



ISSN: 2321-2152

IJMECE

*International Journal of modern
electronics and communication engineering*

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www.ijmece.com

How Ready Are Big Secondary Schools to Use E-Learning

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Abstract:-

Background/Objectives: With the challenge of COVID-19, educational institutions are investing heavily in e-learning technologies to enable students' distant studies. Evaluating the readiness of big secondary schools in the Schools Division of Zambales to adopt e-Learning in Social Studies topics was the objective of this research. The study employs a descriptive and quantitative methodology and employs statistical analysis. Google Forms was used in the research to collect topic-related data. Subjects' informed agreement and confidentiality were the cornerstones of the data gathering process that included 133 instructors from big secondary schools in Zambales's Schools Division. Although big secondary schools were ready to use e-Learning, respondents were well prepared. When respondents were grouped according to profile, there was no statistically detected difference in the institutional preparedness of large secondary schools in terms of administrative and resource support. However, there was a significant difference in teachers' preparedness regarding technology access based on age and sex. The readiness of major secondary schools to deploy e-Learning has been enhanced via the development of an information system action plan.

Keywords: Large secondary schools, e-learning platforms, information and communication technologies, readiness for implementation

INTRODUCTION: With the rise of online education, many schools have begun to take advantage of the numerous ways in which this new medium improves classroom instruction. In order to enhance and strengthen teaching, educational institutions invest in e-learning technologies.

Their trainees' performance and experience in the learning process.

Online learning, or e-learning, allows students to have access to course materials whenever and whenever they choose [1]. The educational value of e-learning lies in the fact that it has the potential to enhance students' learning experiences, introduces innovative approaches to engaging and motivating students of varying abilities, and facilitates learning via the provision of differentiated learning. To help students and educators who are struggling with literacy, numeracy, and information and

communication technology (ICT), it offers a variety of resources that encourage originality, creativity, and resourcefulness in the classroom and beyond. Offers personalised learning assistance and creates a unique learning environment for each student [2]. Some of the advantages of online education that were listed by Al-Azawei and Lundqvist (2016) include the fact that material can be more easily accessed and that it can be adjusted to match different types of lessons. Makes it easier to manage student activities, lowers costs, improves teaching quality by integrating various pedagogical theories, makes classes more interactive, and provides efficient interaction opportunities both on and off campus. When it comes to teaching and learning, e-learning removes a lot of the stress elements by removing the constraints of time and location and by providing flexibility [3].

Despite the many benefits that modern technology offers, not all schools have adopted e-learning or even used it as a complement to their traditional classroom practices. Despite the widespread praise for online education, many educators and academics have struggled to put it into practice or achieve their goals. However, whether or not an educational institution is successful in integrating e-learning will likely depend on how well it is prepared for these obstacles and problems. This study found that large secondary schools are not yet equipped to integrate e-learning in this contemporary period, and it also filled a gap in the literature by examining the degree of readiness on several e-learning components of social science topics.

The remainder of the document is structured as follows: Section 2 lays out the goals of the study, Section 3 introduces the hypothesis, Section 4 delves into the methodology, and Section 5 summarizes the findings and provides commentary. The study effort is summarized in Section 6, which also includes a comment on the future scope.

1. Objectives of the Study

This study set out to accomplish several specific goals. Firstly, it aimed to assess teachers' readiness to implement e-learning. Secondly, it sought to determine the level of institutional preparedness among large secondary schools in the Schools Division of Zambales to do so. Thirdly, it tested whether there was a difference in teachers' readiness when grouped by profile. Fourthly, it tested whether there was a difference in institutional preparedness when teacher-respondents were grouped by profile. Lastly, it developed an action plan to improve the

readiness of large secondary schools to implement e-learning.

2. Hypothesis

The following theories were examined in this investigation:

Grouping educators by profile does not reveal any statistically significant differences in their level of readiness. When analyzing the institutional preparation of teacher-respondents based on their profile, no discernible difference is seen.

3. Methodology

Quantitative methods and a descriptive research strategy were used in this study. The purpose of descriptive research is to outline the traits and habits of a target population. Depicting, explaining, or validating a theory or aim with respect to a certain set of individuals is its purpose. Surveys, such as the ones used in this study, often include interviews or discussions with bigger audiences and tend to focus on more narrowly defined subjects [4]. In order to deduce various statistics and figures pertaining to the population under study, this approach was used to get readily measurable information [5]. Social studies instructors at public high schools for students in grades 9 through 12. The people who filled out the survey are all teachers of social studies at the secondary level. Among the big schools included in this survey, 133 educators served as responders.

