

## Science teacher as classroom manager in online classes

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### ABSTRACT

Exploratory sequential mixed research was conducted to characterize science teachers' experiences as classroom managers in their online classes. There were 15 science teachers from elementary and secondary schools in Cebu, Philippines, participated in the phenomenological study, and 30 teachers responded to the developed tool on their management and its effect on students' performance. Thematic analysis of the interview results unveiled a series of stages, including a different start of the school year and reintegration of online management skills that eventually led to autonomy in online classes and satisfying academic outcomes. Further exploration of the quantitative aspect of the study revealed that they have very good management, which has led to a good effect on students' performance. The different innovations in classroom management strategies by science teachers led to effective online classes. Training on proactive management and positive feedbacking are recommended.

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## 1. INTRODUCTION

Due to the COVID-19 pandemic, long-term disruption was felt by many families around the globe. In addition, governments grapple with the devastating economic and social disruptions, leading to many people falling into distress and even poverty [1]. These effects can also be observed in the educational arena as countries have decided to suspend classes and close schools, colleges, and universities to curb the spread of the virus [2], [3]. As a result, the teaching and learning process was moved online on a drastic, unprecedented scale, affecting teachers throughout the world [4]–[6].

In online classes, teachers use trial and error in their teaching strategies as they are new to delivering instruction [7], [8]. On the other hand, students experience learning shock as they are exposed to unfamiliar teaching methods [9], [10]. Challenges arise from these experiences of teachers and students as they are exposed to physical face-to-face classes than virtual. Of the aspects of the educational process, classroom management in online classes rank among the teachers' concerns in the new normal learning [11], [12].

In Cebu, Philippines, online classroom management entails teachers' checking of actions, contributions, and improvement. Several studies have noted that students drastically become independent learners with loads to work on [10], [13], [14]. This workload leads to concerns about their motivation to learn, focus during classes, and even cheating on exams and projects; hence, they still need guidance to support their self-regulation [15], [16]. Therefore, online classroom management should be instilled to fix the raised issues. Virtual classroom governance is effective. It will increase student success by creating an orderly learning environment that improves students' learning and social and emotional growth [17].

To address the disclosed challenges, the researchers explored science teachers' experiences as classroom managers in virtual classes through a phenomenological study, followed by a descriptive quantitative study of their management level and its effect on their students' performance. The study results are beneficial to the academic community as it provides the real picture of teachers in the online learning environments and help administrators train responsible classroom managers. Moreover, it becomes a guide in employing effective virtual classroom management that helps improve the Science performance of students. Hence, the conduct of the study.

## 2. RESEARCH METHOD

### 2.1. Exploratory sequential mixed research design

The study employed exploratory sequential mixed research to explore the science teachers' experiences in managing their online classes. In this design, qualitative and quantitative data were collected and analyzed separately, and integrated to answer the research aims. Thus, the qualitative data were collected and analyzed first; then, the formulated themes became the basis for tool development to the next quantitative phase [18], [19].

### 2.2. Qualitative data collection and analysis

The qualitative phase of the study used phenomenology to analyze the relatively new phenomenon of online classroom management. There were 15 teachers, five each in elementary, junior, and senior high school levels participated in the study as seen in Table 1. Utilizing purposive sampling, these teachers were selected using these criteria: i) A science teacher; ii) Who conducts an online class; iii) Who employs a classroom management technique. In this phenomenological study, the researchers were the primary tools for data gathering, and a semi-structured guide was used to facilitate the individual interviews. The results of the interviews were analyzed using Braun and Clarke's thematic analysis [20] to identify the recurring patterns within the teachers' narratives. Braun and Clarke's analysis showed that 231 statements were significant, and 57 meanings were formulated, narrowed down to 12 themes and four experience stages.

