

Online Learning and Engagement of First-Year BEED Students in UM Peñaplata College

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Abstract: The study was conducted to determine the relationship between online instruction and students' learning engagement among first-year BEED students. Employing a descriptive-correlational design, the researchers surveyed first-year BEED students at UM Peñaplata College. Using the mean, test scores, and Pearson r, the results indicated that online learning instruction and student engagement were rated very high. This further signifies that student involvement in online instruction is significantly associated. Meanwhile, student learning engagement was analyzed as a very high descriptive level. This entails that BEED students always manifest online learning instruction, which is considered a vital factor in achieving quality learning at all costs. Moreover, the researchers rejected the null hypothesis, indicating a significant relationship between online learning instruction and the learning engagement of first-year BEED students. Furthermore, the p-values for the coefficients indicated that the relationships between online learning instruction and student satisfaction are statistically significant. Similarly, this strongly implies that success in online instruction is largely a function of student involvement. Therefore, school administrators and teachers must provide options for learning instructions or modalities to choose from, if necessary.

Keywords: *online learning instruction, student learning engagement, readiness, internet accessibility, online class participation*

INTRODUCTION

During the COVID-19 outbreak, schools around the world were closed. The pandemic's rapid spread of COVID-19 in educational settings changed several learning adjustments for both students and instructors. In response, this worry affected student learning and the learning process, both worldwide and locally. It is concretely manifested at UM Peñaplata College, where instructors have been adjusting to meet the needs of learners engaged in online learning and instruction. As a result, it has proven to be a lifesaver for students and lecturers who cannot attend classes due to COVID-19-related issues. Although online learning can be a suitable alternative to in-person courses during school closures, it has posed several challenges for college students attempting to adapt (Dhawan, 2020).

In the international setting, there is a lot of conflicting information and research in the current literature on online teaching and learning. Although there is evidence that online teaching and learning are becoming more popular and successful, other research indicates that many students are still struggling (Barrett, 2013). The available study also pointed to several potential reasons for these discrepancies, such as students becoming more accustomed to online teaching and learning or enrolling only out of convenience rather than considering how they would learn the material most effectively (Graff, 2003).

Because many lecturers find it difficult to transition to online teaching and learning while maintaining the motivation of all students, especially those who are less advantaged, there have been national-scale issues as the COVID-19 outbreak has raised serious concerns about student involvement (Habeahan et al., 2022). Education has undergone a considerable transition with the advent of online learning, which involves instruction delivered through online platforms (Li & Lalani, 2020; Maheshwari, 2021). Therefore, the researchers were inspired to continue their investigation since, as far as we know, no research has empirically examined the factors influencing students' engagement in online teaching and learning inside higher education institutions. This is because several recent studies in the Philippines have examined the factors affecting students' participation in online education and learning (Dwivedi et al., 2020; Lam et al., 2020; Lazareva, 2018; Maheshwari, 2021; Vonderwell & Zachariah, 2005).

According to Richardson and Newby (2010), online activities should be developed to enhance student engagement; it is necessary to identify the right target audience and establish interactive activities. Li and Lalani (2020) show differences in how easy it is for some students to participate in online learning depending on their socioeconomic status and access to reliable technology or the Internet. Based on a summary of Gautam et al., (2020), online learning, like most educational modalities, has advantages and disadvantages that need to be acknowledged and understood.

Following the discussion above, many students have difficulty with online learning due to poor internet connections. That is why researchers conducted this study to determine the significance of the level of online learning in terms of readiness, internet connection accessibility, and online class participation, as well as students' social, cognitive, and behavioral engagement among BEED students at UM Peñaplata College.

Statement of the Problem

This study aims to determine the relationship between online learning and the learning engagement of First-Year BEED Students at UM Peñaplata College. It further sought to answer the following questions:

1. What is the level of online learning instruction in terms of:
 - 1.1 readiness;
 - 1.2 accessibility of internet connection; and
 - 1.3 online class participation
2. What is the level of student learning engagement of First Year BEED Students in terms of:
 - 2.1 social;
 - 2.2 cognitive; and
 - 2.3 behavior
3. Is there a significant relationship between online learning instruction and student learning engagement of First Year BEED Students?

REVIEW OF RELATED LITERATURE

1. Online Learning

Online learning is a broad concept that encompasses educational programs delivered via technology that uses the Internet for instructor interaction and the distribution of course material. Online learning is categorized into two types: synchronous and asynchronous. Asynchronous technology involves significant time delays between instruction and its receipt, whereas synchronous technology enables "live" contact between the teacher and students (e.g., audio and video conferencing, web chats). (e.g., e-mail, earlier video recordings, discussion forums, etc.).