Research for this research was place in the Zambales Division. The Mercado (2018) research [6] served as the basis for the tool that was used. Respondents' age, sex, position, greatest level of education, and years spent teaching are included in Part I of the

profile. In the second part, we look at how well-prepared the educators are in terms of their own technological abilities, knowledge, motivation, and time management. Section III addresses the level of administrative and resource assistance that big secondary schools have. We will be using a 4-point Likert scale, where 1 is the lowest and 4 is the greatest.

In order to distribute the questionnaire, the researchers used Google Forms. The school principals were given the URL, and the responders were informed about it. Data was gathered online for a duration of 15 days by the researchers. The collected data was handled with the greatest secrecy. Data was tallied, processed, and understood.

ANOVA were employed to analyze and interpret the collected data.

The output frame is the final objective of the study,

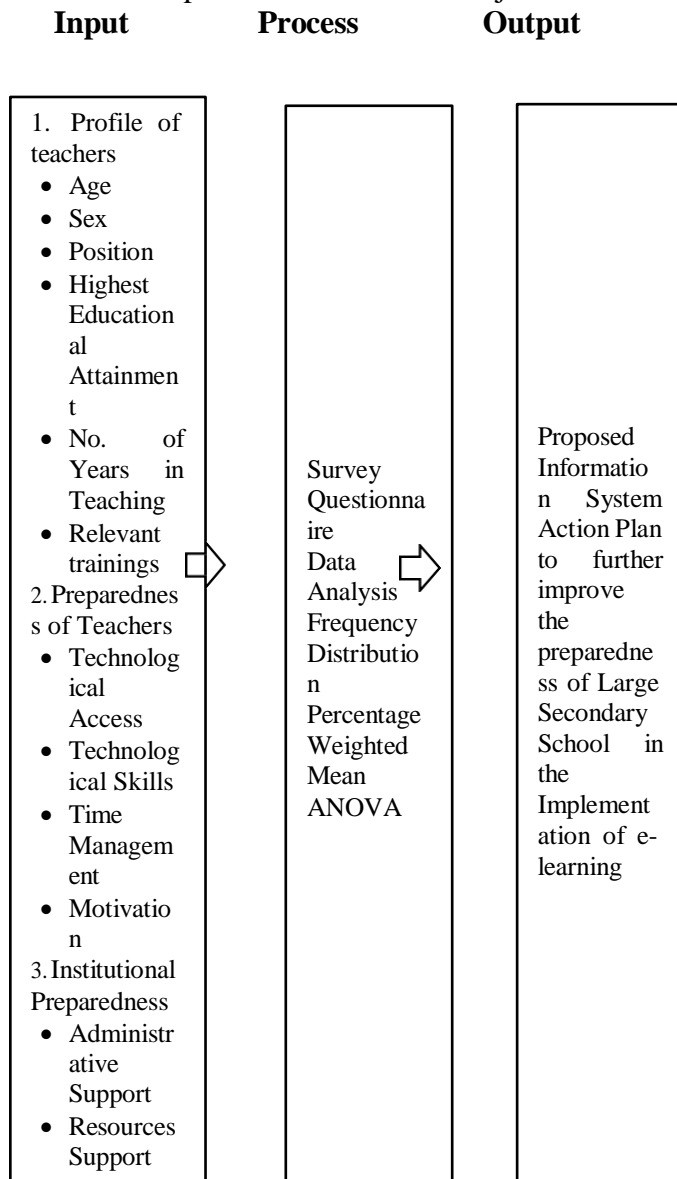


Figure 1. The Paradigm of the Study

Figure: Age, sex, position, highest degree, years in teaching, and quantity of relevant training were used to define the input frame deals on the profiles of social studies instructors. Teachers' levels of readiness were assessed based on their desire, time management abilities, access to technology, and proficiency with that technology. We looked at the administrative and resource support to see how well-prepared the big secondary schools were. The data-gathering tool is shown in the process frame. Statistics for both descriptive and inferential purposes, including percentages, weighted means, and distributions of frequencies and which is the proposed Information System action plan to further improve the preparedness of large secondary schools in the implementation of e-learning.

