

Research Article

**Google Classroom Engagement in the Laboratory School: A Grounded Theory**

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**Abstract**

Google Classroom engagement is one of the best online learning modality for countries attempting to transition from traditional face to face to online classes. Studies revealed the positive effects of Google Classroom engagement among students (Nanthinii, 2020; Heggart & Yoo, 2018; Iftakhar, 2016; and Sudarsana et al., 2019). However, no study has been conducted, yet, exploring the lived experiences of laboratory students in their Google Classroom engagement before and during the pandemic. This qualitative study will conduct an in-depth exploration of high school students' Google Classroom engagement in a laboratory school. The in-depth interviews with the participants exposed five emergent themes and a central category. "TRADE Online Learning Mechanisms" emerged as the core category and will entail five essential themes: (1) Transference to a New Learning Paradigm; (2) Recognition of Challenges; (3) Adaptability towards the Challenges; and (4) Development of Personal and Academic Growth; (5) Effecting Realization of Real-World Values. The grounded theory of transference-recognition-adaptability-effecting: students' online learning mechanism in the new normal of learning revealed that students undergo such phases before attaining success and effecting realization in their Google Classroom engagement. Overall, the theory highlights the accounts of the students' online learning mechanism during their Google Classroom engagement. Students' transference, recognition, adaptability, development and effecting realizations are being magnified as TRADE online learning mechanism in the new educational landscape. Similar studies on students' experiences on their engagement to reveal their online learning mechanisms in other learning platforms are being recommended by the researcher.

**Keywords:** *Google Classroom; Laboratory School; Grounded Theory*

**Introduction**

Google Classroom engagement is one of the best online learning modality for countries attempting to transition from traditional face to face to online classes. Studies revealed the positive effects of Google Classroom engagement among students: (1) serves as an effective medium for creativity and advanced language learning activities (**Nanthinii, 2020**); (2) increases student participation and learning and improves classroom dynamics (**Heggart & Yoo, 2018**); (3) provides unlimited storage for students to upload their files (**Iftakhar, 2016**); (4) improves teachers and students' quality to use technology wisely, especially for learning process, saving time, being environmentally friendly, overcoming distance of residence, increasing collaboration among students, timeless communication, and as a secure document storage (**Sudarsana et al., 2019**). However, no study has been conducted, yet, exploring the lived experiences of laboratory students in their Google Classroom engagement before and during the pandemic. Hence, this study will look into the in-depth experiences of Grade 10 High School students in their Google Classroom engagement.

Educational sectors have resorted to shift instructional modality from face-to-face to online because of the occurrence of the COVID-19 pandemic. Such event has affected 163,921,494 learners and has resulted to 26 world-wide closures (**UNESCO, 2021**) necessitating the need for Learning Management System (LMS) utilization.

An LMS is defined as learner and organization focused that is concerned with the logistics of managing learners, learning activities and the competency mapping of an organization (**Oakes, 2002**). This emergent technology has allowed students at all levels, young and mature, the opportunity to participate in advancing their education in an environment that is diversified, rich in best practices, yet progressive enough to allow students to proceed in a self-paced manner (**Barr, et al. 2013**).

One of the most commonly used LMS is Google Classroom which was released for public utilization in 2014. **According to De Vynck and Bergen (2020)**, Google Classroom users doubled to 100 million during the COVID-19 crisis. These numbers are still increasing because of the on-going paradigm shift in the teaching-learning process.

The proliferation of Google Classroom utilization is an integral step in order for online distance learning to take place and for educational sectors to thrive and continue, especially in developing countries. According to **Sadiku, et al. (2018)**, "Online teaching and learning refers to education that takes place over the Internet." **Barr, et al. (2013)** added that online learning focuses on a wide range of technological based learning platforms, delivery methods, and the integration of educational technology components into the learning environment.

Such paradigm shift has led educational institutions in the Philippines to facilitate teacher trainings on the proficient use of Google Classroom. Unfortunately, students were not trained or were only able to attend to a 1-day Google Classroom orientation which may not suffice preparation for online distance learning. The latter is a true case in a laboratory school of a state university in Cebu City, Philippines.

Hence, this study will explore the experiences of the students as they engage in, both synchronous and asynchronous, Google Classroom-mediated classes. This unravels the themes and central category of the experiences of the students in the new paradigm of education. The aim of this study to generate themes from the respondents' stories which can

provide a grounded construct to formulate an understanding of students' engagement in the Google Classroom.

