

## THE LIVED EXPERIENCES OF GRADUATE SCHOOL STUDENTS ON THE IMPLEMENTATION OF INNOVATIVE CLASSES

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### ABSTRACT

*Educational paradigms have shifted from face-to-face to distance learning due to the impact brought by the COVID-19 pandemic. This shift is inevitable from the preparatory to the graduate level of education. Various improvements to adapt to this change are inevitable. One of which are the innovative classes implemented in the graduate school of Marikina Polytechnic College. Like any other program, evaluation is necessary based on the lens of key actors for its improvement. To evaluate the innovative class program implemented in the College, this study utilized phenomenological research design as lived experiences of the key actors play major roles in the evaluation process. Purposive sampling was utilized in the study and data were gathered through focus group discussion. Gathered data went through two-layered qualitative data analysis following the TPACK model as a priori. It was revealed that the availability of internet connection and appropriate devices, and familiarization of application were the subthemes under the Technology aspect; Appropriateness of pedagogy to content, teacher-centered discussion, the grouping of students, and research-based approach on Pedagogical aspect; Assessment and Evaluation Planning, Reflection-based assessment and Feedback mechanism are the sub-themes under Assessment Aspect; the integrated curriculum is the subtheme of Content Knowledge aspect.*

*Keywords: TPACK, innovative class, graduate school, phenomenology, education adaptation*

### INTRODUCTION

The COVID-19 pandemic had devastating effects on the economies of several countries. One of the most affected is the education system around the globe. This crisis made the policymakers close schools, colleges, and universities in order to save lives and control the

possible spread of the said virus (UNESCO, n.d.). This severe disruption in the education system led to the idea of distance learning instead of total closure to prepare for the possible decrease of manpower in several sectors in the future (OECD, 2020).

Academic sectors that are fond of face-to-face delivery of teaching-and-learning processes are then challenged to the awakening of distance learning as the primary delivery in the new normal. Distance learning is referred to as learning from a different geographical location. There are three learning modalities in the new normal: (1) Modular distance learning, (2) blended learning, and (3) Homeschooling (Codamon, 2020). Modular distance learning can be printed hard copies or soft copies saved on USB, CD, or sent via emails that can be accessed by the learners using computers. Blended learning is a combination of the utilization of online media platforms (e.g. Moodle and Edmodo) and face-to-face interaction between students and teachers (Lawless, 2019). However, the context of face-to-face interaction in terms of blended learning in the new normal became the use of online platforms where students and teachers can meet and discuss topics in real-time (Zoom and Google meet). On the other hand, homeschooling is a stay-at-home learning modality with the guidance of parents, guardians, or other authorized learning facilitators aside from the teachers.

Undeniably, the use of Information and Communication Technology (ICT) plays a major role in education that is even magnified for adaptation to the new normal. Some of the benefits of ICT in education are providing access to the sheer volume of knowledge, providing immediate information, making collaborative learning possible, and facilitating multimedia approaches to the teaching and learning process (Chakma, 2021). These benefits are proven provided that the teachers' technology knowledge is at par with the demands in the education processes in the new normal. As shown in the TPACK Framework (Figure 1), technological knowledge intersects with teachers' content and pedagogical knowledge. While technology knowledge refers to the knowledge of the teacher in current trends and advances in technology which includes the operation of such, technological content knowledge involves understanding how technology can be used to harvest knowledge on the subject matter, and Technological Pedagogical Knowledge refers to the knowledge of how technology can be

used in strategies in teaching (Kim, 2017; Kurt, 2018).

