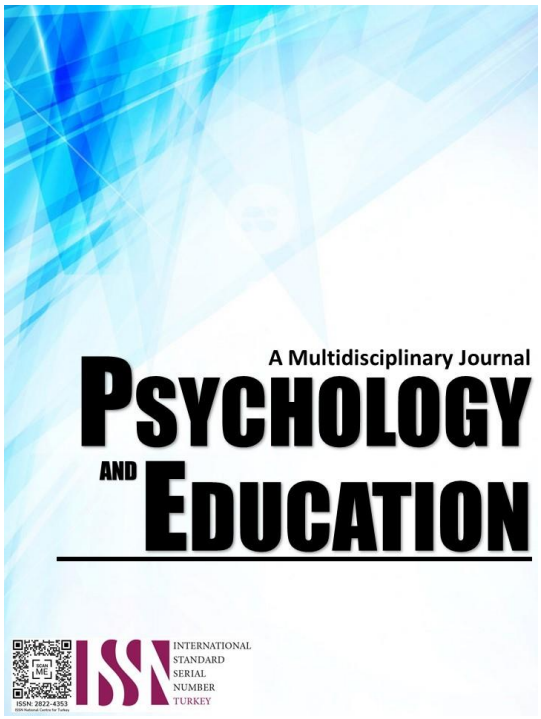
LEVEL OF EFFECTIVENESS OF ONLINE TEACHING AND LEARNING IN FACILITATING INSTRUCTION FOR GRADE ONE LEARNERS: BASIS FOR A PROPOSED TEACHING MODEL



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Research Article

Level of Effectiveness of Online Teaching and Learning in Facilitating Instruction for Grade One Learners: Basis for a Proposed Teaching Model

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Abstract

This study aimed to determine the level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners in four selected public elementary schools in District I, Division of Pasig City during the school year 2022-2023 which served as basis for the development of a proposed teaching model.This study used the descriptive-survey method of research since it was the most suitable to use in determining the perceived level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners in the four selected public elementary schools in District I, Division of Pasig City. The respondents were 66 grade one teachers and 34 master teachers. The researcher used a survey questionnaire which was validated by five experts. The two groups of respondents perceived that the synchronous online teaching and learning for grade one learners was very highly effective in terms of video/webcam interactions and effective in terms of small- group breakout rooms and online interactive applications. On the other hand, they perceived that the asynchronous online teaching and learning was very highly effective in terms of giving instructions through messenger chats and posting of video lessons and guide questions in class Facebook page. Likewise, there was no significant difference in the perceptions of the two groups of respondents on the level of effectiveness of synchronous online teaching and learning and online asynchronous teaching and learning. A teaching model for synchronous online interactive applications and small-group breakout rooms was deemed necessary based on the findings of the study, hence, was developed and proposed by the researcher.

Keywords: *synchronous, asynchronous, level of effectiveness*

Introduction

Technology as one communication tool serves as a path to enable teaching children at home. The immediate shift to distance teaching compels administrators and teachers to prepare the learners to distance learning. Through the digital use of different learning platforms, teaching is facilitated, and learning becomes feasible. Indeed, online learning makes possible the continuation of instruction and becomes a more commonplace in educational settings for all grade/year levels.

For online education to be totally effective, having a high-quality faculty is crucial. In addition, online faculty also needs adequate training in the use of modern technologies applicable to online teaching.

One research study highlighted the importance of the connection between students and their teachers. As Beale (2018) notes, this does not necessarily mean that every lesson needs to include a video meeting, though there is a beneficial psychological impact of knowing that the teacher is still in contact with his/her learners which can be realized through face-to-face online discussions. There are other forms – a discussion thread which begins during a lesson and is open throughout which can perform the same role, though in cases where meeting functions are available, students may be directed to use it rather than the e-mail. Just like the teacher-student relationship, student-student links are important.

In the enclosure No.2 of DepEd Order No. 014 s.2020, it is stated that the school should provide and maximize the use of online platforms which do not require physical interactions or congregations for the performance tasks that include learning delivery, trainings, and conferences. The design and implementation of online education can be guided by evaluation. For instance, evaluation activities can determine educational needs on how to improve a program/course and to what extent, a program/course has achieved its desired outcomes. Evaluation can also determine whether certain standards are being upheld, and thus, can prove very useful in the accreditation process.