The institutional preparedness is the study's dependent variable, while the teachers' preparedness is the independent variable. Thus, the preparedness of large secondary schools in implementing e-learning will depend on teachers' preparedness. This study was anchored on the Cognitive load theory. Cognitive load theory is built upon two commonly accepted ideas. First, there is a limit to how much new information the human brain can process at one time. The second is that there are no known limits to how much-stored information can be processed at one time. Therefore, cognitive load research aims to develop instructional techniques and recommendations that fit within the characteristics of working memory to maximize learning. Cognitive

load theory supports explicit models of instruction because such models tend to accord with how human brains learn most effectively (Centre for Education Statistics and Evaluation 2017).

Because they are more in line with how people's brains learn best, explicit modes of education are supported by cognitive load theory (Centre for Education Statistics and Evaluation 2017). Instead of letting students figure things out on their own, instructors who use explicit teaching explain them exactly what to do and how to accomplish it. Numerous well-established hypotheses on the information processing and storage capacities of the human brain form the basis of cognitive load theory [7]. Assumptions such as these include the following: that there is a difference between working memory and long-term memory in humans; that schemas are the primary means by which information is stored in long-term memory; and that the introduction of new knowledge causes a "cognitive load" on working memory, which in turn may influence the consequences of learning.

4. Results and Discussion

Characteristics of the Resident Population
 There are 98 female teacher-respondents, or 73.70%, and 35 male teacher-respondents, or 26.30%. Female instructors outnumber male teachers in the sample. Similarly, it is worth noting that there are more female instructors than male teachers in the Philippines' Department of Education.

Table 1. Profile of Respondents

| Profile Variables | | Frequency (f) | Percentage (%) |
|-------------------------------------|----------------------|---------------|----------------|
| Sex | Male | 35 | 26.30 |
| | Female | 98 | 73.70 |
| Total | | 133 | 100.00 |
| Age Mean = 33.85 or 34 years old | 61 years old & above | 2 | 1.50 |
| | 51-60 years old | 5 | 3.80 |
| | 41 -50 years old | 22 | 16.50 |
| | 31-40 years old | 44 | 33.10 |
| | 21-30 years old | 60 | 45.10 |
| Total | | 133 | 100.00 |

Age. Most of the teacher-respondents with 60 or 45.10% are from age group 21-30 years old; 44 or 33.10% are from age group 31-40 years old; 22 or 16.50% are from age group 41-50 years old; 5 or 3.80% are from age group 51-60 years old, and 2 or 1.50% are from age group 61 years old and above. The computed mean age of teacher-respondents was 33.85 or 34 years old. The study

further reveals that the teacher-respondents were in their early adulthood, ranging from 21-30 years old.

Position. Most respondents are Teacher I with 51 or 38.30%; 37 or 27.80% are Teacher II; 34 or 25.60% are Teacher III, and 11 or 8.30% are Master Teacher I. Teachers in the DepEd are ranked after they applied when there is an open ranking. They are ranked based on criteria as to performance rating, experience, outstanding accomplishments, education, training, potential, and psycho- social as per Department Order 66, series of 2007.

Highest Educational Attainment. The majority of the teacher-respondents, 52 or 39.10%

are with MA/MS units; 42 or 31.60% are BS/AB degree holders; 24 or 18.00% are MA/MS degree holders; 8 or 6.00% are with Ph.D./Ed.D. units; and 7 or 5.30% are Ph.D./Ed.D. degree holders. Numerous studies reveal that teachers' academic preparation, certification type, and years of teaching experience, among others, are often taken as indicators of teacher quality.

25 years & above in teaching; and 3 or 2.30% with 15-19 years in teaching. The computed number of years teaching teacher-respondents was 7.60 or 8 years. The data suggests length of time that respondents have been educators is indicative of the level of dedication and perseverance needed to succeed in the field. The quantity of useful lessons offered via online courses. Of the teacher-respondents, 59 (44.40% of the total) have 5-9 relevant e-learning trainings, 40 (30.10% of the total) have 0-4 relevant e-learning trainings, 17 (12.80%) have 10-14 years of

No. of Years in Teaching. There were 59 or 44.40% with 0-4 years in teaching; 42 or 31.60% with 5-9 years in teaching; 12 or 9.00% with 10-14 years in teaching; 11 or 8.30% with 20-24 years in teaching; 6 or 4.50% with

experience with e-learning, 10 (7.50% of the total) have 15-19 relevant e-learning trainings, and 7 (5.30% of the total) have 25 or more relevant e-learning trainings. A total of 7.94 or 8 relevant e-learning trainings were calculated for the teacher-respondents.

