

Implementation of Blended Learning Under the New Normal in Selected Elementary Schools in Puerto Princesa District II, Palawan

Joel B. Araya¹, Carolyn M. Illescas²

¹Teacher III, Department of Education

²Bachelor of Elementary Education-Program, Western Philippines University

Abstract

The study was conducted to assess the implementation of blended learning under the new normal in selected elementary school in Puerto Princesa District II.

Descriptive survey, mean, frequency, Slovin Formula, Pearson-r, and T-test were the statistical tools employed.

Laptop computers and smartphones were the most accessible devices for the implementation of blended learning of the teachers and school administrators, while basic cellular phone and smartphone were the most accessible for learners and parents. Mobile data was the most accessible internet connection for school administrators, teachers, learners and parents.

Face-to-face modality was more preferable compared to blended learning for school administrators, teachers, learners and parents. Moreover, there is no significant relationship between the respondents' capacity and access and technical readiness.

On the other hand, a significant difference existed between the respondents' capacity and access for blended learning; and also, between the respondents' technical readiness for blended learning.

Keywords: implementation, blended learning, technical readiness

Introduction

According to Huwan, (2020). the year 2020 is plagued with unprecedented problem that challenged the current global and national socio-political, economic, and educational landscapes.

Zhong, et al., (2020), stated that in the time of COVID-19 pandemic, the global education system is in the process of transforming and adapting to new and challenging situations which test the conventional learning process of human interaction inside a classroom, and capitalized in virtual and online education through the help of technology.

Ching Jorge, (2020) stated if last year's enrollment figures are to be the basis, the Philippine education system will be expecting around 27 million students to enroll in the Basic Education System in the coming school year. With the early closure of the school year in March, enhanced community quarantine in effect, and the still unclear future that COVID-19 pandemic will bring, the Department of Education (DepEd) and millions of learners are facing enormous challenges. In a recent evaluation on ALS (Alternative Learning System) interventions done in the Mindanao region during the quarantine period, platforms such as ICT4ALS, FB Chat, Google Classroom, the Aral Muna app, and DepEd

Commons emerged as the most common technological interventions used. Also popular are the use of radio-based intervention-partnership with local radio stations to announce questions or lessons that can be replied to by phone. There are also the door-to-door delivery of worksheet, take-home learning activity sheets, and take-home portfolio. These modalities are being used and explored during the quarantine period and will serve as key learning points for implementation in the bigger education system. While home school and online learning are among the proposed solutions, access to technology and the internet, especially in remote areas, remains a challenge. In the public-school education system, it is not uncommon for students to lack internet connection at home or be unable to afford to “load” their phones regularly. Some do not even have computers or phones at all. As this is a reality that many schools, students, and communities will face, the DepEd proposes a combination of different learning modalities and will be using the Blended Learning approach.

Rajshe, et al. (2009) stated that in the era of globalization, which has brought about unprecedented changes in the service economy, organizations of all sizes and structures are searching for strategies to improve performance without sacrificing quality. Implication to public sector education program are greatly embedded in the context of creating a learning environment where learners are offered with educational services for the satisfaction of their learner needs.

Simonson (2012) stated that distance education has become the most significant change to the process of teaching and learning of the last decade. Distance learning also called distance education, e-learning and online form of education in which the main elements include physical separation of teachers and students during instruction and the use of various technologies to facilitate students-teacher and student-student communication.

Graham (2006) describes trends of blending distance learning into traditional face-to-face courses in the form of blended learning. But as the complexity of the distance learning landscape continues to grow and change.

Holshue et al., (2020), explained that education’s new normal will not just be about operating in an environment that secures the health of the students; nor will it be about completely transitioning to online modalities. Instead, it should be about using technology to increase efficiency in areas with the capacity to do so, while empowering learners and communities to create positive learning environment in which the students can grow. It should not sacrifice quality but continue to provide equal opportunities, most especially to marginalized and vulnerable sectors. In order to promote and sustain quality education, schools should adopt programs that would suit to the present condition.

Through this study, the researcher will determine the importance and relevance to the present condition of this proposed study in the selected elementary schools in District II, Division of Puerto Princesa.