The COVID-19 pandemic has become a critical challenge across many sectors. Exploring the capacity of the education sector to adapt to the state of uncertainty and manage the emerging situations associated with the pressing challenge of the coronavirus outbreak and subsequent lockdowns has become more critical than ever. There is an evolving body of knowledge exploring the capacities and challenges of online education. The constant and rapid

evolution of information and communication technology has undoubtedly profound impacts on the academic discourse and everyday practices of research, scholarship, and teaching. The use of up-to-date online technologies and the process of continuously evaluating them have also become integral to students' changing demands, particularly within their online educational contexts.

Kauffmann (2019) noted that students with the capacity for self-regulated learning tend to achieve better outcomes from online courses. This result is not surprising, given that in online learning, more responsibility is placed on the learner. Meanwhile, it is plausible to suggest that the two-way relationship between self-regulated learning skills and successful participation in an online distance learning program can be explained in terms of the opportunities online distance learning offers in three areas: first, to develop self-regulated learning skills afforded by the online distance learning environment; second, the prior propensity of learners to self-regulate their learning; and third, changes in distal factors such as exclusive mediation of learning through online platforms to IT and parental involvement in learning (Fernaci, Aguilar and Drynes, 2019).

With the present situation today brought by the COVID-19 Pandemic, teaching and learning must continue or take place using online teaching as one significant platform. It is then very essential for teachers to be capacitated or trained on the use of online platform to serve quality distance learning.Also, teachers need to involve themselves in various trainings to know the critical roles of online teaching and more importantly, to better cater to learning. In view of the aforesaid reasons, the researcher was motivated to conduct this study. Hopefully, the study would bring to the fore the merits or advantages of online teaching and learning.

Research Questions

This study aimed to determine the level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners in four selected public elementary schools of District I, Division of Pasig City during the school year 2022-2023 which served as basis for the development of a proposed teaching model. More specifically, it sought answers to the following questions:

1. What is the level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners as perceived by the teacher and master teacher respondents in terms of the following variables?

1.1 Synchronous
1.1.1 Video/webcam interactions;
1.1.2 Small-group break-out rooms; and
1.1.3 Online interactive applications (e.g. Kahoot, Mentimeter, Class point)?
1.2 Asynchronous
1.2.1 Giving of instructions through messenger chat; and
1.2.2 Posting of video lessons and guide questions in the class Facebook Page?
2. Is there a significant difference between the perceptions of the two groups of respondents on the level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners with respect to the aforementioned aspects?
3. Based on the results of the study, what online teaching model for Grade One may be proposed?

Literature Review

According to Moore & Kearsley (2016), "Distance education is teaching and planned learning in which teaching normally occurs in a different place of learning, requiring communication through technologies as well as special institutional organization." These technologies have evolved—starting with letters, then radio, television, teleconferences, and finally the Internet which have been integral in shaping the course of distance learning. Diaz, Barnes & Zapalska (2017) said that online education allows learners to have a greater sense of control of their education.

Berge (2016) described the teacher's role in a virtual environment in one of the early models called the 'Instructor's Roles Model' identified teachers' functions under four different categories: pedagogical, social, managerial, and technical. The roles were defined within the online discussion context, in which the pedagogical role is meant to facilitate the learning in discussions, the social role to encourage and promote working together, the managerial role to organize and design the logistics of the discussions, and the technical role to provide a transparent technology environment to the learners. These roles were suggested at a time when teachers were just moving to online environments, where the main activities were designed around online discussions.

In another point of view, Varvel (2016) mentioned the need for developing competencies for online education which was recognized by a number of researchers. The researcher indicated that defining the abilities and expectations of online teachers in functional and

observable terms can help the institutions and teachers in planning the professional development opportunities. Therefore, he constructed a competency document for online instructors which was designed to meet the needs of a particular program. In addition, Clark and Mayer (2016) stipulated in their book the principles for effective online learning. In their book, there was a discussion on the use of conversational writing style versus formal writing to personalize 47 information. Thus, writing in this way caused the students to feel as if they were in a familiar conversation.