Statistics for Characteristics
Instructors' Readiness for Online Instruction
With a score of 3.40 (rank 1), the teacher-respondents were "Very Prepared" about their everyday computer access.

while their access to the computer in campus with a stable internet connection was perceived to be "Prepared" (3.08, rank 5). Overall, the implementation of e-learning as to technology access was perceived to be "Very Prepared," with a mean rating of 3.25.

Table 2. Access to Technology

| | Technology Access | Weighted Mean | Descriptive Equivalent | Rank |
|---|---|---------------|------------------------|------|
| 1 | 1. I have access to a computer daily. | 3.40 | Very Prepared | 1 |
| 2 | 2. I have access to a computer with an internet connection at home. | 3.39 | Very Prepared | 2 |
| 3 | 3. I have virus protection on my computer | 3.14 | Prepared | 4 |
| 4 | 4. I have access to a computer with the necessary software installed. | 3.24 | Prepared | 3 |
| 5 | 5. I have access to a computer on campus with a stable internet connection. | 3.08 | Prepared | 5 |
| | Overall Weighted Mean | 3.25 | Very Prepared | |

Table 3. Technology Skills

The pedagogical and socio-economic forces that have driven the learning institutions to adopt and incorporate ICTs in teaching and learning include greater information access, greater communication; synchronous and asynchronous learning; increased cooperation and collaboration, cost-effectiveness, and pedagogical improvement. However, ICTs have not permeated significantly in many learning institutions in most developing countries due to many socio-economic and technological circumstances [8].

| | Time Management | Weighted Mean | Descriptive Equivalent | Rank |
|---|--|---------------|------------------------|------|
| 1 | I can schedule a time to provide timely responses to other students and the instructor. | 3.35 | Very Prepared | 2 |
| 2 | I can control my desire to postpone important tasks. | 3.15 | Prepared | 5 |
| 3 | I can post or send assignments done ahead of time. | 3.42 | Very Prepared | 1 |
| 4 | I can sacrifice personal time to complete the preparation of the lesson. | 3.29 | Very Prepared | 4 |
| 5 | I have the self-discipline to log in and participate in an online course several times a week. | 3.33 | Very Prepared | 3 |
| | Overall Weighted Mean | 3.31 | Very Prepared | |

The teacher-respondents were "Very Prepared" on
Table 4. Time Management

| | Technology Skills | Weighted Mean | Descriptive Equivalent | Rank |
|---|--|---------------|------------------------|------|
| 1 | 1. I can save/open documents to/from a hard disk or other removable storage devices. | 3.53 | Very Prepared | 2 |
| 2 | 2. I can navigate the Webpage (Go to next or previous page). | 3.45 | Very Prepared | 3 |
| 3 | 3. I can send and receive email attachments. | 3.65 | Very Prepared | 1 |

sending and receiving email attachments with a rating of 3.65 (rank 1) while resolving common errors while surfing the internet such as page not found or connection time out was perceived to be "Prepared" (3.17, rank 5). Overall, the implementation of e-learning as to technology skills was perceived to be "Very Prepared," with a mean rating of 3.42.

E-learning nowadays has become a requirement for institutions to support their learning activities. To adopt e-learning, an institution requires an effective strategy and resources for optimal application. Unfortunately, not all institutions that have used e-learning got the desired results or expectations [9].

The teacher-respondents perceived to be "Very Prepared" on posting or sending assignment done ahead of time" with a rating of 3.42 (rank 1) while their ability to control their desire to postpone important tasks was perceived to be "Prepared" (3.15, rank 5). Overall, the implementation of e-learning as to time management was perceived to be "Very Prepared," with a mean rating of 3.31.

| | | | | |
|---|---|------|----------|---|
| 4 | 4. I can resolve common errors while surfing the internet, such as page not found or connection time out. | 3.17 | Prepared | 5 |
|---|---|------|----------|---|

Similarly, despite the potential benefits, e-learning has been slow to catch on in underdeveloped nations, according to research by Issa and Jaaron (2017). Their research looks at the public secondary schools in Palestine and how prepared they are for online learning, highlighting both the positive and negative elements. The e-readiness tool, which was based on an evaluation proposed by Akaslan and Law, was created after a literature study. Public secondary school teachers from eleven different directorates in the West Bank area took the test, and we also spoke with a number of specialists in the fields of e-learning and education. According to Aydin and Tasci's evaluation approach, the overall preparedness was Level 3, which means it required some changes. According to the results, the degree

of preparedness was greatest for Perceived Usefulness and lowest for Content Availability. In addition to providing a theoretical basis for comprehending e-readiness in underdeveloped nations, the results have consequences for the implementation of e-learning in public secondary schools [10].arousal video, and watching a high-arousal video) on learning and subsequent recall as assessed by a posttest. Compared to a baseline no-distraction condition, all six of the distractions significantly impaired posttest performance. In addition to objective measurements of learning, students self-reported their own assessments of learning during the distractions. Judgments of learning were poor for the high- arousal video [11].

