

I AM A GENIUS: A SHOWCASE OF ENHANCING INQUIRY-BASED LEARNING THROUGH THE INCORPORATION OF GENIUS HOUR IN DLP COURSE

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Abstract

This research study if Inquiry-Based Learning can be enhanced through Genius Hour (GH) in one of our Continuous Professional Development (CPD) courses, the Dual language Program (DLP) Supporting Course 2022. The course has seven slots which were classroom instruction I and II, planning science lesson, microteaching I, II and III. The course ended with the slot named "Now Everybody Can Be a Genius". We used a worksheet named "I am a Genius" which consisted of six steps that guided them to experience the application of Genius Hour during the face-to-face interaction. In the worksheet, we collected data to study if this approach motivated them to learn. We investigated how this approach enabled the course participants to acquire deep learning, to perform quality self-reflections and how they would like to apply in their classroom after the course. Respondents were required to post their reflection through twitter #dlpipgm2020 during the course evaluation session. The respondents agreed that GH has provided them the freedom in their learning, GH has led them to acquire deep learning and other areas. They are motivated to apply this approach in their classroom.

Keywords: *Inquiry-based learning, Genius hour, E-learning*

1.0 Introduction

CPD is one of the core duties for lectures who serve in trainer training institute (*Institut Pendidikan Guru, IPG*). We are appointed as trainers and Subject Matter Experts by *Institut Pendidikan Guru Malaysia (IPGM)* for DLP Science Teaching and Learning Support Course 2022. Our tasks include to design the input and to deliver the contents that we have created to our course participants who are serving in form 1 from secondary school.

As meaningful learning is one of the 21st century learning which is giving a lot of emphasis on the elements of collaborative, creativity, communication, critical thinking, and values. It is agreeable that Capacity New Meaningful Learning (NPDL, *KPPB*) has brought changes in pedagogies which include teaching approaches, holistic assessment and providing authentic learning experience to learning. We concluded that our best practises need to foster deep learning among our course participants so that they could contribute to the common good and to address global challenges in complex world (Fullan and Langworthy, 2013). Hence, we have *GH* which is meant to model the application of inquiry-based learning.

Genius Hour (GH) is an approach which can be applied in teaching and learning. It is a situation where trainers guide their learners to make decision on their choice of interests, their existing background knowledge, and their own curiosity to decide what they wish to learn in depth. As GH is not highly organized, informal, and less standardized as compared to traditional learning, it targets to open-ended learning that emphasizes much on learner self-direction learning, passion-based learning, inquiry-based learning, given autonomy, and sense of belonging. Learners are given the space, necessary tools, and sufficient time to create their own authentic learning process and experience (Keslerscience, 2022).

2.0 Literature reviews

In the traditional classroom learning, a trainer explains facts and knowledge about a subject, Inquiry-Based Learning (IBL) is an educational strategy where learners are guided to follow the methods and practices which are alike professional scientists, and to construct knowledge on their own. While IBL on the other hand, has a few prominent benefits such as to improve learners' engagement, to improve learners' knowledge retention, and to assist learners to acquire deeper understanding on a selected topic (Abdi, 2014).

According to Bauld (2022), trainers have important role in IBL as this approach begins with the trainer. There is no doubt that learners are responsible for their own learning during an inquiry-based lessons, but trainers play very crucial guides to assure that learning among the learners take place. The amount of guidance and facilitating

provided by a trainer may varies depends on the needs of the learners. The roles of the trainers include introducing topics and to encourage questioning, and modelling to spark curiosity among the learners. Trainers need to promote and to guide the focused dialogue and discussion among learners who attempt to answer questions, to debate and to justify their explanations. The trainer is responsible to lead learners and to facilitate small-group discussions and whole-classroom discussions. During the teaching and learning session, trainers need to pay focus on the discussions and to clarify misconceptions when needs arise. Trainers should provide extra information which would assist learners to further develop their understanding of their learning. A good IBL provides learner with experiences to discuss and able to make learning relevant to the learners.