E-learning tools have played a crucial role during this pandemic, helping schools and universities facilitate student learning during the closure of universities and schools (Subedi et al., 2020). Meanwhile, Doucet et al. (2020) said that while adapting to the new changes, staff and student readiness needs to be gauged and supported accordingly. The learners with a fixed mindset find it difficult to adapt and adjust, whereas the learners with a growth mindset quickly adapt to a new learning environment. There is no one size-fits-all pedagogy for online learning. There are a variety of subjects with varying needs. Different subjects and age groups require different approaches to online learning.

A study conducted by Black (2017) included research concerning art educators' perceptions and approaches to working with technology tool as a means of both student communication and personal artistic expression determined that teachers' styles of teaching in digital art classrooms were dependent up on several determining factors. Teaching styles are shaped by the overall school Philosophy. Black stated that the teachers were subject to the conditions of their teaching environment, mandates of special programs within their schools, and resources available to the schools when formulating their teaching style.

In a comparative study, Dan and Rick (2017) examined the differences between traditional and online learning environments, arguing that traditional learning environments are bound by the location and presence of the teacher and the students conducted in real time, managed by the instructor, and are linear in teaching methods. However, the online teaching and learning environments are unbound and dynamic, using evolving information and communication technologies, asynchronous communication and real-time information. Online learning environments involve a variety of educational practices and are often characterized by student-centered, active learning techniques. Furthermore, VanPortfliet and Anderson (2018) noted that research into hybrid instruction indicates that students achieve outcomes that match, if not exceed outcomes from other instructional modalities. In particular, academic achievement by students in hybrid programs was consistently higher than that of students engaged in purely online programs.

Methodology

The study used the descriptive research design. According to McCombes (2020), descriptive research aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when and how questions, but not why questions.A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them.The descriptive research design is useful in the study because this will help identify the level of effectiveness of online teaching and learning in the academic performance of individual learners.

Participants of the Study

The sources of data were the 66 Grade One teachers and 34 Master Teachers from four selected public elementary schools in District I, Division of Pasig City. Table 1 shows the distribution of respondents by schools.

Table 1. *Distribution of Respondents by School*

Schools	*Population (Teachers)*	*Sample Population (Teachers) (80%)*	*Population (Master Teachers)*	*Sample Population (Master Teachers) (90%)*
Nagpayong E/S	39	31	15	14
Ilugin E/S	14	11	5	5
Palatiw E/S	11	9	9	8
Pinagbuhatan E/S	19	15	8	7
Total	83	66	37	34

Instruments of the Study

The data gathering instrument that was used in this study was the questionnaire. This was developed by the researcher, checked by the research adviser, and validated by five teachers from the Division of Pasig City who were not part of the respondents.The questionnaire dealt with the level of effectiveness of online teaching and learning in facilitating instruction

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for Grade One learners with respect to (a) Synchronous video/webcam interactions; small – group break out rooms; online interactive applications (e.g.Kahoot, Mentimeter, Class point) (b) Asynchronous -giving of instructions through messenger chat; posting of video lessons and guide questions in the class fb page; and (c) e-learning -e-mail communication; google drive and other collaborative tools (e.g., Microsoft 365 account, Microsoft Teams). These aspects were covered with a total of 35 item indicators used to evaluate the effectiveness of the mentioned variables.

Procedure

After the survey questionnaires were validated by the five validators, the corrections were incorporated. Then, letters asking for permission from the concerned authorities were sought before the conduct of the study. Upon approval of the school's division superintendent and the principal, the survey questionnaires were administered to the teachers and master teacher respondents of Nagpayong Elementary School, Ilugin Elementary School, Palatiw Elementary School, and Pinagbuhatan Elementary School. In the administration of the survey questionnaires to the said respondents, Google Forms were used in order to ensure their safety and in particular, safety protocols were followed. The respondents were given 3-5 days to complete the survey questionnaires and were retrieved from them via online.

Ethical Considerations

The researcher herself explained and gave the informed consent to each participant before the conduct of the study. She ensured them that the information would be used with utmost confidentiality and within the purpose of the study only.

Results and Discussion

Level of Effectiveness of Synchronous Online Teaching and Learning

The finding further implies that they also appreciate the essential benefit that it can give to the learners, more especially in knowing if there are concepts which are being misunderstood by the learners in a particular lesson.

