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“The Teaching and Learning Experiences of Faculty and Students During the Implementation of Hyflex Modality”



Abstract: - The pandemic brought by COVID-19 has led to intense changes in the way teachers deliver their lessons and how learners participate in the discussion of the lessons. Jose Rizal University goes on full online teaching and learning modality during the first two years of the pandemic using the Canvas as its Learning Management System. For the school year 2022-2023, the school adopted the HyFlex learning modality. HyFlex sees teachers teaching students at the same time in a physical classroom and synchronously online through video-conferencing software. This study considers the learning experiences and perceptions of students and teachers from basic and higher education. Hyflex learning. This study considers the learning experiences and perceptions of both educators and learners. The findings such as; strategic classroom setting must be explicitly planned and key enabling equipment must be considered to further enhance technology and classroom setting, more training must be conducted on Hyflex Learning -Teaching to address identified possible issues or challenges, and cogent guidelines must be provided to pupils for them to be aware of the norms in a HyFlex classroom will be used for the preparation of the full implementation of the Hyflex not only as a modality but as a pedagogy as well for the next school year.

Keywords: Hyflex learning, learning management system, video-conferencing software, pedagogy

Online wisdom paths are destined to offer supple learning opportunities for young learners. HyFlex learning was envisioned by the experts which present various routes through progression content that may work well for options where students arrive with varying levels of proficiency or experiences in the subject matter, and to break down the boundary between the virtual classroom and the physical one. By allowing students access to both platforms, the design encourages discussion threads to move from one platform to the other.

The Department of Education (DepEd) in partnership with the Department of Health (DOH) ensure the safe resumption of face-to-face classes in the country. According to our DOH Secretary, Francisco Duque III said that the increased inoculation rates among educators and learners have contributed to the actualization of face-to-face classes. However, though the schools have been allowed to resume face-to-face or f2f classes, they will not likely be returning to full physical classes. In 2021, the DepEd implemented a hybrid setup for the early registration, remote learning for areas under General Community Quarantine (GCQ) and in-person learning for areas under Modified General Community Quarantine (MGCQ) and recently, schools across the country have begun to conduct various pilot testing in different division for Hyflex learning modality as the alert levels goes down and the age bracket, 5-12 years old, was approved for vaccination.

In this context, the Basic and Higher Education of Jose Rizal University have on its way to the implementation of Hyflex learning. Both the Non-teaching staff and the faculty worked hand in hand to reach the purpose of the new modality. Pilot tests were facilitated last April to see its strengths and weaknesses which led the researchers of this study to have it as the ambit of their research.