Table 1. Demographic profile of teacher participants

Level of education	Participant	Sex	Years of teaching	Type of school	Grade level	Interview duration (Min: sec)
Elementary	P1	F	21	Public	5	15:21
	P2	F	2	Private	1, 2, 3	32:09
	P3	F	6	Public	4, 5	21:06
	P4	F	5	Public	4, 5, 6	13:47
	P5	F	5	Public	4, 5, 6	23:08
Junior high school	P6	F	1	Private	7, 8	22:51
	P7	M	25	Public	8	19:10
	P8	F	10	Public	7	20:01
	P9	F	1	Private	9, 10	31:09
	P10	M	1	Private	8	24:11
Senior high school	P11	F	2	Private	12	16:07
	P12	M	3	Private	11, 12	31:36
	P13	M	2	Private	11, 12	21:34
	P14	M	2	Private	11, 12	33:43
	P15	F	8	Private	11, 12	21:14

### 2.3. Quantitative data collection and analysis

The themes that emerged from the qualitative data analysis became the basis for the tool for the descriptive quantitative phase of the study. Two 10-item tools were developed in the study as seen in Table 2, namely Teacher's Online Management Questionnaire (TOMQ) and Online Classroom Management and Academic Performance Questionnaire (OCMAPQ). The adequacy values for both tools (0.648 and 0.600) were above the recommended value of 0.50, indicating that underlying constructs caused the variances. In addition, Bartlett's test yielded  $\chi^2=76.304$  and  $p=.002$  for TOMQ and  $\chi^2=77.426$  and  $p=.002$  for OCMAPQ, signifying that at least one of the items had a significant correlation with some other items. These measures mean that factor analysis is suitable with all ten items per tool.

Table 2. Tools developed, validated, and pilot tested in the quantitative phase

Tool	Construct (No. of items)	Rotated Sq. Load. (Cum. %)	Items	Loadings in rotated matrix	Cronbach's alpha
TOMQ	Student's attention and motivation (5)	3.53 (35.34)	I reprimand students who are sleeping.	0.90	0.83 (Good)
			I call the attention of students who disrupt the class.	0.84	
			I motivate students in the class to learn.	0.82	
			I encourage the equal participation of all students in the classroom.	0.81	
			I give the amount of work that does not demotivate them.	0.67	
	Order and dealing with misbehaviors (3)	2.23 (57.71)	I insist that students in my virtual classroom follow the rules at all times.	0.88	0.780 (Acceptable, Item 8 deleted)
			I strictly enforce classroom rules to control student behavior.	0.88	
			I engage students in an active and contextualized discussion.	0.62	
	Positive feedbacking (2)	2.00 (77.73)	I nearly always use collaborative learning to explore questions in the classroom.	0.91	0.70 (Acceptable)
I give feedback to the students in the classroom with constructive criticisms.			0.79		
OCMAPQ	Regard for learning (6)	3.61 (36.03)	My students are actively participating in the class discussion.	0.83	0.84 (Good)
			My students ask questions regarding the lesson.	0.82	
			My students achieve greater scores than usual.	0.72	
			My students can easily and quickly understand the concepts being taught.	0.70	
			My students are motivated to learn.	0.69	
			My students' projects or works are done better than usual, and it is evident that they put more effort into making it.	0.64	
	Meaning- making experience (2)	2.08 (56.85)	My students can apply or demonstrate an application of their learning to real-life-like situations.	0.84	0.75 (Acceptable)
			My students are more collaborative and interactive with their peers than usual.	0.80	
	Response to tasks (2)	1.88 (75.62)	My students perform or do the given activity in the most appropriate way and the best way it should be done.	0.90	0.802 (Good)
			Comprehend/respond to difficult questions	0.77	

TOMQ has three components with a cumulative percentage of 77.73%, while OCMAPQ also has three components with a cumulative percentage of 75.62%. It means that the components in the mentioned tools can explain more than 75% of the total variance in the variables. The scree plots visually show that there are three components for both tools. None of the ten items for each tool were eliminated because they were above the minimum criteria of 0.40 in the loadings. For TOMQ, items 1-5 represent a particular construct, while 6-8 and 9-10 belong to two other constructs. The items in OCMAPQ can be grouped into three constructs using the following categorization: items 1-6 (construct 1), 7-8 (construct 2), and 9-10 (construct 3). In Tool 1, the constructs are: i) Student's attention and motivation (getting the attention of students and motivating them to do their tasks); ii) Order and dealing with misbehaviors (letting the students follow the rules and procedures in the online class); and iii) Positive feedbacking (using questions and feedbacking for constructive critiques). The constructs in Tool 2 are: i) Regard for learning (effects to learning); ii) Meaning-making experiences (effects to real-life experiences); and iii) Response to tasks (effects to responding to tasks and questions). The tools were tested for their reliability. The Cronbach's alpha values for the constructs range from 0.70 to 0.83 for TOMQ and 0.75 to 0.84 for OCMAPQ. Overall, the values were 0.77 and 0.91, indicating that the tools were reliable and could be used in the study.