Furthermore, students' capability to build significance through assuming agency in their learning, initiating and maintaining meaningful multimodal interactions, and developing conceptual and epistemic understanding through active engagement with digital resources is significantly reliant on online learning (Hartnett, 2016). Online education is the use of technology to educate and learn. Students can work collaboratively with their peers and teachers in real time or independently while learning on the Internet, which is a form of distance learning (Singh et al., 2019).

According to a researcher at the University of Central Florida, digital devices and social media provide students with more opportunities for collaborative learning and enable them to share resources and materials with their colleagues (Gikas & Grant, 2013). Students could use mobile devices and social media to access information, supplies, and course content and communicate with peers and instructors (Cavus & Ibrahim, 2008). Once worldwide closures were implemented, libraries, sporting activities, communication, assessments, and in-person lecture attendance were also affected (Aristovnik et al., 2020; Cao et al., 2020).

When it comes to encouraging children to engage in online learning, one of the most important factors is how teachers can help students learn about technology through supervised interaction (Abnathyan, 2021). Although online learning can be seen as merely an alternative to in-person classes during school closures, it has posed various difficulties for college students adjusting (Zhang, 2020; Dhawan, 2020). With online education systems, teachers and students may express concepts differently. In online communication, a person, in contrast, could influence the quality of this communication (Chang & Hsu, 2016).

According to Aldhafeeri and Khan (2016), several countries have seen significant progress in online learning over the last decade due to its advantages, leading to educational reforms that transition students between traditional classrooms and online instruction in colleges. Despite the widespread availability and adoption of online learning formats in recent years, there is limited observational data on how individuals in Germany and other developed countries took advantage of these opportunities during the COVID-19 pandemic. Adult education research indicates that the pandemic has widened lifelong learning inequalities across several domains and disproportionately harmed disadvantaged populations.

According to Boeren et al. (2020), academically disadvantaged individuals will have had the fewest opportunities to learn online. Nonetheless, many institutions and colleges in Japan continue to prohibit face-to-face classes. Instead, with limited access to university campuses, students use a variety of online learning modalities (Mext & Ono, 2020). Based on studies conducted in the Philippines, students' online learning challenges vary in both size and type. The most difficult challenge was their home learning environment, and the most difficult challenge was technological literacy and expertise.

Furthermore, fully online classes were only a component of online teaching and learning. The history of online learning can be traced back to around 1960, when online teaching and learning first appeared at the University of Illinois in the United States. Students initially learned how to use personal computers to create a network (Clark, 2020; Lowenthal & Moore, 2020; Sarkar et al., 2021). Online teaching and learning is a suitable fit in courses that highlight the growth of students' capacities through knowledge acquisition and evaluation. Online learning and instruction occur in a virtual environment over the Internet (Khan et al., 2017).

As shown by Nguyen's (2015) research, online teaching and learning are now possible thanks to the Internet, and many teachers are enthusiastic about using it to help learners improve their performance. Due to the diversity of the topics involved, a single standard cannot encompass all aspects of online teaching and learning. This one is supported by McNamara (2021), which claims that online teaching and learning is indeed the process of teaching students online. Smith (2016) defined online teaching and learning as a method for preparing students who are physically distant from their instructors through one or more technologies. Hence, online teaching and learning is a formalized activity delivered entirely over the Internet, with some help and guidance from different technologies, yet it occurs when students and lecturers are apart by physical distance or by circumstances. Likewise, Finch and Jacobs (2012) defined online teaching and learning as learning in which students and lecturers are not in immediate contact.

For the time being, Zu et al. (2020) defined teaching and learning primarily as a method of practical instruction via web-based technology that allows students to engage in learning outside the classroom, both from home and other locations. Depending on these concepts, online teaching and learning can be described as a form of education in which students and instructors are separated, with all schedules and learning materials available exclusively for individual access through technology and the Internet.

Additionally, online education appeals to diverse student demographics with a range of academic needs that traditional education programs fall short of meeting. The drive to "give quality education to all students, regardless of location and time" led to the demand for online courses (Chaney, 2010). The number of distance learning courses and programs available has increased due to the need for flexible learning environments for potential students who are hospitalized, have phobias related to school environments, are single parents, have been expelled, are dropouts seeking a diploma, and many other particular cases.

Therefore, flexibility is a significant reason learners prefer online learning; the advantages of online courses cannot be overstated. Online learning allows students to complete their projects at a time and in a location that meets their learning needs. Many instructors and students commented on their ability to focus more on the course topic and less on distractions such as parking, traffic, and other issues that can arise in a traditional classroom setting (Thomson, 2010).

Lastly, during the COVID-19 pandemic, online learning has served as emergency-response remote instruction. The shift to a new learning environment has been delayed by a variety of critical problems related to policy, pedagogy, logistics, socioeconomic concerns, technology, and psychosocial variables, according to Schmidt et al. (2020).