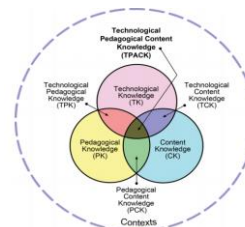


Figure 1. The TPACK Framework and its component ([tpack.org](http://tpack.org))

In the Philippine set-up, the Technological knowledge of teachers can be determined using the Philippine professional standards for teachers (2017). Thru domain 1 (Content Knowledge and Pedagogy) strand 1.3 (positive use of ICT), teachers can be rated from beginners (“Show skills in the positive use of ICT to facilitate the teaching and learning process”) to distinguished (“Mentor colleagues in the implementation of policies to ensure the positive use of ICT within or beyond the school”). In the era of the new normal, even teachers that are classified as “beginners” in the area can further enhance their technical knowledge through personal efforts and numerous activities that are conducted by their respective schools, colleges, and universities, such as webinars (Marcial, D., Fortich, M. and Rendal, J., 2014; Sasing, 2020, ). But despite these efforts, there are problems that teachers are facing in the delivery of education.

Teachers at all levels of education, along with stakeholders, are unquestionably exerting their best efforts in providing quality education to students despite the challenges they are facing in the new normal. Students, on the other hand, are another side of the coin of education that we must look into (Tria, 2020). Baticulon, Sy, Alberto, *et al.* (2021) listed barriers to online learning experienced by medical students in the new normal: (1) Lack of physical space conducive to learning, (2) Low internet speed, and (3) device ownership. They have also added challenges they have elicited through free-response data. These are categorized as (1) technological barriers – issues with the learning platform used, (2) individual barriers – physical and mental health issues, difficulty adjusting learning styles, (3)

domestic barriers – need to fulfill responsibilities at home, family conflict, financial distress, (4) institutional barriers – poor communication between the educators and students, poor quality of learning materials, limited time to interact with peers, policies, and practices that neglect student welfare, and (5) community barriers – mobility restriction due to lockdowns, power interruptions. Rotas and Cahapay (2020) also found that there are overloaded lesson activities given to students. Daily school activities given to students are different from weekly activities not to mention the number of subjects they are enrolled in. Some of the students also have full-time jobs they need to attend to while enrolled in college. They needed to have jobs in order to support their studies and families to pass through this pandemic but needed to continue their studies for their future.

Barriers to online learning also affect graduate school students since they are fulfilling course works to further enhance their skills as the catalysts of change in the future (Cebeci, Nur & Isil, 2018). Their experiences in online learning as graduate school students may also affect their teaching behavior in the future (Klausewitz, 2005; Yuksel, Hatice & Kavanoz, 2015; Ögeyik, 2016).

One way of strategies employed by the Graduate School of Marikina Polytechnic College is the implementation of innovative classes. These innovative classes adhere to Pareto Principle. Pareto Principle was founded by Wilfredo Pareto (1848-1923) which holds the 20-80 proportion. In this principle, Graduate School students are only given integrative tasks to achieve a more efficient result. Integrative tasks mean combining similar outputs of different subjects into a single output.

In this strategy, class subjects are divided into clusters with a maximum of three subjects per cluster. For instance, requirements in major subjects of students in Master of Arts in Teaching (MAT) major in Science – Environmental Science, Earth Science, and Physical Science – are combined as one. Another instance is the combination of Methods of Research in Education and Statistics in Education. This innovative class is newly implemented in the graduate school Marikina Polytechnic College as a response to the emerging problems in instruction brought on by the

COVID-19 pandemic since the teaching and learning process is still held in online classes.

## OBJECTIVES OF THE STUDY

Guided by the TPACK Framework, this study aims to evaluate the implementation of Innovative Classes at Marikina Polytechnic College through the lived experiences of Graduate School Students. It specifically aims to achieve the following objective:

1. To determine the experiences of graduate school students in the implementation of innovative classes in the TPACK Domains;
2. To discover the pros and cons of the innovative class based on graduate school students' experiences; and
3. To ascertain the suggestions offered by the graduate school students to further enhance the innovative class strategy implemented by the college.