After the tool development process, the validated, reliable tools were administered to 30 participants using Google Forms. The quantitative data were analyzed in Statistical Package for Social Sciences (SPSS), using descriptive statistical measures such as frequencies, percentages, and weighted means. The latter measure was the basis for the qualitative description of the level of classroom management and the extent of its effect on students' performance.

## 2.4. Ethical considerations

The study was subjected to ethics review and given certification by the university ethics review committee. After securing this certification, the researchers sought permission from the principals to conduct the study in their schools. They also asked for informed consent from the teacher participants for their voluntary participation in the study. Once they gave their consent, they participated in both the qualitative and quantitative phases of the study. All data collected from both studies were kept confidential, files were secured with passwords, and names were anonymous at all times.

## 3. RESULTS AND DISCUSSION

### 3.1. Teachers' experiences in managing online science classes

#### 3.1.1. Stage 1—A different start

Teacher participants mentioned that managing online classes in science started differently, as they had a challenging welcome, frustrating experience, and students' misbehaviors. The teacher participants stated that different challenges welcomed them as they started their journey as online Science classroom managers. Technological challenges were prevalent in their responses, especially on the Internet connection and the platforms for online classes. Not only this, but they also found it hard to manage students as it was hard to manage and connect with the number of students they were handling and how to keep them focused in class. Some teachers mentioned:

*"I find it difficult to deliver the lesson, especially if my topic has something to do with experiments. I am not computer literate or technology literate, so I have no expertise on the platforms on the internet that I could utilize for my discussion."* (Participant 10)

*"Communication is the biggest challenge for me. As I said earlier, it's very hard to communicate with my students because the learning environment is new to me. I find it hard building a good relationship with my student because of the set-up."* (Participant 15)

Accompanying these technological and social challenges were the undesirable behaviors the students displayed during virtual class sessions. Teachers' responses showed that students ditched their classes by either leaving in the middle of the class or not coming to the class at all. Apart from this, they felt disrespected when the latter did things apart from listening and participating in the activities because they relied on online tutorials rather than learning from their teachers. Three teachers shared:

*"Also, I am very, very strict with the attendance, the ones that left the meet, ... because there are times where the students only enter the meet for the attendance and will leave after then will rejoin the meet if the class is about to end."* (Participant 10)

*"The teachers have many enemies in an online class like distractions, online games, etc. So, for example, just like online games where students are engaged because it gives them an instant reward after the match."* (Participant 13)

*"Some concepts need more interaction between the teacher and students. Students don't want to ask questions because they think that there a lot of tutorial videos on YouTube."* (Participant 14)

As teachers fight against the tide of students' misbehaviors, they experience a mixture of different frustrations. They described their early experiences as struggling, challenging, and stressful. Different factors bring these they encounter inside and sometimes outside of their virtual classrooms. Participants 3 and 9 disclosed:

*"Stressful because for me, managing an online class is difficult especially my class which are elementary students, they are very unorganized and sometimes, they don't listen to my discussion because they are taking advantage of the fact that they are at home ..."* (Participant 3)

*"At the same time, struggle because I am handling teenagers and it is hard to control a teenager. I mean not controlling, but it is difficult to handle because they have their world."* (Participant 9)

Due to the drastic shift to online classes, teachers faced Internet connectivity, communication, and constant monitoring with their students [21]. To deal with the unwanted students' behaviors that may affect academic activities, social relationships, and the virtual environment [22], [23]. With this, teachers become stressed early, as they must use the technology they are not comfortable with [12], [24]–[26], and when they fail to develop positive teacher-student relationships [27]. Every teacher has struggled with resolving a specific student's behavior issue at some point in their career, which is why teachers must receive adequate training to best assist students.

### 3.1.2. Stage 2—Reintegration

Teacher participants revealed that they find ways to deal with their challenging start of the school year by reintegrating the management principles. They did this by updating their management principles and strategies, learning from colleagues, and revisiting their management plans. From the rough start, teacher participants overcame it by enhancing their management principles that organize and control students' operations. For example, some of them conducted online conferences with the parents to monitor the latter's actions at home jointly. In contrast, others implemented rules so that students were guided and could undoubtedly listen to the class discussion. Selected teachers' responses included:

*"About my students' behavior is I had a one-on-one conferencing with the parents since I only have a few students, there are only 13 of them. I always make sure to buy time for it because I know that the parents can monitor their children more than I can."* (Participant 5)

