

Senior High School Teachers' Practices And Readiness In Blended Learning Environment: Basis For A Blended Learning Preparedness Framework

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Abstract: Since the transition of Senior High School in the Philippines, technology also arose and became one of the trends in education. As Education 4.0 enters the academe, teachers should be equipped with competencies relating to blended learning. This study aimed to determine readiness and practices of teachers, specifically this study determine the profile of the teachers, level of readiness of SHS Teachers for Open and Distance Education in terms of self-direction, learning preferences, study habits, technology skills, and computer equipment capabilities. Identify the linear correlations of variables, and lastly develop a proposed Blended Learning Preparedness Framework. The SHS Teachers of the current SY 2018-2019 were the sources of data for this study. Frequency, Percentage, Average weighted mean and linear correlation was used as a statistical treatment. The result of the study shows that the majority of respondents were ready for Open and Distance Education. The proposed Blended Learning Preparedness Framework enables educators in the Senior High School level to improve their skills in Distance Education application and application is recommended.

Index Terms: Senior High School, DepEd, blended learning

1. INTRODUCTION

Pioneering the offering of Open and Distance Education in the Philippines is the University of the Philippines, which started on February 23, 1995. They pioneered the online teaching and learning and continues to play a leading role in the study and practice of open learning and distance education in the Philippines [1]. Students go through independent study of specially designed learning materials (i.e., print, video, and multimedia). Moreover, interaction takes place through a virtual classroom, text, and teleconferencing. Final exams are then conducted online or face-to-face at designated learning centers [2], [3]. UPOU offers Faculties of Study in Education, Information and Communication Studies, and Management and Development Studies.

Another pioneering University that offered blended education is Pangasinan State University, located in Lingayen. The Pangasinan State University (PSU) established the Open University Systems (OUS) in the latter part of the year 1996. It was launched at the Lingayen Campus in March 1997. The establishment of the OUS was born out of the need to respond to the unique requirements for further professional and technical development of career people, administrators and managers, technicians, and workers who may have limited time or opportunity to attend or perform at a regular class in the university. At the moment, the OUS still administers a hybrid of open learning systems, composed of 50% distance education mode and 50% face-to-face mode. PSU OUS now faces a transition period to embrace technology and adopt the practice of real online education [4]. Since the transition of Senior High School in the Philippines [5], technology also arose and became one of the trends in education. As Education 4.0 enters the academe, teachers should be equipped with competencies relating to online education. Several advocates, such as Mark Anthony Sy, DepEd's OER

Team Leader, and Executive Assistant to the Office of the Undersecretary for Administration was able to promote technology for teachers in the whole nation [6]. The advocacy of DepEd empowers teachers around the Philippines to upgrade their knowledge and competencies as we face Industry and Education 4.0.

1.2 The objective of the Study

This study aimed to answer the following questions: (1) What is the profile of the teachers? (2) What is the level of readiness of SHS Teachers for Open and Distance Education in terms of self-direction, learning preferences, study habits, technology skills, and computer equipment capabilities? (3) Identify the linear correlations of variables, and lastly (4) develop a proposed Blended Learning Preparedness Framework.

1.3 Significance of the Study

Distance education is no longer new in the Philippines. Open and Distance Education's main mission is to be the vanguard of modern information and communication technologies to deliver quality education especially marginalized sectors and areas of the country. The possible of distance education to deliver education to many Filipinos was more renowned with the passing of Republic Act 10650, or the Open Distance Learning Act, which offers precise strategies to allow other schools to offer degree programs in the distance education mode of instruction [7]. This ODE will help those students with location issues and personal constraints to attend school. Many students will benefit if the ODE will also cover Senior High school. In this way, at an early age, it will teach them to make themselves responsible for pursuing and set their own goals and adjustment to cope up with ODE for Senior High school. This study may benefit not only the Senior High School of the Department of Education but all levels including the elementary and junior high school. Other colleges and universities could also improve their offerings of Senior High School if the teachers are ready. This study helps and encouraged educators to learn about different technological competencies [8] that is needed for distance education. This

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study is an eye-opener for the department and can be a basis for other distance learning institutions in implementing and adopting Open Distance Education. Quality Education doesn't need to be inside the four walls of a classroom. Open and Distance Education practiced in the United States. And right now, it's already been practiced in the Philippines.