1.1 Readiness

Readiness refers to a student's ability to learn, considering individual and environmental factors. A student's readiness to know could have been influenced by various factors, including specific adverse circumstances or a lack of physical or emotional development. It may be the outcome of external forces or a personal challenge. According to Warner et al. (2020), who were the ones who introduced the concept of online learning readiness, it is defined as 1) students' preference for classroom instruction over face-to-face learning; 2) students' comfort with using varied types of technology, such as the Internet, as well as, in particular, computer mediated tools for communication in online learning; and 3) students' engagement throughout their autonomous learning. Smith et al. (2003) used a ready-for-online learning questionnaire in a study and found that students' self-management of learning and their level of comfort with online learning were the two main factors indicating its success. However, those two factors did not account for all aspects of students' readiness for online learning.

According to Alem et al. (2016), e-learners require specialized talents and orientations to overcome challenges with the e-learning medium. In other words, readiness for online learning is indeed the extent to which a person or institution holds the prior knowledge/skills and effective characteristics (attitude, motivation, etc.) required for effective e-learning (Yurdugül & Demir, 2017).

1.2 Accessibility of Internet Connection

The Internet has already been represented as a communication superhighway that unites, connects, and transforms the entire world into a virtual village wherein people can easily communicate, see, or speak to one another and share information quickly from one end of the globe to the other (Shitta, 2002). According to Dogniez (2019), Internet access is essential to realizing the world's promise of success by 2030. It possesses the potential to raise the quality of education in a variety of ways. It provides access to a wealth of information, expertise, and educational resources, broadening learning opportunities in and out of the classroom.

Compared with the Young (2020) study, students classified as internet-dependent reported more significant adverse effects on their lives due to excessive internet use than 'non-dependent' users. Except for Hazelhurst et al. (2011), other studies on this topic have produced contradictory results. According to the Federal Communications Commission (FCC) in the United States, estimates of the number of Americans without internet access were likely underestimated. According to a study released by the US Congress in 2017, 12 million children in the United States are growing up without access to the Internet (Broom, 2020). According to the Pulse Asia Survey, most adult Filipinos use the Internet more than once a day (Cruz, 2021).

1.3 Online Class Participation

One of the several factors indicating a traditional classroom is student participation, which is essential for effective teaching and successful learning. According to Dixon (2015) and Shi and Tan (2020), student engagement appears to be part of the broader concept of student learning. Even so, student engagement has been reduced to a narrower, more focused concept, such as online classroom participation on internet-based media (Dewan et al., 2019; Rocca, 2010). Students who engage in their learning tend to comprehend more thoroughly, retain information longer, develop improved communication skills, engage in more critical reflection, and perform better, especially in online learning environments (Bigatel & Malizia, 2018).

Hrastinski (2008) defined online student participation as "a method of education through taking part and establishing relationships with others." His method emphasizes the importance of interpersonal connections as the foundation of online activity and is, therefore, more relationship-based. For instance, Dwivedi et al. (2020) suggest that professors must focus on student interactions during online lectures delivered via a virtual classroom application. Furthermore, the authors suggested that teachers allow their students time before or after class to discuss the lecture's content. A significant issue the authors raise is the requirement that teachers encourage students to keep their cameras on while working on group assignments. Teachers can use this to measure students' participation in their tasks.

2. Student Engagement

Student engagement is the extent to which students actively engage in and immerse themselves in learning at behavioral, cognitive, and emotional levels (Fredricks et al., 2004). Several researchers define student engagement as involvement in the course and curriculum development, classroom management, and other pedagogical obligations (Liu et al., 2018). Other studies described engagement as interest, effort, motivation, and time on task, i.e., the amount of time a student spends on a specific learning assignment (Bulger et al., 2008). Studying students' engagement in online environments is essential because the pandemic has provided firsthand educational opportunities (Borko, 2004) as instructors figure out how to engage students, support meaningful innovation, and teach content beyond the face-to-face classroom.

The term "student engagement" refers to students' overall involvement and dedication to their learning (Krause & Coates, 2008). However, NSSE considers how collaborative and active learning, academic challenge, engagement among students and faculty, and a supportive campus environment all influence such engagement. College student engagement is typically defined as the amount of time and effort students devote to educational activities (Kuh, 2010). A study conducted in the Philippines found that online course satisfaction was significantly related to online student participation. Structural equation modeling also revealed that online course

satisfaction is closely related to students' abilities to engage emotionally, participate, and perform, as components of student engagement in online learning.

2.1 Social

Social engagement is defined by the National Research Council of the United States (2003) as a combination of students' sense of belonging at school, their sense of connection and acceptance with classmates and peers, quality interaction with faculty, and overall acceptance of the concept of schooling. Meanwhile, disengaged students are thought to retreat from their peers, with some even engaging in rebellious behavior against their teachers and other faculty members (Kim et al., 2020). In other words, socially isolated students who do not comprehend the purpose of studying are more likely to struggle academically (Hu & Hui, 2012).