Objectives

Generally, the study aimed to determine the implementation of Blended Learning under the New Normal in Selected Elementary School in Puerto Princesa District II.

Specifically, it aimed to:

1. determine the capacity and access of the respondents on the implementation of Blended Learning in terms of:
 - a. devices;
 - b. internet connectivity, and;

- c. learning modalities
2. determine the technical readiness of the respondents in preparation of the Blended Learning in terms of:
 - a. devices;
 - b. internet connectivity, and;
 - c. learning modalities.
3. determine the significant relationship between the capacity and access of the respondents and technical readiness for the implementation of blended learning.
4. determine the significant difference between the respondents' capacity and access for blended learning in terms of:
 - a. devices;
 - b. internet connectivity, and;
 - c. learning modalities.
5. determine the significant difference between the respondents' technical readiness for blended learning in terms of:
 - a. devices;
 - b. internet connectivity, and;
 - c. learning modalities.

METHODOLOGY

Materials and Methods/Description of Project Activities

The study determined the implementation of Blended Learning under the New Normal in Selected Elementary School in Puerto Princesa District II; hence, it employed quantitative type of research. Descriptive research is concerned with the conditions of relationships that exists, practices that prevail, and processes that are going on, effects that are being felt or trends that are developing (Best, 2015).

The study used quantitative research approach using a descriptive survey to investigate the relationship of the blended learning under new normal. Descriptive survey design is suited to this study because it allows the researcher to gather information, summarize, present and interpret data for the purpose of clarification.

Sampling

In the selection of the respondents, the researcher The target population of this study consisted of school administrators, teachers, parents and learners in Cluster 7 Puerto Princesa District II, namely; Matahimik Bucana Elementary School, Luzviminda Elementary School, Mangingisda West Elementary School, Mangingisda Elementary School, Tagbarungis Elementary School, Inagawan Sub. Elementary School, Inagawan Elementary School, and Kamuning Elementary School.

Research Design

Descriptive research method was used to determine the implementation of Blended Learning under the New Normal in Selected Elementary School in Puerto Princesa District II.

Descriptive research is defined as a research method used to describe the existing phenomena as accurately as possible (Atmowardoyo, 2018).

Research Instrument

The questionnaires were adopted from Department of Education ,the first part was designed to assess the devices and the modalities of the respondents. The second part assessed the capacity and access of the respondents. The questionnaire was designed for the school administrators, teachers, parents and learners to form a major data collection tool as it allows the study to include a large sample for representativeness to inform the study on practice, opinions and attitudes of the respective respondents with regard to implementation of blended learning under the new normal in Clusrter 7 in Puerto Princesa District II.

Data Collection and Analysis

A written permission was secured from the Schools Division Superintendent, District Supervisor and respective School Administrators of Cluster 7 Puerto Princesa District II to conduct the study in selected elementary schools.

The survey questionnaire was personally administered to the students, parents and teachers, based on the sampling procedure. The purpose and direction on how to accomplish the questionnaire were explained to the respondents.

Ethical Consideration

The respondents' responses will be treated with utmost confidentiality and those data will be used only for the purpose of this research.

RESULTS AND KEY FINDINGS

Results and Discussion

This chapter presents the analysis and interpretation of data. The discussions of the findings are consistent with the sequence of the problems presented in the first chapter of this study.

Capacity and Access of Respondents on the Implementation of Blended Learning in terms of Devices

Table 1.1 shows that laptop is the top available device for the school heads and teachers with the frequency of 56 or 86.1 percent; followed by smartphone, 50 or 76.9 percent; desktop computer with 16 or 24.6 percent; basic cellphone with 11 or 16.9 percent; tablet and cable tv with the same frequency of 8 or 12.3 percent; radio with 6 or 9.2 percent; and non- cable tv with 3 respondents or 4.6 percent.

This result implies that laptop computer is the most frequently device used by school administrator and teacher in performing their work because they can afford to provide it.

In line with the study conducted by Laurillard, (2002) technology's affordances do not originate from the technology itself, but the careful selection of a technology tool for a given instructional strategy and the pedagogically sound ways in which it may be used to support human cognitive processes, and to engage learners. Thus, this is not about technology for technology's sake and we need to use technology when it is effective and appropriate to do so.