2. RESEARCH METHODOLOGY

In this research study, the researcher adopted the quantitative method of research. It used the survey as a method of data collection in the form of questionnaires because it yielded information that was more systematic for all participants. The questionnaire was adopted from Texas A&M University-Texarkana [9], [10].

2.1 Sources of Data and Processing

The SHS Teachers of the PSU of the current SY 2019-2019 were the sources of data for this study. All of the SHS Teachers of PSU were invited to participate in the survey.

Purposive sampling based on characteristics of a population and the objective of the study was used. Participants were requested to complete the survey within one term from the date of the issuance. The researcher shortened the link using bit.ly and sent it to the respondents. The survey questionnaire was floated using Google Forms, and extracted in CSV for analysis in a spreadsheet. The gathered data was analyzed using a spreadsheet that automatically created a graphical representation of the result.

2.2 Statistical Treatment Used

Frequency and Percentage were used in the first and second problems, which were about the profile of the respondents and the readiness of the graduate students and grade teachers. Average weighted mean was also used in determining the interpretation based on the Likert rating scale used. To interpret the linear relationship, a range of strengths was adopted as shown in Table.

TABLE 1 INTERPRETATION FOR STRENGTH OF THE LINEAR RELATIONSHIP

Correlation	Strength of the linear relationship
1	Perfect
0.8 to 1.0	Very strong
0.60 – 0.80	Strong
0.40 – 0.60	Moderate
0.20 – 0.40	Weak
0.00 – 0.20	None to extremely weak

RESULTS AND DISCUSSION

This part of the study shows the results and discussion regarding the profile of the teachers, the level of readiness of SHS Teachers for Open and Distance Education, the linear correlations of variables, and the developed proposed Blended Learning Preparedness Framework.

Profile of the Teachers

Table 2 is the Profile Respondents of Senior High School teachers. The teachers came from different locations of the province. The most number of locations were Lingayen and Bayambang. The overall respondents were 108 Teachers. The Age bracket of the most numbers was 20 to 25 years old for having a respondent of 27. The most gender who respond with the survey is Females for having 72 respondents. Most of the Respondents were Master's Degree (with units) for having 51 respondents. There are 71 LET passers out of 108 respondents.

TABLE 2 PROFILE OF THE TEACHERS

Variables	Categories	Frequency	Percentage
Age	20-25 years old	27	25%
	26-30 years old	20	19%
	31-35 years old	18	17%
	36-40 years old	23	21%
	41-45 years old	11	10%
	46-50 years old	5	5%
	51-55 years old	4	4%
Gender	TOTAL	108	100%
	Female	72	67%
	Male	36	33%
Level of Education	TOTAL	108	100%
	Bachelor's Degree	42	39%
	Doctorate Level (with units)	4	4%
	Master Degree (with units)	51	47%
	Master's Degree	11	10%
Years of Teaching	TOTAL	108	100%
	0-3 years	70	65%

Experience	4-6 years	12	11%
	7-10 years	15	14%
	11-15 years	11	10%
	TOTAL	108	100%

The readiness of Senior High School Teachers

The next part of the results is the level of readiness of SHS Teachers for Open and Distance Education in terms of self-

direction, learning preferences, study habits, technology skills, and computer equipment capabilities.

TABLE 3 TECHNICAL SKILLS OF TEACHERS

Technical Skills	WM	VD
I have a computer available to me at home or in the office.	4.44	SA
I travel with a computer.	3.58	A
I access the Internet frequently and can search the Internet for what I need.	4.08	A
I am competent and using e-mail.	4.20	A
I am competent in using word processing software.	4.27	SA
I am able to download files from the Internet and can attach files to an e-mail.	3.91	A
I am competent in using presentation software such as PowerPoint.	4.29	SA
I am familiar with and can create a blog.	3.41	A
I am familiar with and can create wikis or Web sites.	3.12	A
I am familiar with and can use social networking technologies, such as Facebook and Twitter.	4.31	SA
I am familiar with my university's learning management system.	3.68	A
I have used technology to support my face-to-face teaching.	4.02	A
Overall	3.94	A

The Technical Skills Indicator shows that the Senior High School Teachers are ready when it comes to technology facets. Teachers are equipped with a computer whenever they are at home or at the office. The table also shows that teachers can travel with computers and there will be no hindrance to conduction an online lesson. It also shows that respondents have access to their internet more often can search for anything on the internet for their needs. They are competent in using E-mail and in the word processing software. They are also capable of downloading files through

the internet and knowledgeable in attaching it in email. They are also knowledgeable in using presentation software such as PowerPoint. They are also familiar in creating lesson thru blog and has strong familiarity in creating wiki and websites. The data also shows how comfortable they are in using Social Networking Technologies such as Facebook and Twitter. It also shows that they very familiar and knowledgeable in using their University's teach management System and they use technology in supporting their face to face teaching.