2.2 Cognitive

Cognitive engagement is described as the awareness and desire to put in the effort required to comprehend complex ideas and master challenging abilities (such as focused attention, memory, and creative thinking) (Anderson et al., 2004). Rotgans and Schmidt (2011) define cognitive engagement as students' willingness and ability to engage in the learning task. Traditional measures of cognitive engagement have included students' homework completion, class attendance, extracurricular participation, general contact with teachers, and their apparent motivation during classroom discussions (Appleton et al., 2006). According to Greene (2015), higher levels of cognitive engagement are positively related to achievement. Moreover, based on the findings of Richardson and Newby (2010), who investigated the extent to which learners cognitively engaged with their online courses, students can gain experience in online learning and become much more responsible for their learning.

2.3 Behavior

Behavioral engagement is based on participating, which includes involvement in the classroom and extracurricular activities, maintaining focus, completing assigned work, and following the instructor's interpretation (Christenson et al., 2012). Even though the concept of behavioral engagement is well defined and has been studied in multiple face-to-face scenarios, student behaviors in online contexts have only recently been shown to vary (Louwrens & Hartnett, 2015).

The shift was sudden and unannounced, causing worry and concern among students and instructors. Schools have decided to adopt emerging technologies to transition to online platforms, provide educational opportunities, and engage students. Student engagement is significant for learning and fulfillment in online education (Martin & Bolliger, 2018). However, most teachers face both intrinsic and extrinsic barriers to adopting new technological tools for effective active learning, including relevant technological resources and skills, attitudes and beliefs toward technology, and the ability to design lessons that promote students' engagement and critical thinking (Johnson et al., 2016).

Theoretical Framework

This study relies on the Community of Inquiry Model theory proposed by Garrison, Anderson, and Archer (2000). This was founded on three different "presences": cognitive, social, and teaching. The ability of a person to engage with the community (e.g., through a course of study), communicate meaningfully in a trusting environment, and establish interpersonal relationships by projecting their unique personality is defined as social presence (Garrison, 2009). Students want to get to know their teachers as individuals, even beyond their roles as instructors and subject-matter experts. Online learners benefit from teachers' and other students' social presence to feel part of the online learning community, minimize feelings of isolation, and develop trust and a sense of community. Teaching presence is generally described as the "design, facilitation, and direction of cognitive and social processes to achieve personally meaningful and educationally acceptable learning outcomes" (Anderson, Rourke, Garrison, & Archer, 2001). Teaching comprises planning and arranging the course and directing and assisting students during course delivery. Cognitive presence is "the ability of learners to develop and confirm meaning through ongoing thinking and speech" (Garrison, Anderson & Archer, 2001).

Vigorous and exciting learning activities are required for the course to be practical. The primary purpose of cognitive presence is to cultivate higher-order thinking processes (for example, critical thinking or practical inquiry) that integrate prior learning with new information through reflection, debate, and feedback. The founders of the CoI framework for e-learning worked together for five years (1996–2001) at the University of Alberta in the Faculty of Extension Department on a partially online graduate program, intending to provide a pattern recognition understanding and a technique for studying the potential and effectiveness of computer conferencing (Garrison, Anderson, & Archer, 2010).

Their model encourages the development of active learning environments or communities wherein the instructors and students exchange ideas, information, and points of view. It is vital to remember that "presence" is a social phenomenon that manifests through student participation. The concept of a community of inquiry is widespread in online and blended courses designed to be highly engaging among students and teachers through online forums, blogs, wikis, and videoconferencing. Garrison (2018) proposes focusing on practical aspects, since concerns about facilitation have received considerable attention. The Community of Inquiry (CoI) originates with John Dewey's work and is compatible with constructivist approaches to learning in higher education (Garrison, 2007). Online learning students are held accountable for their learning and how they know it. Dewey believed that by collaborating in a way that recognized the individual, students would take on the responsibility of proactively generating and verifying meaning (Swan et al., 2009).

Conceptual Framework

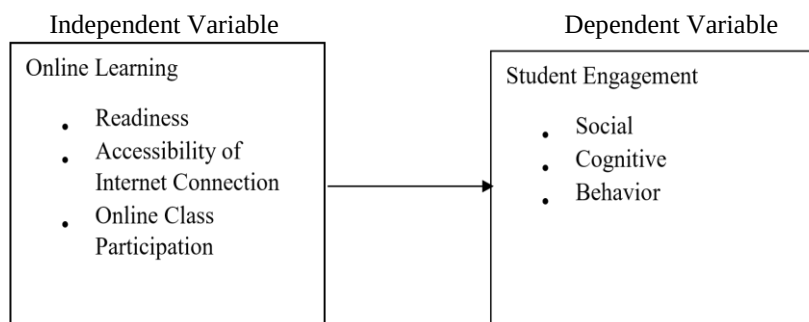


Figure 1. Conceptual Framework

The figure above depicts the conceptual framework. It shows the relationship between this study's independent and dependent variables. Concerning the dependent variable, student engagement in terms of social, cognitive, and behavioral engagement, the independent variable is online learning in terms of readiness, accessibility of internet connection, and online class participation. The dependent variable, student engagement in social, cognitive, and behavioral engagement, is determined by the independent variable.