### Statement Of Objectives

The aim of the study is to generate a theory on understanding students' experiences on Google Classroom engagement exploring their (1) perceptions before the start of online classes; (2) challenges encountered; (3) approaches used in dealing with the challenges; (4) successes experienced after Google Classroom usage; and (5) explication of the meaning of Google Classroom engagement as high school students.

### Literature Review

COVID-19 has shook the global educational landscape affecting nearly 1.6 billion learners in more than 200 countries leading to closures of schools, institutions and other learning spaces which impacted more than 94% of the world's student population (**Pokhrel & Chhetri, 2021**). In order to lessen the spread of the pandemic and at the same time promote learning continuity, many governments took measures in order to avoid spreading the virus and to ensure the continuity of the educational process, and universities worldwide adopted online learning (**Ali, 2020**).

Such circumstance has led universities to constrainedly carry out their activity with students exclusively online (**Sobaih et al., 2020**). This has led the education system and the educators to adopt "Education in Emergency" through various online platforms and are compelled to adopt a system that they are not prepared for (**Pokhrel & Chhetri, 2021**). These online platforms, also known as Learning Management Systems (LMS), are web-based software platforms that provide an interactive online learning environment and automate the administration, organization, delivery, and reporting of educational content and learner outcomes (**Turnbull, 2019**).

One of the most prominent LMS worldwide is Google Classroom. According to Google Classroom Program Manager **Melanie Lazare (2021)** that to date Google Classroom has helped teach and learn more than 150 million students, educators and school leaders around the world— up from 40 million last year. Google Classroom is an internet-based service provided by Google as an e-learning system (**Martínez-Monés et al., 2017**).

Several studies have been conducted on the effectiveness of Google Classroom in facilitating online learning. One study discussed that the advantages of using Google Classroom are quick and convenient setting, time saving, increase in cooperation and communication, centralized data storage, and quick sharing of resources (**Izenstark and Leahy, 2015**). Another set of studies found out that Google Classroom enhances the teaching and learning process (**Hussaini et al., 2020; Okmawati, 2020; Saputri, 2020; Brahmabatt, 2020; Mafa, 2018; Mohd Shaharane et al., 2016**). Additionally, Google Classroom increased student participation and learning and improved classroom dynamics (**Heggart & Yoo, 2018**). Additionally, Google classroom is an effective tool for teaching and learning online classes because of its ease of use and features which are both teacher friendly and student friendly (**Sheelavant, 2020**). Moreover, another study exposed that the use of Google Classroom brings about benefits that allow students and teachers to ease the teaching and learning of writing; to practice their writing mainly for both academic and non-academic purposes in an

engagingly attractive space; and they pointed out that the experience using Google Classroom was more satisfactory than other platforms (**Fonseca & Peralta, 2019**). **Hussaini et al. (2020)** also discovered in their paper that Google Classroom is effective in improving Students access and attentiveness towards learning, knowledge and skills gained through Google Classroom makes Students to be active learners, as a digital tool, it provides meaningful feedback to both Students and Parents. Furthermore, **Isda et al. (2021)** added that Google Classroom significantly affects students' speaking skill and helps them finish and collect the assignment without any bound by time and space.

On one hand, Google Classroom, though effective, has still some certain limitations that are revealed in various studies. According to **Alim et al. (2019)**, the use of Google Classroom was effective with various limitations: (1) not all students got an account what was provided by the lecturers because they did not have a smartphone, (2) Wi-Fi availability in the campus was limited and (3) the students did not have enough mobile data plan during the time of online discussion and even some students submitted their assignments using their friends' account. Additionally, poor network hinders students from effective utilization of Google Classroom; thus, submitting their work late (**Hussaini et al., 2020**). Furthermore, **Nanthinii (2020)** found out that Google Classroom has disadvantages such as poor internet connectivity, unfamiliarity with its use, unfamiliarity with ICT tools, and disinterest in the posted activities.

With the literature review on the efficacy and limitations of Google Classroom as an LMS for online distance learning as an option to deliver quality education amidst the COVID-19 pandemic, there has been a gap in exploring the Google Classroom experiences of high school students. The researcher aims to look into the perceptions, challenges, approaches, and successes as students engage in Google Classroom during the synchronous and asynchronous classes in order to discover the essence of such experience in their lives. This also provides education implications as to how students cope with online learning during the pandemic. Hence, the study is conducted.

