

Readiness on Blended Learning Implementation and Performance in Basic Education Services Among Secondary Technology and Livelihood Education Teachers

Jillian S. Nuñez

jillian.nuneza@deped.gov.ph

Malvar Senior High School, Malvar, Batangas.4233, Philippines

Abstract

Teachers are responsible in improving the quality of the teaching and learning process in raising student achievement. Enhancing teacher quality ranks foremost in the many educational reform efforts toward quality education. To complement reform initiatives on teacher quality, the Philippine Professional Standards for Teachers (PPST) has been developed and nationally validated. This was signed into policy by Department of Education (DepEd) Secretary Maria Leonor Briones through DepEd Order No. 42, s. 2017.

Thus, this study hopes to improve teaching strategies and techniques that teachers used nowadays. Specifically, this study was undertaken to investigate the readiness and implementation of blended learning and performance of TLE teachers. The descriptive-correlational design sought to gather relevant data and information to determine the relationship between the readiness on blended learning implementation and performance of TLE teachers. A survey questionnaire were utilized to obtain the data from the 196 TLE teachers in third district of Batangas, Batangas province. Based on the results, the teachers agreed when they assessed the perceived level of readiness such as to content in terms of technological knowledge, skills and disposition, instructional planning, instructional methods and strategies, implementing assessment and evaluation, teacher performance in basic educational services described in terms of: content knowledge and pedagogy, diversity of learners and assessment curriculum and planning, and community linkages and professional engagement and personal growth and professional development.

These results suggest that knowing the readiness of teachers, it can help to determine, develop, and enhance their instructional strategies on blended learning.
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Keywords: *readiness; blended learning; basic education; performance; Technology and Livelihood Education;*

INTRODUCTION

Over the years, the COVID-19 pandemic conforms to the conclusions which have emerged as natural disasters. Its occurrence as a natural phenomenon has changed many of us, perhaps evolving for the better.

The teaching community has been severely impacted; be it from reopening of educational institutions to conducting lessons for students, there has been uncertainty in everything (BBC News, 2020; Reid, 2020).

The education system is one of the agencies profoundly affected by coronavirus. Around 1.2 billion students in 186 countries are out of school during the pandemic. This COVID-19 changed the education landscape dramatically (Li and Lalani, 2020).

Saboowala and Mishra (2021) stressed that in this phase of the pandemic, the teacher community tried hard to adapt themselves with the new dimensions of teaching-learning so that the loss caused is to the minimum and is coming up with strategies for the benefit of the learners and their schools. All living organisms learn to adapt to their environment. This means that the way they look, the way they behave, how they are built, or their way of life makes them suited to survive and reproduce in their habitats.

Since the issue on the pandemic disease aroused, adaptability on different teaching delivery modes is very much expected. More so, due to this issue, the practice of physical distancing must also be considered. Institutions from other countries long before are practicing this online teaching.

Education is regarded with great importance and priority in any state or country. In the Philippines, the Constitution states that, "The State shall protect and promote the right of all citizens to quality education at all levels." (Article IV, Section 1, 1987 Philippine Constitution).

A new era of teaching and learning is redefining the delivery of instruction at the Department of Education. Teachers and students have harnessed the power of digital technology by using Blackboard Open LMS, an online learning management system platform of the school. With more than half of the teacher population using Blackboard to deliver content and perform assessments, blended learning has now become the new norm.

Blended learning is an approach to education that combines face-to-face and online learning. Recent studies prove that blended learning is superior to traditional methods in delivering specific course outcomes. Therefore, Department of Education has fully embraced digital education by educating, simplifying, and monitoring the use of LMS not to replace, but to enhance the current status of classroom instruction in response to present challenges.

The DepEd's aspiration to advancement in terms of the education of the youth through alternative and innovative learning pathways today has become more pertinent and relevant. While there are challenges in implementing "blended learning", the need to educate the young people of the country is not only essential but also imperative. Among the challenges the teachers are facing include the idea that they must grapple with an increased cognitive load, and a vertical and high-ceilinged learning curve, especially for teachers who are not acquainted with blended learning. Teachers who are not as adjusted and familiar with the dynamics of technology, must upgrade their aptitude and literacy quickly. This could be more challenging for these teachers than their students.

With the pandemic that the world is facing right now, there is a shift in terms of the modalities in education, from face-to-face to distance learning and online distance learning. In online distance learning, according to Ashby et al. (2011), students are enrolled in an online course in which materials can be accessed through a specific learning management system and never meet face-to-face. According to Christensen, Horn, & Caldera (2011) and Nagel (2010), there has been a rapid growth in the use of online learning in education.

However, Nuangchalem, Prachagool, & Sriputta (2011) found out that students' online learning was less effective due to the difficulty of accessing the technology and the fluctuations of the use of internet connectivity. This is somehow similar to the struggles of every student not just in one's institution but perhaps in the whole country, the Philippines.

Furthermore, it should be noted that while this inquiry mainly focused on the construct of readiness on blended learning transition, the qualitative results inevitably and constantly probed different facilitating and hindering factors. The vast body of research highlights a complicated pattern of interconnected factors related to

readiness and is expected to be predictors of the successful integration of technology in education (Player-Koro, 2012).

Before implanting the blended learning model as the best fit model of education for post-pandemic era, it is important to understand the attitude of teachers toward adopting this approach. Understanding the attitude will enable the researchers, policymakers, and management to take a step forward in implementing this pedagogy, which is presumed to be the new normal postcrisis (Saboo-wala and Mishra, 2021).

1. LITERATURE REVIEW

Educators hone skills and competencies required in traditional teaching, most traditional educator preparation programs have required coursework related to technology integration, they have required very limited training related to online teaching (Archambault et al., 2014; Barbour et al., 2012; McAllister et al., 2016) and have supplied sparse data on preparation for blended teaching. Teachers have received only minimal preparation for a blended school environment, partially due to limited understanding of the competencies needed, including those competencies which are most important to teachers' success.

21st -century competencies have been defined as the knowledge, skills and attitudes necessary to be competitive in the 21st century workforce. Teacher preparation and professional development should be reworked to incorporate training in teaching key competencies. The 21st -century teacher needs to know how to provide technologically supported learning opportunities for students and know how technology can support student learning. Online Integration is the ability to effectively combine online instruction with in-person instruction while Online Interaction on the other hand ability to facilitate online interactions with and between students.

Most of the literature for K-12 online teaching and the more traditional technology integration have come from separate communities that consider themselves to be distinct. Research in K-12 online teaching and learning (often referred to as virtual or cyber schooling) has focused on a learning environment with physical separation of students and teachers and the primarily asynchronous interactions among them.