TABLE 4 EXPERIENCE WITH ONLINE TEACHING

Experience in Online Teaching and Learning	WM	VD
I have experienced at least one online course as a student.	3.60	A
I have received training in online instruction.	3.27	A
I have used online quizzes in teaching my classes.	3.31	N
I have used online discussions and teaching my classes.	3.18	N
I have used virtual classroom tools like GoToMeeting, Adobe Connect, WebEx, or Skype in teaching my classes.	2.90	N
I have used the chat in teaching my classes.	3.12	N
I have used a publisher web site in teaching my classes.	2.90	N
I have used my school's learning management system to supplement my classroom teaching.	3.34	N
Overall	3.2	N

Compare to the previous table, the Experience with Online Teaching and Learning Indicator has a lower score. It shows that not all respondents have experience with Online Teaching. Most of them have experience at one online course as a student and received training in online instruction. However, most of them have responded Neutral in an online quiz in teaching their class. Some of them also used online as their tool in discussion and used virtual classroom tools like

GoToMeeting, Adobe Connect, WebEx and skype in teaching their class. Some of them also used chat too in teaching their class, but not most of them have used the publisher web site in their teaching class though they are very much capable of using their school's Learning Management System to supplement their classroom teaching.

TABLE 5 ATTITUDES TOWARD ONLINE LEARNING

Attitudes toward Online Learning	WM	VD
I believe that online learning is as rigorous as classroom instruction.	3.82	A
I believe that high-quality learning experiences can occur without interacting with students face-to-face.	3.69	A

I support the use of discussion as a means of teaching.	4.12	A
I support learner-to-learner interaction and collaborative activity as a central means of teaching.	3.31	N
I recognize that community building is an important component of online teaching.	4.13	A
I encourage students to bring life experiences into the classroom and create activities that draw on those experiences.	4.29	SA
I believe that lecture is the best way to convey content in mental discipline.	3.90	A
I feel comfortable communicating online and feel that I'm able to convey who I am in writing.	3.91	A
I am a critical thinker and can develop assignments that encourage critical thinking in my students.	4.05	A
Overall	3.91	A

The above table which is Attitudes toward Online Learning Indicator has an overall mean of 3.91 with Verbal Description of Agree shows that a positive response about Open and Distance Education. They agree that online learning is almost the same as classroom instruction. They also believe that high-quality learning experience can occur without interacting with students face-to-face. They also consider that they can use discussion as a means of teaching. They agree to support learner-to-learner interaction and collaborative activity as a central means of teaching. They also recognize that community building is an important and main factor

component of online teaching. They also strongly agree that students should be encouraged to bring life experience into the classroom and create activities that draw on those experiences. They also believe that lecture is the best way to convey content in mental discipline. The data also shows that they are comfortable communicating online and able to convey their writing. The table also shows that most of the respondents are a critical thinker and can develop assignments that will encourage critical thinking in their students.

TABLE 6 TIME MANAGEMENT AND TIME COMMITMENT

	WM	VD
Time Management and Time Commitment		
I am able to log in to an online course at least once a day.	3.76	A
I am able to post my online class at least four to five times per week.	3.54	A
I am able to manage my time well.	3.91	A
I am flexible in dealing with students on such issues as due dates, absences, and makeup assignments.	4.07	A
I am fairly organized and tend to plan ahead in my teaching.	4.01	A
I am responsive to my students, responding to e-mail within 48 hours and assignments within one week.	3.87	A
Overall	3.86	A

The last table with Time Management and Time Commitment Indicator has a Weighted Mean of 3.86 with Verbal Description of Agree shows that the respondents have a positive response on how they can manage their time and give a full commitment on it. They said that they can able to log in to an online course at least once a day, and they can be able to post an online class of at least four to five times per week. They also believe that they manage their time well and flexible in dealing with a student on different issues such as due dates, absences, and makeup assignments. They also said that they could fairly be organized and tend to plan ahead of time in their teaching, and

lastly, they can be responsive to their students in responding email within 48 hours and assignments within one week. The overall survey for both students and teachers only shows that they are very much open in Open and Distance Education. It also shows that Technology savvy and ready enough to embrace interactive learning.