## METHODOLOGY

To evaluate the implementation of the innovative classes, this study adopted the phenomenological method of qualitative research. Phenomenology as a research method assumes that there are multiple realities rooted in each perspective attached to the experiences of the participants. It aims to describe and interpret the diverse perspective of the participants regarding a certain phenomenon (Robinson, 2012). Employing the purposive sampling method (Palinkas, et al 2013), participants of this study were science major students – MAT Science, MAT Chemistry, and MAT Physics – of the Institute of Graduate Studies in Marikina Polytechnic College who experienced the implementation of the innovative classes.

The instrument utilized in the study is researcher-made. Questions included are probing and open-ended in nature so that sufficient data will be collected for the analysis. Questions are the following but not limited to: (1) How was your general experience in the implemented innovative classes in the graduate school in the areas of (a) Technology, (b) Pedagogy, (c) Assessment, (d) Content Knowledge? (2) What do you think are the



pros and cons of this strategy for you as graduate school student? (3) What are your suggestions to further improve the innovative classes?

The protocol of MPC in the conduct of research was strictly employed by the researchers. Upon approval, data collection commenced. Factions per major in the science major cluster were interviewed using the focus group discussion (FGD). Focus group discussions involve gathering people with similar experiences to discuss specific topics of interest, it is a form of data collection strategy that gives the participants the freedom to share their opinions, ideas, and experiences on a certain phenomenon (Focus Group Discussion, 2016). Due to the current situation brought on by the

pandemic, factions of participants were given free will in the selection of FGD whether it will be conducted via face-to-face or online meeting set-up.

The moderator of each faction is a researcher of the current study who shared the same specialization as the participants. Active analysis, or analysis concurrent with data-gathering, was employed by each researcher assigned to a specific faction. As stated by Yin (2009) that the process of active analysis further drives data collection. To eliminate albeit bias of the study, a member audit was done by the researchers to match all the initial findings and agree on the subthemes presented in this study.

## RESULTS AND DISCUSSION

### 1. Lived experiences of graduate school students in the innovative class

The pedagogical shift in the educational system is not limited to preschool, elementary, and college students but also the Graduate School. This study mapped the experiences of Graduate school students in the implementation of innovative

classes as a response to this pedagogical shift. The subthemes per a priori and their corresponding interview representative responses are presented in Table 1. To identify the origin of the responses while hiding the identity of the participant, codes were used – C1 to C5 for MAT Chemistry faction, P1 to P5 for the Physics faction, and S1 to S6 for MAT Science faction.

**Table 1**  
*Lived experiences of graduate school students on the innovative class*

Domain	Themes	Representative responses per subthemes
Experiences of participants in the implementation of innovative class	<p><b>Technological Aspect</b></p> <p>Internet connection was always been a problem in the Philippines even prior to the COVID-19 pandemic (Chiu et al., 2017) where online classes were very minimal compared to these days. On the other hand, device availability and ownership are also a problem in the education sector as it may affect the implementation of online learning (Salac &amp; Kim, 2016). Due to the nature of these problems, graduate school students tend to shed more budget to access reliable internet connections and gadgets to support effective learning processes in innovative classes.</p> <p>Teachers (professors in the case of graduate school) are the main actors in the education process. As they are the one who designs the learning environments as they are expected to explore various approaches to teaching (Paniagua &amp; Istance, 2018). However, due to the difference in the generation gap between seasoned professors, younger professors, and students among</p>	<p><b>Availability of the internet connection and devices</b></p> <p>“We used laptops and our internet connections, same with the ones we used in an online class in our work. We did not experience any problem in terms of gadgets”-P2</p> <p><b>Familiarization with using applications</b></p> <p>“There are also young professors who have introduced new applications.”-S8</p> <p>“There are some professors who are not that good at using power point. There were instances of discussions without PowerPoint.”-S1</p>