Institutional Preparedness of Large Secondary Schools

Table 6. Administrative Support

Table 5. Motivation

| | Motivation | Weighted Mean | Descriptive Equivalent | Rank |
|---|---|---------------|------------------------|------|
| 1 | I was able to complete the discussion even when there were online distractions. | 3.18 | Prepared | 5 |
| 2 | I can set goals and objectives for learning of the students. | 3.46 | Very Prepared | 2 |
| 3 | I consider flexibility in time as an essential motivating factor in taking an online class. | 3.36 | Very Prepared | 4 |
| 4 | I enjoy learning that is both interesting and challenging. | 3.54 | Very Prepared | 1 |
| 5 | I can teach even though some of the students are not online at all times. | 3.37 | Very Prepared | 3 |
| | Overall Weighted Mean | 3.38 | Very Prepared | |

The teacher-respondents perceived to be “Very Prepared” on enjoying learning to be both interesting and challenging” with a rating of 3.54 (rank 1) while their ability in completing the discussion even when there are online distractions was perceived to be “Prepared” (3.18, rank 5). Overall, the implementation of e-learning as to motivation was perceived to be “Very Prepared” with a mean rating of 3.38.

Unique distractions are present in nonclassroom environments, and many students attempt to multitask while learning online. In relation to the study of Blasiman, Larabee, & Fabry (2018) who examined the effect of six distractions (folding laundry, playing a computer video game, texting on a cell phone, engaging in conversation, watching a low-

| | Administrative Support | Weighted Mean | Descriptive Equivalent | Rank |
|---|--|----------------------|-------------------------------|-------------|
| 1 | An e-learning initiative is aligned with the institution’s mission. | 3.26 | Very Prepared | 8 |
| 2 | The institution recognizes that large-scale course redesign for e-learning initiatives involves strong collaboration among the teachers, IT personnel, and administrators in the planning as well as the implementation. | 3.26 | Very Prepared | 8 |
| 3 | There is a commitment on the part of institutional leaders to use technology to achieve strategic academic goals. | 3.30 | Very Prepared | 4.5 |
| 4 | There is commitment on the part of institutional leaders to use technology to achieve strategic academic goals and that such commitment extends beyond just using technology. | 3.28 | Very Prepared | 6 |
| 5 | The institution is willing to employ or to assign an academically capable and/ or experienced faculty to oversee the implementation of the e-learning environment. | 3.30 | Very Prepared | 4.5 |
| 6 | The institution support employees who seek out non-traditional development programs or | 3.31 | Very Prepared | 3 |

"Very Prepared" (rank 1) was the perceived level of institutional preparation in offering professional development opportunities to instructors to help them improve their online teaching. On the other hand, "Prepared" (3.24, rank 10) was the impression given to the institution's readiness in terms of the existence of a committee or the desire to establish one that would aid in the creation of online programs and courses. A mean assessment of 3.29 indicated that the major secondary schools were institutionally "Very Prepared" in terms of administrative assistance.

Worldwide, schools are adapting to new economic, social, and technological norms. Educational institutions are deeply contemplating how to best meet the need for students' global knowledge and

abilities. The rise of the new economy and the need for lifelong learning have led to the rise of online education. It satisfies this demand by providing fresh perspectives on education and novel methods of instruction. It is critical to identify and resolve the causes of educational failures before thinking about e-learning solutions or technologies. Knowing the requirements and level of preparedness of key participants in the online learning environment is crucial to the success of online learning. Gaining insight into these crucial elements that promote online

learning, the success of implementing an online learning- ready environment is more likely to be achieved [12].