Linear Correlations

The result of the correlation matrix shows that there is a strong positive relationship in terms of Age and Years of teaching which is obviously expected since like the age of the teacher increases, the years of teaching increases.

TABLE 7 CORRELATION MATRIX

Attributes	Age	Sex	Level of...	Years o...	Technic...	Experie...	Attitudes	Time M...
Age	1	0.165	-0.063	0.602	-0.023	-0.010	0.099	0.126
Sex	0.165	1	-0.136	-0.015	0.042	0.091	0.165	-0.003
Level of Education	-0.063	-0.136	1	0.174	0.153	0.040	-0.024	0.042
Years of Teaching	0.602	-0.015	0.174	1	0.060	0.221	0.059	0.116
Technical Skills	-0.023	0.042	0.153	0.060	1	0.527	0.571	0.621
Experience	-0.010	0.091	0.040	0.221	0.527	1	0.422	0.344
Attitudes	0.099	0.165	-0.024	0.059	0.571	0.422	1	0.628
Time Management	0.126	-0.003	0.042	0.116	0.621	0.344	0.628	1

Another visible result is the technical skills have a moderate positive correlation to experience, attitudes and time

management in online and distance learning. This means that as the level of technical skills increases, faculty experience, attitudes and time management also increases. When it comes to Experience in Online Education, there is a moderate positive correlation to technical skills and attitudes in online and distance learning. This means that as the experience of teachers increases, the technical skills and attitudes in distance learning also increases. Lastly, time management has also a moderate positive correlation with technical skills and attitudes. This means that as time management increases, the technical skills and attitude in online education also increases.

Blended Learning Preparedness Framework

After determining the readiness of the teachers in the blended

learning approach. A Preparedness framework was prepared. The blended learning approach is a combination of online learning and face to face, where students may be able to learn using network connectivity outside the institution. Based on the proposed blended learning preparedness framework, in order for educators to implement blended learning, preparation of online content and online assessment tools are needed for instructional delivery and assessment. Without content, online learning as a component of a blended learning approach is not possible. A learning management system such as Moodle is hosted in the cloud needs for content delivery.