Alternatively, technology integration has been viewed as an extension of the traditional classroom-based learning model by which technology enhances or mediates synchronous in-person interactions. Blended teaching requires a combination of the skills from both environments (Pulham & Graham, 2018; Pulham, Graham, & Short, 2018).

It should be stressed that educational technology integration is dependent on the readiness of individual teachers (Petko et al., 2018). The successful implementation of digital technology into the curriculum relies heavily on the readiness of the teachers (Singh & Chan, 2014 as cited by Anoba & Cahapay, 2020).

Hence, this study found it important to ascertain the readiness of teachers on blended learning which is likely a promising direction in education in the post-COVID-19 period. As educational systems are searching for alternative approaches (Cahapay, 2020b) amid the age of social distancing measures (Cahapay, 2020c), schools seem to head towards blended learning modality.

The level of readiness of the teachers on technology integration has been widely reported in the related researches. The results are divergent (e.g. see Norizan et al., 2018; Tondeur et al., 2017 on a low level; Ng & Cheng, 2019; Noh et al., 2013; Al-Awidi, 2017 on the moderate level; Singh & Chan, 2014 on a high level). This global trend on the moderate level of teacher readiness on technology integration corroborates the quantitative results of the current study on the readiness of teachers on blended learning transition.

The measurement model used to develop items for measuring blended learning readiness is from the study of Pulham and Graham, 2019 using the top-level areas such as (a) foundational knowledge, skills, and dispositions, (b) instructional planning, (c) instructional methods and strategies, (d) assessment and evaluation. The disposition focuses on the teacher's attitude and belief towards blended learning and teaching while online integration focuses on the teacher's ability to make and implement decisions related to selecting when or how to combine online and other method of learning as part of core interaction and online interaction refers to teacher's ability to use digital tools as well as the ability to facilitate online interactions with and between students.

Wolff, van de Bogert, Jarodzka, and Boshuizen (2014) showed that expert teachers were significantly more effective at predicting classroom management events than novice teachers. This suggests that with years of

experience, teachers develop a better understanding of classroom management, which enables them to anticipate issues and to adapt their classroom management practices accordingly.

A competency consists of one or more skills whose mastery would enable the attainment of the competency. A competency is linked to all three of the domains under which performance can be assessed: knowledge, skills and attitude. Possessing a performance dimension, competencies are observable and demonstrable. Since competencies are observable, they are also measurable. It is possible to assess a competency from a teacher's performance. Teaching competencies may require equal amounts of knowledge, skill and attitude, but some will not. Some competencies may involve more knowledge than skill or attitude, whereas, some competencies may be more skill or performance based. (Nessipbayeva, 2012).

Further, the study of Nessipbayeva, O. (2012) gave emphasis that the competencies of modern teachers, in order to facilitate learning of their student teacher must show their acumen and versatility using various methods and materials suited to the needs of all students. They are also expected to display their awareness of technology's potential to enhance learning by integrating technology into their instruction to maximize student learning. Although the challenge of assessing what students have learn using multiple indicators, both formative and summative, to monitor and evaluate student progress and to inform instruction is now quite difficult.

According to Arthur and Philips (2012), competence gives the teacher the responsibility to present evidence of the achievement of the students. The question is how teachers perform, identifies the competencies and relate to overall performance of the students according to the capacity. In general, teachers must not be in any way, negligent of the instructional competencies that they must own so as to assure betterment and quality education on the students' part.

Ideally, educators should demonstrate this particular competency, technology skills, knowing when and how to use current educational technology, as well as the most appropriate type and level of technology to maximize student learning (Nessipbayeva, O. 2012).

Developing skills as a teacher therefore is as much about developing and extending the type of decisions that teachers make about their own teaching as it is about the successful execution of those decisions. In the Philippine system of education, there are factors that give difficulty to the implementation of objectives. The problems of inadequately-trained teachers, lack of support either from the government or from private sector, lack of solid planning, lack of follow-up of result – all these add to the difficulty (Nem Singh et al., 2009).

Approaches in evaluating teacher's instructional competencies include classroom observation, student ratings, peer ratings, principal/HOD/administrator ratings, self-rating, teacher interview, parent rating, competency tests, and other indirect measures (Joshua et al., 2006).

Mullin, et al. (in Abraham, 2011) concept of Best Teaching Practice stressed that effective teaching is simply not a set of generic practices but a set of context or wise decision-making processes. Effective teachers do not use the same set of practices for every lesson. They do not, as mindless automators, review the previous lesson, state their objectives, present, demonstrate, check the understanding, provide guide practices and use closures. Instead, effective teachers constantly reflect about their work, observe whether students are learning or not and then adjust their practices accordingly.

In the study of Valera (2015), stressed that teachers are qualified to teach T.L.E. subjects having finished Bachelor of Science in Industrial Education, with a good average teaching experience having attended several numbers of seminars/training and very satisfactory general performance ratings.

Steiner (2012) stressed that planning deals with selecting missions and objectives and the actions to achieve them. It requires decision-making; that is, choosing from among alternatives future courses of action. Plans provide a rational approach to achieving pre-selected objectives. It bridges the gap between where we are now and where we want to be. It is an intellectually demanding process because it requires deliberate courses of action where decisions are based on purpose, knowledge and a considerable degree of estimates. It minimizes costs. Its emphasis is on efficient and effective operations and consistency of procedures and methods and includes a review of performance and feedback to introduce a new planning cycle.

Similarly, planning defines where the organization wants to be in the future and how to get there. Daft (2012) defined planning as defining goals for future organizational performance and deciding on the tasks and use

of resources needed to attain them. It is the function of management that involves setting objectives and determining a course of action for achieving these objectives. Planning requires that managers be aware of environmental conditions facing their organization and forecast future conditions. It also requires that managers be good decision-makers.

Teaching puts premium on the ability of the teachers to guide students to “reflect” on their own experiences in order to arrive at new understandings and meaning the effective teachers are proactive, that is, they are active information processors particularly in the classroom, good decision makers, and task oriented. They are equipped with knowledge and mastery of content in the particular fields, aware of the characteristics of their students, and skillful in decision making particularly in keeping their student’s tasks.

As pointed by Clark, Jones, Reutzel, & Andreasen, (2013); Perkins, (2013) the teacher roles are critical in delivering the instruction to achieve successful outcomes of any reading programs. Effective instruction is partly dependent on teachers’ perceptions of reading and their instructional goals which are influenced by their past experiences of learning to read and their preparation or training programs.

Also, teachers have teaching styles that works best for people who have individual learning styles which needs to be considered when planning and teaching them. An effective classroom organization plan involves advance planning of a lesson, from beginning to end, using a variety of procedures. Because teachers are watched by thirty-five or more pairs of eyes at a time, they are focusing on procedures that enforce his or her role as a manager (Villena and De mesa, 2015).