### **Research Design**

This study utilized grounded theory which is widely applied in educational research. According to **Glaser and Strauss (1967)** that grounded theory is the discovery of a theory which is derived from systematically obtained and analyzed data. Grounded theory offers a peculiar set of systematic methods that uphold the analysis and abstraction of the information to build up a theory that is based on empirical data (**Kaiser and Presmeg, 2019**). These methods incorporate distinctive coding procedures, such as open coding, axial coding, and selective coding, which depend on the constant comparison technique. As new data are gathered and new cases are unveiled in the analysis, there is a huge potential for contribution to the refinement and advancement of an evolving theory.

**Participants:** 12 High school students, who are using Google Classroom all throughout Academic Year 2020-2021, will be the main participants in the study. They will be chosen through purposive sampling. The saturation of data was considered by the researcher in determining the number of participants for the study. Cebu Normal University – Integrated Laboratory School will be the locale of the study.

**Instrument:** The main instrument for this study will be a semi-structured interview that will be conducted through English considering the comfortability of the respondents. The interview will be done online via Google Meet.

**Data Gathering Procedure:** Permission to conduct the study will be asked from the Laboratory School Supervisor. After the transmittal letter has been approved, required documents will be submitted to the University's Research Ethics Committee (REC). Data gathering procedure will start as soon as the REC approves the conduct of the study.

All respondents will be chosen through purposive sampling. An informed consent form will be given to the chosen respondents. They will be given ample time to review their participation in the study. After the consent will be granted, participants will be oriented on the nature of the study, their extent of participation, the risks and conveniences, the participants' rights, benefits, and confidentiality. After gathering the necessary information, data will be coded using Strauss and Corbin's triadic coding procedure.

**Data Analysis:** There are numerous and distinct qualities that are designed to uphold the "groundedness" of the approach of the Grounded Theory. **Davidson (2001)** explains that data collection and analysis are deliberately merged, and primary data analysis is utilized to create a profile of the ongoing collection of data. Interweaving data collection and analysis are considered to magnify the insights and explain the boundaries of the emerging theory by asking divergent questions that would account for the real phenomenon relevant to the respondents. **Kaiser and Presmeg (2019)** expound that the collected data are evaluated by employing various techniques of coding as the core procedure. In grounded theory, coding is a method of conceptual abstraction by designating broad ideas (codes) to particular occurrences in the data.

In this instance, coding and constant comparative technique are critical in unearthing a grounded theory (**Charmaz, 2006**). The constant comparative technique is a continuous and inductive way of funneling the data by recoding constantly. The pieces of information or incidents are contrasted and analyzed with the other data during the coding process (**Glaser & Strauss, 1967**).

**Glaser & Strauss as cited by Kolb (2012)** elucidates that the constant comparative technique involves four activities: (1) evaluating incidents similar to each category, (2) incorporating categories and their characteristics, (3) defining and delimiting the emergent theory, (4) crafting the theory. All through the phases of this method, the researcher unceasingly figures out the data collection, provides analysis and codes for the collected data, and strengthens the generation of the theory through theoretical sampling. This method is valuable to the researcher as the exploration emanates from raw data and authentic statements from the participants while noting the similarities and differences of the responses. By painstakingly comparing and analyzing the data, a considerable theory will be uncovered.

#### **OPEN CODING**

After collecting the data, although not necessarily all, the evaluation process may commence. **Strauss and Corbin (1990)** distinguish the three types of coding processes that are necessary to establish a grounded theory: "open, axial, and selective coding". **LaRossa (2015)** emphasizes when these three phases are utilized, this triadic coding procedure makes the grounded theory substantial.

The initial approach to the data is through open coding. A thorough analysis of data will be done for the conceptualization and categorization of the phenomena. In this first phase of open coding, the information is fragmented is reduced into parts that are methodically analyzed. This process intends to grasp the core concept of each part and to come up with a code that would best define it (**Kaiser and Presmeg, 2019**). These fragments of information are compared while noting the similarities and differences. The same code will be attributed to similar parts (**Mey and Mruck, 2011**).

The ultimate purpose of open coding is to come up with a wealth of codes with which to define the data until saturation is peaked (**Strauss and Corbin, 1990**). “Indicators” in the form of phrases, expressions, statements from the data, or significant observations are utilized to reveal the “concepts” (**Feeler, 2012**). This would create a pathway to unveil a certain degree of novelty of the stories or experiences.