Table 2. *Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Video/Webcam Interactions*

Indicators Video/Webcam Interactions:	*Respondents*			
	Teachers		*Master Teachers*	
	WM	*VI*	*WM*	*VI*
1. help develop practical knowledge about the concept of the lesson.	3.73	VHE	3.71	VHE
2. enable the sharing of narratives that enhance the skill of noticing.	3.74	VHE	3.71	VHE
3. supervise learners achieve desirable results in their performance in class.	3.82	VHE	3.79	VHE
4. develop learners' communication skill and the art of reasoning.	3.74	VHE	3.74	VHE
5. encourage or promote active engagement among the learners which results to a meaningful and productive discussion.	3.71	VHE	3.79	VHE
6. allow individual learners to clarify misconceptions or misunderstanding in certain competencies.	3.68	VHE	3.82	VHE
7. give the learners a chance to ask for further explanations as regards the directions / instructions given in a particular task.	3.76	VHE	3.53	VHE
8. enable the learners to exchange ideas and have an agreement as regards important lessons needed to be given focus.	3.83	VHE	3.68	VHE
9. inspire a healthy forum through questions that empower participants to question each other / elicit rich discussion.	3.86	VHE	3.85	VHE
10. give learners the chance to share experiences related to the lesson being discussed	3.67	VHE	3.79	VHE
Average Weighted Means	3.75	VHE	3.74	VHE
Standard Deviation	0.13		0.14	

As shown in the table, the teachers and the master teacher respondents got the average weighted means of 3.75 and 3.74, respectively, which were verbally interpreted as Very Highly Effective. This finding implies that both groups of respondents share the same perception in all the indicators set under the variable-video/webcam interactions. It further connotes that the teachers and the master teachers are very much inclined and equipped on the use of video/webcam interactions that promote healthy conversation among learners, encourage positive feedback, improve learners' confidence to share their feelings and develop learners' communication skills. The data in the table show that the average weighted means obtained by the two groups of respondents were 3.24 and 3.37 which were both verbally interpreted as Effective.Among the set indicators, the first indicator, "make attendees feel more comfortable in joining conversations" and the second indicator, "address topics that were missed", were perceived differently by the master teacher respondents as evidenced by the weighted means of 3.53 and 3.59, interpreted as Very Highly Effective.

Table 3. *Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Small Group Breakout Rooms as Perceived by the Two Groups of Respondents*

Indicators Small-Group Breakout Rooms:	*Respondents*			
	Teachers		*Master Teachers*	
	WM	*VI*	*WM*	*VI*
1. make attendees feel more comfortable in joining conversations.	3.14	E	3.53	VHE
2. address topics that were missed.	3.20	E	3.59	VHE
3. offer department / group specific discussions.	3.23	E	3.35	E
4. hold attendees / learners more accountable / and responsible for contributing essential ideas.	3.23	E	3.26	E
5. enable individual learners to host impromptu discussions.	3.27	E	3.44	E
6. boost productivity by giving members of the group a voice and a comfortable concept and discussions to be heard.	3.30	E	3.29	E
7. give a person a chance to share his/her thoughts without fear of time constraints.	3.21	E	3.26	E
8. enable a group of learners to recap points discussed during online classes with a big number of attendees.	3.29	E	3.29	E
9. urge a group of learners to ask questions and investigate more details about information presented.	3.24	E	3.38	E
10. permit the learners to focus on topics that are of interest to their group where individuals can contribute their expertise on the subject.	3.33	E	3.32	E
Average Weighted Means	3.24	E	3.37	E
Standard Deviation	0.33		0.35	

This means that the master teacher respondents appreciated the benefits of small-group break-out rooms. With this perception extended by the master teachers, there is a need for the master teachers to reinforce to the teachers the vital contributions that small group breakout rooms can give/offer to the individual learners. It can also be noticed that in the computed average weighted means of 3.24 and 3.37, interpreted as Effective, both groups of respondents share the same perceptions among other indicators, hence, it is imperative that they should collaborate and strengthen more on the use of this online teaching and learning strategies- the small group breakout rooms, in order to produce a learning environment where everyone can speak out their insights and questions which will certainly result to a very productive and meaningful teaching-learning process.The data in the table show that the master teachers and the teacher respondents got the average weighted means of 3.29 and 3.38, respectively, both verbally interpreted as Effective.This finding means that the two groups of respondents are somehow amenable as regards the important points and contributions that online interactive application (Kahoot, Mentimeter, Class point) can bring in learning. However, it can be observed that the first indicator, "enhance effective virtual communication and collaboration among learners and learners' peers", was perceived as Very Highly Effective as evidenced by the weighted mean of 3.68.