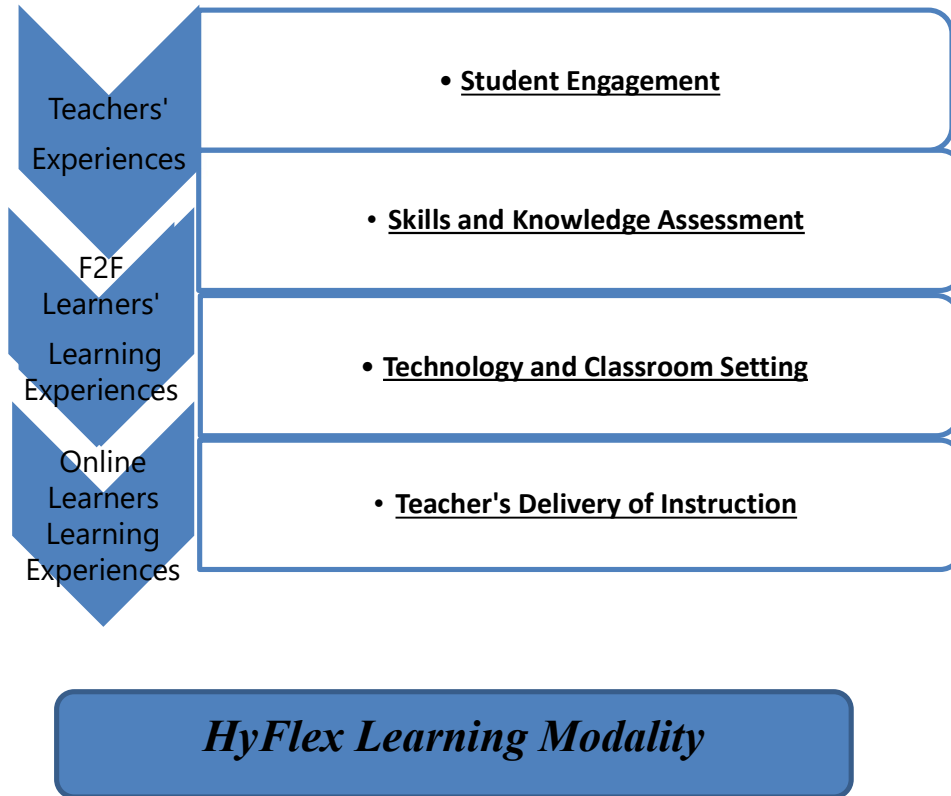
The hallmark of Hybrid-Flexible delivery (coined HyFlex) is a hybrid-structured partnered with flexible learning opportunities where learners could participate in-person, synchronously online, and/or asynchronously. It was developed by Brian J. Beatty at San Francisco State University in 2005 in response to enrollment concerns; a Masters of Arts program was suggested to make completely online. Beatty and his colleagues faced barriers such as the lack of institutional support, lack of faculty experience teaching online, and a perceived lack of support from enrolled students who were located regionally. Thus, led Beatty to experiment with some delivery options for both online and onsite learners, and later created a new delivery mode called HyFlex. Since education is an evolving field, HyFlex being influenced by other learning theories was developed as part of understanding how humans most effectively learn. The framework below shows how HyFlex design partners, both teachers/observers

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and learners, were observed and how they perceived the said modality based on the given areas; Student Engagement, Skills and Knowledge Assessment, Technology and Classroom Setting and Teacher’s Delivery of Instruction.

The Conceptual Framework



*Figure 1. Research Paradigm on the Utilization of Hyflex
Based on Teachers’ and Students’ Experiences*

Statement of the Problem:

The researchers of this study aimed to investigate and to know answers to the following specific questions:

1. What are the experiences of teachers in terms of:
 - A. Preparation
 - B. Student Engagement
 - C. Skills and Knowledge Assessment
 - D. Technology and Classroom Setting
 - E. Delivery of Instruction
2. What are the learning experiences of the face-to-face learners in terms of:
 - A. Student Engagement
 - B. Skills and Knowledge Assessment
 - C. Technology and Classroom Setting
 - D. Delivery of Instruction
3. What are the learning experiences of the online learners in terms of:
 - A. Student Engagement
 - B. Skills and Knowledge Assessment
 - C. Technology and Classroom Setting

D. Delivery of Instruction

METHOD

The qualitative type of research was employed in this study. The researcher interacted with the participants, which involved interviews to collect the necessary information needed. The study underwent three stages. The first stage was an interview which was conducted with the teachers who facilitated the lessons using the said modality as well as with the teachers-observers. The focus of the questions was sort of describing their experiences in terms of preparation, instruction, learner's engagement, and the like. The second and the third stage of the study focused on the learning experiences of the learners in both the face-to-face and online setup. Sets of questions were formulated here in order to gather answers from the participants. An interview and a focused group discussion were also conducted. To analyze data, the researcher did the coding process to classify the participants' answers to the research questions.

The Pilot Tesing Preparation

As the University gears up for the coming school year, the basic education conducted pilot-testing of the HyFlex Learning, the chosen modality for SY 2022-2023. With the help of the academic council which includes the principals of each division, the Information and Technology System Office and the faculty members and the stakeholders, the necessary equipment, classroom structure, safety protocols, and other related matters were prepared.