**Table 1. Open Coding**

Apprehensions	Unfamiliarity	Enthusiasm	Learning Continuity
Poor Internet Connectivity	Flexibility	Technical Challenges	Positive Teacher Feedback
Ask Classmates	Parental Support	Knowledge Acquisition	Home – Study Conflict
Personal Growth	Academic Achievement	Useful in Future Endeavours	Values Inculcation
Social Skill Development	Immediately Do the Task	Successful Grade Level Completion	Overcoming Difficulties
Determination	Independence	Time Consciousness	Useful in Daily Living
Sharing Learnings to Others	Difficulty with Time Management	Task Submission Anxiety	Check To-Do-List

**AXIAL CODING**

Next is the axial coding. It is deemed to be the process for interrelating the concepts and categories. **Kaiser and Presmeg (2019)** state that evolving relationships between the individual concepts must be incorporated into an overarching structure with one central category to establish a grounded theory. This second phase in coding is required according to **Strauss and Corbin (1990)** to examine and explore the connections between and among the categories and to formulate ties between them. **Strauss (1987)** further implicates that intense analysis should be done to come up with one central category about the conditions and consequences.

Inductive and deductive reasoning methods are emphasized axial coding in the course of connecting subcategories to a category by continuing to create inquiries and to make comparisons (**Mills et al., 2006**). In this regard, emerging novel concepts that capture the varied categories are being observed by the researcher to formulate a comprehensive narrative.

**Table 2. Axial Coding**

Unfamiliarity	<b>Shifting to a New Learning Paradigm</b>
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Apprehensions Enthusiasm Learning Continuity	
Poor Internet Connectivity Technical Challenges Home – Study Conflict Difficulty with Time Management Task Submission Anxiety	<b>Impending Challenges of Google Classroom Engagement</b>
Flexibility Ask Classmates Parental Support Immediately Do the Task Check To-Do-List	<b>Actions Towards the Challenges of Google Classroom Engagement</b>
Positive Teacher Feedback Knowledge Acquisition Personal Growth Determination Independence Time Consciousness Task Completion Academic Growth	<b>Manifestations of Personal and Academic Growth</b>
Useful in Future Endeavours Values Inculcation Social Skill Development Successful Grade Level Completion Overcoming Difficulties Useful in Daily Living Sharing Learnings to Others	<b>Realizations to the Real-World Value of Google Classroom Engagement</b>

### **SELECTIVE CODING**

At this phase of coding, categories are funneled and refined since the core category is systematically related to other categories (Strauss, 1987). The researcher will determine or decide the key story behind the analysis. In other words, the narrative gathered by the researcher should be reflective, coherent, and ideally compelling (LaRossa, 2005).

When the core category is discovered, the line of the story of the research is set. The researcher distinguishes the chief phenomenon of the study and can finally answer the research query. Finally, the grounded theory will emerge that emanated from the raw data which were painstakingly gathered, analyzed, and interpreted (Vollstedt (2015).

### **Results and Discussion**

After the analysis, the core category that emerged was students' flexible and meaningful online learning mechanisms in the new educational landscape. There are five essential themes under this category, namely:

Theme 1: Transference to a New Learning Paradigm

Theme 2: Recognition of Challenges

Theme 3: Adaptability towards the Challenges

Theme 4: Development of Personal and Academic Growth

Theme 5: Effecting Real-World Values

Propositions are formulated out of these themes. Hypotheses are derived and evaluated based on these propositions. For each theme, a comprehensive discussion is given.

### **Theme 1: Transference to a New Learning Paradigm**

Here are some statements of the participants that described their *unfamiliarity* and *apprehensions* upon learning that they will use Google Classroom in their online classes. But later on as they get to use the app, they had claimed positive experience towards it.

*“First of all, everything was very unexpected because I thought that we will get back to face to face classes sooner or later. Knowing that we will be engaging in online learning, I didn't have much of an idea on how to use Google Classroom...it was **fun** and I have **learned a lot** during the period.” P7*

*“At first, I was really nervous because I don't have any idea of it. But when the classes went by, I encouraged my classmates to see the positive side of learning new things because for us online class is never easy and everyone was surprised.”*

**P3**

*“...I found using Google classroom really troubling because I wasn't used to doing everything especially homework, projects and essays on an online app. It was a hard time for me since I still don't know about the application, like what does it do, how to organize all the necessary tasks or how I'll pass my outputs. But with time I was able to learn from my classmates and also from the orientation about the basics on how to use Google classroom so in the end, the app eventually became really convenient and I can say that I prefer using this than dealing modules.” P9*

*“I think it was challenging to adapt at first...when the pandemic started I had no idea what Google Classroom even was and all was that it was an online platform for teaching or schooling...I found that it was actually easier than I thought, ”*

**P11**

*“First, I was confused on how the teachers would deliver their lessons effectively because the idea of online learning was new to you, so we don't have any background on what to do. So, for the first few weeks it was shocking but as days went by, the classes were okay and it was like face to face with less quizzes and tests and that's the big difference I have found out.” P8*

The importance of students' role as active engagers in the new learning paradigm was revealed as they expressed *enthusiasm* and *learning continuity*.