Table 7. Resources Support

| | Resources Support | Weighted Mean | Descriptive Equivalent | Rank |
|---|--|----------------------|-------------------------------|-------------|
| 1 | The institution is financially ready to venture into e-learning. | 2.99 | Prepared | 10 |
| 2 | The institution is willing to create a budget for implementing e-learning. | 3.04 | Prepared | 7.5 |
| 3 | The institution has experienced human resources or a department that organizes | 3.14 | Prepared | 5.5 |

| | | | | |
|---|--|------|----------|-----|
| | trainings related to online learning. | | | |
| 4 | The institution has adequate human resources to support an e-learning initiative. | 3.16 | Prepared | 3 |
| 5 | When technical issues arise, adequate and timely support is available to the teacher and students. | 3.04 | Prepared | 7.5 |
| 6 | The institution has a courseware delivery system (LMS) through which courses and programs are delivered. | 3.15 | Prepared | 4 |
| 7 | The current technological infrastructure is adequate to build and/or sustain an online learning environment. | 3.03 | Prepared | 9 |

| | | | | |
|----|---|------|----------|-----|
| 8 | The online platform used for course delivery has the necessary system capacity to support the course's learning activities. | 3.14 | Prepared | 5.5 |
| 9 | The online platform provides appropriate tools for communication and collaboration. | 3.20 | Prepared | 1.5 |
| 10 | The online platform used for course delivery has the | 3.20 | Prepared | 1.5 |

| | | | | |
|--|--|-------------|-----------------|--|
| | necessary system capacity to support the course's learning activities. | | | |
| | Overall Weighted Mean | 3.11 | Prepared | |

The institutional preparedness in the online platform that provides appropriate tools for communication and collaboration and the online platform used for course delivery has the necessary system capacity to support the course's learning activities were perceived to be "Prepared" with a rating of 3.20 (rank 1). In contrast, the institutional preparedness in terms of being financially ready to venture into e-learning was perceived as "Prepared" (2.99, rank 10). Overall, the institutional preparedness of the large secondary schools in resource support was perceived as "Prepared" with a mean rating of 3.11.

Inferential Statistics

Table 8. Test of difference on the preparedness of teachers on the implementation of e-learning when they are grouped according to profile

| Sources of Variations | Technology Access | | Technological Skills | | Time Management | | Motivation | |
|---|-------------------|---------------|----------------------|-------|-----------------|-------|------------|-------|
| | F | Sig | F | Sig | F | Sig | F | Sig |
| Age | 6.198 | 0.014* | 1.366 | 0.245 | 2.536 | 0.114 | 3.043 | 0.083 |
| Sex | 2.495 | 0.046* | 2.214 | 0.071 | 2.137 | 0.080 | 0.948 | 0.439 |
| Position | 0.059 | 0.981 | 1.013 | 0.389 | 0.934 | 0.426 | 0.271 | 0.846 |
| Highest Educational Attainment | 1.323 | 0.265 | 0.587 | 0.673 | 0.733 | 0.571 | 0.267 | 0.899 |
| No. of Years in Teaching | 1.695 | 0.141 | 2.180 | 0.060 | 0.967 | 0.441 | 0.847 | 0.519 |
| No. of Relevant Trainings in e-learning | 0.732 | 0.572 | 0.445 | 0.776 | 0.584 | 0.675 | 1.022 | 0.398 |

***Significant**

Technology Access. There was a significant difference on the preparedness of teachers as to technology access when grouped according to age (Sig. = 0.014) and sex (Sig. = 0.046). The computed significance values (Sig.) were less than (<) 0.05 alpha level of significance; therefore, the null hypothesis was rejected. On the other hand, the computed significance value (Sig.) for the position (Sig. = 0.981), highest educational attainment (Sig. = 0.265), no. of years in teaching (Sig. = 0.141),

According to Azimi (2013), understanding users' readiness is paramount to the success of any e-learning program. Implementing e-learning by educational institutions has substantial benefits, one of which is that e-learning provides consistent content that assists students to overcome problems involved with instructors different teaching styles. E-readiness assessment is a helpful tool for determining a country's starting point and can be considered as an initial phase of the national strategy building for an area that needs ICT as a precondition for strategy implementation [13].

and no. of relevant training (Sig. = 0.572) were all greater than (>) 0.05 alpha level of significance. The results indicate no significant difference in teachers' preparedness regarding technology access when grouped according to position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