Significance of the Study

This study will determine the factors influencing online learning and student engagement among first-year BEED students at UM Penaplata. The current study's generalization would significantly contribute to the comprehensive knowledge base concerning online learning and student engagement.

The result of this study could be highly significant and beneficial to the following:

The study's findings were beneficial to online lecturers, as they could learn more about how students have been affected and how well they manage their classes to ensure that no one falls behind. Thus, the result of this study was highly significant and beneficial, especially for the following:

School Administrator. This research proved beneficial to the school administration. This helps them assess the advantages and disadvantages of integrating online learning. Also, it helps decide which areas to focus on more and improve to make the curriculum more responsive and better prepare students for their future. *Teachers.* This study was beneficial to the teachers. Through this research, teachers could learn whether online learning affects student engagement.

Students. The first-year BEED students are the direct recipients of the study's findings. In this study, students determined if the knowledge and abilities gained through online learning would benefit them in their future professions.

Parents. This research study helped parents understand the importance of providing their children with an education that prepares them to be productive members of society.

Future Researchers. This study will provide the baseline information needed for future researchers and studies in this area.

METHOD

The study used a quantitative design and a descriptive-correlational research method. This method was chosen for the study because it aligns with the researchers' interest in examining the connections between teaching-learning quality and literacy skills. Douglas (2012) identifies descriptive-correlational research as a non-experimental study in which the researcher evaluates two variables and analyzes the statistical relationship. This quantitative study used a correlational research design to determine the association between online learning and student engagement among BEED students at UM Penaplata College. A correlational research design looks at correlations between variables without requiring the researcher to influence or alter them (Bhandari, 2021).

Research Participants

The researchers used random sampling to choose the investigation's respondents. As a result, responses can be collected as a dataset from a group. As a result, a research participant is a representative sample of the population the researcher seeks to investigate using the study method. The respondents for this study were first-year BEED students at UM Penaplata College during the 2021–2022 school year. As a result, the sample size is vital to any study that aims to generalize from a sample to a population (Taherdoost, 2017). Using the Sample Size Formula by Raosoft, researchers calculated a sample size of 88 respondents from a population of 113, with a 5% margin of error, a 95% confidence level, and a 50% response distribution.

Research Instruments

The researchers used a modified survey form to collect data for online instruction and student learning engagement. A research instrument helps measure opinions, concepts, attitudes, and other constructs. Check and Schutt (2012) describe survey research as "the collection of information from a sample of people through their responses to questions." The researchers used the survey questionnaire to obtain data from respondents concerning the study. The survey questionnaire aims to collect information about how online instruction influences student engagement. Following the safety and health procedure, the researchers distribute survey questionnaires via Google Forms.

The researchers used a modified survey questionnaire to gather data for online learning. This survey questionnaire on online learning has three areas: readiness, internet connection accessibility, and online class participation. It has 15 items, and students answered the questionnaire using a scale with 5 indicating always, 4 often, 3 sometimes, 2 rarely, and 1 never. In addition, the Likert Scale shown below was used in the analysis. Furthermore, the range of means was used to determine the data's overall distribution and the possible values in a given dataset.

Furthermore, the presented data ranged from 4.21 to 5.00 as the highest value and from 1.00 to 1.80 as the lowest value in the distribution. It is commonly used to measure variability. Along with measures of central tendency, measures of variability provide descriptive statistics for summarizing your data set.

Online Learning

Range of Means	Descriptive Level	Interpretation
4.21 – 5.00	Very High	This means that online learning instruction is always manifested.
3.41-4.20	High	This means that online learning instruction is often manifested.
2.61-3.40	Moderate	This means that online learning instruction is sometimes manifested.
1.81-2.60	Low	This means that online learning instruction is rarely manifested.
1.00 – 1.80	Very Low	This means that online learning instruction is never manifested.

The researchers still used a modified survey questionnaire to gather data for student engagement. This survey questionnaire on student engagement has three indicators: social, cognitive, and behavioral. It has nine items, with three distributed to each hand, and students answered the questionnaire using a scale with five indicating always, four often, three sometimes, two rarely, and one never. Additionally, the analysis and interpretation used the Likert Scale below. Furthermore, the range may only be used to determine the distribution of values within a data set with multiple values, not the mean, median, or mode. Thus, the range of means was 4.20-5.00 (maximum) and 1.00-1.79 (minimum). It measures variability using the same units as the data. Further, the questionnaires underwent validity and reliability testing before actual administration to the respondents. To analyze the result, the Range of the means below was used.