*“...it was also exciting because you can't expect on what will happen...” P7*

*“In fact, I feel like it will be a great "portal" for me to connect with the whole class. It's also probably because I trust the company and I know that they will provide the best for their users.” P10*

*“...a part of me was also excited because it was something new to explore and learn...” P12*



*"This is a way to help us students learn more in this pandemic and apply it in our daily living." P1*

*"...using Google Classroom is a viable option for our learning..." P4*

*"I think Google Classroom is very helpful especially during this pandemic and it makes tasks easier and more arranged on things to be done. Since it is very accessible in any devices, it makes studying very effective for managing lessons and in general, learning." P6*

*"...the app eventually became really convenient and I can say that I prefer using this than dealing modules." P9*

**Hypothesis 1:** Students who are aware of the new learning paradigm exhibit an enthusiastic and active attitude towards continual learning.

**Proposition 1:** Students' role as active engagers is an essential key in shifting and adapting to the new learning paradigm.

## **Theme 2: Recognition of Challenges**

### Poor Internet Connectivity

*"...the poor internet connection. It was very hard for me because I had so much difficulty in accessing the site or even browsing through the web due to not having proper internet connection." P7*

*"The challenge that I experienced is the low internet connection since I can't understand the lesson when it is lost and sometimes the teacher can't be heard or choppy." P1*

*"...the major problem I think is the Wi-Fi connection because here in our place the connection is so slow." P3*

*"Internet instability also causes time to time disconnection from the meeting which would make me lose focus on about the lessons being discussed." P5*

*"The challenges I mostly encounter are due to the instability of the internet connection..." P12*

*"We know that the Philippines does not really offer great internet deals. Due to this our online classes often gets disturbed since a classmate or a teacher of ours often gets disconnected." P8*

### Technical Challenges

*"Most of the challenges that I've encountered during Google Classroom engagements are technical challenges. There were a lot of times when my mic or camera stopped working." P10*

*"On the minor part, I don't know what and when to press but I get used to it..." P3*

*"The editing/accessibility options can also sometimes be a hindrance to doing the given assignments. I have experienced not being able to open a document because I wasn't an "owner" of it." P6*

*"...I think that I've already done an output but then Google Classroom still fails to give me a notification... sometimes tasks get cluttered. I get so confused sometimes on which tasks are considered as actual assignments, which one is supposed to be a test or even a project/performance task. I can't even tell which tasks are part of which grading!" P9*

*“There was also an instance when the teacher noted me about an unsubmitted assignment, which I actually passed already, and it seriously scared me.” P12*

Home – Study Conflict, Difficulty with Time Management and Task Submission Anxiety

*“One of the main problems in online engagement is that we are still in our home. Compared to the school environment, it’s hard to be in that mindset of doing work or thinking about school projects all the time in our own homes. So “murag mawala-wala ang” comfort that we are in our house. Before during face-to-face, we would be thinking and leaving our thoughts about school works in the school and focus on ourselves, sleep, or whatever to relax when we are already home.”*

**P4**

*“Noises in your house, primarily from other people (neighbors) and animals (esp. Chickens). These hinder my ability to effectively hear and focus on the ongoing class.” P8*

*“Another challenge for me was to balance my time for myself, the time for doing household chores and the time finish my piled up activities before deadlines. The reason why it is a challenge for me is because if I overwhelm myself with the amount of workload, I might not be able to give a satisfying output in all of my activities.” P5*

*“...when we got to Google Classroom we were always in consistent anxiety that I haven’t done certain tasks yet so I always recheck... This fear was amplified by the fact that I was determined to do better than I have done in the past few years, so I was determined to at least pass the assignments and tasks on time, but thank God I had this anxiety of not passing tasks... I couldn’t imagine myself in that situation without panicking, so it was a really important challenge for me.” P11*

**Hypothesis 2:** Acknowledgement on the impending challenges of Google Classroom engagement is important in attaining success among students.