As it was mentioned previously, in Beatty's HyFlex course, students can choose to participate in any mode:

1. Face-to-face, in-class, in-person (in a classroom on campus)
2. Synchronous online via video conferencing during the in-person class
3. Asynchronous online in the learning management system (LMS)

The first and second modes were used during the pilot testings among the forty (40) sixth graders of the elementary school division; twelve onsite learners or "roomies" and twenty-eight remote learners or "Zoomies". In developing the HyFlex learning activity plan, the teachers used the backward design which was the recommended framework by Wiggins and McTighe (2005) for designing courses using the said strategy. Once the outcomes and assessments were determined, they started to build the learning plan, including instructional materials or content and the learning-teaching activities for the engagement part. The pupils who will participate onsite were identified- only those who are fully vaccinated, reside near the school, and are allowed by their parents were selected. The parents of the onsite learners accomplished a consent form allowing their children to be part of the pilot testing with the schedule as an attachment. Orientation about the study was provided by the researchers to every respondent and information is treated with confidentiality.

Table 1. Simulation Schedule of Hyflex Classes

ESD K-309 (April 25-26, 2022) Mon-Tues			
Time	Min	Subject	Faculty
8:40 - 9:30	50	Math	Teacher A
9:30 - 9:50	20	Recess	Adviser
9:50 - 10:40	50	Science	Teacher B
10:40 - 10:50	10	Break	Adviser
10:50 - 11:40	50	P.E.	Teacher C

RESULTS AND DISCUSSION

The Simulation of HyFlex Classes

It was evident that the onsite learners, parents, and teachers were excited about the pilot testing as all of them arrived at the school early. Safety and health protocols are in place which ensured everyone that the university is limited face-to-face ready. The classroom set-up was ideal for HyFlex learning as it displayed the equipment/tools necessary for the simulation. After the simulation classes, the researchers conducted an in-depth interview with the teachers who demonstrated the new learning modality, the teacher-observers, the roomies, and the Zoomies.

SOP 1: Teachers' Experiences in terms of:

A. Preparation - The three educators agreed that it was one of the most challenging times of their careers but through the training sessions on classroom set-up, the use of digital equipment, and the collaborative sessions with other faculty members, they were able to create their own learning activity plans, came-up with teaching-learning strategies designed for HyFlex classes and delivered the lessons with ease and confidence. The presence of IT specialists helped them overcome their fear of the unknown.

B. Student Engagement –

b.1. Onsite Learners – The teachers observed that the roomies shared their ideas during the collaborative activity. It was easy to acquire responses from classmates/ groupmates. It was evident that the pupils were adjusting to the classroom set-up. They all needed to be motivated to participate. Pupils' energy was a bit down on the first day, however, it improved on the second day. It was noticed also that they are still re-adapting to the classroom environment.

b.2. Remote Learners - It was evident that the Zoomies were very participative, they were more active than the roomies. They were able to provide or share good answers. They were more engaged during Math class. On the other hand, they could easily off their videos and mute themselves which resulted in limited interaction with other classmates during breakout activities. It was also spotted that they were not able to hear the roomies clearly.

C. Skills and Knowledge Assessment –

c.1. Onsite Learners – For assessment, the following perceptions were given; the use of a digital quiz app (Quizziz) during the formative assessment is good. It has been explained/explicated well by the teacher in Science. The misconceptions in the formative quiz were corrected immediately by the teacher. The level of fun in answering assessments using digital tools was not as exciting as the Zoomies, the mode of answering is different. The font used in Canvas must be bigger

c.2. Remote Learners - It was noted that familiarity with the process helped them become independent learners. The provision for Moderate Quiz was not observed which is an important part when conducting an online assessment in Canvas. The use of the pen tab has become an advantage for the Zoomies, they were able to see the writings of the teacher clearly.

D. Technology and Classroom Setting –

d.1. Onsite Learners – All the educators mentioned during the interview that the classroom was well-ventilated, proper physical distancing was observed and technical support from the IT department was visible. The voice of the pupils couldn't be heard by the Zoomies and they observed that there is a need to improve the audio system. The wires are not placed in a safe area and extension cords were limited. Provision in using the gadgets in the classroom especially for lower grades should be available. The Zooming in and out of the camera took some of their class time.

d.2. Remote Learners - The faculty members noticed that the video presentations were all clear. The audio of the teacher was clear. The laptop hung, the feedback was delayed and the video glitched were some of the problems seen.