Genius Hour (GH) is an approach of learning, where learners are guided by their own interests, background knowledge, and curiosity to learn. It is a less organized, less formal, and less standardized approach as compared to traditional learning. It is regarded as 'open-ended' learning, where it is characterized by learners' self-direction, passion-based learning, inquiry, and given autonomy. They are given the liberty, space of time to create something personal and compelling on their own. GH has a few unique characteristics, trainers are to empower learners by connecting them with the ideas and content, provide them opportunities, allowing them to choose topics that they want to learn more, and to allow them to explore based on their curiosity through inquiry and deep learning. GH provides authentic learning experience, embrace new challenges, spark creative, purpose-driven, provide rooms for collaboration and social interaction. Teachthought (2022) mentioned that GH should be driven by learners' own curiosity, and trainers are advised to use clear driving questions to guide the learners. In the process of learning, it should involve research or clear new learning/ new knowledge and experience to the learners. To increase the sense of belongings among the learners, the products of learners' work are advised to be shared/published.

3.0 Objective of the Study

This study has two objectives. It intended to study to find out if how GH motivated them to learn. It also examined how would the course participants apply this approach in their classroom instructional.

There are two research questions in this study;

1. How did GH motivate the course participants' their learning?
2. How would the course participants apply GH in their classroom instructional?

4.0 Significance of the Study

This study applied the same principles of GH in the classroom. In this context, it helped us to share some of our best practise, as well as to explore the course participants' need especially in terms of classroom instructional. Throughout the process, we facilitated the course participants projects to ensure that they were on task. This built us to become better facilitators, to understand the authentic needs and to apply GH specially according to the context of this course.

5.0 Limitation

The Dual language Program (DLP) Supporting Course 2022 was offered to selected course participants from six zones. However, the responses only collected from zone Sabah's course participants as it was a face-to-face interaction for Sabah zone. The course participants were required to response after they completed this course. Therefore, this study only applied on this group of course participants.

6.0 Methodology

This study utilized a worksheet named "I am a Genius". There were six steps in this worksheet. Step 1 required them to list things that they "do not really know"/ "What they do not know"/ "What they are curious to know" after they were given input for the earlier six slots. In Step 2, they were required to decide on a topic/item from Step 1 which they would like to take it as their GH. Step 3 asked for their justification on the topic chosen. In Step 4, they were given time to explore and to share with other course participants. In step 5, the course participants were required to answer how did activity in this worksheet motivated them. In step 6, they were required to tweet their reflection on how they would like to apply GH in their classroom in twitter and hashtag #dlpbgm2020.

This study used document analysis and reflection as the instrument to collect data. It was administered to all the course participants from Sabah zone. Their responses on the first research question were collected from the worksheet while their reflections were collected from twitter with hashtag#dlpipgm2020.

7.0 Findings

The respondents explained that GH has motivated them to implement GH in their classroom.

Yes, I will share with my peers and to implement this in my school. - R1

I have a lot to learn. I realize there is a lot for me to learn and to improve myself. – R2

It (GH) strengthens our professionalism, I would like to implement this for myself and my pupils. – R3, R5

Yes. It is a new skill for me to apply and I am sure it will help me to become a better trainer. - R4

Respondents agreed that GH motivated them to strive and strengthen their instructional in the classroom. They wished to apply this method in their 5E Instructional Model. They believed GH could provide quality learning for them and their pupils and acknowledged that there were plenty rooms for them to learn more through GH.

Yes, I want to study more (GH) and apply in my classroom. -R7

I like, it is easy for me to arrange my teaching process, the 5E. -R2

Yes, I feel motivated to teach. -R3

It is interesting, I want to do new things. -R10

It helps me to focus and to earn quality things. – R15

Respondents were happy that they were given the freedom to pick topics of their interest. However, they were overwhelmed with the choices that they had, and they needed more guidance and facilitations.

Yes, I am happy that I can decide on what we want to explore further. -R13

Yes I do have the freedom (to pick the topics)...but I don't know how to pick...too many things now (things to explore). -R22

Yes, I like to have the freedom...but I am kind of lost with the freedom I have as there are many things to explore. -R13

I need people to guide me more on choosing the topics. -R14

I need more discussion when I was given the freedom (to choose the topics). – R8

From the course participants' twitter, they expressed that GH has led them to gain the passion in deep learning especially on instructional. They gave a few suggestions on how they could pursue through the application of GH.