*"What I did was I implemented rules for our online classes. Based on what I have observed, ever since I have set rules and regulations, the flow of our class has improved."* (Participant 6)

*"I always call out their bad behavior whether they like it or not."* (Participant 8)

Aside from updating management principles, teachers asked their co-teachers for guidance and other ways of supervising online classes effectively. Some of the valuable learning experiences as a teacher are almost always with colleagues and other teachers. Two participants mentioned:

*"Since I am not an expert or I just have little knowledge about computer apps, I always seek help to my co-teachers, also to nieces and nephews that knows about online apps that I can use in my class."* (Participant 1)

*"I also seek help from my co-teachers, especially if I have difficulty or I'm having a hard time and my powers couldn't take it."* (Participant 10)

Moreover, teachers research other classroom management techniques as this help review the purpose of students' learning, adapt quickly to the changes of the new environment, and better overcome short-term problems. Other teachers consider some of the student's situations because identifying and meeting individual learner needs boosts their morale and encourages them in their stage of learning. Two participants explicitly illustrate:

*"I researched for classroom management strategies that I can employ in the class to get their attention, maintain their interest in my class and such."* (Participant 3)

*"So, in my case, you should be friends with the students. I gave them small breaks because they also get tired. I am approachable and understanding so that they will be comfortable and open regarding their concerns or understand some parts of the lesson. Sometimes, students are saying it's a slow internet connection, even if it's not, I just understand them so that they will just be at ease and still be motivated when I give them directions regarding the given task as I showed them that I am patient and understanding enough regarding with their concerns."* (Participant 13)

The different strategies in reforming the management principles have been how teachers did to address the struggles in managing Science virtual classrooms. The school community, including teachers, must keep up to pace in the shift to virtual classroom management methods to suit the students' needs to fully meet the transition to the new learning environment [28]. To do so, teachers work together to derive a positive impact and contribute naturally to teaching improvement [29]. To further improve, they re-examine classroom management ways to increase student success and an orderly learning environment that enhances the latter's skills and competencies [30]. Thus, reintegration becomes a preliminary phase before having autonomy in online classroom management.

### 3.1.3. Stage 3—Autonomy

After reintegration, teacher participants said that they applied the classroom management principles in their Science online classes. It is a process towards autonomy as classroom managers. In terms of managing the Science virtual classroom, the teachers stated that they had employed different classroom management strategies that involve routines or classroom procedures; conducting prayers, checking attendance, and reminding of online class rules, to name a few. They also employed ways to maintain the order in online classes like turning off the microphone when somebody is discussing, turning it on only when recognized, and using the raise hand feature in Google Meet to raise or answer questions. Lastly, they made mention implementing techniques for dealing with students' behaviors. Some teachers shared:

*“I had one on one conferencing with the parents, I remind my students about the rules, and I change the tone of my voice when speaking in recalling the rules and when undesired behavior arises, that’s all.”* (Participant 2)

*“The classroom management strategies I am employing is that I have rules for the class, that is the main. Also, we have attendance checking before the classes start, and I recap and call random students to recall what we had the last meeting. We also have opening and closing prayer.”* (Participant 5)

*“During the discussion, I strictly prohibit them from making unnecessary noises that may distract the discussion. After the discussion, it is necessary to turn on their microphone and camera to answer questions in every synchronous class. My virtual classroom management in terms of discipline is that I prohibit my students from asking unnecessary questions.”* (Participant 11)

In addition to the strategies mentioned, teachers also mentioned managing the class through retaining students’ attention during the virtual experience. As a support to this, they kept their students motivated by establishing a good relationship with them, always checking on them, giving them breaks and encouraging them to join the class. Two teachers stated:

*“Sometimes, I incorporate comedy inside the virtual classroom to lessen the pressure or tension during discussions. Also, I formulated rules which include turning on of cameras because, in that way, I will be able to know whether or not they are listening to my discussion.”* (Participant 7)

*“In terms of student engagement, I always check on my students though there are a lot of them, I always make sure that I will be able to talk to them even just for a little bit before I start my classes, in that way they will be able to breathe a little before my discussion.”* (Participant 9)

Teachers also articulated the part of positive feedback in managing their classroom management. They shared that they entertain students' concerns and communicate with parents to provide constructive feedback regarding their children in the online class. It is exemplified by Participant 11:

*“After the discussion, every synchronous class, it is a must to turn on their microphone and camera when it comes to answering and asking questions. Also, I always employ probing techniques to clarify the thoughts and concerns of my students.”* (Participant 11)

When planning strategies for online classroom management, teachers consider effective routines or classroom procedures to maintain order and address misbehaviors in the virtual learning environment [22], [23]. Aside from this, they keep their students focused and motivated during class and build good relationships with them, which is a critical component of successful management in any form [31]. They also provide positive and constructive feedback and give the latter the chance to ask or raise concerns, which effectively builds community and trust within the virtual class [31], [32]. Video conferencing with parents also reinforces this community-building with students and parents [31], [33]. Thus, virtual classroom management involves the teachers' part and the help of parents and other stakeholders in providing positive dealings during online Science classes.

#### **3.1.4. Stage 4—Satisfying outcomes**

As teachers reflected on the impact of effectively and efficiently managing the virtual classes in science, they stated that it had significantly affected their students’ performance. The teacher participants stated that integrating classroom management strategies in their respective Science virtual classes significantly affected their students' performance. They described the latter’s synchronous performance as positively improving. They affirmed this improvement because there was explicitly positive students’ performance in class. Some of the vignettes that support this are:

*“I was able to come up with different classroom strategies. And now that the end of the final term is near, there are a lot of changes in their academic performances; they are more engaged, participative, and attentive, unlike before when I had no classroom management strategies yet.”* (Participant 1)

*“I cannot say that they excelled a lot, but there are improvements in their performance.”* (Participant 5)

*“Yes, I can say that the virtual classroom management that I employed has a positive impact on my students because I observed that they have high scores in our exercise activity during our synchronous classes, which eventually results in the improvement of their grades in Science subject.” (Participant 11)*

Moreover, the teacher participants mentioned that they learned how to be patient when they adapted to online classroom management, especially when teaching students difficult scientific concepts. Instead of getting irritated, they developed long patience and a love for learning. They enjoyed the teaching-learning process, even more, leading them to innovate ways in teaching Science lessons virtually. The teacher participants illustrate these beneficial effects of adapting to online classroom management:

*“I was able to learn how to be patient, especially to my students, which are grade 7 students; it is difficult to make them understand, but thru time I was able to adjust, and that was it. I practiced patience because of this set-up.” (Participant 1)*

*“Uhm, I have learned to innovate ways just to have a smooth flowing class, and I get satisfied when I hear the words “Ohhh” or “Aha” of students when learning something.” (Participant 2)*

*“I learned to be patient. Like every time I conduct my class, I always get irritated, especially if my environment is noisy or my class is unorganized. Still, as time went by, I learned to control myself and became more patient and developed a love for learning.” (Participant 5)*

*“I get to teach with fun. Science requires a deeper understanding which is why, as much as possible, I try to make my discussions fun and interactive. I get to learn new things from my students, and I somehow developed or grew along the way.” (Participant 7)*

Furthermore, they have significantly enhanced their perception of online classroom management because it helped discipline students online. They have also used their management skills effectively to maintain the class organized virtually. Three teacher participants stated:

*“Virtual classroom management for me are skills of us teachers to keep the class organized.” (Participant 8)*

*“For me, the teacher can manage the class and to keep it orderly.” (Participant 9)*

*“Okay, so we know that classroom management is a process in which the teachers and the school create and maintain appropriate behavior of the students in a classroom setting. But in virtual, it's how we should sustain a conducive environment. So, for me, when we say virtual classroom management, it's a way, or it's our practice on how to discipline students even though we're meeting them virtually.” (Participant 13)*

The results revealed that the integration of classroom management in the Science virtual class improved many aspects of the students, as good online management practices promote and encourage learning and boost their performance [34]. As students gave a good performance, teachers adapted to the online classroom management, and they became patient and innovative. Facilitating an online Science course requires educators to be innovative and creative to have an impactful online presence [35]. Due to positive results for their students and themselves, teachers enhanced their perceptions of the new normal management. Furthermore, online classroom management encourages and maintains appropriate behavior during synchronous classes [34].

### **3.2. Level of teachers' management in online science classes**

The level of teachers' management in online classes in science is presented as seen in Table 3. The Science teachers were very good at enhancing students' attention and motivation, maintaining order and dealing with misbehaviors, and giving positive feedback. Teachers can minimize disciplinary concerns by motivating students to perform well in class [30]. Through various strategies, they can be able to manage well the latter's behavior [22]. They also provide positive feedbacks that create a harmonious relationship within the new learning environment [32]. Effective classroom management practices help improve the learning environment where the students are.