Table 4. *Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Online Interactive Applications*

Indicators Online Interactive Applications:	*Respondents*			
	Teachers		*Master Teachers*	
	WM	*VI*	*WM*	*VI*
1. enhance effective virtual communication and collaboration among learners and learners' peers.	3.35	E	3.68	VHE
2. support active engagement and interaction among group of learners.	3.21	E	3.44	E
3. facilitate the learners to watch educational videos as output of their learning in certain subjects.	3.38	E	3.41	E
4. strengthen learners' knowledge and understanding as regards the different concepts presented.	3.18	E	3.32	E
5. provide weaker learners with additional technology instructions.	3.36	E	3.32	E
6. facilitate active teaching and learning about lessons to be taught.	3.33	E	3.41	E
7. motivate the learners to share rich dialogues that improve learning and relationships.	3.24	E	3.26	E
8. give assistance to the learners in developing their skills in organizing and working collaboratively with other groups of learners.	3.26	E	3.32	E
9. urge learners to actively engage during class discussion specifically in reciprocal learning activities, soaking new ideas, and sharing perspectives and experiences.	3.21	E	3.24	E
10. help the learners boost their interests in learning which results to an improved class standing.	3.33	E	3.41	E
Overall Weighted Means	3.29	E	3.38	E
Standard Deviation	0.26		0.22	

This means that in this particular aspect, the master teacher respondents who are serving as technical assistance providers are effectively empowered, capacitated, and could strengthen the ability of the teachers to make use of online interactive applications.Moreover, looking into the overall weighted means where both groups of respondents have a parallel view, there is a need for them to embrace and appreciate the online interaction applications since, these will help them make an increase on the learners' active engagement in class and in the development of their technology skills.

Table 5. *Summary of Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners*

Indicators Synchronous:	*Respondents*			
	Teachers		*Master teachers*	
	OWM	*VI*	*OWM*	*VI*
a. Video / Webcam Interactions	3.75	VHE	3.74	VHE
b. Small-Group Breakout Rooms	3.24	E	3.37	E
c. Online Interactive Applications	3.29	E	3.38	E
Grand Weighted Means	3.43	E	3.49	E

Table 5 reflects the summary of the respondents' perceptions on the effectiveness of synchronous online teaching and learning. Among the variables under Synchronous, both the teacher and master teacher respondents obtained the grand weighted means of 3.43 and 3.49, respectively, which were also verbally interpreted as Effective.It can be observed that in general, they have a parallel perception about the three indicators. The two groups of respondents are adaptive enough and they effectively address learners' concerns/issues and more importantly cater the necessary learning which learners are expected to assimilate.

As shown in the table, both the teachers and the master teacher respondents perceived all the indicators as Very Highly Effective as shown by the average weighted mean of 3.75.This finding implies that giving of instructions through messenger chat during asynchronous online teaching and learning facilitates learners' understanding of their lessons. It also implies that learners are enabled to access faster responses from their classmates or teachers.The data imply that both the teacher and the master teacher respondents perceived "Giving of Instructions through Messenger Chats" as Very Highly Effective as evidenced by the average weighted means of 3.75 and 3.75, respectively. These indicators were positively seen by the master teachers and the teachers to be helpful and advantageous for Grade One learners since at their stage, they need to develop their communication skills and socialization among their peers and teachers. They both agreed that these indicators have positive impact to the learners who cannot attend zoom classes because of some circumstances like poor internet or data connection. They can alternatively do their activities through messenger chats.

Table 6. *Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners in Terms of Giving of Instructions through Messenger Chats*

Indicators Giving of Instructions Through Messenger Chats:	*Respondents*			
	Teachers		*Master Teachers*	
	WM	*VI*	*WM*	*VI*
1. enables learners to access materials or activity sheets anytime.	3.79	VHE	3.53	VHE
2. helps teachers to communicate with parents regarding the concern of every student.	3.83	VHE	3.76	VHE
3. provides effective communication without sucking up any of the teachers' extra time.	3.74	VHE	3.76	VHE
4. helps the learners view / read instructions and announcements anytime.	3.74	VHE	3.76	VHE
5. offers a room where both teachers and learners can discuss homework or ideas.	3.74	VHE	3.85	VHE
6. forms a place where learners can share, develop, and refine new or creative ideas.	3.76	VHE	3.79	VHE
7. enables the learners to access faster response either from classmates or teachers.	3.79	VHE	3.88	VHE
8. allows effective interaction through exchange of chats which can help learners become more confident in sharing their thoughts.	3.65	VHE	3.62	VHE
9. offers assistance and response to questions which are needed immediate actions.	3.71	VHE	3.62	VHE
10. provides an area where students can be reminded of assignments, due dates, changed of class schedules, and so on.	3.71	VHE	3.88	VHE
Average Weighted Means	3.75	VHE	3.75	VHE
Standard Deviation	0.15		0.17	