	<p>others, younger professors tend to share more knowledge in the applications used in the digital era.</p>	
	<p><b>Pedagogical Aspect</b></p> <p>Options for online learning are very limited during the time of COVID Pandemic. This diminished the value of online learning rooted in a teaching style improperly adapted to the online environment (Coman et al, 2020). Laboratory subjects require actual experiences in the laboratory, but due to the limitations brought by the pandemic, and even in innovative classes, professors had no choice but to utilize other strategies to deliver lessons.</p> <p>Another problem of imploring the pedagogical shift to online learning was shifting primarily to the teacher-centered classroom (Beattie, 2022), especially in classes with voluminous students. This tends to limit the teacher-student and student-student interaction which will limit the students' problem-solving and decision-making skills (Serin, 2018). Some of the innovative classes tend to have 100+ attendees excluding major subjects of the Natural Science cluster with limited enrollees. Major subjects of students enrolled in the Natural Science sciences cluster tend to enjoy student-centered approaches implored by their professors. Among these are the group activities which include requiring research-related work with their peers.</p>	<p><b>Appropriateness of pedagogy to content</b></p> <p>"We do have class in the major [subject] which requires a laboratory. The case is the laboratory is just the same as the lecture"-C5</p> <p><b>Teacher-centered discussion</b></p> <p>"There is no interaction between the professor and the students, unlike the reporting system which has interaction. The innovative class works like a seminar-type"-P5. It's good they opt non-reporting system"-S6</p> <p><b>Grouping of students</b></p> <p>"We are only a few in our major subject classes. Rightly enough to raise our queries to our professors."-C1</p> <p>"It's embarrassing to ask questions due to the huge number of participants included in one cluster, even the students of other subjects were there. So instead of asking questions, you will just pretend to understand the lesson"-P3</p> <p><b>Research-based approach</b></p> <p>"Research-based is good. There are many new applications learned during our collaboration."-S6</p>
	<p><b>Assessment</b></p> <p>The assessment aims to gather information on the needs, abilities, and knowledge of the students while evaluation will determine the success of the program aligned with its goals (Tosuncuoglu, 2018). There must be clear assessment and evaluation plans in the implementation of innovative classes. For instance, reflection-based assessment (known as reflective assessment) is good when utilized accordingly. Reflection-based assessments or reflective assessment is a metacognitive strategy for the students to think what they are thinking. It let them connect their learned ideas and skills in the world (Evans, 2016). However, reflective assessment should coincide with the goals of the subject matter as the reflective assessment has its taxonomy (Vos, H., &amp; Cowan, J., 2009). This is where the feedback</p>	<p><b>Assessment and Evaluation Planning</b></p> <p>"Different professors give different requirements and instructions and activities and device. They have distinct assessment styles."-C2</p> <p>"It is supposed to be Integrative Assessment, however, due to lack of coordination among the professors, they give their activities, or even worse they're pointing fingers as to who will give the activity."-P3</p> <p><b>Reflection-based assessment</b></p>



	<p>mechanism comes in. Feedback mechanism also plays an important role in the education process as it provides an idea to understand, improve, and provide opportunities for learning (Mamoon-Al-Bashir, Kabir and Rahman, 2016).</p>	<p>There are no quizzes, only essays, they call it academic writing, in which we will only read a part of a book and we will write a reflection paper out of it.”-P1</p> <p>Learning cannot be measured by reflection since reflections are subjective.”-P5</p> <p><b>Feedback mechanism</b></p> <p>There are assignments or activities right after we submit there is no remarks.”-C4</p>
	<p><b>Content-knowledge</b></p> <p>The integrated curriculum has its pros and cons. Some of the considerations are (1) time of implementation, (2) design of the learning environment, and (3) effective teacher collaboration (Mezni, 2017). In the case of the innovative classes implemented in the college, some subjects are executed smoothly, on the other hand, some require further planning for implementation.</p>	<p><b>Integrated curriculum</b></p> <p>Based on the innovative class I attended, the professor was prepared, and the content was relevant in his discussion, so that’s very good”-S5</p> <p>“Clustering of classes sometimes comes with overlapping schedules or subjects/topics due to the teachers having extended time for discussion or having an advance topic or late topics which cause gaps in terms of content and also confusions to the students”-C4</p>