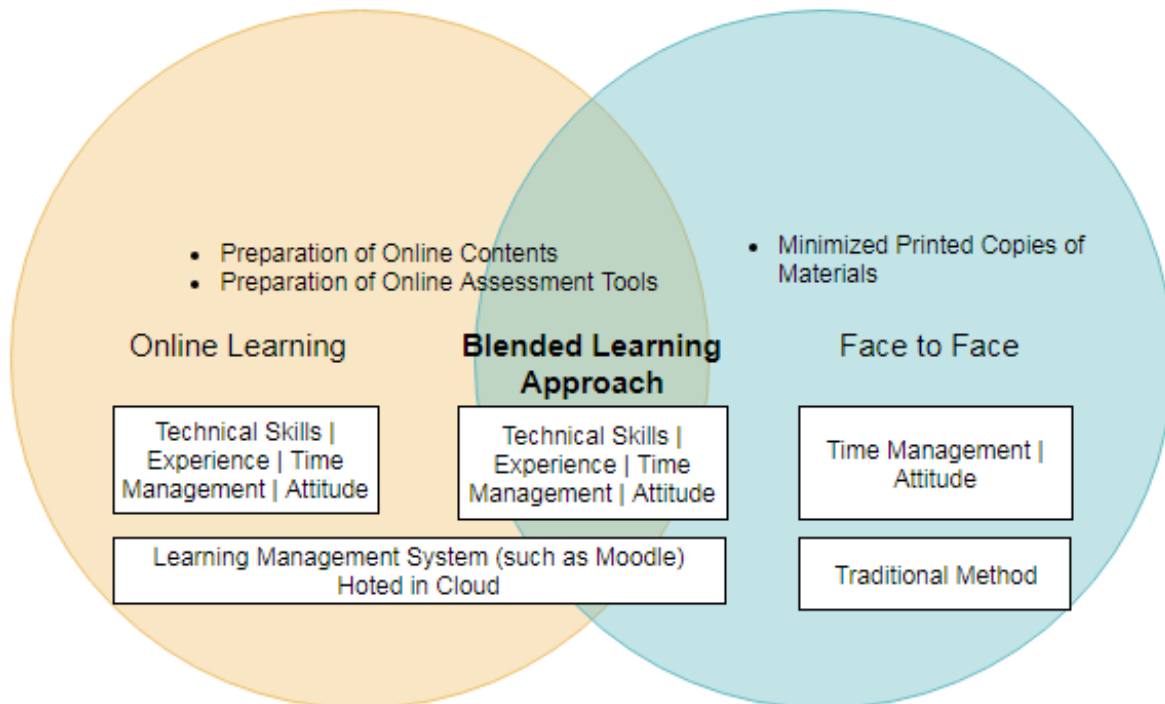


FIGURE 1 BLENDED LEARNING PREPAREDNESS FRAMEWORK

As included in the framework, technical skills, experience, time management, and attitude are needed in order for the teachers to satisfy blended learning.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that the majority of respondents were ready for Open and Distance Education. Regardless of their statuses, they are ready for the Open and Distance Education System. They believe that this is an opportunity for them to maximize their time and give an opportunity for some to complete their education for those students who cannot complete because of time constraints and other personal matters. The respondent also believes that this Open and Distance Education will help them to develop their selves to become a better person. All respondents believe that this will also help them to be more advantageous and focus on their studies. For the teachers, this will also be a great opportunity for them to be more creative in developing their toll and create strategies on how they can enhance their knowledge in using the technology as their teaching tool. This will be an advantage for the teachers to showcase their talent in creating

their videos according to their subjects. It is recommended that Open and Distance Education must be offered as well for Senior High School to give them an opportunity for those students who have struggles and challenges going to school. The institution must adopt a singular vision, policies, and procedures for Open and Distance Education for Senior High School implementation. The institution must establish clear guidelines to follow when planning Open and Distance Education for Senior High School. It is most important for the success of Open and Distance Education for Senior High School implementation that the systems for the ODE delivery be in place and working and training must be implemented as well for the faculty so that they can execute the program well. Therefore, future studies with a broader scope such as gamification in education and other related studies on readiness were recommended to be conducted to validate future results.

REFERENCES

- [1] Melinda dela Pena-Bandalaria, "Ensuring Quality Education in Open and Distance eLearning (ODeL),"

- AAOU, 2011, doi: 10.1108/AAOUJ-06-01-2011-B002.
- [2] L. B. Dimasuay and B. R. Pabro, "Use of Learning Management System : A University of the Philippines Los Baños (UPLB) Classroom Experience," in 6th International Conference on eLearning for Knowledge-Based Society, 2009.
- [3] M. M. Dela Pena-Bandalaria, "E-Learning in the Philippines: Trends, Directions, and Challenges.," Int. J. E-Learning, 2009.
- [4] C. Orlanda-Ventayen and R. J. Ventayen, "ROLE OF SOCIAL MEDIA IN EDUCATION: A TEACHERS' PERSPECTIVE," ASEAN J. Open Distance Learn. □, 2017.
- [5] D. H. Sarmiento and R. L. Orale, "Senior High School Curriculum in the Philippines," J. Acad. Res., 2016.
- [6] A. Pobre, "DepEd 'connects disconnected' schools in its new e-learning initiative," 2019. [Online]. Available: <https://www.rappler.com/technology/features/234342-department-education-e-learning-initiative>. [Accessed: 13-Dec-2019].
- [7] C. Villar, "Republic Act No. 10650 | Official Gazette of the Republic of the Philippines," 2014. [Online]. Available: <https://www.officialgazette.gov.ph/2014/12/09/republic-act-no-10650/>. [Accessed: 14-Dec-2019].
- [8] R. J. M. Ventayen, "Educators competencies on the application of technological tools in teaching," Int. J. Sci. Technol. Res., 2019.
- [9] UCF's Center for Distributed Learning, "Faculty Online Readiness Assessment," 2018. [Online]. Available: http://tamut.edu/Training/readiness_assessment.html. [Accessed: 20-Nov-2018].
- [10] Tamut.edu, "Faculty Online Readiness Assessment | www.tamut.edu." [Online]. Available: https://www.tamut.edu/training/readiness_assessment.html. [Accessed: 15-Dec-2019].