The data in the table show that both the teacher and the master teacher respondents perceived the posting of video lessons and guide questions in the class FB Page as Very Highly Effective as evidenced by the average weighted means of 3.75 and 3.73, respectively. This finding connotes that the set indicators under the variable- Posting of video lessons and guide questions in class Facebook Page, were properly and responsibly done by the teachers and the master teachers which further implies that they show commitment in guiding, supervising, and facilitating the learning activities being done by the learners.

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Table 7. *Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners in Terms of Posting of Video Lessons and Guide Questions in Class Facebook Page*

Indicators *Posting of Video Lessons and Guide Questions in Class FB Page:*	*Respondents* *Teachers*		*Master Teachers*	
	WM	*VI*	*WM*	*VI*
engages the teachers and learners in a common conversation through posting comments and replies on the page.	3.74	VHE	3.68	VHE
creates a new sense of community and promotes learning collaboration among groups of learners.	3.73	VHE	3.56	VHE
provides a place where learners can submit class projects.	3.73	VHE	3.71	VHE
allows learners to create discussion boards and be linked with online projects and other requirements.	3.77	VHE	3.76	VHE
provides an extension of the classroom where learners can be helped in managing their time accomplishing their tasks.	3.76	VHE	3.74	VHE
gives the learners a clearer understanding regarding directions, ways, and techniques to perform the given activities.	3.68	VHE	3.79	VHE
provides another conducive learning environment where activities can be created to augment face to face interaction.	3.73	VHE	3.71	VHE
increases learners' informal learning their communication about course content.	3.82	VHE	3.91	VHE
allows positive interaction between the teachers and the learners such that queries, and confusions are being addressed.	3.74	VHE	3.82	VHE
provides rich learning and teaching practices in informal learning context.	3.76	VE	3.65	VE
Average Weighted Means	3.75	VHE	3.73	VHE
Standard Deviation	0.15		0.13	

Table 8. *Summary of the Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners*

Indicators	*Respondents* *Teachers*		*Master teachers*	
	AWM	*VI*	*AWM*	*VI*
Giving of Instructions through Messenger Chats	3.75	VHE	3.75	VHE
Posting of Video Lessons and Guide Questions in Class Facebook Page	3.75	VHE	3.73	VHE
Average Weighted Means	3.75	VHE	3.74	VHE

The table shows that the two groups of respondents obtained the average weighted means of 3.75 and 3.74 which were both verbally interpreted as Very Highly Effective. This generally implies that asynchronous online teaching and learning modality has a great effect for the teachers and master teachers. Further, it elaborates that these are very useful on their part specifically in reaching out their learners to provide guidance and give necessary activities beneficial for them specially in helping increase their performance in all aspects.

Test of Significant Difference between the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners

Table 9. *Test of Significant Difference in the Perception of the Two Groups of Respondents on the Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Video / Webcam Interactions*

Respondents	*n*	*AWM*	*S*	*Computed z Value*	*Critical z value*	*Decision*	*Interpretation*
Teachers	66	3.75	0.13	0.46	1.96	Fail to reject the H_0.	Not Significant
Master Teachers	34	3.74	0.14				

The data in the table show that at 5% level of significance, the critical z value is 1.96 and the computed z value is 0.46. Since the computed z value is lower than the critical z value, it failed to reject the null hypothesis.Thus, there was no significant difference between the perceptions of the two groups of respondents on the level of effectiveness of online teaching and learning in facilitating instruction for Grade One learners with regard to video/webcam interactions.It implies that both groups of respondents appreciate the importance of using video/webcam interactions in teaching learners to be actively engaged in the learning process.