**Proposition 2:** Students’ acknowledgement on the impending challenges of the new learning platform promotes success.

### **Theme 3: Adaptability towards Challenges**

#### Flexibility

*“...but if it’s really hard and we don’t understand further that’s the time we watch on YouTube or Google. The best approach also is asking the teacher but we find ways to solve the problems/questions as a group or a class before approaching the teacher...” P2*

*“Maybe, finding options. Like for example, when we had a power interruption in our place, I went to the nearest mall so that I can have a Wi-Fi connection.” P3*

*“Personally, one of the approach is just to do it first and then relax later... And sometimes, I use some tricks up my sleeve to make the assignment easier like in video outputs, voice overs are better than having to memorize long phrases that I’d be struggling to memorize.” P4*

*“I did advance study for the lesson that is going to be discussed for today because it will help me learn a bit about the lesson from the start and not only to rely on the teachers.” P5*

*“If the internet is unstable or slow and the deadline of the assignment is upcoming, I panicked and went to the house of my friend. And about the mentor forgetting to post, we just reminded him/her. As for the editing/accessibility, we simply assisted and asked the mentor kindly.” P6*

*“To continue my studying, I started using data connection in meeting all the deadlines and passing my outputs to my subject teachers.” P7*

*“For noisy animals, I just move away and go to a room a bit farther than the current room I am staying in so that their noise won’t be that loud. Then for the neighbors, I politely ask them if they can tone down their noise, most of the time they will consider it since it’s for educational purposes. Lastly, for the internet lag or connectivity issues, I simply go to a place which has better signal...” P8*

*“When it comes to the organizing issue, I make mental notes to myself or write the tasks and their details down on a note or notebook so that I won’t forget what I need to do and what the output is supposed to be.” P9*

*“The internet offers a lot of possible solutions to the different problems that I’ve encountered.” P10*

*“I had to learn to adapt and adjust which is basically my only advice for people who are struggling in this new normal classes.” P11*

*“I also started exploring the web more than how I used to in order to be more aware of its functions and procedures. I also look it up in Youtube and Google, searching for the technicalities I am not aware of and looking for their solutions.” P12*

#### Ask Classmates and Parental Support

*“Usually, I ask my classmates on what is being discussed so that I can answer the questions given when the internet connection is back/retrieved. Let’s say for example, when I just return from the meeting and my teacher suddenly call me, I can answer right away even if I lost my internet for a while since I ask my classmates about what is being ask and what it is about.” P1*

*“The approaches I used is either ask a classmate or a friend about the lessons...” P2*

*“It is when I come to my friends and ask for help, since more of them are more advanced. They teach me until I reach the point that I learn the things on my own.” P12*

*“...I experienced a lot of stress and headache during that moments, but with the help of my parents I was able to overcome all of those challenges.” P7*

*“...and sometimes I tell my family members if possible they could turn off their devices.” P8*

#### Check To-Do-List and Immediately Do the Task

*“I make it a habit to check my to-do list in the Google Classroom from time to time so that I won’t be able to have any missing outputs that I need to pass.” P9*

*“I can just plot my time to do the assignment directly once it is been posted.” P4*

**Hypothesis 3:** Students take on the role of flexible problem solvers in dealing with the challenges brought about in their Google Classroom engagement.

**Proposition 3:** Students are flexibly addressing the challenges of the new learning platform.

**Theme 4: Development of Personal and Academic Growth**

Personal Growth: Determination, Independence, and Time Consciousness

*I learned to be independent and time-conscious... I'd say it's a "success" because it pushed me to step up my game towards personal growth and development. P10*

*One of the successes I was able to achieve with the help of Google Classroom was that I was able to achieve proper organization of what stuff I need to do and time-management... P9*

*...I was always on the impression that everything in on a deadline... P11*

*...but as time passed by, I gradually learned and eventually did on my own already without asking the help of others... P12*

*It helps us to be more flexible in life because the experience of having to adapt to something new is a valuable lesson we could use as we grow up. You'll be challenged to cope up with things that are new to you, and so, you will be resilient and disciplined and overall become a better version of yourself. P8*

*...I consider them my success because I believe that the true meaning of success is the thought of never failing to get back up and striving for the best without the thought of either having a good or bad outcome in all of our hardships in which we choose to be passionate about. P7*

*They pushed the students to finish school and do their best, show their talents or show others on what they got. P2*

Academic Growth: Positive Teacher Feedback, Knowledge Acquisition, and Task Completion

*The successes that I've encountered was the compliments from my subject teachers from the outputs I submitted and the learnings that I have gathered during the journey of learning using the Google Classroom... P7*

