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Research Article

Exploring students' readiness in online learning in the new normal

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ABSTRACT

Online schooling is a main source of instruction in the aftermath of the Covid-19 pandemic and the transition to the new normal. This type of learning has been utilized at several educational levels and across a variety of platforms. Using a mixed-method research design, the study unveiled the students' readiness for online learning at Quirino State University, Cabarroguis Campus. Thus, this study sought to ascertain students' preparedness for online learning. Further, it also sought to identify the factors that affect the students' readiness in online learning. A random sample of 125 students was chosen to participate in the online survey. The study's findings indicated that students lacked readiness, indicating that they are not adequately equipped or prepared for online learning. Additionally, the factors that impacted students' preparation level corroborate the online survey findings. Moreover, the study's findings need a thorough and comprehensive assessment of the institution's preparedness to offer educational programs that go beyond the minimum standards. Numerous factors must be examined as the institution begins on a novel mode of instruction. Additionally, the university's existing regulations for online learning should be reviewed and enhanced.

Keywords: *Financial Problems; Internet Connectivity; Online Education; Self-Directed Learning*

1. INTRODUCTION

The COVID-19 outbreak has become a serious threat to the wellbeing of individuals all over the world. According to projections made by the Centers for Disease Control and Prevention (CDC), by October 6, 2020, there would have been 36 million cases of infection, which will have led to the deaths of more than one million people. This corresponds to more than 325,000 people in the Philippines being unwell on a yearly basis, with 6,000 people losing their lives as a direct consequence of the illness (Worldometer, 2020). As a direct consequence of this, almost one billion children across the world have been negatively affected. During the duration of the epidemic, more than 28 million Filipino students across all levels of school were required to remain indoors and adhere to the restrictions imposed by the Philippine government (UNESCO, 2020). The majority of nations have implemented quarantine procedures and temporarily shut down academic institutions in an effort to stop the virus from spreading further. As a direct consequence of this, about one billion students all around the world have been impacted. Ateneo de Manila University (ADMU), the University of the Philippines at Diliman (UPD), the University of Santo Tomas (UST), and De La Salle University are some of the most prestigious educational establishments in the

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Philippines (DLSU). In the past, Dominican University of Los Angeles offered both asynchronous and synchronous forms of online education. Learners who are unable to take part in online education have the option of choosing from a number of different solutions that are customized to their particular circumstances. There are a number of other private schools in the Philippines, such as St. Scholastica's College, Ateneo de Davao University, STI College, Far Eastern University, Adamson University, San Carlos University, and University of the East, that also provide students with the opportunity to take classes online. E-learning, according to the findings of a new study, offers a variety of advantages. The student-focused and individualized asynchronous and synchronous resources such as email, discussion forums, chat rooms, and videoconferencing are beneficial to the learning experience of the students (Dhawan et al., 2020; Marinoni et al., 2020; and Anwar et al. 2020). Additionally, internet technologies have made it possible to deliver content to a large number of users at the same time. An online learning environment provides learners with a number of benefits, including the ability to exercise control over the subject matter and the amount of time spent studying, as well as the capability to rapidly adapt the process to the learner's specific objectives and requirements (Suresh, 2018). Students' educational opportunities can be considerably improved by the use of online learning, despite the fact that it comes with its own set of challenges, which have been made even more difficult by the current economic crisis.

On the other hand, a great number of research have brought to light the drawbacks of online education. There are certain worries over the possible integration of peer culture and society, as well as the possibility of passing on values in a classroom that is considered to be "remote." Students acquire less information in an online setting since there is no human interaction during the learning process. This means that they learn less than they would in a typical classroom (Gamage et al., 2020). Second, the artificial nature of online education and its impacts are unsettling because they go counter to traditional methods of education and instruction (Adnan & Anwar, 2020). In addition, "increasing the students' duties elevates their stress and undermines the declared objective of the lockdown, which is to support the students' families in preparing for and responding to a crisis." The stated aim of the lockdown is to assist the students' families in preparing for and responding to an emergency. The phrase "lack of an acceptable learning environment for distance education and the value of online courses" has also been brought up as a source of concern (Bagayas, 2020). Mahyoob (2020) discovered technological, pedagogical, and communicative challenges to online learning during the COVID-19 epidemic. Kanwal and Rehman (2017) say e-primary learning's difficulties are equipment, technologies, management, application, assistance, and pedagogical components. The forced transition from traditional to online education impacted institutions' and students' COVID-19 preparation (Dorn et al. 2020; & Farrington 2020). Restrictions on internet access and social networking sites, combined a decline in educational quality, contributed to these results (UNESCO, 2020). Different countries have taken steps to limit Covid-19's impact on education, especially learning, based on research results. Online and distance learning are widely utilized to reduce learning challenges. Online learning preparation is a huge barrier. The investigation was done at QSU Cabarroguis. In September 2021, the university created an

online platform that would be used for the first semester of Academic Year 2021-2022. As a result, this study was conducted to provide a full picture of student readiness in online learning. Further, this paper sought to assess learners' preparedness in online learning. Additionally, it sought to determine the factors that influence learners' preparation for online learning. Finally, the outcomes of this study establish the foundation for the formulation of a comprehensive policy for students' online learning.