Table 3. Level of teachers' management in online science class

Aspects	Item No.	Responses (%)					Mean	Aspect mean	Overall mean
		1	2	3	4	5			
Students' attention and motivation	1	0.0	6.7	10.0	30.0	53.3	4.30 (VG)	4.57 (VG)	
	2	0.0	0.0	10.0	23.3	66.7	4.57 (VG)		
	3	0.0	0.0	0.0	16.7	83.3	4.83 (VG)		
	4	0.0	0.0	0.0	23.3	76.7	4.77 (VG)		
	5	0.0	6.7	6.7	26.7	60.0	4.40 (VG)		
Order and dealing with misbehaviors	6	0.0	0.0	6.7	30.0	63.3	4.57 (VG)	4.55 (VG)	
	7	0.0	3.3	3.3	30.0	63.3	4.53 (VG)		
Positive feedbacking	8	0.0	3.3	10.0	30.0	56.7	4.40 (VG)	4.57 (VG)	
	9	0.0	0.0	3.3	20.0	76.7	4.63 (VG)		

### 3.3. Extent of the effect of online classroom management on students' performance

The level of teachers' management in online classes in science is presented in Table 4. The online classroom management of science teachers yields good effects on the students' performance in aspects of regard for learning, meaning-making experience, and response to tasks. When teachers manage well the online class, students are motivated to learn, and thus, they boost their knowledge, skills, values, and attitudes towards the class, including Science [34]. They would lead the students to apply what they learned in real-life scenarios [31]. As meaningful experiences are given, they become more participative in doing the tasks and more comprehensive in answering questions; hence, they have engaged appropriately in the assigned task [31], [34]. Thus, effective online classroom management boosts the academic performance of students.

Table 4. Extent of the effect of online classroom management on students' performance

Aspects	Item No.	Responses (%)					Mean	Aspect mean	Overall mean
		1	2	3	4	5			
Regard for learning	1	0.0	0.0	16.7	63.3	20.0	4.03 (GE)	3.83 (GE)	
	2	0.0	3.3	13.3	53.3	30.0	4.10 (GE)		
	3	0.0	3.3	40.0	40.0	16.7	3.70 (GE)		
	4	0.0	3.3	26.7	66.7	3.3	3.70 (GE)		
	5	0.0	0.0	30.0	60.0	10.0	3.80 (GE)		
	6	0.0	6.7	36.7	40.0	16.7	3.67 (GE)		
Meaning-making experience	7	0.0	0.0	20.0	66.7	13.3	3.93 (GE)	3.83 (GE)	
	8	0.0	10.0	30.0	36.7	23.3	3.73 (GE)		
Response to tasks	9	0.0	3.3	26.7	63.3	6.7	3.73 (GE)	3.77 (GE)	
	10	0.0	3.3	23.3	63.3	10.0	3.80 (GE)		

## 4. CONCLUSION

The study revealed that there were several stages of science teacher to manage the online class. The beginning stage is concerned with the rough path encountered by the participants in handling classes. The second stage is about the various ways to overcome the challenges, and innovations were applied to adjust to the new teaching-learning set-up. Further, autonomy designates the different strategies employed by the teachers to handle the different classes effectively. Finally, the last stage is the effects of classroom management strategies on the academic performance and behavior of the students. It has been concluded that the teacher's experience, particularly in their management level, has effectively managed students' behavior, encouraged student participation, and followed orders. On the other hand, the extent of the effect of classroom management is effective to the students' academic performance. The different innovations in classroom management strategies employed by science teachers led to effective online classes.

Based on the study's findings, the researchers recommend that teachers strategize more on how they give feedback or do positive feedbacking to their students since the strategy mentioned in the findings of this study is asking questions. Also, parents should ensure that their kids stay focused on school and play an active role at home. For online education in general, the researchers recommend that the Department of Education (DepEd) should provide more training, seminars, and workshops about online media for education or educational technologies and classroom management strategies for teachers to be well equipped with the skills needed as a facilitator of learning in an online class. In line with this, it is also recommended that adequate facilities and resources are also necessary to enable a successful academic career for both teachers and students.






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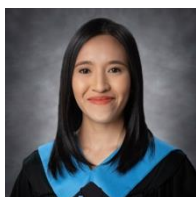
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