According to Lin et al.(n.d.), inquiry- based learning pedagogies can be used in solving the issues in an online learning and in increasing the quality of it as well as learners’ satisfaction. In line with this, Lin et al.(n.d.) explained three main reasons on why is inquiry- based learning pedagogies helpful in improving the quality of online learning. Firstly, inquiry-based learning has been proven to have a positive impact on learning from basic education to college levels. Secondly, inquiry- based learning has different instructional models. Thirdly, Lin et al. (n.d.) emphasized that based on the constructivist theoretical perspectives, IBL has many elements that can help produce learner satisfaction. And lastly, with inquiry-based learning, learners in the 21st century are expected to have, media and information literacy and technology skills. Thus, current IBL pedagogy emphasizes that learning with technologies can help meet goals.

To improve online learning, technology-enhanced environments can be blended with inquiry-based learning (IBL) approach to optimize the design and development of virtual online learning activities since IBL makes it possible for more meaningful and self-regulated learning by motivating learners to generate their own problem-solving procedures (Hwang et al., 2012).

The recent growth in collaborative and interactive virtual learning communities integrating innovative digital technologies and contemporary learning frameworks is contributing enormously to the use of e-learning in higher education in the twenty-first century (Chanprasitchai et al., 2016). Furthermore, it is found in their study that the use of virtual innovations such as inquiry-based learning activities has significant effect on enhancing students’ problem-solving skills and improves the effectiveness of online learning among students.

Birnbaum (2020) stated that many nations attempted to open classes after a month of lockdown, but many failed. For instance, in Canada, 12 students tested positive in May, and in South Korea, two brothers have the virus on June 29 upon restriction was lifted. Thus, countries like Belgium and Japan adopted an alternative school schedule and lowered students’ numbers per classroom to have space between learners to protect them from infection

With the pandemic that the world is facing right now, there is a shift in terms of the modalities in education, from face-to-face to distance learning and online distance learning. In online distance learning, according to Ashby et al. (2011), students were enrolled in an online course in which materials can be accessed through a specific learning management system and never meeting face-to-face. According to Christensen, Horn, & Caldera (2011) and Nagel (2010), there has been a rapid growth in the use of online learning in education.

However, Nuangchalem, Prachagool, & Sriputta (2011) found out that students’ online learning was less effective due to difficulty of accessing the technology and the fluctuations of the use of internet connectivity. This is somehow similar to the struggles of every student not just in one’s institution but perhaps in the whole country, the Philippines.

According to Salmon (2012), online media can provide multiple benefits for students and teachers in supporting students' learning experiences particularly. Despite students acknowledge the benefits of technology in supporting students' learning, there is still a difficulty arises due to the limits on capability of accessing technologies particularly in terms of its functionality. Salmon (2014) emphasized that the accessibility of the online medium tends to make it easier with strategies such as reminders for what should be prepared each week, drop-in sessions, step-by-step instructions for how to access and use each platforms and technologies, overviews of how session will run, expectations, ability to access information and sessions at other times, interactive schedules through the learning management system (LMS), and opportunities for consultation (online, offline, and via email).

According to Gillet- Swan (2017), challenges in the online space and limitations of a specific Learning Management System can slow down interaction and provide limits to functionality while also adding to the time limitations and frustrations experienced by both teacher and student.

However, in the study of Nuangchaterm, Pranchagool, & Sriputta (2011), they found out that students' online learning experience was less effective due to the difficulty of access to technology. This finding was supported by the result concluded by Ku et al. (2011), where students felt less satisfied with online learning since they are lacking the skills to use of technology.

According to Ashby et al., (2011), in an online environment, students were enrolled in an online course accessed all the materials through a learning management system, never face-to-face. Moreover, Ashby et al., (2011) emphasized that the lectures were slideshow-based, used of a PowerPoint or sometimes used other strategies in discussing the lesson. Each unit ended with a test. Unit tests were timed, just as they were for the face-to-face students.

Lee (2014) emphasized that it is important for the schools to understand the emerging online environment, in particular, the level of students' satisfaction which is associated and somehow have effects on student learning outcome. Moreover, Lee (2014) found that teachers' and content experts' availability was a key component of student learning ability in mathematics on an online learning. Thus the availability of teachers is important in an online math education since mathematics requires a clear understanding of the tasks and contexts in order to successfully perform and complete them. Finding ways in maximizing the availability of teachers or facilitators is essential. More so, setting up online conferences like webinars and live chats on a regular basis and having weekly and having virtual office hours during which students can communicate with teachers can easily facilitate learning.

In addition, Cawsey and Loughland (2016), Professional Standards for Teachers states that one of the assessments to be use was direct observation of teaching, an important part of effective practice of collecting evidence that serve as basis for ongoing feedback, reflection and further development. In this context, high quality assessment of classroom practice is the responsibility of schools to ensure the quality of teaching and learning practice of teachers, teams, and schools. Developing a growing understanding on classroom observation provides evaluator a rich and varied range of evidence that can be effective for formative and summative purposes.

The Department of Education (DepEd) reaffirmed that the alignment of the Results-Based Performance Management System (RPMS) with the Philippine Professional Standards for Teachers (PPST) is the result of the Focus Group Workshops.

The RPMS tools pertain to the two different teacher performance assessment instruments, one for Teacher I to III (Proficient Teachers) and another for Master Teacher I to IV (Highly Proficient Teachers).

Each tool describes the duties and responsibilities of teachers across career stages, the Key Result Areas (KRAs) for the realization of those duties, and the specific objectives to attain the KRAs. It further presents in detail the various Means of Verification (MOV) that serve as proof of the attainment of specific objectives alongside performance indicators, from outstanding to poor performance.

These tools are practical to use, give preference to quality over quantity, ensure teacher effectiveness, and motivate professional growth and development. This set of RPMS tools were made by and for the teachers, resolving the issues of teachers having difficulty coming up with their IPCRF and compiling irrelevant and voluminous MOVs, and ensuring that their performance and practice of teaching are measured through standardized and objective manner.

It is important to note that with the development of these tools, teachers shall no longer craft/develop their own Individual Performance and Commitment Review Form (IPCRF) in view of the developed RPMS tools in the Manual allowing them to focus on teaching.

RPMS adheres to standard of the competency-based performance which is the National Competency-Based Teacher Standards and job-embedded requirements of the teachers in their duties and responsibilities, promotes and encourages teacher personal growth and professional development, and provides a new paradigm of instructional leadership and supervision which ultimately will improve learners and school performance outcomes.