I've learned a lot but i focus on the questioning slot. GH helps me to generate my own Learning outcomes,design Learning process, encourage me to improve my social skill. Help me to refresh my Knowledge and application on pedagogy. If i can, my student also can![#dlpipgm2020](#)

I will apply GH to in my class before we learn new topic. I can give them homework to find anything about topic they gonna learnt, discuss in group and do a simple presentation to share their findings with their friends. So that, my students will be more prepared. [#dlpipgm2020](#)

We can apply GH to enable students to choose the topic of their interest and explore to get more knowledge. Students will then become a 'teacher' to teach the other in the class. [#dlpipgm2020](#)

I would apply GH in science lessons for certain topics. For example, form 2 science, chapter 3 "Nutrition", I would let students do GH on classes of food. I would let them choose their favourite class of food, next let them do some research on the class of food. #dlpipgm2020

Genious Hour (GH) is suitable to be applied when conducting science experiments where students will promote science process skills throughout the activity. Students are also interested in knowing the finding after carrying out the activity #dlpipgm2020

Genius Hour enables a teacher to figure out what the students do not know/do not really know/ curious to know. I'll like to use it in my class and also in my daily life. It can reflects my strength and weakness when doing an activity #dlpipgm2020

8.0 Discussion

A few lessons learnt from this study. When design a GH, there are a few guidelines which we should always refer to, such as the access to facilities, learner-centered learning approach, trainer's role as facilitator, providing authentic experience for learners, giving enough time, a well-prepared classroom instructional, to consider learners' engagement with other activities and allow time for learners' reflection.

When design such activities, it should focus on learner-focused learning and exploration. Trainers need to support learners to determine on their area of passions, and to help them authentically pursue what they have decided to explore. As there were time allocated for the course, we need to plan the lesson well, and to limit the time spent introducing a concept or lesson. Learners need to be given time for brainstorm, trainers need to facilitate them to think about the source of references and area of exploration in depth.

Trainers need to be flexible as each learner are different, having diverse needs, and require diverse types of guidance. Trainers need to be willing to adapt and adjust their approaches to keep the inquiry going and learners' engagement remain strong. To end the activity, trainers need to allocate time available for reflection at the end of every inquiry lesson. It could be a discussion as a class or a period of quiet journaling. Reflection should include the concepts learnt, but also the reflection on the learning process, as it is a powerful tool for growth and improvement.

9.0 Acknowledgement

Our appreciation to the module writers and subject matter experts of DLP from IPGM, Dr. Chin Chee Keong from IPGK Tunku Bainun, Dr. Rajeswari a/p Vellu Pillai from IPGK Ipoh, Madam Aida Rahayu bt Sharifuddin from IPGK Pulau Pinang, Madam Amni Safiah bt Abd Halim from Sultan Mizan, Dr. Nor Kamilah Makhtar from IPGK Kota Bahru, Mr. Sazli bin Aziz @ Abdul Aziz IPGK Dato Razali, Madam Suziela bt Tahir IPGK Perempuan Melayu, Dr. Cindy Wong Chyee Chen IPGK Rajang, Dr. Tay Soon Hiang IPGK Tun Abdul Razak, Dr. Lee Chui Hiong IPGK Batu Lintang, Madam Zakia Bt Setu IPGK Tun Abdul Razak, Mr. Ding Anak Giri IPGK Batu Lintang and Madam Thelugu Novah Mary a/p Guruloo IPGK Tun Abdul Razak.

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Appendix: Worksheet

I am a Genius

Step 1:

Slot	What I do not really know	What I do not know	What I am curious to know
1 Classroom Instruction I			
2 Classroom Instruction II			
3 Planning Science Lesson			
4 Microteaching I			
5 Microteaching II			
6 Microteaching III			
Now everybody can be a Genius			

Step 2:

From the checklist in Step 1, make a decision on which topic/item you wish to take for your Genius Hour (GH). I have decided on:

Step 3:

Answer the following questions before you proceed.

- Why do you care about this topic/item?
- What makes this topic/item interesting to you?
- List things that you have in mind, what you wish to share with your peers.

Step 4:

Let's wish for it, dream it, talk about it and do it. One hour from now.

You are free to share your findings verbally with the help of ppt, poster, apps such as Canva, Powtoon or any form that you are comfortable with.

Step 5:

Let's talk again.

- How does your GH change you?
- How does GH change your idea of what it means to learn?
- Does this change motivate you to learn? How?
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Step 6:

Tweet your reflection (100 - 120 words) on how you would apply GH in your classroom in twitter and hashtag #dlpipgm2020.

<https://wegrowteachers.com/what-is-genius-hour-an-overview-for-the-classroom/>