*Success is completing the assignments and receiving compliments from mentors about the nice outputs submitted. P6*

*I have learned things in which I can easily understand the given assignments... P1*  
*Learning new things and also being an achiever which is unexpected to become a high honor. It's really overwhelming and I feel so blessed about it. P3*

*In spite of having online classes using the Google Classroom as a platform of learning, I can say that even though we are in a pandemic, the CNU did not find it as a hindrance to make its students learn and use the time for Education unlike other countries... P2*

*...I was able to understand most of the lessons and that I was able to answer the activities given by the teachers. What I think were the successes that I have experienced with the aid of Google Classroom engagements were the fruitful marks that I have received by the end of the school year. It is also a success for me to be able to overcome with the challenges that I have encountered and that despite the foreign method used in learning, I was still able to adapt and complete this whole school year without taking a gap year. P5*

*Doing the most of time making the tasks in the Google Classroom... P11*

*For me, passing an assignment is a success because that is what I used to struggle for... it gave me an opportunity to learn and explore more of the technology we have today. It helped me prepare for a much more advanced future as it sharpened my skills and knowledge, at the same time, piqued my interest. P12*

**Hypothesis 4:** Google Classroom engagement promotes personal and professional growth in students.

**Proposition 4:** Students manifest personal and professional growth as they engage in the new learning platform.

**Theme 5: Effecting Realization of Real-World Values**

Useful in Daily Living and Future Endeavours

*It really means a lot because I think it will be very useful in my every day journey and for my future purposes in education... P7*

*I think it is a big help for future purposes... P1*

*So I think with the use of Google Classroom and other applications or programs that we used in our online classes trained us to be more adaptive and methodological, preparing us for college, or rather, the world in the future. P12*

Values Inculcation: Overcoming Difficulties, Sharing Learnings to Others, Successful Grade Level Completion

*...As a highschool student, I think it is quite a memorable experience for me since I was able to complete a whole school year with flying colors despite the unexpected appearance of the pandemic. I would also like to commend the admirable efforts of both the teachers and students at how resilient we are to be able to overcome the obstacles in achieving another step in education... P5*

*For me, the challenges in using our new and advanced technology today define us as a student because as a student it is important that we do not only know things by the book for it is also important that we know how to apply our learnings and then, we are adaptive in whatever learning environment the teacher or the education system can provide us... P12*

*...A sign of growing because for the first time ever I haven't asked for help and I'm proud of it looking back as our school is coming to a close... P11*

*...From the skills and values that I have gathered during the moment which I will forever be keeping with me in every step of the way. Nonetheless, an example in making a good use of Google Classroom would be being able to teach other people how to use the site and why it is convenient for them to learn this way. P7*

*...helping my siblings to know the tools in the Google Classroom. As a high-school student, my experiences of Google Classroom engagement means a lot to me... P1*

*It means a lot. Google Classroom is a big help. It gave opportunities and opened up on the other side of being a student. It meant that we could complete our final year of junior high despite the pandemic. P6*

*For me, it does mean a lot, like it depends on how students will cope up on things/problems they encounter in school and we can't say that students haven't*

*learned because of online classes because it all depends on how they show their attitude or behaviour towards learning or education. P2*

#### Social Skill Development

*...since this is the way to interact with my classmates and teacher if we have further questions about the lesson. P1*

*.... it has also proven to be useful when it comes to meeting my classmates and teacher virtually... P9*

*It means a lot to me because these are the only times that I get to see my teachers and classmates, especially those who are not part of my circle of friends. Moreover, I also think that these experiences are important to me owing to the fact that these will help me develop my social skills. P10*

*...My experiences with the use of Google Classroom was that it aided me in communicating with the teachers through class and established a way to find another method of learning. Google Classroom became the bridge for us students to complete our junior high school experience. P5*

**Hypothesis 5:** Google Classroom engagement promotes life-long knowledge, skills, and attitudes in students.

**Proposition 5:** Students realized the effecting real-world value gained from their new online learning platform engagement.