E. Delivery of Instruction –

e.1. Onsite Learners – The CANVA presentation in the Receive Part (the presentation of the concept) was good and smooth. The teachers were enthusiastic in explaining the lessons. They gave clear instructions to the pupils. Learnings were evident through positive responses of pupils to the teachers' questions. Mastery of the teachers in the use of digital tools should be enhanced. The movement of the teacher was limited due to the audio and video reception. The voice of one of the teachers was already high-pitched because of the struggle of being heard by the remote learners.

e.2. Remote Learners - The teacher was able to connect the zoomies and the roomies. During breakout room, the teacher visits each room to accommodate pupils' questions or clarifications. Teacher created spaces where he can connect with all learners. Teachers focus on the camera for zoomies, not on the TV. The pupils could not share screens during breakout rooms to complete the activity. The Canvas hanged The Zoomies was not able to hear the teacher clearly.

SOP 2: Onsite Learners' Experiences in terms of:

A. Student Engagement –

a.1. Robustness – One hundred percent of the onsite learners (Zoomies) were able to do the online activities fast. It is evident that their enthusiasm before and during the pandemic have been sustained. "Seeing my classmates onsite got me motivated to participate actively", respond by one of the pupils.

a.2. Challenges - Some mics were not working well so they just use the Zoom chatbox. Internet connection of some zoomies was interrupted. The audio was not clear so most of them were not able to hear the roomies clearly. Internet connection onsite caused lagging video presentation.

B. Skills and Knowledge Assessment –

b.1. Robustness - The digital tools used during the formative and summative tests were fun! The use of Pentab is good because it's clearer. Familiarity with the use of digital tools helped the Zoomies in completing their tasks. The online games made me more competitive. Games are entertaining and educational. Different digital tools were utilized.

b.2. Challenges - The twenty-eight Zoomies said that they did not encounter any challenges, the learning apps used by the teachers were enjoyable. All zoomies didn't encounter any challenges on this part, molded as independent learners, their mastery, and familiarity with the system and well-designed Canvas modules have helped them acquire knowledge and complete assessments with ease and confidence. They said that the Chat link provided for questions or clarifications (Reach-out) and their access to the RC part (concept) allowed them to clarify misconceptions, thus, making them ready to answer the summative test.

C. Technology and Classroom Setting –

c.1. Robustness - The challenges experienced on the first day were improved on the second day. Something new was seen compared to just seeing the classmates on Zoom. Being in Zoom was more convenient since the gadgets are just within one's reach and the modules were accessed easily.

c.2. Challenges - The writings on the whiteboard in the classroom were not readable for the remote learners for it was not focused on the camera during the first day. During the first day, the roomies cannot be heard and the camera was focused only on one area. However, on the second day, the mentioned challenges were resolved.

Delivery of Instruction –

d.1. Robustness - The delivery of the lesson was clear and understandable. The flow of the lessons was good and interesting. The use of digital tools made the delivery of the lesson more interesting, engaging and fun.

d.2. Challenges - During the first day, the audio was not clear. The board work and the solution written by the teacher were not readable because the camera was not focused on the whiteboard. Teachers needed to split her attention to communicate with the zoomies and the roomies.

SOP 3: Remote Learners' Experiences in terms of:

A. Student Engagement –

a.1. *Robustness* – It was perceived that the remote learners or the roomies were able to participate because there were only a few of us in the classroom. The collaborative activity was very essential and fun, each of the roomies was able to work together as a group physically. Reciting and answering the questions has become easy for them as well and they were able to express their ideas easily. Being in the classroom helped them to focus more and understand the lesson better. The use of a globe in the mini-experiment made them understand the concept clearer. They were able to participate well in PE and were able to perform in the dances actively.

a.2. *Challenges* – One of the challenges encountered by the remote learners was that they have to adjust socially and emotionally. Two days would not be enough for them to fully adapt to the classroom setting again. Bonding time was limited. They were not able to express their ideas well due to physical distancing and face mask-wearing. They needed to adjust in the new environment since they are now already used to facing the monitors. One of the roomies said that she was a little bit nervous at first and needed to go closer to the mic or to speak louder, she felt the pressure of putting more effort during recitation because she prefers using her normal speaking voice when reciting.