Furthermore, the research is founded on the "Activity Theory Approach," which has been critical in the creation of novel pedagogies (Engeström & Mwanza, 2005). The interaction between people and computers lies at the heart of this theoretical approach. It was crucial in the distribution of knowledge, among other things, via instruments, tools, and mediation. This concept emphasizes the possible impact that developing technologies may have on updating, contextualizing, and adjusting activity patterns (Engestrom, 1993). Activity theory is a sociocultural perspective on the connections between persons, organizational policies and culture, and mediated technology, all of which are aimed at a shared goal or objective (Bertelsen & Bodker, 2003; Cole & Engeström, 1993). As a result, this theory is best applied to the current research in order to gain a better knowledge of the goals of online learning in an academic context, as well as the impact of cultural and social norms, values, language, and technology.

2. METHODOLOGY/MATERIALS

This study employed a descriptive strategy to collect and analyze data utilizing both quantitative and qualitative methods. This research design is also used to collect data on the current state of phenomena in order to determine "what exists" in terms of the existing facts or circumstances in a given situation. The descriptive method was also employed in this study to evaluate students' readiness for online learning. The qualitative method is often employed to identify potential characteristics that affect students' readiness for online learning.

Using the "Online Learning Readiness Scale" developed by Hung et al., the researchers gathered information for the study (2010). In addition, Yurdugül and Sarikaya (2013) validated the questionnaire and discovered five characteristics: self-directed learning, motivation to learn, learner control, computer/Internet self-efficacy, and online communication self-efficacy. For the purpose of determining the dependability and validity of the instruments, a pilot study was undertaken, which included an examination of the collected data. Moreover, the survey questionnaires contained two components. The first section contains the demographic information of responders, while the second section contains the Online Learning Readiness Scale. The researchers also interviewed twenty individuals who met the aforementioned criteria in order to acquire qualitative data. To adhere to our society's safety rules, the researchers conducted qualitative phone interviews to collect data. In addition, the researcher plans the telephone interview based on the participants' accessibility and convenience. In addition, participants were made aware of moral considerations, such as maintaining the confidentiality during the study. The interview guide has three sorts of questions: engaging, exploratory, and exit. On occasion, follow-up questions are included to clarify key issues and solicit additional clarification. To

ensure the integrity of the information, participants were interviewed in their native Ilocano, allowing them to talk freely. In addition, each participant was interviewed for 30 minutes. As a result of the numerous participant comments, the restriction was extended to ensure that adequate data was collected from the chats and that the saturation threshold was reached.

Responses obtained to the Online Learning Readiness Scale were tallied, tabulated, and assessed. In addition, a mean score was employed to quantify learners' ratings of preparation across multiple sub-areas. In addition, the interviews were recorded verbatim, and the statements were translated, analyzed, and reviewed to ensure that their original meaning was preserved. The results were subsequently examined using thematic analysis. Consequently, according to Braun and Clarke (2006), thematic analysis is the process of detecting, comprehending, and assessing themes and patterns in data. It summarizes and describes the facts in the simplest terms possible. The collected data were evaluated and reread in order to find notable verbalizations and characterize what was common among the views and experiences of the participants. We developed simplified interpretations of noteworthy utterances and categorized them by codes and themes. Both the correspondent and critical friendly procedures were used to ensure the integrity and reliability of the data.

3. RESULTS AND FINDINGS

This part presented the data collected from the respondents' answered questionnaires and analyzed and interpreted by the researchers.