Table 10. *Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Small-Group Break-Out Rooms*

Respondents	*n*	*AWM*	*S*	*Computed z Value*	*Critical z value*	*Decision*	*Interpretation*
Teachers	66	3.24	0.33	1.79	1.96	Fail to reject the H_0.	Not Significant
Master Teachers	34	3.37	0.35				

As the computed z value of 1.79 is smaller than the critical z value of 1.96, at 5% significance level, the null hypothesis could not be rejected. Therefore, there was no significant difference between the perceptions of the two groups of respondents on the level of effectiveness of synchronous online teaching and

learning in facilitating instruction for Grade One learners with regard to small-group break-out rooms.It implies that the teacher respondents are not that equipped enough with skills to use the small-group breakout rooms for synchronous online teaching and learning. Thus, both groups of respondents have to be capacitated in order to appreciate its effective benefits.

Table 11. *Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners in Terms of Online Interactive Applications*

Respondents	*n*	*AWM*	*S*	*Computed z Value*	*Critical z value*	*Decision*	*Interpretation*
Teachers	66	3.29	0.26	1.82	1.96	Fail to reject the H_0	Not Significant
Master Teachers	34	3.38	0.22				

Since the computed z value of 1.82 is below the critical z value of 1.96, at 5% significance level, the statistical decision was not to reject the null hypothesis. Thus, there was no significant difference between the perceptions of the two groups of respondents on the level of effectiveness of synchronous online teaching and learning in facilitating instruction for Grade One learners with regard to online interactive applications (e.g. Kahoot, Mentimeter, Class point).It implies that the two groups of respondents stand firm and honest in their perceptions on the use of online interactive applications. Furthermore, both the teachers and the master teachers are not yet fully adaptive on the different technology applications and that they still need more orientation and training.

Table 12. *Summary of Test of Significant Difference in the Perception of the Two Groups of Respondents on the Level of Effectiveness of Synchronous Online Teaching and Learning for Grade One Learners*

	Teachers		*MT's*		*Z computed Value*	*Decision*	*Interpretation*
	AWM	*S*	*AWM*	*S*			
Video / Webcam Interactions	3.75	0.13	3.74	0.14	0.46	Fail to Reject the H_0	Not Significant
Small-Group Breakout Rooms	3.24	0.33	3.37	0.35	1.79	Fail to Reject the H_0	Not Significant
Online Interactive Applications	3.29	0.26	3.38	0.22	1.82	Fail to Reject the H_0	Not Significant

The perceptions of teachers and the master teacher respondents on the level of effectiveness of synchronous online teaching and learning for Grade One learners in terms of video /webcam interactions, small-group breakout rooms, and online interactive applications did not show significant difference as observed in the corresponding computed z values which are lower than the critical z value of 1.96.This concludes that the respondents' perceptions do not vary significantly. It implies that the teachers and master teacher respondents appear to have equal understanding in the indicators set in all the variables.Further, it explains that both groups of respondents certainly need to train themselves on the use of different online teaching and learning strategies specifically small-group breakout room and online interactive applications.

Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners

Table 13. *Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners in Terms of Giving of Instructions Through Messenger Chat*

Respondents	*n*	*AWM*	*s*	*Computed z Value*	*Critical z value*	*Decision*	*Interpretation*
Teachers	66	3.75	0.15	0.00	1.96	Fail to reject the H_0	Not Significant
Master Teachers	34	3.75	0.17				

As the computed z value of 0.00 is less than the critical z value of 1.96, at 5% significance level, the null hypothesis could not be rejected. This suggests that there was no significant difference between the perceptions of the two groups of respondents on the level of effectiveness of asynchronous online teaching and learning in facilitating instruction for Grade One learners with respect to giving of instructions through Messenger chat.This means that both groups of respondents have shown versatility on the use of messenger chat as a means of giving instructions to the learners as regards the different activities/tasks given.

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Table 14. *Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners as to Posting of Video Lessons and Guide Questions in the Class Facebook Page*

Respondents	*n*	*AWM*	*s*	*Computed z Value*	*Critical z value*	*Decision*	*Interpretation*
Teachers	66	3.75	0.15	0.46	1.96	Fail to reject the H_0	Not Significant
Master Teachers	34	3.73	0.13				

As the computed z value of 0.46 is smaller than the critical z value of 1.96, at 5% significance level, the statistical decision was not to reject the null hypothesis. As a result, there was no significant difference between the perceptions of the two groups of respondents on the effects of asynchronous online teaching and learning in facilitating instructions with respect to posting of video lessons and guide questions in the class Facebook page.This explains that the teacher and master teacher respondents are quite capacitated/ expert enough in using the class Facebook page to post various information and updates as regards important concepts of the lessons.