Student Engagement

Range of Means	Descriptive Level	Interpretation
4.20 – 5.00	Very High	This means that online learning instruction is always manifested.
3.40-4.19	High	This means that online learning instruction is often manifested.
2.60-3.39	Moderate	This means that online learning instruction is sometimes manifested.
1.80-2.59	Low	This means that online learning instruction is rarely manifested.
1.00-1.79	Very Low	This means that online learning instruction is never manifested.

Research Procedures

A survey of First-Year Beed students was conducted at UM Peñaplata College to examine the relationship between online learning and student engagement, and the following procedures were used to collect the data: they were asking for Permission to conduct the Study; the researchers secured a permission letter from Prof. Cornelio R. Monteroso, the Dean of UM Peñaplata College, to conduct a survey inside the campus concerning the "Online Learning and Student Engagement of First Year BEED Students in UM Peñaplata College" for the school year 2021-2022 (See Appendix A); Questionnaire Construction; the researchers developed a Likert-scale questionnaire, and the distribution of questionnaires and data retrieval are handled through Google Forms (See Appendix B); Validation of the Questionnaire; the researchers presented the questionnaires to the panel members for verification and approval (See Appendix C); they are asking for permission from the Respondents; the researchers will formally request permission before administering the survey questionnaire; they are conducting a Survey; the researchers will administer a Likert-scale questionnaire, and respondents will answer questions about the problem statements via Google Forms; Retrieval of the Survey Questionnaires; after conducting the survey, the researchers will retrieve files from Google forms done by the researchers; Tabulation, Analysis, and Interpretation of Data; the data were presented in tables, graphs, and figures with explanations, and these data will be analyzed using appropriate statistical tools.

Statistical Treatment

Statistical treatment refers to applying any statistical procedure to the data. To interpret the data effectively, researchers will employ the following statistical treatment.

Mean –the process of collecting and analyzing numerical data. It is used to assess the level of online learning in terms of readiness, internet connectivity, and participation in online classes.

Regression Analysis - This method estimates the associations between a dependent variable and one or more independent variables.

RESULT AND DISCUSSIONS

Level of Online Learning Instruction of First-Year BEED Students

Determining the level of online learning instruction in terms of readiness, accessibility of internet connection, and online class participation of the First Year BEED Students at UM Peñaplata College was the first objective of this study. Thus, Table 1 addresses this objective. The table shows that the overall mean was 4.46 with a standard deviation of 0.37, which was interpreted as a very high descriptive level. This means that students' engagement with online learning instruction is always manifested.

Table 1: Level of Online Learning

Indicators	SD	Mean	Descriptive Level
Readiness	.41	4.64	Very High
Accessibility of Internet Connection	.51	4.32	Very High
Online Class Participation	.43	4.42	Very High
Overall Mean	.37	4.46	Very High

Note: N = 88, M = Mean, SD = Standard Deviation

Based on the table for each indicator, readiness had the highest mean of 4.64 and a standard deviation of 0.41, indicating a very high descriptive level, meaning that online learning instruction is consistently evident. According to Schrader's (2001) study, learners must possess traits such as self-determination and a general desire for excellence to achieve success across various learning methods. The high expectations inherent in the experience may make it challenging for the learner to progress if these qualities are omitted. Being a self-directed learner for adults involves not only knowing study techniques but also applying them and adopting certain attitudes. Moreover, Bloom (2005) provided evidence supporting this, noting that readiness, which is essential to the educational process, is a significant input to learning. The student's readiness determines how well the learner will improve.

The second-highest indicator is online class participation, which obtained a mean of 4.42 and a standard deviation of 0.43, with a descriptive level of very high. Thus, this further explains that students always engage and manifest during online learning instruction. Learner participation is a significant factor affecting success in online courses (Bettinger et al., 2016), learner interaction is central to online learning participation. The concept of interaction is multifaceted, and different types of interaction affect learners' participation, satisfaction, and performance (Jung & Choi, 2002). Therefore, the confluence of different styles and characteristics of interactional aspects should be considered when promoting high-quality interaction among learners to support active participation and enhanced learning performance. However, student participation has also been reduced to a more focused concept, such as in-class online participation via internet-based media (Dewan et al., 2019; Rocca, 2010). Student engagement is a significant element of active and engaged learning (Bloom et al., 2005). Learners who do not physically see each other may develop new personalities and not feel compelled or pressured to participate in online dialogue. This relates to a study by Bigatel and Malizia (2018), who found that students who actively engage in their education tend to learn more thoroughly, retain information longer, develop stronger communication skills, exercise more critical thinking, and perform better academically, especially in online learning environments. The lowest indicator, albeit still very high, is the accessibility of internet connection, which had a mean of 4.32 with a standard deviation of 0.51, indicating that online learning instruction is always evident. The students must access the online course materials and other learning resources created by the online learning platform (Rice & Deshler, 2018). Whenever students are enrolled in one or more courses on a part-time basis rather than in fully online programs, problems arise. In any of these situations, contact between the primary school of participation and the provider of the online course is essential to divide and designate responsibilities for ensuring course accessibility. This one is supported by Dogniez's (2019) research, which found that the Internet is essential to implementing the goals for the future that the world has committed to by 2030. It possesses the potential to improve educational quality in a variety of ways. It provides access to a wealth of information, expertise, and educational resources, broadening learning opportunities in and out of the classroom.