B. Skills and Knowledge Assessment –

b.1. *Robustness* – They were more concentrated and motivated in taking the quizzes. There were fewer distractions in the classroom. The use of pen and paper motivated them to go face-to-face again for they are already missing it- they enjoyed answering the worksheets. They understood the lessons more clearly that's why they got better scores. During the collaborative task, they were able to create more observations.

b.2. *Challenges* - They had difficulty writing unlike if it's online where they would just type their answers in just a click. The use of pen and paper is time-consuming in answering the questions. Digital tools were not utilized personally unlike the Zoomies. Unlike the zoomies, if they would like to clarify something, they could easily access the RC part to review the concepts but for us, the roomies, the access to the module was being controlled by the teacher.

C. Technology and Classroom Setting –

c.1. *Robustness* - The classroom was organized and the arrangement of chairs is good. The technology in the classroom was very high quality, the Hyflex monitor had a very high resolution and the 360 Camera can look at multiple groups of students at the same time. They felt comfortable and safe inside the classroom because it is organized.

c.2. *Challenges* - Accessibility of the modules/online materials is a challenge. The classroom is not as cold as before because the doors and windows were opened.

D. Delivery of Instruction –

d.1. *Robustness* - The teacher's instructions were heard loud and clear and all our questions or clarifications were addressed right away. Teachers utilized different digital tools such as Slido, Bamboozle, Padlet, Quizziz, Live worksheets. The strategies of the teachers were very appropriate and interesting and they were able to address the needs of both the zoomies and the roomies.

d.2. *Challenges* - The teachers had difficulty observing two groups of students at the same time and they had trouble with the microphone and the share screen Zoom.

CONCLUSION

Based on the findings of the study, the researchers were able to draw conclusions focusing on the four areas of observation- Student Engagement, Skills and Knowledge Assessment, Technology and Classroom Setting and Teacher's Delivery of Instruction.

A. *Student Engagement –*

Student involvement was evident during the Hyflex learning pilot testing, to keep such vigor, the simultaneous and engaging instruction that was used by the teachers should be maintained for it has effectively encouraged student engagement among onsite (roomies) and remote (zoomies) learners. To help the pupils adjust to the new modality of learning, consider assigning roles to pupils such as Zoom and Canvas chat monitoring; one pupil for each onsite and remote on a rotating basis.

The pupils feel safe and secure inside the classroom, however, to continuously observe safety protocols, a “Keep Physically Distanced Chart” must be visible around the classroom to remind active learners of the limitations during collaborative activities and free time such as recess and lunch breaks. It is also important to provide guidelines and inform pupils about norms in a HyFlex classroom.

B. *Skills and Knowledge Assessment –*

Most of the on-site learners miss using pen and paper, on the other hand, they would still want to feel the same excitement when using online tools, to further improve on this, create assessments that would help tie together online and f2f components. The use of Quizziz for remote learners is fun and challenging, how could it be equally exciting for onsite learners?

The use of pen and paper is time-consuming and the roomies exert extra effort in completing their tasks. One group should not have a perceived advantage over another, the assessments for both onsite and remote learners must have equal credits. The rubrics must be presented with clarity and equality. Online follow-up assessments that are more substantive and comprehensive must be provided to ensure learning takes place for both groups. Accessibility to online modules is one of the challenges for the roomies, therefore consider embracing BYOD to allow the on-site learners easy access to their modules, at the same time, also experience the fun of doing interactive online activities.

C. *Technology and Classroom Setting -*

It was observed that the classroom set-up during the pilot testing is indeed good and the technological devices/equipment used are of high quality. To further enhance, strategic classroom setting must be explicitly planned and key enabling equipment must be considered:

- Wires should be organized.
- There should be a fixed desktop for each classroom.
- Extension and plugs should be placed in a safe and secured place
- Lapel mic to allow remote students to hear the instructor and ceiling mics (or conference mics) to allow remote students to hear onsite pupils
- A tracking camera to capture the instructor at the front of the classroom
- A document camera (in substitute for PenTab) to capture teachers’ writing and annotation clearly for remote learners.
- A contingency plan for technology glitches must always be ready.