Table 15.*Summary of Test of Significant Difference in the Perceptions of the Two Groups of Respondents on the Level of Effectiveness of Asynchronous Online Teaching and Learning for Grade One Learners*

Indicators Asynchronous Online Teaching and Learning	*Teachers*		*MT's*		*Z computed Value*	*Decision*	*Interpretation*
	AWM	*s*	*AWM*	*s*			
Giving of Instructions through Messenger Chats	3.75	0.15	3.75	0.17	0.00	Fail to Reject the H_0	Not Significant
Posting of Video Lessons and Guide Questions in Class Facebook Page	3.75	0.15	3.73	0.13	0.46	Fail to Reject the H_0	Not Significant

The perceptions of teachers and the master teachers on the level of effectiveness of asynchronous online teaching and learning in terms of giving of instructions through Messenger Chats and posting of video lessons and guide questions in class Facebook Page did not show a significant difference as shown by their respective computed z values of 0.00 and 0.46 which are below the critical z value of 1.96. This indicates that the respondents' perceptions are similar to each other.

Proposed Online Teaching Model for Grade One Teachers

Rationale. Grade One learners are still exploring a lot of things in an online learning setting since these online interactive applications are all new to them. Thus, an innovative online teaching model was developed by the researcher. It was developed based on the results of the study where synchronous online teaching and learning using interactive applications got an overall weighted mean of 3.29. It will help learners to be more motivated and fully engaged in online classes. By using this online teaching model, they will be given more opportunities to express themselves and create positive relationships among their peers. Furthermore, they will develop their self-confidence and speaking skills in an online learning modality. E-teachers as the facilitators will effectively convey the knowledge and competencies, thus objectives of the lesson will be easier to attain.

Objectives. The main objectives of this proposed innovative online teaching model are to conveniently access and use the different components of an online platform and to be more effective and efficient in nurturing learners in an online learning environment.

Expected Beneficiaries. Basically, this online teaching model will support learners in adopting online learning modality. Moreover, teachers from other grade levels will gain some insights that will elevate their flexibility and ability to advance their career.

Proposed Online Small-Group Breakout Rooms Teaching Model for Grade One

Rationale. Small-Group Breakout Room is one of the challenging components in an online classroom among young learners. Based on the result of the study on the level of effectiveness using small-group breakout room, it has an overall weighted mean of 3.24 which means that Grade One teachers and master teachers were not that capacitated in utilizing the aforementioned indicator. To fully equip with the proper use of the small-group breakout room, an online small-group breakout rooms teaching model was developed. It will aid them to access the platform and encourage learners to participate and collaborate with small groups. Learners will develop their communication skills and will get to know their classmates better. Furthermore, they can create a new idea that is relevant to their lesson.

Objectives. The main objective of this proposed online small-group breakout room model is to allow

learners to meet and talk virtually with their peers in a small room that enables them to express and share their ideas without being judged by others since they are more comfortable and at ease with each other. They will know each other better as they exchange conversations and later will gain some good values and attitude.

Expected Beneficiaries. Teachers will gain a lot of useful things from using this teaching model. They will act as facilitators, can do easier tasks as they will promote a positive learning environment in a small group. Learners can acquire new ideas from their peers and develop their interpersonal skills.

Conclusion

Based on the findings of the study, the following conclusions were drawn: (1)The teachers and master teachers are not that much familiar on the effective use of synchronous online interactive applications and small- group breakout rooms. (2) The teachers and master teachers showed versatility or expertise in using video/webcam interactions (Synchronous), in giving of instructions through messenger chats and posting of video lessons and guide questions in the class Facebook Page (Asynchronous).

Based on the conclusions of the study, the following recommendations are hereby offered: (1) The developed innovative synchronous online teaching models could be presented during a half-day online seminar for Grade One teachers.(2) Other Grade One teachers and master teachers could try out the proposed online teaching models.(3) Grade One teachers could also use the online teaching models as basis for creating their own online teaching model. (4) Future researchers may conduct parallel studies as reference for future research undertakings on online teaching practices.

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