Level of Student Learning Engagement of First-Year BEED Students

As shown in Table 2, the level of student learning engagement had an overall mean of 4.46 and a standard deviation of 0.27, indicating a very high descriptive level. This means that students' engagement with online learning instruction is sometimes active. Based on the data presented, it can be seen that all indicators in the level of student engagement in terms of social, cognitive, and behavioral have the same descriptive level, which is very high.

The level of student engagement in terms of social had the highest mean rating, 4.49, and a standard deviation of 0.35. This implies that online learning is consistently evident. Moreover, Richardson et al., (2003) discovered that students with high overall perceptions of social presence performed well in perceived learning and felt gratification from the instructor. They proposed that the focus should be on the interaction between students and teachers. Thus, active learning and student involvement are crucial to greater student learning and retention. According to Swan (2001), conceptual clarity, engagement with instructors, and active discussion among course participants significantly influenced students' motivation and assessed learning.

Table 2. Level of Student Learning Engagement

Indicators	SD	Mean	Descriptive Level
Social	.35	4.49	Very High
Cognitive	.39	4.44	Very High
Behavioral	.30	4.46	Very High
Overall Mean	.27	4.46	Very High

Note: $N = 88$, $SD = \text{Standard Deviation}$

While several studies on student engagement in online learning environments have been undertaken, Kuh (2001) revealed that students self-reported knowledge acquisition, improved social skills, and increased engagement in the learning process. As students are obligated to collaborate more cooperatively with their peers, their impression of their engagement in their education and participation in courses improves (Thurmond & Wambach, 2004).

The second highest indicator is cognitive, which got a mean rating of 4.44 and a standard deviation of .39. This result is congruent with the study of (Dismore et al., 2019), which states that the student engagement process encompasses the cognitive involvement of the student, in which a student puts quality effort into online learning and authentic participation in academic activities. According to Greene (2015), high levels of cognitive engagement are relevant resources invested by students and institutions to improve the overall learning experience. As student engagement increases, academic institutions improve student learning outcomes, performance, and reputation. Several studies have found connections between student engagement with course content and desirable outcomes. For example, engagement is positively associated with knowledge retention and cognitive development levels, effort to learn, self-involvement in education, pride in learning, mastery of a subject, working with others, knowledge transfer, creative problem-solving, and academic achievement (Alvarez et al., 2019).

Additionally, when students gain experience with online learning, they become more responsible for their learning, according to Richardson and Newby (2010). They explored the degree to which students cognitively interact with their online courses. The lowest indicator of student learning engagement is behavior, with a mean rating of 4.46 and a standard deviation of .30. This means that the student's engagement from online learning is always manifested.

According to Fredricks et al. (2004), behavioral engagement in academic activities, including attention, participation, and effort, is a strong and consistent predictor of children's educational outcomes, and students who are actively engaged with learning materials demonstrate more significant learning gains than those who are passively involved. It has been shown that classroom norms for behavioral engagement influence children's social behaviors and acceptance (Chang et al., 2004). As a result, classroom standards for prosocial and academic behavior may also be expected to influence engagement in primary school.

Relationship between Online Learning and Student Engagement of UM BEED Students

As presented in Table 3, the Pearson Product-Moment Correlation was used to test if there is a significant relationship between online learning and student engagement at a 0.05 level of significance. The result shows that readiness is not substantial to social and behavioral engagement. The accessibility of the internet connection is not significant to behavioral engagement. This finding is supported by Ali's (2018) study, which found that internet connection influenced student-teacher relationships, negatively affecting academic achievement. The teacher must create an academic structure that allows students to connect with the teacher and lowers the need for students to access the Internet for advice and help. Moreover, Online class participation is not significant to social engagement and behavior. Thus, the study found that online class participation indicators were irrelevant in the current research context, based on the available data and the research literature on assessing learner engagement within the module. It was found to have a weak positive correlation between students' social engagement and their performance in the final learning activity (Rajabalee et al., 2019). Also, students reported decreases in live lecture engagement and attendance, with 72 percent reporting that low engagement during lectures hurt their online learning experience. Most students reported struggling to stay connected with their peers and instructors and to manage the pace of coursework (Hollister et al., 2022).