Table 1. Computer/Internet Self-Efficacy

S#	Dimension	Mean	Verbal Interpretation
1	I am confident to perform the essential functions of Microsoft Office programs (M.S. Word, M.S. PowerPoint and MS Excel).	2.41	Low
2	I am confident with my knowledge and skills on how to manage software for online learning.	2.71	Moderate
3	I am confident to use the Internet (Google & Yahoo) to find or gather information for online learning	2.53	Low
	Overall Mean	2.55	Low

Legend: 1.00 – 1.79 =Very Low | 1.80 – 2.59 = Low | 2.60 – 3.39 = Moderate| 3.40 – 4.19 = High| 4.20 – 5.00 = Very High

The table 1 reveals that students exhibit poor self-efficacy when it comes to using computers and the internet. Furthermore, the statistics show that students have a modest efficacy in online learning due to a lack of knowledge and abilities in software management. Furthermore, they exhibit limited effectiveness in using internet-based apps such as Google and Yahoo to discover or acquire information. Finally, they are inefficient computer users, particularly when it comes to completing the key duties of Microsoft Office programs.

According to the study, students lacked basic computer and internet abilities for online learning. Consistent to the result of the study, Aldhahi et al. (2021) found that time management, learning, and technology were the three characteristics of online learning

self-efficacy (OLSE) that played a significant influence in students' fulfillment during the shift to online learning during the pandemic.

Table 2. Self-Directed Learning

S.#	Dimension	Mean	Verbal Interpretation
1	I can carry out my own study plan.	3.27	Moderate
2	I can seek assistance whenever I face problems in my studies	3.46	High
3	I can utilize my time wisely.	3.31	Moderate
4	I can set up my own learning goals.	3.58	Moderate
5	I have higher expectations for my own learning performance.	3.29	Moderate
	Overall Mean	3.38	Moderate

Legend: 1.00 – 1.79 =Very Low | 1.80 – 2.59 = Low | 2.60 – 3.39 = Moderate| 3.40 – 4.19 = High| 4.20 – 5.00 = Very High

Table 2 shows that students in self-directed learning have intermediate social skills. They demonstrate a modest amount of independence in choosing their own learning objectives and require support whenever they encounter challenges with their knowledge. Similarly, they have a modest level of time management.

The lack of social skills affects online learners' behavior and preparedness. They can participate in online education if they can manage their time and set goals. According to Pelikan et al. (2021), students with higher perceived competence are better at managing time and tasks, creating objectives, and using higher cognitive processes. Financial concerns give college students worry. Because of employment loss, they worried about meeting basic demands. Participant replies show this.

> *"This pandemic is challenging; we don't have enough money because my parents are unemployed. Even though there is no school fee, our daily costs are insufficient. It's the most stressful thing for me." (P3, P6)*

Table 3. Learner Control (in an online context)

S#	Dimension	Mean	Verbal Interpretation
1	I can be able to direct my own learning progress.	2.48	Low
2	I can focus and able to manage distraction such as other online activities (instant messages, Internet surfing).	2.23	Low
3	I can be able to repeat the online instructional materials based on my needs.	2.88	Moderate
	Overall Mean	2.53	Moderate

Legend: 1.00 – 1.79 =Very Low | 1.80 – 2.59 = Low | 2.60 – 3.39 = Moderate| 3.40 – 4.19 = High| 4.20 – 5.00 = Very High

Table 3 indicates that students display low self-control with various online activities. They repeat the online instructional materials based on individual requirements at a moderate level. Furthermore, when studying online, participants had little control over their learning process and they were easily distracted by the other online activities such as instant chatting and rapid surfing.

Table 4. Motivation for Learning (in an online context)

S#	Dimension	Mean	Verbal Interpretation
1	I am open to new ideas.	3.26	Moderate
2	I am motivated to learn.	3.31	Moderate
3	I accept mistakes and improved from it.	3.42	Very High
4	I like to share my ideas with others.	3.18	Medium
	Overall Mean	3.29	Moderate

Legend: 1.00 – 1.79 = Very low | 1.80 – 2.59 = Low| 2.60 – 3.39 = Moderate| 3.40 – 4.19 = High| 4.20 – 5.00 = Very High

Table 4 reveals that respondents were moderately motivated to study in an online situation. They are very motivated to learn from their failures and go online since they can better their blunders. They are also moderately driven to study, embrace innovative thoughts, and share their thoughts with others.

The findings back up the conclusion drawn by Rafique et al. (2021), which states that Pakistani students were not fully capable of assessing the extent to which they used the internet when the COVID-19 pandemic was continuing. In despite of this, students were actively participating in online learning and were successful in acquiring fundamental computer and internet abilities.