Smartphone and basic cellphone are the most available device for the learners with the same frequency of 40 or 38.5 percent. Followed by cable tv with 37 respondents or 35.6 percent; radio with 33 respondents or 31.7 percent; non-cable with 22 respondents or 21.1 percent; laptop with 12 respondents or 11.5 percent;

desktop computer with 7 respondents or 6.7 percent; and tablet computer and none or without any gadgets are the same frequency with 5 or 4.8 percent.

This implies that the learner respondents have a capacity to provide cellphone but limited capacity and access to buy expensive devices like laptop computer needed for blended learning.

According to the study of Rodrigo, (2005) students in countries like the Philippines have less access to digital content. Rodrigo further conducted surveys with elementary students, public primary school students, and private primary school students and found that in Metro Manila, 25 students shared one computer.

For the parents, smartphones appear to be the most accessible with the frequency of 57 or 54.8 percent. Followed by basic cellphone with 50 respondents or 48.1 percent; radio with 43 respondents or 41.3 percent; cable tv with 34 respondents or 32.7 percent; non-cable tv with 27 respondents or 25.9 percent; laptop with 20 respondents or 19.2 percent; and desktop computer and tablet computer are the same frequency of 4 or 3.8 percent.

The results imply that the use of smartphones is most accessible to the respondents.

According to the study of Purcell et al. (2013), Digital technology allows students and teachers to interact with the curriculum through the use of a wide range of digital devices including desktop computers, laptops, digital cameras, mobile phones, and smartboards.

Williamson and Payton, (2009) also explained that when digital curriculum is implemented, it gives schools more flexibility in providing innovative teaching and learning activities based on technology. One of the options is blended learning which combines online learning with other means of instructional dissemination.

Table 1.1 Capacity and Access of the Respondents for the Implementation of Blended Learning in terms of Device used

Device	School Head/Teacher		Learners		Parents	
	Frequency (n=65)	%	Frequency (n=104)	%	Frequency (n=104)	%
Cable TV	8	12.3	37	35.6	34	32.7
Radio	6	9.2	33	31.7	43	41.3
Non-Cable TV	3	4.6	22	21.1	27	25.9
Desktop Computer	16	24.6	7	6.7	4	3.8
Basic Cellphone	11	16.9	40	38.5	50	48.1
Laptop	56	86.1	12	11.5	20	19.2
Smartphone	50	76.9	40	38.5	57	54.8
Tablet Computer	8	12.3	5	7.7	4	3.8
None	0	0	5	7.7	0	0

Capacity and Access of the Respondents on the Implementation of Blended Learning in terms of Internet Connectivity

It can be seen that Mobile data is the most accessible internet connectivity option for the teachers/administrators with frequency of 58 or 89.2 percent, followed by mobile broadband with 36 respondents or 55.4 percent; and DSL with 1 respondents or 1.5 percent. Also, for the learners, the most accessible internet connectivity is mobile data with 96 respondents or 92.3 percent, followed by mobile broad with 7 respondents or 6.7 percent. Relatively mobile data is also the top access of the parents in terms of internet connectivity with 92 respondents or 88.5 percent, followed by mobile broadband with 11 respondents or 10.6 percent, only 1 respondent use other access with 0.9 percent.

This implies that mobile data is the major access of the respondents in terms of internet connectivity.

According to study the of Picciano and Seaman, (2007), the success of blended learning is highly dependent on experience in internet and computer application.

Table 1.2 Capacity and Access of the Respondents for the Implementation of Blended Learning in terms of Internet Connectivity

Internet	School Head/Teachers		Learners		Parents	
	Frequency (n=65)	%	Frequency (n=104)	%	Frequency (n=104)	%
Mobile Broadband	36	55.4	7	6.7	11	10.6
DSL Service	1	1.5	0	0	1	0.9
Mobile Data	58	89.2	96	92.3	92	88.5
Others	0	0	3	2.9	1	0.9

Capacity and Access of the Respondents on the Implementation of Blended Learning in terms of Learning Modalities.