#### **Theory Generation:**

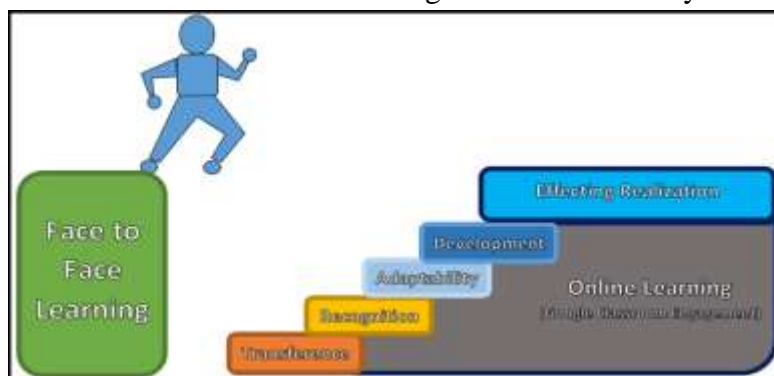
After exploring the experiences of students in the new educational landscape, the core category emerged: **TRADER online learning mechanism**. The interview responses of the participants revealed their learning mechanism when they did transference from face-to-face to online learning, recognition of challenges, adaptability to challenges, development of personal and academic growth, and effecting realization of real-world values in using Google Classroom. After thoroughly analysing the data, the experiences of the students' Google Classroom engagement can be described as follows:

The COVID-19 pandemic prompted the closure of educational institutions across all levels worldwide. This resulted into the creation of a new educational policy set to promote continual education – online distance learning. With this move, schools have utilized online learning platforms/learning management systems that serves as a medium through which the teaching-learning processes take place. One of the most commonly used learning platforms is Google Classroom. However, such platform is unfamiliar to students making them think of certain apprehensions towards it at the onset of the classes. But later on, they were able to enthusiastically and engagingly shift to the new learning paradigm in order for continual learning to take place (**Theme 1**). As they started engaging all of their educational classes in Google Classroom, they have experienced impending challenges which they need to acknowledgement in order to further succeed in such set-up (**Theme 2**). The challenges that were recognized by the students have made them flexible problem-solvers. This enabled them to think and use practical solutions in order to address whatever hurdles they experience in their Google Classroom engagement (**Theme 3**). After resolving the challenges, students found out in themselves that they have already exhibited personal and academic growth all

throughout their engagements in Google Classroom. These growths have helped them evolve and become better students who can passionately and resiliently accomplish goals in both personal and academic aspects (**Theme 4**). Finally, students were able to realize the real-world values that Google Classroom engagement has brought about in their lives. These real-world values are the significant knowledge, skills, and attitudes that helped them cope with their online classes amidst the limitations brought by the pandemic and these will be useful in their lives (**Theme 5**).

**TRANSFERENCE-RECOGNITION-ADAPTABILITY-DEVELOPMENT-EFFECTING REALIZATION**

TRADER Online Learning Mechanism Theory



**Figure 1: Conceptual Model of Cabarse's TRANSFERENCE-RECOGNITION-ADAPTABILITY-DEVELOPMENT-EFFECTING REALIZATION**

TRADER Online Learning Mechanism Theory

Cabarse's Theory states that transference, recognition, adaptability, development, and effecting are considered to be the students' TRADER online learning mechanism for them to succeed in their Google Classroom engagement. Being a student who have shifted to a new learning paradigm requires open-mindedness to entertain apprehensions and still be enthusiastic in dealing with one's learning (*transference*), acknowledging the forthcoming challenges (*recognition*), flexibly acting on to the challenges (*adaptability*), manifesting personal and academic growth (*development*), and realizing the real-world values of their Google Classroom engagement (*effecting realization*).

Development is characterized by the ability to flexibly learn, grow, and evolve amidst life's diverse challenges while Effecting Realization is a mental state that values the significant application of such growth. These two elements are mutually integral for life-long learning to take place in online learning platforms. This theory further strengthens the notion that online learning entails continual growth and realization only if the learner openly shifts into learning the new platform, acknowledges its challenges, and acts upon its hurdles. Hence, TRADER online learning mechanism was unveiled.

The theory can provide a frame of reference for the educational leaders and institutions to create policies that support online learning. This can also provide a better understanding of what happens during students' transference from face-to-face learning to online learning platform, recognizing the encountered challenges, adapt to the challenges, develop personally and professionally, and realize the effecting real-world values of the learnings accumulated in the online learning platform amidst the limitations brought about any adverse phenomena just like the COVID-19 pandemic.

Overall, the theory highlights the accounts of the students' online learning mechanism during their Google Classroom engagement. Students' transference, recognition, adaptability, development and effecting realization are being magnified as TRADER online learning mechanism in the new educational landscape.

Similar studies on students' experiences on their engagement to reveal their online learning mechanisms in other learning platforms are being recommended by the researcher.

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