In the development and use of the RPMS, a number of considerations serve as guiding principles: Pedagogical Content Knowledge (40%), Learning Environment and Diversity of Learners (20%), Curriculum Planning (30%), Assessment and Reporting (10) and Plus Factor.

Pedagogical content knowledge is the integration of subject expertise and skilled teaching of that subject. Teacher is one of the key aspects of student's achievement. Teachers should master content material taught, how to teach it, and can interpret the students' thinking so that students easily understand the subject matter (Juniati, 2017). It is equivalent to 40 % on the total performance rating.

Learning environment and diversity of learners. 'Learning environment refers to the diverse physical locations, contexts, and cultures in which students learn. (William, 2017). Diversity of learners defines as the variety of the learners. It is the group and individual differences that we see in students (Pearson, 2010). It is equivalent to 20 % on the total performance rating.

Curriculum Planning is the process whereby the advance arrangement of learning opportunities for a particular population of learners is created. It is equivalent to 30 % on the total performance rating.

Assessing student learning is an integral part of the school classroom. It improves learning and informs teaching: it is the process through which teachers identify, gather and interpret information about student achievement and learning in order to improve, enhance and plan for further learning. Teachers use achievement standards when planning for, assessing and reporting student learning and achievement. This involves teachers making ongoing professional judgements against the curriculum about students' knowledge, understanding and skills (Joachim, 2013).

Further, reporting is a process, not simply a format for a printed report card. It includes summaries of student achievement in a printed report card; teacher/parent interviews about learning achievement and progress; and student portfolios incorporating overall statements of achievement and assessment samples. Reporting involves a professional judgement made on a body of evidence about a student's progress and achievement against the curriculum (Joachim, 2013 in Uri, 2020).

Table 1. Distribution of Respondents by School

School	Number of TLE Teachers	School	Number of TLE Teachers
Don Julio Leviste Memorial National High School	2	San Pedro National High School	24
Malvar School of Arts and Trade	28	Sta. Anastacia San Rafael National High School	16
San Isidro National High School	3	Santa Clara National High School	7
Santiago National High School	4	Sta. Teresita National High School	6
Alitagtag National High School	7	Wenceslao Trinidad National High School	15
Balasbuc National High School	5	Agoncillo National High School	3
Banyaga National High School	4	San Nicolas National High School	3
Bayorbor National High School	5	Dona Maria Laurel Platon of Agriculture	7
Coral na Munti National High School	4	Balete National High School	6
Cuenca National High School	4	Luyos National High School	7
Fermin La Rosa National High School	4	Balele Integrated High School	5
Maabud National High School	6	Janopol Oriental National High School	2
Mataas Na Kahoy National High School	7	Malaking Pulo National High School	2
San Jose National High School	10		
	91		103

RESULTS AND DISCUSSIONS

Part I. Respondents Profile

The respondents of the study were composed of one hundred ninety- six (196) secondary TLE teachers from the different schools in Third District, Division of Batangas Province. Due to their prior experiences, they can provide the necessary information required by the study.

Table 2. Distribution of the Respondents as to Type of School

Description	Frequency	Percent
Small	15	7.7
Medium	72	37.1
Large	3	1.5
Mega	104	53.6
Total	194	100

Based on the distribution of the respondents as to type of school, Table 2 reveals that the number of respondents in the mega schools are in great number with 104 or 53.6%. On the other hand, 72 or 37.1% of the total respondents' type of school are classified as a medium while the small and large are 15 or 7.7% and 3 or 1.5% respectively.

The result shows that the majority of the respondents belong to the mega school, as well as medium schools, which implies that they are more exposed to the bulk of student population, workloads, and bigger allocation of funds that may influence their readiness for blended learning and serve as a strong basis in this study.

Table 3. Distribution of the Respondents as to Length of Service

Description	Frequency	Percentage
0 - 5 years	83	42.8
6 - 10 years	8	4.1
11 - 15 years	64	33
16 - 20 years	8	4.1
Above 20 years	31	16
Total	194	100

Table 3 clearly shows the distribution of the respondents as to the length of service. It reveals that 83 of the 194 respondents have been in the service for 0-5 years, while those who have served for 11-15 years and above 20 years are 64 or 33% and 31 or 16%. Further, tied at 8 or 4.1% are the respondents who served for 6-10 years and 16-

20 years.

This may imply that majority of the respondents are scattered and may be described as new, average, and long enough. The number shows that the respondents' length of service as enveloped by their acquired experience may be of help in this foregoing study.

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Part II. Perceived Level of Readiness on Blended Learning Implementation

Presented in Table 4 on the next page is the perceived level of readiness on blended learning implementation as to technological knowledge, skills and disposition. Indicator 4 "*can download and upload files from the Internet and can attach files to an e-mail.*" attained the highest mean of 4.87 and was interpreted as strongly agreed by the respondents. This implies that the respondents are well-versed already when it comes to manipulating internet files.

Table 4. Perceived Level of Readiness on Blended Learning Implementation as to Technological Knowledge, Skills, and Disposition

<i>As a Teacher I...</i>	Mean	SD	Verbal Interpretation
1. can utilize the tools in Microsoft Word to create necessary documents	4.79	0.41	Very Much Ready
2. can make use of the tools in Microsoft Powerpoint to develop slide decks	4.72	0.45	Very Much Ready
3. can use Microsoft Excel as an E-class record and for tabulating data	4.84	0.37	Very Much Ready
4. can download and upload files from the Internet and can attach files to an e-mail.	4.87	0.34	Very Much Ready
5. can use social networking sites, such as Facebook as a back-up instructions, learning materials, etc.	4.81	0.39	Very Much Ready
6. am knowledgeable with the proper netiquettes (i.e.security issues, data privacy, etc.)	4.68	0.47	Very Much Ready
7. am familiar with the use of video conferencing applications (Google Meet, Zoom and Microsoft Teams)	4.64	0.54	Very Much Ready
8. am familiar with the use of online storage devices such as Google drives and Icloud	4.63	0.54	Very Much Ready
Overall	4.75	0.34	Very Much Ready

Legend:

4.50 – 5.00	Very Much Ready/ Outstanding	1.50 – 2.49	Slightly Ready/ Unsatisfactory
3.50 – 4.49	Moderately Ready/ Very Satisfactory	1.00 – 1.49	Not Ready/ Poor
2.50 – 3.49	Ready/ Satisfactory		

In contrast, indicator 8, "*am familiar with the use of online storage devices such as Google drives and Icloud*", received the lowest mean of 4.63 interpreted as strongly agree. This connotes that not all of the respondents utilize the storage facilities available on the internet.