D. *Delivery of Instruction –*

The three teachers who demonstrated Hyflex displayed flexibility and professionalism. However, there is a need for more training on Hyflex Learning -Teaching to address the following issues in both delivery and technology must be provided; the movement and blockings inside the classroom – where should the teacher look when addressing remote learners, on the camera or on the big screen? Zoom technicalities like the teacher should enable multiple share screens during breakout activities. Hyflex learning class management styles such as; the teacher should send the link in Zoom chat in case the Canvas hangs or the pupils could not access the Canvas due to poor internet connection. Flexibility with classroom management tools and instruction ideas must be given to all teachers. It is imperative that teachers stay up-to-date on best practices in hyflex instruction. Mental and physical preparation for the teachers is a must to avoid being overwhelmed with the new modality of learning and in meeting the needs of both zoomies and roomies.

RECOMMENDATIONS

The researchers would like to state suggestions that would support the findings of the present study. As we are preparing to shift from online distance learning to HyFlex, it is, therefore, pivotal to consider the following proposals:

- a. To revisit and revise the following to align with the new learning modality –
 - Curriculum – Most Essential Learning Competencies
 - Syllabus – Learning Outcomes, Teaching-Learning Activities and Tools
 - Assessment – Formative and Summative Assessment Content, Structure, and Digi- Tools
 - Faculty Development Trainings and Plans – Learning Activity Plan, Classroom Observation Criteria, Module Rubrics
- b. To conduct a full cycle study with an experimental group to validate the results from this study. Research on HyFlex Learning for one school year across all divisions would produce interesting results to understand better the effect or impact of the new pedagogy.
- c. To create a set of guidelines that would establish an organized HyFlex Classes such as the rules for the use of gadgets inside the classroom for onsite learners or a “HyFlex Learning Code of Conduct” for both onsite and remote learners. They must be informed regarding the norms in a HyFlex classroom.

REFERENCES

- [1] Barclay, A., Ceccolini, K., Clarke, K., Domonchuk, N., Shapiro, S., Singh, J., Young, M., Hayman, J., Beer, J., & Arseneau, C. (2022, February 28). *Unit 1: Theory and pedagogy*. HyFlex Course Design and Teaching Strategies. Retrieved July 4, 2022, from <https://ecampusontario.pressbooks.pub/hyflexcoursedesignandteachingstrategies/chapter/unit-1-theory-and-pedagogy/>
- [2] Beatty, B. J., Brian J. Beatty. Brian Beatty is Associate Professor of Instructional Technologies in the Department of Equity, & Beatty. (1970, January 1). *Hybrid-flexible course design*. EdTech Books. Retrieved July 4, 2022, from <https://edtechbooks.org/hyflex>
- [3] *Hyflex learning: The readiness of the teachers to transition from ...* (n.d.). Retrieved July 3, 2022, from <https://depedbataan.com/wp-content/uploads/2022/04/HYFLEX-LEARNING-THE-READINESS-OF-THE-TEACHERS-TO-TRANSITION-FROM-ONLINE-DISTANCE-LEARNING-TO-HYBRID-FLEXIBLE-LEARNING.pdf>
- [4] *Hyflex learning: What, why and how*. THE Campus Learn, Share, Connect. (2022, April 15). Retrieved July 4, 2022, from <https://www.timeshighereducation.com/campus/hyflex-learning-what-why-and-how>
- [5] Kohnke, L., & Moorhouse, B. L. (2021). Adopting HyFlex in higher education in response to COVID-19: students' perspectives. *Open Learning*, 36(3), 231–244. <https://doi.org/10.1080/02680513.2021.1906641>
- [6] Sevillano, S. (2022, April 5). *DepEd, Doh guarantee safe, progressive F2F classes resumption*. Philippine News Agency. Retrieved July 4, 2022, from <https://www.pna.gov.ph/articles/1171474>
- [7] *(PDF) understanding by design (2nd edition)*. Grant Wiggins and Jay McTighe. (n.d.). Retrieved July 3, 2022, from https://www.researchgate.net/publication/264226731_Understanding_by_Design_2nd_Edition_Grant_Wiggins_and_Jay_McTighe
- [8] University of Phoenix. (2021, September 9). *5 educational learning theories and how to apply them: UOPX*. University of Phoenix. Retrieved July 4, 2022, from <https://www.phoenix.edu/blog/educational-learning-theories.html>