Table 5. Online Communication Self-Efficacy

S#	Dimension	Mean	Verbal Interpretation
1	I am confident in using online tools (email, discussion) and in communicating with others effectively.	2.58	Low
2	I am confident in expressing myself (emotions and humor) through text.	2.60	Moderate
3	I am confident in posting questions online discussions.	2.40	Very low
	Overall Mean	2.53	Very low

Legend: 1.00 – 1.79 =Very Low | 1.80 – 2.59 = Low | 2.60 – 3.39 = Moderate| 3.40 – 4.19 = High| 4.20 – 5.00 = Very High

Table 5 demonstrates students' online communication effectiveness is quite poor. They are ineffective at using internet resources such as email conversations and failed to share successfully with others. Furthermore, they are only competent at communicating themselves through text. Finally, they are ineffective at asking questions in internet forums.

3.1. Factors Affecting Readiness in Online Learning: Students' Perspective

There are several problems involved with online schooling, yet its benefits in times of crisis cannot be overlooked. This research analyzes the factors that influence learners' readiness in online learning.

3.1.1. Internet connectivity issues

This factor, which participants identified, influenced their readiness for online learning, which relates to their inability to connect in the internet due to lack of signal or wifi connection in their place. During the pandemic, conventional face-to-face training was supplanted by blended learning, making teaching students difficult. Learners, on the other hand, should be prepared to complete their education via this medium. As a result, this style of instruction is dependent on internet access. According to survey respondents, the

most significant barrier they would encounter if they pursued online learning was a lack of internet access. As they revealed:

> *"I'm not quite prepared because we don't have a stable internet connection. We have a weak signal here since our place is very far." (Student 16) "To be honest, if you ask me about my preparation for online learning, I'm not ready yet, because the signal is difficult for us. So, sometimes I can't keep up with webinars or any other online activities." (Student 9)*

Due to internet connectivity concerns, learners are unprepared for online learning, according to the prior claims. They believe online education is inaccessible to them due to their location, signal quality, and internet connection speed. According to the most recent research on the effects of the COVID-19 epidemic on higher education in Ireland, approximately half of the schools surveyed experienced difficulties acquiring high-speed broadband and/or providing students with acceptable technological equipment (Mohan et al., 2020).

When asked if they were prepared for online classes, some students who remained in remote communities in the province stated that they were not prepared to participate when they were questioned about it. The availability of reliable internet access presents the most significant barrier to the expansion of online education in the United States (Balasa et al., 2021). The problem in this scenario is that the infrastructure of telecom companies cannot be repaired by the common person. This is a widespread issue among students, as more of them use the Internet on a regular basis. Adnan and Anwar (2020) concluded that online education in Pakistan fails because to the fact that the vast majority of students have poor internet connection and have technological challenges.

3.1.2. Lack of technological devices

Another issue that online learning students face is a shortage of adequate technological devices, such as laptop computers and Android phones. Students must have computers, mobile phones, ipads, scanner, and printer, as well as a reliable internet connection, to participate in online classes. Virtual courses necessitate the use of specialist software programs as well. It incorporates audio and video conferencing, which allows teachers and students to see and hear each other, as well as real-time text messaging services for education. According to the participants:

> *"I am not prepared since I lack the necessary equipment such as a laptop to participate in an online class." (Student 11). "I should first acquire sufficient gadgets to enable me to understand how to use various online learning tools." (Student 15)*

Digital technology and computers have helped modern university students learn. Cell phones and unlimited internet access have changed educational communication. Social networks can modify and improve instructional practices by engaging and encouraging students (Ramirez & Gordy, 2020). During the interview, students were asked about their opinions, and many of them stated that they come from low-income families and that their parents are unable to provide them with the necessary technology for online learning, such as laptops. This was in response to questions posed by the interviewer. Therefore, students

who do not have access to the technology required to participate in online courses may have a negative self-perception in comparison to their peers who do have such capabilities. Many students, particularly Cambodian students, are at risk of falling behind financially or facing additional challenges as a result of the COVID-19 issue. This risk is exacerbated by the fact that many of these kids come from economically disadvantaged backgrounds.

3.1.3. Financial problems

Furthermore, students have difficulty with online education as a result of financial hardship. This entails them purchasing a load in order to participate in online learning. Even if students could work to increase their income while studying, many are unable to do so under the present economic downturn. As two of them expressed it:

> *"I'm not ready for online yet because we've been short of money since the pandemic started. of course, you'll need enough load to be online at all times." (Student 6)*

> *"My family cannot support me financially, so if it is purely online, I wouldn't be able to join daily because I am a working student. All I thought, the mode of learning is modular; that's why I enrolled this semester." (P12)*

The articulations above indicate that students faced financial difficulties and were obliged to maintain a full-time load to attend online courses. Students globally are being impacted by the pandemic in various ways, most notably through school cancellations and the replacement of face-to-face (f2f) instruction with online platforms. The present conclusion is consistent with Bernardo's (2018) assertion that financial pressure is widespread among Filipino students. According to government statistics, a significant proportion of students have financial challenges. Students from low-income families frequently lack the ability to acquire a broadband connection and the requisite devices, such as laptops/computers or tablets, for online education.