Respondents perceived the level of readiness on blended learning implementation as to technological knowledge, skills and disposition as strongly agree with an average mean of 4.75 signifying that teachers are now getting aligned with the different technologies that may help in the delivery of learning through blended learning. Through the series of training given to them, they are now deemed ready to use different online platforms to maximize learning in the absence of a physical learning environment.

Table 5. Perceived Level of Readiness on Blended Learning Implementation as to Instructional Planning

<i>As a Teacher I...</i>	Mean	SD	Verbal Interpretation
1. make sure that the objectives are specific, measurable, attainable, realistic and time-bound	4.70	0.46	Very Much Ready
2. can create a motivation that enhances the interest of the learners towards the lesson	4.74	0.44	Very Much Ready
3. ensure that the materials to be used are aligned with the lesson objectives, activities, and assessments	4.69	0.46	Very Much Ready
4. consider the availability of learning materials and equipment necessary in the execution of the lesson	4.65	0.48	Very Much Ready
5. can relate the subject matter with relevant and current social issues or trends	4.79	0.41	Very Much Ready
6. can integrate values formation in the lesson	4.76	0.43	Very Much Ready
7. develop assignments that encourage critical thinking in my students.	4.70	0.46	Very Much Ready
8. construct formative and summative assessments to measure the level of learner's understanding	4.71	0.45	Very Much Ready
Overall	4.72	0.36	Very Much Ready

Legend:

4.50 – 5.00	Very Much Ready/ Outstanding	1.50 – 2.49	Slightly Ready/ Unsatisfactory
3.50 – 4.49	Moderately Ready/ Very Satisfactory	1.00 – 1.49	Not Ready/ Poor
2.50 – 3.49	Ready/ Satisfactory		

Table 5 yielded, indicator 5 “*I can relate the subject matter with relevant and current social issues or trends*” earned the highest mean of 4.79 interpreted as “strongly agree.” This implication denotes that the teachers contextualize and localize their lessons to connect with the present events and extract learning opportunities from these situations.

On the contrary, indicator 4 “*consider the availability of learning materials and equipment necessary in the execution of the lesson*” received the lowest mean of 4.65, interpreted as “strongly agree,” which connotes that the teachers became used to the scarcity of learning materials and equipment, as a result, they take initiatives and being resourceful to make use what is available in their community.

Furthermore, the overall mean of 4.72 attained by the respondents’ assertion on the perceived level of readiness on blended learning implementation as to instructional planning, interpreted as “strongly agree,” proves that they are aware of their main functions as a teacher and that is to plan; and develop an effective lesson plan that caters the learners’ needs.

Table 6. Perceived Level of Readiness on Blended Learning Implementation as to Instructional Methods and Strategies.

<i>As a Teacher I...</i>	Mean	SD	Verbal Interpretation
1. capitalize on the different applications and software to present the lesson	4.38	0.51	Moderately Ready
2. allow students to work collaboratively even in the online platform.	4.40	0.58	Moderately Ready
3. utilize different mobile applications as instructional materials and resources.	4.44	0.59	Moderately Ready
4. give assignments and activities that are relevant to the continuity of learning experiences.	4.59	0.51	Very Much Ready
5. consider multiple intelligences of the learners.	4.61	0.51	Very Much Ready
6. use manipulative models and simulation in the lesson for learners to experiment on new ideas	4.35	0.61	Moderately Ready
7. use engaging and interactive instructional strategies appropriate to the learners' level and learning styles	4.52	0.52	Very Much Ready
8. design collaborative group activities to encourage participation and shared leadership	4.54	0.52	Very Much Ready
Overall	4.48	0.43	Moderately Ready

Legend:

4.50 – 5.00	Very Much Ready/ Outstanding	1.50 – 2.49 Slightly Ready/ Unsatisfactory
3.50 – 4.49	Moderately Ready/ Very Satisfactory	1.00 – 1.49 Not Ready/ Poor
2.50 – 3.49	Ready/ Satisfactory	

Table 6 manifests the perceived level of readiness on blended learning implementation as to instructional methods and strategies, indicator number 5 “*consider multiple intelligences of the learners*” with the highest mean of 4.61 interpreted as strongly agree among the others. This implies that the teachers are aware of the individual differences most especially the multiple intelligence of the learners. These multiple intelligences are taken into consideration with the methods and strategies that are tailor-fitted to the ability of the learners.

Unlike the other indicators, the respondents perceived indicator 6, “*use manipulative models and simulation in the lesson for learners to experiment on new ideas.*” The lowest mean of 4.35 was interpreted as agree. This signifies that in this time of distance learning, manipulative models and simulation are least to be used as means of instructional delivery.

Overall, the perceived level of readiness on blended learning implementation as to instructional methods and strategies gained the overall mean perception of 4.48, interpreted as “agree.” Simply because methods and strategies in teaching play a vital role in the teaching and learning process. This is the way how the contexts and processes will be delivered to the learner that is suitable for their learning difficulties and needs.

Table 7. Perceived Level of Readiness on Blended Learning Implementation as to Implementing Assessment and Evaluation.

<i>As a Teacher I...</i>	Mean	SD	Verbal Interpretation
1. use different types of assessment depending on the learning objectives	4.54	0.50	Very Much Ready
2. consider the individual differences of learners in the assessment and evaluation	4.53	0.50	Very Much Ready
3. value the importance of formative and summative assessment in the teaching and learning process	4.64	0.48	Very Much Ready
4. keep the students aware of their progress	4.61	0.49	Very Much Ready
5. ensure the authenticity of assessment by giving varying levels of activities	4.54	0.50	Very Much Ready
6. select problems that are applicable to real-life situations and let the learners find a solution	4.68	0.47	Very Much Ready
7. allow an open conference style of interaction to promote peer assessment and evaluation	4.52	0.57	Very Much Ready
8. focus on project-based learning which enables learners to put knowledge together	4.54	0.50	Very Much Ready
Overall	4.57	0.41	Very Much Ready

Legend:

4.50 – 5.00	Very Much Ready/ Outstanding	1.50 – 2.49 Slightly Ready/ Unsatisfactory
3.50 – 4.49	Moderately Ready/ Very Satisfactory	1.00 – 1.49 Not Ready/ Poor
2.50 – 3.49	Ready/ Satisfactory	

Table 7 depicts the respondents' perceived level of readiness for blended learning implementation as to implementing assessment and evaluation asserted indicator 6 "*select problems that are applicable to real-life situations and let the learners find a solution*" with the mean of 4.68 interpreted as "strongly agree". This implies that the teachers aim to assess the learning of the learners through real-life based scenarios and problems. This remains true to the aim of the curriculum that promotes lifelong learning.