## 2. General Impression on Innovative Classes

**Table 2**  
*General Impression on Innovative Classes*

<p><b>Advantages</b></p>	<p><b>a. Integrative discussion</b> “The learners gain knowledge in different subject areas” -P5</p> <p><b>b. Integrative output</b> “Since it is innovative, different subjects were involved in a single class. There are requirements applicable to all subjects in innovative class.”-C3</p> <p><b>c. Time is conserved</b> “The time was conserved since the different subject was combined, the time allotted in each subject become one”-P4</p>
<p><b>Disadvantages</b></p>	<p><b>a. Passive Learning</b> “There were no interactions between the students and the professors which will result to passive learners”-P4</p> <p><b>b. Limited assessment strategy</b> “The students lose their responsibility to learn since their mindset focuses only on submission and not on quality. Most of the time reflection is the basis of the assessment, and not the content of the subject.”-P3</p> <p><b>c. Attendance checking</b> “They should have proper monitoring of the attendance so that we can know how they check the attendance for those students who join the innovative class.” -S1</p>



### 3. Suggestions for further improvement

**Table 3**  
**Suggestions for further improvement**

<p><b>Preparatory</b></p>	<p><b>Centralization of E-mail</b></p> <p>“Innovative class needs some improvements for its centralized email address and facilitating it. It should have centralized communication between the admin, registrar, professor, and students. Sometimes, the links [on our major subject] for the meeting are late which causes the students and professors misguided in meeting links.”-C3</p> <p><b>Appoint of Coordinator per student cluster</b></p> <p>“They might appoint a professor per cluster for us to coordinate with during the semesters we are enrolled in. For instance, Sir [intentionally deleted] in the Natural Science cluster. Graduate School Office might have difficulty in handling bulk students.”-P1</p> <p><b>Training for Professors</b></p> <p>“Maybe they might train professors that are having a hard time using online platforms. The topic is good but the discussion is voice only. We can’t visualize concepts since there was no PowerPoint presentation.”- S1</p>
<p><b>Implementation</b></p>	<p><b>Attendance monitoring</b></p> <p>“It seems unfair for those who were always present compared to those who sometimes to never present in the class. Attendance is not monitored.”-S1</p>

### CONCLUSIONS

Innovative classes in the College is a strategy implemented by the college to respond to the changing needs in the educational system brought about by the COVID19 Pandemic. It was implemented in the Graduate School at first due to their capacity to adapt to such scenarios. Compare to undergraduate students, they can easily provide internet and device requirements of the innovative classes. Moreover, it is also believed that they may finish their Graduate Studies since most of the requirements in the innovative class were compressed provided that they are in the same subject clusters. But like any other program, there is no such thing as the size fits-all scenario. It is found in this study that innovative class has their pros and cons. It is an accepted fact that not all Graduate School students have an access to quality internet connection and appropriate devices. Internet connection problems may be rooted in their location during classes. Updated devices to be utilized in the class may not be achievable to some due to limited funds. Pedagogies and assessment strategies utilized by

some Professors are good for some students but do not fit other students. Among all the suggestions of the participants of the study, they are giving premium to the appointment of coordinators per cluster (one for MAT Natural Science Cluster) to bridge the communication between the – students – and the administration. Coordinators may also be the ones to deliver orientations to new grad school students, programs, offering of subjects per semester, and the like.

### RECOMMENDATIONS

Innovations in delivering quality education among students are essential, especially in the changing circumstances brought about by the COVID-19 pandemic. Such innovations may be incorporated into any TPACK aspects of the teaching and learning process. Innovation in classes may be adopted across layers of the education system from basic to postgraduate education. However, evaluation of the implemented innovative classes should be done not only quantitatively but also qualitatively as education must be inclusive. The Open-



mindfulness of the administration is also necessary for some adjustments to further enhance the advantages of innovative classes. Other institutes may adopt the innovative class presented in this paper if it suits their institution.

It is further recommended to conduct studies focusing on the experiences of Graduate School professors on the implementation of innovative classes.

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