3.1.4. Power interruptions

Furthermore, because online learning is dependent on electrical gadgets, learners may experience power outages. This is especially problematic in situations where disruptions occur frequently or are unexpected. As stated by the participants:

> *"We always have brownouts. How come we have online class every day?" (Student 20)*

> *"What if I'm required to submit my projects or quizzes online since it's the deadline and then suddenly there's a brownout? I'm sure this would affect my performance in school." (Student 4)*

> *"I'd rather have printed modules because I can work on this even during brownouts." (Student 1)*

The students revealed that they experienced electricity interruptions in their respective places. Further, they worry about the impact of this problem on their academic performance. Remote learning entails the use of electronic devices in this setting, and

students were confronted with it. This is especially difficult in an inevitable problem in virtual classroom setups. As a consequence, student participants identified power outages as another barrier to e-learning. A power outage during a virtual classroom instruction is an unavoidable event. This is true for some of the students examined who live in areas where brownouts were a regular problem prior to the outbreak. A similar result has been reached in studies (e.g., Verawardina et al., 2020; Sarwar et al., 2020; and Subedi et al., 2020), which demonstrates that students in distant rural locations face difficulties maintaining online learning connections due to disruptions or even a lack of energy.

3.1.5. Limited knowledge and skills in using technological devices

The third worry expressed by the participants is inadequate knowledge and skill in using digital gadgets. Taking an online class, according to them, is difficult if a learner does not have skills to handle digital technologies. Participants stated the following:

> *"I didn't even try using a laptop, and I'm not familiar with the term "Learning Management System." "Perhaps that system is complicated to use." (Student 13)."*
>
> *Online classes are challenging, especially*
>
> *for me. I am not entirely technologically savvy. "Appropriate understanding about the use of digital technologies is required." (Student 8)*

According to participant remarks, they are anxious about pursuing online education since they lack knowledge and abilities for manipulating technology equipment such as computers. Additionally, the majority of them do not have access to laptops, desktop computers, tablets, or cellphones, which are necessary for delivering online lessons. This study verifies the comments of Zalat et al., (2021) that students' unfamiliarity with the e-learning medium, as well as their diverse technological knowledge and skills, emphasize the need for training and workshops on how to use various technical approaches and platforms to improve online activities.

4. CONCLUSION

The findings of the study indicated that students' preparation level was low, indicating that pupils are not completely equipped or ready for online learning. Furthermore, the factors that determine students' preparation level complement the online survey results. In the future, the university will require a complete set of regulations and norms based on a modern and effective instructional framework. This necessitates a thorough and comprehensive assessment of the university's readiness to provide educational programs that demand more than the minimum qualifications. As the institution begins on a new style of learning, several factors must be addressed. This includes the instructor's capacity, the learner's circumstance and context, and the educational setting's efficacy. These, however, are in addition to the more obvious issues related with connection speeds, material costs, and delivery methods. Looking at the larger picture and developing a strategy that includes instructors, professors, parents, students, school administrators, and technology-based organizations is the best way to go forward. This collaborative approach based on a common vision is the innovative solution required for this unusual situation.

This study, on the other hand, suffers from a number of serious drawbacks. Because of the research participants and location, the conclusions may not reflect the experiences of all learners locally and worldwide. This study even advises that several studies be conducted in order to build a complete definition of student preparedness for online learning and to uncover more depth results for the elements influencing students' readiness level.

Author Contributions:

Roselle M. Soriano and Pilipina Cagurangan conducted the interview from the participants. Christian Escario and Chleo Pascual contributed to the conceptualization of the manuscript particularly on the introduction and methodology. Abegail Ambonon helped in the formal analysis of the data gathered. R.M.S and C.E. prepared the first draft. All authors contributed substantially to the finalization of the manuscript.

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The study was conducted according to the guidelines stipulated in the University Research Manual and approved by the Institutional Review Ethics Committee of QUIRINO STATE UNIVERSITY last October 24, 2021.

Informed Consent Statement:

Written informed consent has been obtained from the participants for publication of this paper.

Data Availability Statement:

The data that support the findings of this study are available on request from the corresponding author, R.M.S.

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Conflicts of Interest:

The authors have declared that no conflict of interests exist.

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