The table shows that majority of the school administrators and teachers favored modular instruction with 58 respondents or 89.2 percent, while combination with other instruction were preferred by 37 or 56.9 percent of the respondents; followed by online with 2 or 3.0 percent; while Television appears to be the least accessible with 1 respondent or 1.5 percent.

For the learners, majority favored modular instruction (63 or 60.6%); followed by combination with frequency of 40 or 38.5 percent. Also, for the parent modular instruction is the top choices with 67 respondents or 64.4 percent, next is combination with 37 respondents or 35.6 percent.

The result implies that the responses from school administrators and teachers, learners and parents suggest that modular instruction is the most preferred learning modality.

Gonzales (2015) explained that to surpass the difficulties faced by the students, modular approach may be a good alternative since it is student-centered, self-paced, and requires no note-taking.

Table 1.3 Capacity and Access of the Respondents for the Implementation of Blended Learning in terms of Learning Modalities

Internet	School Head/Teachers		Learners		Parents	
	Frequency (n=65)	%	Frequency (n=104)	%	Frequency (n=104)	%
Online	2	3.0	0	0	0	0
Modular	58	89.0	63	60.6	67	64.4
Combination	37	56.9	40	38.5	37	35.6
Television	1	1.5	1	0.9	0	0
Others	0	0	3	2.9	0	0

Technical readiness of the school administrators and teachers in the implementation of blended learning.

In terms of device, table 2.1 shows that the school administrators and teachers gave a highest rating on the statement: *“I appreciate modern devices (computer, cellphone, television etc.) required for blended learning”*, with a mean of 4.42, described as *Moderately Agree*; while the least was the statement *“I just borrow gadgets for my family and friends”* with a mean of 2.11, described as *Disagree*.

In terms of internet connectivity, the highest rating on the statement: *“I have with me smartphone or android phone with mobile data”* with the rating of 4.27, described as *moderately agree*, while the least was the statement *“I use to connect internet on my neighbors, friends or family’s house”* with a mean of 2.70, described as *agree*.

In terms of learning modalities, the highest rating on the statement: *“I can use social media (Twitter, Instagram, Facebook, Messenger) as a platform of my instruction.”* with the rating of 4.08, described as *moderately agree*, while the least was the statement *“I can use the local television and radio to deliver our lessons to our learners.”* with a mean of 2.92, described as *agree*.

It implies that the school administrators and teachers have perceived readiness in reference to use of devices for the implementation of blended learning. Teachers can use mobile devices to contact and monitor the learners. Interventions can be carried-out beyond the school setting through the use of cellphone. Smartphone features twitter, Instagram, Facebook and messenger that can use both teachers and learning in asynchronous learning.

The results of Gulchak (2008), studies indicate that self-monitoring techniques using digital mobile devices can be just as effective as traditional self-monitoring techniques.

Table 2.1 Technical Readiness of the School Administrators and Teachers in the Implementation of Blended Learning

Component/Statement	Mean	Description
A. Device		
1. I am fairly good at using laptop and desktop computer.	4.40	MA
2. I use electronic devices for learning activities.	4.21	MA
3. I am comfortable conducting online meeting using gadgets.	3.72	MA
4. I am able to manage my time well using technology.	4.01	MA

5. I am familiar with the use of integrating technology or devices in curriculum.	4.00	MA
6. I am able to download files from the internet and upload files to flash drive.	4.38	MA
7. I use electronic devices for teaching activities.	3.92	MA
8. I don't have enough budget to buy gadgets.	3.28	A
9. I just borrow gadgets from family and friends.	2.11	D
10. I appreciate modern devices (computer, cellphone, television etc.) required for blended learning.	4.42	MA

Overall Mean **3.84** **MA**

B. Internet Connectivity

1. I am using laptop or desktop computer with internet connectivity at home.	4.02	MA
2. I have with me smartphone or android phone with mobile data.	4.27	MA
3. I am using tablet computer with internet access at home.	3.29	A
4. I have smart or LED television at home with cable.	3.60	MA
5. I have good internet connection at home.	3.65	MA
6. I can pay my monthly internet bills.	3.55	MA
7. I use internet every day.	3.72	MA
8. I used to connect internet on my neighbors, friends or family's house.	2.70	A
9. I don't have enough budget for internet connectivity.	3.27	A
10. I just buy load for my mobile data.	3.89	MA

