions: The hypothesis stating that there is no significant relationship between the application of Genius Hour in teaching 21st Century Literature from the Philippines and the World and students' learning achievement was rejected. Further, the engagement with Genius Hour significantly affected students' learning achievement based on the gathered data resulting to reject the null hypothesis.

RECOMMENDATIONS

Based on the findings and conclusions drawn from this study, the researcher would like to recommend the following:

1. The teachers may consider the use of Genius Hour in teaching, not only on the subject 21st Century Literature in the Philippines and the World, but also on different subjects considering that Genius Hour is a student-centered teaching pedagogy, and 21st century classrooms are also learner-centered;
2. The teachers and future researchers, considering that this study was conducted only using the online distance learning, may consider adapting the strategies to an in-person classroom setting;
3. Stakeholders may consider the results of the study on their planning given that the students' application of and engagement on Genius Hour both have significance on their learning achievements;
4. Students may refer on this study in order for them to understand their need to wonder, ask questions, be inquisitive, and create their own research is vital for their learning and their future as an individual. This may also help them realize that their competencies are harnessed by different approaches their teachers apply in their class;
5. Future researchers, contrary to how the researcher gathered information on the students' application, may conduct in-person classes and gather data on the level of students' application based on the teacher's assessment and not on the learner's perception;
6. Future researchers may also utilize the variables that were used considering that all indicators and predictors were proven to provide a satisfying outcome for this study, specifically Application of Strategies, as it was proven to be very strongly significant in students learning achievement; and,
7. Future researchers may use this study as it may serve as data bank for further enrichment of their readings of similar nature and thus may strengthen further the findings of the present research undertaking.

ACKNOWLEDGEMENTS

It is with great honor to extend the researcher's sincerest gratitude and appreciation to those people who inspired and extended their help in making this research project possible:

Rosario G. Catapang, PhD., Associate Dean of the College of Teacher Education, for her utmost support to the GSAR students who are writing their thesis and dissertation;

Aileen M. Daran, EdD, Research Adviser, for her willful comments, understanding, suggestions, and assistance all through the writing of this paper; and,

Her family, partner, and few close friends, who always supported the researcher every time they tell them what they want to do and what they want to learn;

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