The role of Information and Communication Technologies (ICTs) in the school classroom is becoming increasingly

prominent, both because children need to develop skills that will empower them in modern society and because of the potential value of such technologies as tools for learning. One of the challenges facing teacher educators is ensuring that graduate teachers have the necessary combination of skills and pedagogical knowledge that will enable them to effectively use today's technologies in the classroom and continue developing and adapting to new

technologies that emerge in the future. This study explores first-year teacher education student preparedness to use ICTs in the classroom. The primary data source for the study is a set of intensive interviews with eight teacher education students. The results suggest that despite the prevailing view that this generation of University students are 'Digital Natives') Threesomes of barriers to their preparedness to use ICTs in the classroom. In particular, the study suggests that as well as looking at the teacher education curriculum and relevant training (Sig. = 0.776) were all greater than ($>$) 0.05 alpha level of significance. The results indicate no significant difference in teachers' preparedness as to technology skills when grouped according to age, sex, position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

Time Management. The computed significance value (Sig.) for age (Sig. = 0.114), sex (Sig. = 0.080), position (Sig. = 0.426), highest educational attainment (Sig. = 0.571), no. of years in teaching (Sig. = 0.441), and no. of relevant training (Sig. = 0.675) were all greater than ($>$) 0.05 alpha level of significance. The results indicate no significant difference in teachers' preparedness as to time management when grouped according to age,

other aspects of the formal preparation of these preservice teachers, the preservice teachers' personal preparedness including differences in their age, sex, attitude, motivation, and confidence, along with various social factors are essential. The results are discussed in the context of various preservice teacher ICT pedagogical development models. As well as being important for teacher educators, the findings are also significant in the context of academic staff development associated with the use of ICTs as a learning tool in tertiary education, as well as in the context of other disciplines where similar assumptions about the ICT literacy of first-year university students are being made [14].

Technology Skills. The computed significance value (Sig.) for age (Sig. = 0.245), sex (Sig. = 0.071), position (Sig. = 0.389), highest educational attainment (Sig. = 0.673), no. of years in teaching (Sig. = 0.060), and no. of sex, position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

Motivation. The computed significance value (Sig.) for age (Sig. = 0.083), sex (Sig. = 0.439), position (Sig. = 0.846), highest educational attainment (Sig. = 0.899), no. of years in teaching (Sig. = 0.519), and no. of relevant training (Sig. = 0.398) were all greater than ($>$) 0.05 alpha level of significance. The results indicate that there was no significant difference on the preparedness of teachers as to motivation when grouped according to age, sex, position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

Table 9. Test of difference on the institutional preparedness when teacher-respondents are grouped according to profile

| Sources of Variations | Administrative Support | | Resources Support | |
|---|------------------------|-------|-------------------|-------|
| | F | Sig | F | Sig |
| Age | 2.959 | 0.088 | 3.841 | 0.052 |
| Sex | 0.834 | 0.506 | 0.565 | 0.689 |
| Position | 0.438 | 0.726 | 0.503 | 0.681 |
| Highest Educational Attainment | 0.356 | 0.840 | 0.205 | 0.935 |
| No. of Years in Teaching | 0.527 | 0.756 | 0.874 | 0.501 |
| No. of Relevant Trainings in e-learning | 0.569 | 0.685 | 1.230 | 0.301 |

Administrative Support. The computed significance value (Sig.) for age (Sig. = 0.088), sex (Sig. = 0.506), position (Sig. = 0.726), highest educational attainment (Sig. = 0.840), no. of years in teaching (Sig. = 0.756), and no. of relevant training (Sig. = 0.685) were all greater than ($>$) 0.05 alpha level of significance. The results

indicate no significant difference in the institutional preparedness of the large secondary schools in terms of administrative support when teacher-respondents are grouped according to age, sex, position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

Resources Support. The computed significance value (Sig.) for age (Sig. = 0.052),

sex (Sig. = 0.689), position (Sig. = 0.681), highest educational attainment (Sig. = 0.935), no. of years in teaching (Sig. = 0.501), and no. of relevant training (Sig. = 0.301) were all greater than ($>$) 0.05 alpha level of significance. The results indicate no significant difference in the institutional preparedness of the large secondary schools in terms of resource support when teacher-respondents are grouped according to age, sex, position, highest educational attainment, no. of years in teaching, and no. of relevant training. Therefore, the null hypothesis was accepted.

The proposed Information System action plan has been developed to improve the preparedness of large secondary schools further to implement e-learning in social studies subjects.