Overall Mean **3.59** **MA**

C. Learning Modalities

1. I am able to use any of the following learning management system; google classroom as means on online learning.	3.45	A
2. I can use social media (Twitter, Instagram, Facebook, Messenger)	4.08	MA
3. I have attended distance learning (Digital Education, Flexible Learning option, etc.)	3.45	A
4. I can use the local television and radio to deliver our lessons to our learners.	2.92	A
5. I have enough instructional materials, modules to implement blended learning among learners.	3.59	MA

6. I am able to facilitate my child on his online activities like chatting and forum.	3.09	A
7. I can assist my child to download files from the internet and upload files.	3.00	A
8. I can provide adequate parental guidance on the use of cyberspace.	3.52	MA
9. I can help my child on the use of appropriate devices for his online study.	3.08	A
10. I am able to manage my time in helping my child in answering his modules.	3.45	A
Overall Mean	3.36	A

Legend:	Rating Scale/Range	Verbal Description
	4.51 – 5.0	Strongly Agree (SA)
	3.51 – 4.5	Moderately Agree (MA)
	2.51 – 3.5	Agree (A)
	1.51 – 2.5	Disagree (D)
	1.0 - 1.5	Strongly Disagree (SD)

Technical readiness of the school administrators and teachers in the implementation of blended learning.

In terms of device, table 2.2 shows that the learners gave a highest rating on the statement: “*I don’t have enough budget to buy gadgets*”, with a mean of 2.93, described as *agree*, while the least was the statement “*I am able to download files from the internet and upload files to flash drive.*” with a mean of 1.94, described as *disagree*.

The data imply that the learners were not yet ready in the use of devices for blended learning due to limited resources.

According to the study of Shraim and Khlaif (2010), 75 percent of students were lacking in skills to utilize ICT- based learning components due to insufficient skills and experience in computer and this may lead to failure in e-learning and blended learning.

In terms of internet connectivity, the highest rating on the statement: “*I just buy load for my mobile data.*” with the rating of 2.86, described as *agree*, while the least was the statement “*I am using tablet computer with internet access at home.*” with a mean of 1.76, described as *disagree*.

In terms of learning modalities, the highest rating was obtained by the statement: “*I can do home-based learning.*” with the rating of 2.92, described as *agree*, while the least was the statement “*I can download files from the internet and upload files with or without the help of my parents.*” with a mean of 2.10, described as *disagree*.

The data imply that the learners were not completely ready in the use of devices, internet connectivity due to limited budget and poor internet connection in their area for blended learning.

The results negate the study of Penjuree Kanthawongsa, Penjira Kanthawongs, (2012) that from the Perception of Primary School Students, Parents and Teachers toward the Use of Computers, the Internet and Social Networking sites that most of the respondents have accesses to computer, internet connection from home.

Table 2.2 Technical Readiness of the Learners in the Implementation of Blended Learning

Component/Statement	Mean	Description
A. Device		
1. I am fairly good at using laptop and desktop computer.	2.10	D
2. I can use electronic devices for learning activities.	2.10	D
3. I am able to manage my time well using technology.	2.63	A
4. I am familiar with the use of integrating technology or devices on my study.	2.78	A
5. I am able to download files from the internet and upload files to flash drive.	1.94	D
6. I can use any form of gadget that use on my online classes.	2.21	D
7. I don't have enough budgets to buy gadgets.	2.93	A
8. I just barrow gadgets for my family and friends.	2.36	D
9. I appreciate modern devices (computer, cellphone, television, etc.) required for blended learning.	2.92	A
10. Myparents can provide gadgets needed for online learning.	2.08	D
Overall Mean	2.40	A
B. Internet Connectivity		
1. I am using laptop or desktop with internet connectivity at home.	1.87	D
2. I have with me smartphone or android phone with mobile data.	2.59	A
3. I am using tablet computer with internet access at home.	1.76	D
4. I have smart or LED television at home with cable.	2.07	D
5. I have good internet connection at home.	1.81	D
6. My parents can pay our internet bills.	1.79	D
7. I use internet every day.	1.89	D
8. I used to connect internet on my neighbors, friends or family's house	2.04	D
9. I don't have enough budget for internet connectivity.	2.38	D
10. I just buy load for my mobile data.	2.86	A
Overall Mean	2.10	D
C. Learning Modalities		
1. I can do home-based learning.	2.92	A
2. I can access different platform like Deped Common and etc.	2.52	A
3. I have an idea of what is home schooling or distance learning (Digital Education, Flexible Learning Options, etc.)	2.50	D