On the other hand, the respondents perceived indicator 7, which is "*allow an open conference style of interaction to promote peer assessment and evaluation.*" The lowest mean of 4.52 was inferred as strongly agree. The result implies that even though it ranks lowest among other indicators, still the teachers value the essence of peer evaluation as it enhances the skills of the learners to think critically and be objective in their judgments.

Collectively, perceived level of readiness on blended learning implementation as to implementing assessment and evaluation indicators were foreseen by the respondents as "strongly agree" with an overall mean of 4.57.

This shows that assessment and evaluation are highly regarded by the teachers as part of the readiness for the implementation of blended learning. Assessment and evaluation in the blended learning should be flexible and measure the holistic and authentic learning of the students as it will show the progress of the learners on their subjects.

PART III. Level of Teacher Performance in Basic Educational Services

Table 8. Level of Teacher Performance in Basic Educational Services in Terms of Content Knowledge and Pedagogy

	<i>Indicators</i>	Mean	SD	Verbal Interpretation
1.	Applies knowledge of content within and across curriculum teaching areas.	4.16	0.48	Very Satisfactory
2.	Ensures the positive use of ICT to facilitate the teaching and learning process	4.23	0.64	Very Satisfactory
3.	Applies a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills.	4.14	0.59	Very Satisfactory
Overall		4.17	0.54	Very Satisfactory
<i>Legend:</i>				
	4.50 – 5.00	Outstanding	1.50 – 2.49	Unsatisfactory
	3.50 – 4.49	Very Satisfactory	1.00 – 1.49	Poor
	2.50 – 3.49	Satisfactory		

As seen in Table 8, the level of teacher performance in basic educational services in terms of content knowledge and pedagogy assessed indicator 2, which "*Ensured the positive use of ICT to facilitate the teaching and learning process*" with the highest mean of 4.23 interpreted as very satisfactory. The figure suggests that the respondents consider ICT as an integral part of delivering content knowledge and pedagogy. The use of ICT in the teaching and learning process through activities, assessments and outputs encourages the learners to be acquainted with the different gadgets and applications that they may use and find these helpful and see that these can be used positively in their academic performances, and not just for entertainment purposes.

However, respondents assessed indicator 3, "*Applied a range of teaching strategies to develop critical and creative thinking, as well as other higher-order thinking skills.*" with the mean of 4.14 being the lowest amongst the other indicators interpreted as very satisfactory. Even though it ranked the lowest, this shows that the development of critical and creative thinking, as well as HOTS are still practiced by the respondents since it is not only required but it taps the potential of the learners.

Overall, the respondents asserted "very satisfactory" the level of teacher performance in basic educational services in terms of content knowledge and pedagogy with an overall mean of 4.17. The result denotes the teachers are performing well in terms of the delivery of content knowledge and pedagogy but it doesn't end the fact that they can still perform better and aim for the level of outstanding since it is their main role as a teacher, to teach.

Table 9 on the next table manifests the level of teacher performance in basic educational services in terms of diversity of learners & assessment and reporting; indicator number 3 "*Used strategies for providing timely, accurate and constructive feedback to improve learner performance,*" with the highest mean of 4.18 interpreted as very satisfactory among the others. This implies that giving constructive feedback in a timely and accurate manner serves as a springboard in the enhancement of learners' performance as it let them know their strengths and weak points that they can work on.

Table 9. Level of Teacher Performance in Basic Educational Services in Terms of Diversity of Learners & Assessment and Reporting

Indicators		Mean	SD	Verbal Interpretation
1.	Established a learner-centered culture by using teaching strategies that respond to their linguistic, cultural, socioeconomic and religious backgrounds	4.07	0.46	Very Satisfactory
2.	Planned and delivered teaching strategies that are responsive to the special educational needs of learners in difficult circumstances*, including: geographic isolation; chronic illness; displacement due to armed conflict, urban resettlement or disasters; child abuse and child labor practices	4.12	0.57	Very Satisfactory
3.	Used strategies for providing timely, accurate and constructive feedback to improve learner performance	4.18	0.60	Very Satisfactory
Overall		4.13	0.52	Very Satisfactory
<i>Legend:</i>				
4.50 – 5.00	Outstanding	1.50 – 2.49	Unsatisfactory	
3.50 – 4.49	Very Satisfactory	1.00 – 1.49	Poor	
2.50 – 3.49	Satisfactory			

Unlike the other indicators, the respondents perceived indicator 1 “*Established a learner-centered culture by using teaching strategies that respond to their linguistic, cultural, socioeconomic and religious backgrounds*” with the lowest mean of 4.07 interpreted as very satisfactory. The result signifies that the respondents cater to the differences of each learner. The teaching and learning process is not a one-size-fits-all process. Differences in beliefs, language, and religion should be best taken into consideration if we want all learners to be engaged in the process.

Overall, the level of teacher performance in basic educational services in terms of diversity of learners & assessment and reporting gained the overall mean perception of 4.13, interpreted as a “very satisfactory.” The results connote that the respondents are performing well in terms of considering the variety of learners, tailor-fitting learning experiences, and providing holistic and authentic assessment of the learned competencies.

Table 10. Level of Teacher Performance in Basic Educational Services in Terms of Curriculum and Planning

Indicators		Mean	SD	Verbal Interpretation
1.	Selected, developed, organized and used appropriate teaching and learning resources, including ICT, to address learning goals	4.15	0.67	Very Satisfactory
2.	Set achievable and appropriate learning outcomes that are aligned with learning competencies	4.19	0.61	Very Satisfactory
Overall		4.17	0.63	Very Satisfactory
<i>Legend:</i>				
4.50 – 5.00	Outstanding	1.50 – 2.49	Unsatisfactory	
3.50 – 4.49	Very Satisfactory	1.00 – 1.49	Poor	
2.50 – 3.49	Satisfactory			

Table 10 reflects the level of teacher performance in basic educational services in terms of curriculum and planning. As shown, it revealed that indicator 2, “*Set achievable and appropriate learning outcomes that are aligned with learning competencies*” attained the highest mean of 4.19, interpreted as “very satisfactory.” This implies that the respondents value the alignment of learning competencies mandated by the Department of Education, down to the content and performance standards, lesson objectives, activities and assessments.

On the contrary, the lowest mean amongst the two indicators with 4.15; the respondents interpreted indicator 1 “*Selected, developed, organized and used appropriate teaching and learning resources, including ICT, to address learning goals*” as very satisfactory. The result means even though it attained the lowest mean, still, the respondents are performing very satisfactorily in terms of preparing and utilizing learning resources. Indeed, it is important to use learning resources that aid the planned learning experiences, and one must consider its availability and convenience to the users.