Table 3. Significant Relationship between Online Learning and Student Learning Engagement

	Social	Cognitive	Behavior	Overall
Readiness	.181 (.092)	.353* (.001)	.169 (.115)	.316* (.003)
Accessibility internet connection	.354* (.001)	.441* (.000)	.191 (.075)	.445* (.000)
Online Class Participation	.118 (.273)	.334* (.001)	-.139 (.198)	.164 (.127)
Overall	.273* (.010)	.459* (.000)	.094 (.381)	.382* (.000)

$p^* < .05$

Consequently, the readiness and accessibility of internet connections are significant to overall student engagement, except for participation in online learning. Consequently, social and cognitive engagements are significantly related to overall online learning instruction, except for behavioral engagement. Therefore, online instruction is primarily related to overall student engagement. Thus, this is anchored to the study of Hassan (2012). He stated that the development of online learning offers significant opportunities for

teachers to serve as online mentors to support student engagement in learning. Online learning provides multimedia and instructional information. Therefore, online learning is a viable tool for helping students actively engage in online activities and discussions. By using electronic communications, online mentoring aims to develop the skills, knowledge, confidence, and cultural understanding of the less skilled individual. Online learning enables teachers to interact with students through e-mail, online chat, and online bulletin boards, regardless of geographic location. Consequently, learners can build their knowledge when they feel connected to the activity they engage in virtually.

Moreover, the results show that all indicators of online learning are significantly related to BEED students' learning engagement at the 0.05 level of significance. In addition, the results show a significant relationship between overall online learning and student learning engagement ($R: .000, p > 0.05$) among BEED students at the 0.05 level of significance. As reflected in the study results, internet connection accessibility has the lowest mean among all student engagement indicators. Therefore, the proposed recommendation is to provide internet access for better learning among BEED students as online instruction continues to emerge. According to Souter (2017), access to the Internet is key to realizing this future vision. It possesses the potential to improve educational quality in a variety of ways. It provides access to a wealth of information, knowledge, and educational resources, expanding opportunities for learning both in and out of the classroom. Teachers use online materials to prepare lessons, and students use them to broaden their learning opportunities. Teachers can provide more attention to individual students' needs and enhance shared learning using interactive teaching methods backed by the Internet. This can help to address educational inequities faced by girls and women. Internet access helps educational administrators reduce costs and improve the quality of schools and institutions. Furthermore, online learning appeals to a diverse group of students with a range of academic needs that traditional educational programs cannot meet. The desire to "provide quality education for all students, regardless of location or time" fueled the demand for online courses. The demand for versatile learning environments for prospective students hospitalized with phobias related to school environments includes single parents, those who have been expelled, and dropouts seeking a diploma. Many other exceptional cases have increased the number of available distance-learning courses and programs (Chaney, 2010).

CONCLUSION

Students rated online teaching highly. It also suggests that internet activities are important. Students can interact with one another and with teachers during lessons. Students can work together to solve problems through online classes and instructional activities. Similarly, first-year BEED students are believed to have high levels of learner engagement. This indicates that students have participated in, and even engaged in, online activities. They include awareness of social, cognitive, and behavioral signs. The observed language classroom environment, including relational processes between teachers and students, is consistently connected with students' educational and social achievement.

As a result, the researchers rejected the null hypothesis, demonstrating a significant correlation between online learning instruction and first-year BEED students' learning engagement. Furthermore, the p-values for the coefficients suggest that the relationships between online learning instruction and student engagement are statistically significant. Similarly, this strongly suggests that success in online instruction is determined primarily by student engagement.

Furthermore, to meet students' demand for internet access, teachers may focus on enhancing the instructional medium and take prompt action to help learners learn more efficiently and make teaching more meaningful to students' learning needs.

RECOMMENDATION

For school administrators, it is recommended that they provide students with options for the teaching modality to sustain a high level of quality education amid the pandemic. Also, teachers may further improve their instruction through blended learning to better meet the needs of new-standard learners. Similarly, their primary task is to monitor students' technological tools and specialized experience. Teachers must monitor their students' use of technological resources for online learning to ensure that no student falls behind in daily discussions. Additionally, students who select online learning must prepare for the variety of activities available online. Because the direct recipients of the research results are the first BEED students, they must consider whether the knowledge and skills gained through online learning will be valuable to them in their future careers. Moreover, *parents play* significant roles in this new normal of education. They must consistently guide their children as they learn independently at home, helping them become functional individuals in society. The ones who actively teach their children at home are the parents. Parents who homeschool face challenges such as limited media resources, time constraints, and limited technological proficiency. Encourage parents to adapt and adjust, particularly in this post-modern period. Parents must be able to lead, assist, and guide their children to participate in online learning so that they do not fall behind and can complete all assignments provided by the instructor. Lastly, *future researchers* may conduct another study to identify how online learning instruction affects student engagement. This can serve as a baseline for the development of their future studies and their significant outlook.

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