Table 10. Proposed Information System Action Plan

| Dimension | Needing Preparedness | Proposed Action |
|-----------|----------------------|-----------------|
|-----------|----------------------|-----------------|

| | | Plan |
|--------------------------|---|--|
| Technology Access | Access to the computer in campus with stable internet connection. | Partnership with the Department of Information and Communications Technology (DICT) to increase internet bandwidth among larger secondary schools. |
| | Establishing and strengthening networks with local government units and other agencies to implement technology-based instruction and the needs for the program's success. | Partnership to local government units and other agencies. |
| Technology Skills | Ability to resolve common errors while surfing the internet, such | Training on resolving internet-related issues |

| | | |
|--|---|---|
| | as page not found or connection time out. | es among teachers. |
| | Strengthen and enhance the ICT skills of teachers with recent | Training and upgrading on technology skill development. |

| | | |
|------------------------|---|---|
| | applications that are needed in the new normal. | |
| Time Management | Control the desire to postpone important tasks. | Review on schedules should be considered to include internal and external activities that will affect learning schedules. |
| | Develop time management skills to focus attention on what matters. | Training for teachers on how to improve time management. |
| Motivation | Ability to complete the discussion even when there are online distractions. | Training for teachers on the creation of video lessons as a |

| | | |
|--|--|--|
| | | strategy may be considered to ensure synchronous lessons are facilitated to address onlin e distractions. |
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5. Conclusion and Future Scope

The bulk of the teachers that participated in this research are young women, and they fall into the "Teacher I" category. They have master's degrees or higher, are relatively new to teaching, and have had sufficient training in online education. Teachers who took the survey felt "Very Prepared" for the introduction of online courses. The teacher-respondents rated the big secondary schools' institutional readiness as "Prepared." Teachers' readiness with regard to technology access varied significantly when categorized by age and sex. When examining the institutional preparation of major secondary schools in relation to administrative assistance and resource support, there was no discernible difference when teacher-respondents were categorized according to profile. To help big secondary schools become ready to use online social studies courses, an information system action plan was created. If school administrators want a reliable internet connection on campus, they may enhance the bandwidth by establishing and building links. Online seminars on fixing typical internet mistakes are something that teachers should definitely sign up for. Before submitting their lessons to an online learning platform, teachers should set aside time and stick to the timetable to ensure they are well-prepared. In order to address issues like noise

disruptions in online classrooms, school principals may think about forming partnerships with nearby barangays or municipalities. It is recommended that school principals form a committee to assist in the creation of online programs and courses. In order to make sure that their schools are

sufficiency of existing technology resources to establish and maintain a virtual classroom. To confirm the research's results, it is necessary to undertake a more comprehensive follow-up investigation.

6. Acknowledgment

The researchers wholeheartedly thank President Ramon Magsaysay State University and the Department of Education for their valuable help and support in finalising this research article and its publication.

References

in the year 2019 I am D. J. Abernathy. Kindly define online education. A research conducted in 2016 by Vanve, Gaikwad, and Shelar found that online education has recently become popular in schools. This article is taken from issue 04, volume 3 of the IRJET, an international

journal that focuses on engineering and technology research.

Research by Al-Azawei, Parslow, and Lundqvist was published in 2016. Use Iraqi public institutions to illustrate the benefits and drawbacks of distance learning. Distributed and Open Education: A Global Perspective, 17,(5).

Can you explain descriptive research? According to McNeil (2004).

The cited work is Jovancic (2020). Methods and Content of Descriptive Research.

[6]**Mercado, C.** (2018). A tool to assess prerequisite knowledge for online courses.

[7]In the first edition of the Educational Psychology Handbook, edited by K. Harris, S. Graham, and T. Urdan, a section titled "Evolutionary educational psychology" was written by Geary (2012) and was published by the American Psychological Association. Pages 597-621 make up the publication, which was created in Washington D.C.

A research was published in 2017 by Siffe, Lwoga, and Sanga. Problems encountered by universities in developing countries in relation to innovative instructional technologies.

Adiyarta, Napitupulu, Rahim, Abdullah, and Setiawan (2017) published the information that is used here. Evaluation of readiness for online education implementation using the integrated elr model

A article was published in 2017 by Issa and Jaaron. An analysis of the e-learning preparedness of public secondary schools in Palestine the eleventhIn 2018, Larabee, Blasiman, and Fabry did it again. Distractions in online lectures: a research comparing three types of disruptions and their impacts on students' ability to learn. Scholarship of Teaching and Learning in Psychology, Volume 4, Issue 4, Pages 222-230.

[12]**Mercado, C.** (2018). Assessment Tool for the Readiness of Online Learning in [13]In 2013, Hassan Azimi wrote. School of Education Readiness for Online Courses

Gil and Dargano released their findings in a 2018 paper. Influences on prospective teachers' preparedness to use technology in the classroom