Generally, the level of teacher performance in basic educational services in terms of curriculum and planning are “very satisfactory,” with an overall mean of 4.17 which signifies that the curriculum, being the backbone of educational system, is treated with high regards by the respondents as evidenced by their level of

performance.

Table 11. Level of Teacher Performance in Basic Educational Services in Terms of Community Linkages and Professional Engagement & Personal Growth and Professional Development

Indicators		Mean	SD	Verbal Interpretation
1.	Built relationships with parents/ guardians and the wider school community to facilitate involvement in the educative process	4.21	0.63	Very Satisfactory
2.	Participated in professional networks to share knowledge and to enhance practice	4.15	0.63	Very Satisfactory
3.	Developed a personal improvement plan based on reflection of one's practice and ongoing professional learning	4.18	0.67	Very Satisfactory
Overall		4.18	0.64	Very Satisfactory

Legend:

4.50 – 5.00	<i>Outstanding</i>	1.50 – 2.49	<i>Unsatisfactory</i>
3.50 – 4.49	<i>Very Satisfactory</i>	1.00 – 1.49	<i>Poor</i>
2.50 – 3.49	<i>Satisfactory</i>		

Table 11 shows the level of teacher performance in basic educational services in terms of community linkages and professional engagement & personal growth and professional development. It is revealed that indicator 1 “*Built relationships with parents/ guardians and the wider school community to facilitate involvement in the educative process*” obtained the highest mean of 4.21 as perceived by the respondent inferred as “very satisfactory,” which implies that the respondents recognize the importance of school and community partnerships. The stakeholders are involved in the progress monitoring and different activities in school that supports learners’ needs.

On the other hand, the respondents perceived indicator 2, which “*Participated in professional networks to share knowledge and to enhance practice.*” The lowest mean of 4.15 among all indicators was construed as “very satisfactory.” This signifies that the respondents support the idea of continuous professional growth and development. This will not only benefit them as a professional through promotion nevertheless it will enhance the performance of the learners.

Overall, the level of teacher performance in basic educational services in terms of community linkages and professional engagement & personal growth, and professional development was asserted as “very satisfactory” the with the overall mean level of 4.18 by expressing that stakeholder partnership and professional engagement, growth and development enhances teachers’ performance as it enables them to interact with various group of persons as well as gives them opportunity to upgrade their position through initiated activities and recognition that they may earn along the process.

PART IV. Test of Correlation between the Perceived Level of Readiness on Blended Learning Implementation and Teacher Performance in Basic Educational Services

Based on the findings in Table 12, the perceived level of readiness on blended learning implementation as to technological knowledge, skills and disposition shows a significant relationship to the teacher performance in basic educational services as to content knowledge and pedagogy ($r = .411$), diversity of learners & assessment and reporting ($r = .354$), and curriculum and planning ($r = .382$) when tested at $p < .01$ level of significance.

Table 12. Test of Correlation between the Perceived Level of Readiness on Blended Learning Implementation and Teacher Performance in Basic Educational Services

Perceived Level of Readiness on Blended Learning Implementation	Teacher Performance in Basic Educational Services			
	Content Knowledge and Pedagogy	Diversity of Learners & Assessment and Reporting	Curriculum and Planning	Community Linkages and Professional Engagement & Personal Growth and Professional Development
1. Technological Knowledge, Skills and Disposition	.411**	.354**	.382**	-0.081
2. Instructional Planning	.469**	.440**	.418**	0.032
3. Instructional Methods and Strategies	.360**	.288**	.238**	-.150*
4. Implementing Assessment and Evaluation	.395**	.342**	.315**	-0.096

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Likewise, when tested at $p < .01$ level of significance, these three variables, content knowledge and pedagogy ($r = .469$), diversity of learners & assessment and reporting ($r = .440$), and curriculum and planning ($r = .418$) were found to have a positive correlation with instructional and planning.

Moreover, all of the teacher performance in basic educational services variables such as content knowledge and pedagogy ($r = .360$), diversity of learners & assessment and reporting ($r = .288$), and curriculum and planning ($r = .238$) were significantly related to instructional methods and strategies when tested at $p < .01$ level of significance, while community linkages and professional engagement & personal growth and professional development were found to have a negative correlation when tested at $p < .05$ level of significance.

Furthermore, when tested at $p < .01$ level of significance, implementing assessment and evaluation as the basis for the level of readiness on blended learning implementation was significantly related to the teacher performance in basic educational services namely content knowledge and pedagogy ($r = .395$), diversity of learners & assessment and reporting ($r = .342$), and curriculum and planning ($r = .315$).

Parallel to the work of Cahapay and Anoba (2020) using a parallel mixed method design revealed points of convergence, elaboration, and divergence in the data sets. An interesting point can be further underscored in their conclusion that though quantitative and qualitative results diverge on some points, challenges in these facets of blended learning can be turned into opportunities for teachers in the conduct of blended learning in the new normal. A comprehensive view as regards the overall moderate readiness of teachers on blended learning transition is gained in the study that they have conducted.

The impact of the pandemic has already been felt by all sectors of society including the education sector. It is an accepted fact that this impact will exist for a fairly long time. This pandemic is clearly a sign of changing times and thus requires the educational system to undergo a major revolution.

A significant positive correlation was observed in the study of Saboowala, and Manghirmalani (2021) wherein among the factors as far as readiness of in-service teachers toward Blended Learning was considered. This indicates that learning flexibility, online learning, study management, technology, classroom learning, and online interaction are responsible for affecting the overall readiness of in-service teachers toward BL. Any difference in these factors would affect their attitude toward BL.

Part V. Regression of Respondents' Profile on the Level of Readiness of the Teachers in the Implementation of Blended Learning and their Performance

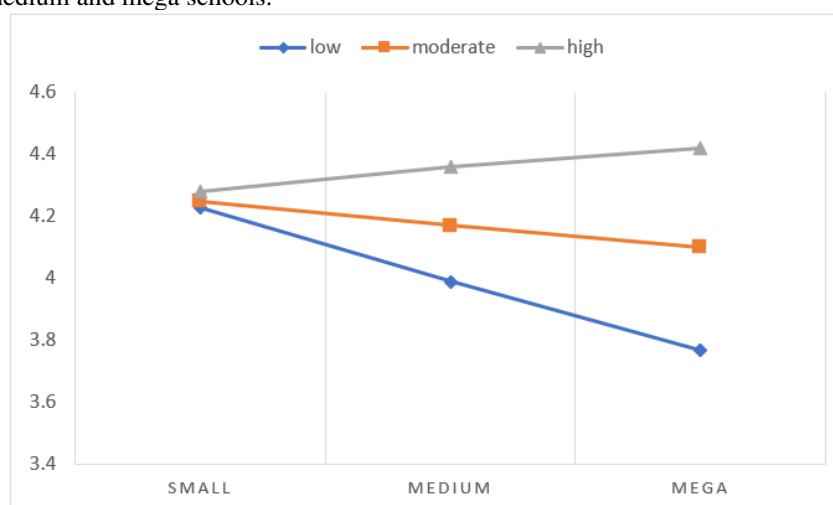
Table 13. Regression of Respondents' Profile as to Type of School on the Level of Readiness of the Teachers in the Implementation of Blended Learning and their Performance