4. I use the local television and radio to my study.	2.71	A
5. I can answer my modules with or without the help of my parents.	2.25	D
6. I am able to do online activities like chatting and forum.	2.11	D
7. I can download files from the internet and upload files with or without the help of my parents.	2.10	D
8. Blended learning helps me to continue my study.	2.40	D
9. I can identify appropriate for my learning.	2.24	D
10. I am able to manage my time in answering my modules at home.	2.69	A
Overall Mean	2.44	D

Legend:	Rating Scale/Range	Verbal Description
	4.51 – 5.0	Strongly Agree (SA)
	3.51 – 4.5	Moderately Agree (MA)
	2.51 – 3.5	Agree (A)
	1.51 – 2.5	Disagree (D)
	1.0 - 1.5	Strongly Disagree (SD)

Technical readiness of the parents in the implementation of blended learning.

In terms of device, results show that the school administrators and teachers gave a highest rating on the statement: *“I can assist my child in using electronic devices for learning activities”*, had the highest rating with a mean of 2.84, described as *agree*, while the least was the statement *“I can provide gadgets needed for online learning”* with a mean of 2.28, described as *disagree*.

In terms of internet connectivity, the highest rating on the statement: *“I just buy load for my mobile data”* with the rating of 2.84, described as *agree*, while the least was the statement *“I can assist my child to use electronic devices for learning activities”* with a mean of 2.10, described as *disagree*.

In terms of learning modalities, two highest rating on the statement: *“I can help my child doing homed-based learning and I can assist my child to answer his modules”* with the rating of 3.27, described as *agree*, while the least was the statement *“I can assist my child to download files from the internet and upload files”* with a mean of 2.51, described as *agree*. (Table 5.3)

Result implies that the parents could also not be ready in terms of devices, internet connectivity and learning modalities due to limited knowledge and information on blended learning.

The results negate the study of Penjuree Kanthawongsa, Penjira Kanthawongs, (2013) while found that parents have positive perceptions toward the use of computers, the internet and social networking sites.

Table 2.3 Technical Readiness of the Parents in the Implementation of Blended Learning

Component/Statement	Mean	Description
A. Device		
1. I am fairly good at using laptop and desktop computer.	2.64	A
2. I can assist my child in using electronic devices for learning activities.	2.84	A
3. I am able to manage my time well using technology.	2.75	A
4. I am familiar with the use of integrating technology or devices in the study of my child.	2.81	A
5. I am able to download files from the internet and upload files to flash drive.	2.68	A
6. I can assist my child in using electronic devices for learning activities.	2.75	A
<i>Continuation of table 5.3...</i>		
7. I don't have enough budget to buy gadgets.	3.21	A
8. I just borrow gadgets from my family and friends.	2.43	D
9. I appreciate modern devices (computer, cellphone, television, etc.)	2.71	A
10. I can provide gadgets needed for online learning.	2.28	D
Overall Mean	2.71	A
B. Internet Connectivity		
1. I am using laptop or desktop with internet connectivity at home.	2.56	A
2. I have with me smartphone or android phone with mobile data.	2.61	A
3. I am using tablet computer with internet access at home.	2.21	D
4. I have smart or LED television at home with cable.	2.11	D
5. I have good internet connection at home.	2.15	D
6. I can assist my child to use electronic devices for learning activities.	2.10	D
7. I use internet every day.	2.32	D
8. I use to connect internet on my neighbors, friends or family's house.	2.15	D
9. I don't have enough budget for internet connectivity.	2.52	A
10. I just buy load for my mobile data.	2.84	A
Overall Mean	2.35	A