APPENDIX A HyFlex Teaching-Learning Plan

ACTIVITY	TIME ESTIMATE	SYNCHRONOUS IN PERSON	SYNCHRONOUS ONLINE	ASYNCHRONOUS ONLINE
Day 1-Opening/Introduction	2 min	<p>Script: <i>Good morning “roomies”, hello there “zoomies”. How are you? I am so excited to meet you all today. What about you, are you all excited? Roomies say hi to the Zoomies. Zoomies, please click your heart reaction for the roomies.</i></p>		
REBOOT “I Can” Statement	5 min	<p>Script: <i>Let’s first discuss the learning targets. Zoomies are you all in RB now? Show me your thumbs up please. (Call pupils to read and discuss briefly) Based from the Learning Targets presented, write your “I Can” statement in the pieces of paper that you prepared. Zoomies, you may now type your I Can statement in the reply tab.</i></p> <p>Activity: Accomplish the “I Can” Statement. Post in the “I Can” wall and reply tab.</p>		<p>Students read the objectives and expectations. Write self-expectations in the discussion forum</p>
RECEIVE Activity 1 The Mystery of Day and Night and Earth’s Seasons Phase 1 Think -individual	20 min	<p>Phase 1: Questions on Rotation and Revolution</p> <p>Script: <i>Alright, I just hope that all of you already posted your “I CAN” statements. Now kids,</i></p> <p><i>At this point, before we move on to our main lesson. Let’s us have some riddles. Zoomies, I want you to post your answers in the Zoom CHAT tab. And Roomies, you may write your answer in your notebook.</i></p> <p><i>Alright, we will now move on to our main activity called the “The Mystery of Day and Night and Earth’s Seasons”. I have here three questions that we need to find for the answers.</i></p> <ol style="list-style-type: none"> 1. <i>Why does the earth experience night and day at different times?</i> 2. <i>What should happen for the Philippines to experience the four seasons?</i> 3. <i>What causes the differences of seasons on Earth?</i> 		<p>Students will watch embedded video</p> <p>If you're watching the recording, press pause and participate in the Think-Pair-Share discussion forum.</p>

<p>-give questions</p> <p>Phase 2 Pair/Share (validation)</p>		<p>Phase 2: Group or Collaborative Activity</p> <p>2.1 Watch or read/5-Minute Light Bulb/Share</p> <ul style="list-style-type: none"> - Videos - Textbook/Articles <p><i>For the Zoomies, this is your task. You will be assigned to a seven breakout rooms.</i></p> <p><i>Rooms 1-4 will be the Watch Groups. Watch group because you will be watching a short video.</i></p> <p><i>The question that you need to answer is found in the Receive part of the module. You will answer a question based from the embedded video in the module.</i></p> <p>https://www.youtube.com/watch?v=CqkQv617bcw</p> <p><i>For Rooms 5-7, you will be the Read Groups. The “read” group because I will be giving you a reading material and an article as your reference materials. You are also be given a question to answer. Open the Receive part of your module. You can find there the pages to read and the questions that you need to answer as well.</i></p> <p><i>Again, a specific question will be given to each group and you should answer it based from the material assigned to you. Is that clear?</i></p> <p>2.2 Mini Experiment</p> <p><i>Script: Roomies, You will be the experiment group where you will follow the procedures given in the experiment sheets. A question will also be given for you to answer based on your observations.</i></p> <p><i>I already grouped you into four groups. (Mention the groupings)</i></p> <p><i>Okay, roomies, you may now have one representative to get a globe for your group and make sure also to bring out your own lamp which was pre-assigned to you.</i></p> <p><i>Everybody, are we all good? Or are there clarifications, before we move on to your activity?</i></p> <p><i>If none I will give you 20-mins. to accomplish your tasks.</i></p> <p><i>While the groups are doing their tasks, take time to visit the different rooms of the Zoomies and Roomies to help facilitate the tasks and to monitor activities.</i></p>	
<p>Presentation / Discussion/ Deepening/</p>	<p>20 mins.</p>	<p>Script: <i>Time is up Roomies and Zoomies for your discovery time. This time, I will give you the opportunity to present your answers to the questions assigned to you. This is the question that you will answer.</i></p>	<p>Write ideas and learnings in the</p>