	R	R-sq	MSE	F	df1	df2	p
	.4441	.1972	.5223	15.5581	3.0000	190.0000	.0000
	Coeff	Se	t	p	LLCI	ULCI	
Constant	17.5415	2.6307	6.6680	.0000	12.3524	22.7306	
Teachers' Performance	-2.7514	.5599	-4.9144	.0000	-3.8558	-1.6471	
Type of School	-4.4782	.7597	-5.8947	.0000	-5.9767	-2.9796	
Level of Readiness	.9291	.1621	5.7304	.0000	.6093	1.2489	

Gleaned on Table 13, shows that a multiple regression model was tested to investigate whether the association between the level of readiness of the teachers in the implementation of blended learning and their performance depends on the type of school. After centering the readiness and the type of school and computing the readiness-by-service interaction term (Aiken & West, 1991), the two predictors and the interaction were entered into a simultaneous regression model.

Results indicated that greater readiness of teachers to implement blended learning ($B = -.275$, $t(190) = -4.914$, $p < .001$) was associated with higher teaching performance. The larger the size of the school is associated to the lower teaching performance ($B = -4.478$, $t(190) = -5.895$, $p < .001$).

The interaction between readiness and size of the school was also significant ($B = .929$, $t(190)$, $p < .001$), suggesting that the effect of level of readiness on the teaching performance depended on the size of their school. Together, the variables accounted for approximately 19.72% of the variance in teaching performance, $R^2 = .198$, $F(3,190) = 15.558$, $p < .001$. Simple slopes for the association between readiness and performance were tested for small, medium and mega schools.



Each of the simple slope tests revealed a significant association between readiness and performance, but the readiness was more strongly related to teaching performance for those in mega schools ($B = .988$, $t(190) = 7.809$, $p < .001$) than for medium schools ($B = .562$, $t(190) = 5.184$, $p < .001$). The figure below plots the simple

slopes for the interaction. For the teachers in small school with low, moderate and high level of readiness, their teaching performance are the same.

Cognizant to the study of Cahapay and Anoba (2020) where an interesting point can be further underscored in their conclusion that though quantitative and qualitative results diverge on some points, challenges in these facets of blended learning can be turned into opportunities for teachers in the conduct of blended learning in the new normal. A comprehensive view as regards the overall moderate readiness of teachers on blended learning transition is gained in the study that they have conducted.

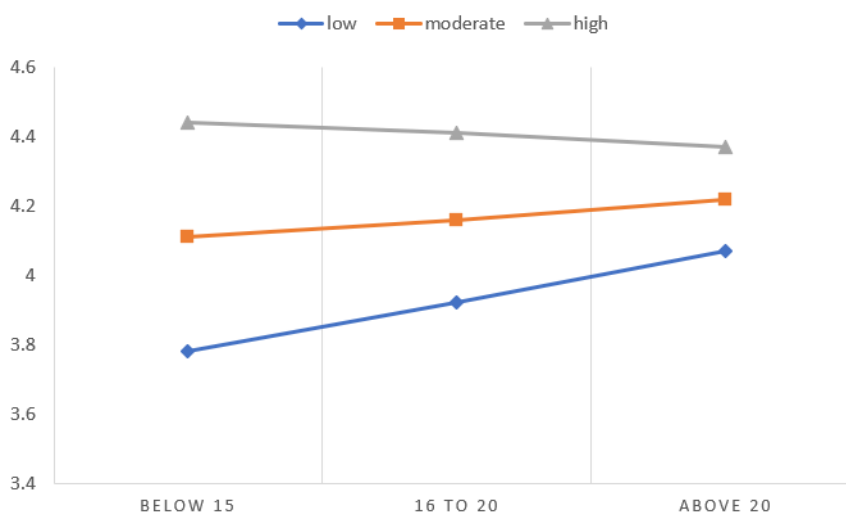
The Table 14 on the next page presents that a multiple regression model was tested to investigate whether the association between length of service on the level of readiness of the teachers in the implementation of blended learning and their performance. After centering the readiness and the length of service and computing the readiness-by-service interaction term (Aiken & West, 1991), the two predictors and the interaction were entered into a simultaneous regression model.

Table 14. Regression of Respondents' Profile as to Length of Service on the Level of Readiness of the Teachers in the Implementation of Blended Learning and their Performance

	R	R-sq	MSE	F	df1	df2	p
	.4941	.2442	.2289	20.4603	3.0000	190.0000	.0000
	Coeff	Se	t	p	LLCI	ULCI	
Constant	4.1639	.0344	120.9607	.0000	4.0960	4.2318	
Teachers' Performance	.7495	.1053	7.1196	.0000	.5418	.9571	
Length of Service	.0410	.0241	1.7000	.0908	-.0066	.0885	
Level of Readiness	-.2122	.0636	-3.3377	.0010	-.3376	-.0868	

Results indicated that higher level of readiness ($B = .750$, $SE = .105$, $p < .001$) was associated with higher performance. The interaction between service and readiness was also significant ($B = -.212$, $SE = .064$, $p < .001$), suggesting that the effect of readiness to the implementation of blended learning depended on their length of service. Together, the variables accounted for approximately 24% of the variance in satisfaction, $R^2 = .24$, $F(3,190) = 20.460$, $p < .001$.

For teachers who have less than 15 years and between 16 to 20 years in service, the higher the level of readiness the higher performance they manifest. At more than 20 years of service, the teachers who have low, moderate, and high readiness shows the same performance.



A multiple regression model was tested to investigate whether the association between level of readiness of the teachers in the implementation of blended learning and the teacher's performance depends on the type school they work in. After centering readiness and type of school and computing the readiness-by-type interaction term (Aiken & West, 1991), the two predictors and the interaction were entered into a simultaneous regression model.

CONCLUSIONS

From the summarized findings, the following conclusions were drawn:

1. The null hypothesis “There is no significant relationship between the level of readiness of the respondents on blended learning implementation and teacher performance in basic education services” is not sustained in this study.
2. Likewise, the null hypothesis “There is no significant relationship between the respondents’ profile and level of readiness of the respondents on blended learning implementation; and teacher performance in basic education services” is partially supported in this study.

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