C. Learning Modalities

1. I can help my child doing home-based learning.	3.27	A
2. I can assist my child to access different platform like Deped Common and etc.	3.06	A
3. I have an idea of what is home schooling or distance learning (Digital Education, Flexible Learning Options, etc.)	2.86	A
4. I know the local television and radio to deliver our child’s lessons.	2.80	A
5. I can assist my child to answer his modules.	3.27	A
6. I am able to facilitate my child on his online activities like chatting and forum.	2.65	A
7. I can assist my child to download files from the internet and upload files.	2.51	A
8. I can provide adequate parental guidance on the use of cyberspace.	3.03	A
9. I can help my child to identify appropriate for my child’s learning.	3.00	A
10. I am able to manage my time in helping my child in answering his modules.	3.06	A
Overall Mean	2.95	A

Legend:	Rating Scale/Range	Verbal Description
	4.51 – 5.0	Strongly Agree (SA)
	3.51 – 4.5	Moderately Agree (MA)
	2.51 – 3.5	Agree (A)
	1.51 – 2.5	Disagree (D)
	1.0 - 1.5	Strongly Disagree (SD)

Relationship between the Respondents Capacity and Access and Technical Readiness.

Table 3 presents the relationship between the respondent’s capacity and access and technical readiness.

It can be seen from table 8 that the correlation between the teachers and school administrators’ capacity and access and technical readiness, is negligible was shown in internet connectivity ($r=.014$); learning modalities ($r=.066$), and low in device ($r=.130$). The p-value indicates that there is no significant relationship between the respondents’ capacity and access and technical readiness.

As for the learners, the data indicated that the relationship was negligible in device ($r=.056$), internet connectivity ($r=.039$) and learning modalities. The p-value also show that there is significant relationship between the learners’ capacity and access and technical readiness.

For the parents, data revealed that a negligible correlation was shown in internet connectivity ($r=.015$) and learning modalities ($.032$). Likewise, the p-value revealed that only device is significantly correlated at .05 significant level.

Table 3. Relationship between the Respondents’ Capacity and Access and Technical Readiness

Technology	School Head/Teacher			Learners			Parents		
	r	p-value	Decision	r	p-value	Decision	r	p-value	Decision
Device	.030	.130	Accept	.056	.575	Accept	.195*	.049	Reject
Internet Connectivity	.014	.922	Accept	.039	.365	Accept	.015	.882	Accept
Learning Modalities	.066	.599	Accept	.019	.851	Accept	.032	.744	Accept

Legend:

r- pearson Coefficient

*- significant at .05 level

** - significant at .01 level

Difference between the Respondents’ Capacity and Access to Blended Learning

The difference between the respondents’ capacity and access in blended learning were analyzed using t-test.

The data on table 4 revealed that there is no significant difference between the respondents’ capacity and access in blended learning as revealed by p-value of .176 which is greater than .05 level of significance. However, internet connectivity and learning modalities between respondents were having a significant difference as shown by the p-value of .000.

This result implies that the teachers, school administrators, parents and teachers differ in terms of internet connectivity and choices in terms of learning modalities because of their own capacity and access to blended learning.

Table 9. Difference between the Respondents Capacity and Access to Blended Learning

Technology	t-value	Degree of Freedom	P-Value	Decision
Device	1.369	64	.176	Accept
Internet Connectivity	17.76	64	.000	Reject
Learning Modalities	3.849	64	.000	Reject

Difference Between the respondents Technical Readiness and Blended Learning.

T-test was used to determine whether there is a presence of statistically significant difference among the respondents with respect to technical readiness

The data on table 10 reveal that there is significant difference between the respondents’ technical readiness as shown by the p-value of .000, which implies that the teachers, school administrators, parents and learners differ in terms of device, internet connectivity and choices of learning modalities.

Table 5. Difference between the Respondents’ Technical Readiness and Blended Learning

Technology	t-value	Degree of Freedom	of p-value	Decision
Device	10.942	64	.000	Reject
Internet Connectivity	11.558	64	.000	Reject
Learning Modalities	6.918	64	.000	Reject

ISSUES IDENTIFIED AND POSSIBLE INTERVENTIONS/CONCLUSION(S) AND RECOMMENDATION(S)

Conclusions

Based on the findings, the following conclusions are drawn.