		<p><i>Why does the earth experience night and day at different times?</i></p> <p><i>May I call on any representatives in the Zoomies watch group to share their answers?</i></p> <p>(The teacher may use “Wheel of Names” apps for random selection of groups to present. Call the watch groups first to answer the first question. Then continue using the Wheel of Names to call other watch groups)</p> <p>(After the each presentation, ask follow-up questions based on what were not covered in their discussion.)</p> <p>Script: <i>Thank you watch groups for sharing your ideas and discoveries. Alright class! Let’s give the watch group three YES CLAPS!</i></p> <p><i>This time, let’s have the second question to be answered by the 2nd group.</i></p> <p><i>The question that they will answer is:</i></p> <p><i>What should happen for the Philippines to experience the four seasons?</i></p> <p>(Again, the teacher may use “Wheel of Names” apps for random selection of groups to present. Then continue using the Wheel of Names to call other read groups)</p> <p>(After the presentation, ask follow-up questions based on what were not covered in their discussion.)</p> <p>Script: <i>Ok Zoomies Read Groups, can you add more details about the question? (Call representatives) Good job read groups! 6-A, let’s give them three OISHI CLAPS.</i></p> <p><i>For the last group to present, let’s have the experiment group to discuss their answers.</i></p> <p><i>The question they answered is:</i></p> <p><i>What causes the differences of seasons on Earth?</i></p> <p>Call the first group (first table) to present their answer. Call all groups until all groups shared. Ask follow-up questions for deepening purposes.</p> <p>Script: <i>Those are very good observations! Let’s all give them Three BOOM CLAPS!</i></p>	discussion forum
Wrap-up	2 mins	<p>Script: <i>Based on the activities that we have for today, what impacted you the most? Why? Zoomies please type your answers on the chat box.</i></p> <p>(For Roomies, call volunteers to answer orally.)</p>	Students work in discussion forum
2 nd DAY Intro.	2-3 mins	<p>Greetings and setting of moods.</p> <p>Script: <i>Good morning class. How are you? I hope you are all fine but to know more about how you are feeling today, Zoomies I will post a link in the chat box for our poll using SLI.DO.</i></p> <p>(After the poll, ask also the Roomies how are they feeling so far based from the choices given in the poll. Read the result of the poll)</p> <p>Script: <i>Can you recall and report to us what we have accomplished so far yesterday?</i></p>	

		(Call volunteers in the Roomies and Zoomies to answer orally. Encourage others also to post their answers in the chat box)	
REFINE	15 mins.	<p>Script: <i>Let's have a review of the lesson. Zoomies, please click the Quizziz link which I am going to post in the Chat box.</i></p> <p>(Post the Quizziz Link)</p> <p>Script: <i>Are you all there? This Quizziz is set to instructor-paced. I will also project the questions so the roomies can also write their answers in their notebook.</i></p> <p>After the Quizziz, do item analysis to reteach concepts that were not answered correctly.</p> <p>(Note: If time permits, give additional online activities using the Liveworksheets)</p>	Accomplish the task given in the REINE PART of the module.
Reconcile	5 mins	<p>Script: <i>We are now in the reconcile part of the module/lesson. Zoomies, please click the next button to proceed to the Reconcile. There are two questions that you need to answer there. Please post your answers in the REPLY TAB. Roomies, you may get your notebook to answer the questions.</i></p> <ol style="list-style-type: none"> 1. <i>Compare and contrast rotation and revolution;</i> 2. <i>Why is it important to understand the motions of the Earth?</i> <p>Script: <i>Ok kids, it's time to take your RI. Are you ready? Can you show me Zoomies a thumbs-up if you are ready? How about you Roomies are you ready?</i></p>	Accomplish the task given in the RECONCILE PART of the module.
Reinvent	20 mins	<p>Script: <i>Zoomies you may now click the next button to move on to the Reinvent portion of the module. Roomies, I will give you an answer sheets for your RI. You are only going to answer the questions for 20 mins.</i></p> <p>(After 20 mins.)</p> <p>Script: <i>Time is up kids. We will now check your answers.</i></p> <p>Item analysis will be done.</p>	Take and submit the quiz in the REINVENT part of the module.