Based on the findings, the following conclusions were drawn:

1. Teachers and school administrators’ laptop computer and smartphones are the most accessible. While for the learners and parents the most accessible devices are smartphone and basic cellphone.
2. Mobile data is the most accessible internet connection.
3. Face-to-face is more preferable compared to blended learning.
4. There is no significant relationship between the profile of the respondents and the capacity and access for blended learning except in gender of teachers and school administrators.
5. There is significant relationship between the profile of the teachers/school administrators and the technical readiness in blended learning except on the highest degree, while there is no significant relationship between the profile of the learners and parents.
6. There is no significant relationship between the profile of the respondents and perception in face to face and blended learning.
7. There is no significant relationship between the respondent’s capacity and access and technical readiness except on parent’s device.
8. There is significant difference between the respondents’ capacity and access for blended learning except in device, and a significant difference is also noted between the respondents’ technical readiness for blended learning.

Recommendations

Based on the findings of the study, the following recommendations are hereby offered for consideration:

After a thorough examination of the findings and conclusions of the study, the researcher recommends the following:

The Department of Education

1. Should provide enough ICT facilities and devices that could be used for the implementation of blended learning modalities.
2. Should include to MOOE the additional budget for internet connectivity of the teachers.
3. Should consider the capacity and access of the learners if school chooses to go online.

Teachers

1. The teachers must have enough capacity and access to use in learning delivery.
2. Teachers need to be flexible and creative in establishing policies and practices in terms of monitoring of learners.

Parents

1. Should continue to support their children to school and emphasize the importance of quality education even in the new set up of education.
2. Parents should be directly involved to monitor their children's learning.

Learners

1. Should recognize these challenges and stay motivated on their study.
2. Should emphasize the proper use of the gadgets or devices for their online learning.

Future Researchers

1. Should present this study to the Division Office and sent a copy of abstract to the schools included in the study.
2. May use this study as basis for the related studies to be conducted.

BIBLIOGRAPHY**RESEARCH JOURNALS/ RESEARCH REPORTS/ PERIODICALS**

1. Atmowardoyo, Haryanto (2018) Research Methods in TEFL Studies: Descriptive Research, Case Study, Error Analysis, and R & D. Journal of Language Teaching and Research, Vol. 9, No. 1, pp. 197-204, January 2018
2. DOI: <http://dx.doi.org/10.17507/jltr.0901.25>
3. Ching George (2020) PH education and the new normal: INQUIRE. NET 2020, 1-3. <https://opinion/inquirer.net/hbe2.191>
4. Gonzales, (2015). A Modular Approach Utilizing Decision Tree in Teaching Integration Techniques in Calculus. Department of Arts, Science, and Teacher Education, City College of Calamba, Calamba City, Laguna, Philippines.
5. Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C.J. Bonk & C. R. Graham (Eds.), Handbook of blended learning: Global perspectives, local designs (pp. 3-21). San Francisco, CA: Pfeiffer.
7. Gulchak, D. J. (2008). Using a mobile handheld computer to teach a student with an emotional and behavioral disorder to selfmonitor attention. Education and Treatment of Children, 31, 567–581.
8. Holshue, (2020) First case of 2019 novel coronavirus in the United States. N Engl J Med [epub ahead of print 31 Jan 2020] in press. <https://doi.org/10.1056/NEJMoa2001191>
9. Huwan A. (2020). The Possible Immunological Pathways for the Variable Immunopathogenesis of COVID—19 Infections among Healthy Adults, Elderly and Children. Electronic Journal of General Medicine, 17(4), em202. <https://doi.org/10.29333/ejgm/7850>
10. Laurillard, D. (2022). Rethinking University Teaching: a conversational thinking for the effective use of learning technologies, London; New York: KouledgeFalmer
11. Picciano, A. (2006). K-12 online learning: A survey of U.S. school district administrators. New York, USA: Sloan-C.

12. Penjuree Kanthawongsa, Penjira Kanthawongs. (2012) Perception of Primary School Students, Parents and Teachers toward the Use of Computers, the Internet and Social Networking sites. Kasem Bundit University, Bangkok, 10250, Thailand b Business Administration, Bangkok University, Bangkok, 10110, Thailand