Perceived Proficiency with Technology and Online Learning Expectations of Students in the Graduate Program of One State University in the Philippines

Julie Fe D. Panoy, Rose R. Andrade, Loraine B. Febrer, and Delon A. Ching

Abstract—COVID-19 has imposed changes to the educational system shifting from conventional classroom setting to online learning. Assessing students’ proficiency with technology and expectations for online learning are vital for their success. Hence, this study explores the perceived proficiency with technology and online learning expectations of graduate students employing descriptive-correlational design. The study utilized survey questionnaires to examine their proficiency with technology and expectations for online instructor, course content, social interaction and course navigation. The findings suggest that the graduate students are proficient with technology. Moreover, a significant relationship exists between proficiency with technology and online expectations of graduate students. In addition, there is a moderately high expectation as to course navigation. Moreover, a significant relationship exists between proficiency with technology and online expectations of graduate students. Bridging the gap between students’ expectations and the actual experiences offered to them play a crucial role in ensuring that teaching and learning outcomes are achieved. Intensive understanding and awareness of their expectations could aid higher educational institutions in planning, designing and modifying online courses that responds to students’ needs. It is recommended that the sources of expectations be further explored.

Index Terms—Graduate students, online learning expectations, proficiency with technology.

I. INTRODUCTION

The COVID-19 pandemic has forced changes to people’s lives all over the world in an unimaginable way [1]. Such unprecedented disruptions caused more challenges than opportunities to different sectors of the society. While numerous daily practices were temporarily, yet completely prohibited to minimize the transmission of the virus, work and businesses were compelled to take a different approach by transitioning to a virtual set-up [2]. The educational system all over the world was no exemption.

In Southeast Asia, the pandemic has forced the education sector to prepare the system, along with the required technological facilities for online learning. [3]. Most notably, the system has clearly been steered away from the conventional classroom setting and has shifted to online learning wherein the teaching and learning process is remotely facilitated through different digital platforms [4]. Although the Philippines has adapted to technological advancements over the years, being ranked 83rd out of 142 countries in terms of technological readiness only proves that it is far from being at par with other countries [5]. Nevertheless, as advancement in technology happens at a fast pace, its use in the educative process races with it [6]. If anything, the shift from face-to-face to online learning due to the health and safety risks brought about by the pandemic only highlighted the important role that technology plays in the educational system. Conventional face-to-face classroom interaction was being replaced by video lectures and real-time video conferences involving tools such as Microsoft Teams, Zoom, Google Meet or similar platforms [7]. In place of the traditional note taking, presentations, video recording and written lectures are being sent out to students [8], [9].

In higher education, online learning can already be observed in some schools and universities even before the pandemic. In fact, online education is no longer a trend, but mainstream [10]. Today’s version of distance education is dominated by online education enabled by computer and internet connectivity in delivering the course content [11]. For the most part, students perceive online courses as a positive learning environment [12] as it provides students with flexible schedule and convenience which is seldom true in a traditional face-to-face course [13]. Distance education, such as those offered in online learning, is seen by graduate students as opportunity for lifelong learning as it conforms to the flexibility relative to the restrictions of adult life [14]. Indeed, due to the community constraints enforced during the pandemic, online learning proves to be even more essential in supporting the teaching and learning process [15]. However, engaging in an online course comes with some technological prerequisites [16] including proficiency with technology as one of the key priorities [17].

Thus, the main objective of this study is to investigate the relationship between proficiency with technology and online learning expectations of graduate students in one state university in the Philippines. Specifically, the study intends to determine the extent of student-respondents perceived level of proficiency with technology and describe the
perceived expectation level of the student-respondents in online learning aspects such as the course instructor, course content, social interaction and course navigation. Further, the study aims to determine whether a significant relationship exists between the level of proficiency with technology and the perceived expectation level of the student-respondents in online learning. From this, insights on online expectations of the graduate students could be better understood thereby aiding higher educational institutions in planning, designing and modifying online learning delivery with consideration on the students’ level of proficiency with technology.

**II. LITERATURE REVIEW**

**A. Proficiency with Technology**

Proficiency with technology refers to the capability of using a wide variety of technological tools and processes in performing necessary tasks and achieving meaningful results [18]. This includes the use of computers and gadgets, processing software programs like Microsoft Office, and email management. Moreover, it also involves computer software and hardware troubleshooting [19]. Undeniably, students whether in the undergraduate or graduate level, have been heavily exposed to the use of technology in their everyday lives thus, institutions expect them to be highly technologically proficient [20]. The perception of graduate students showed that they considered themselves technologically proficient in terms of email management, presentation software usage, search engine navigation and word processors utilization [16]. However, a different study showed students’ performance in online courses does not exhibit impressive technological literacy [21]. Graduate students though claiming to have trainings on search engines usage, navigating and filtering information still proves to be ineffective [22]. By actual gauging technology proficiency among graduate students who were performing multi-role as a student and as teachers in their own stations, comfort level and confidence in integrating technology into their educational environment could be better understood and enhanced [23].

Thus, it is imperative for educational institutions to assess students’ proficiency with technology, as this serves as the foundation for the delivery and facilitation of online instruction. In higher education, researches on technology education (TE) models have been explored in an attempt to establish comprehensive eco-system for teaching and learning in the digital era [24]. Looking specifically at the graduate students will not only advance the scholarship elements in the teaching and learning process, however, their perspectives are oftentimes overlooked [19], [26] even when the democratic structure of higher education puts special emphasis on encouraging the students to express themselves [27]. Being the main consumer in the educational system, students, and their expectations on how their own learning can be maximized should be taken into consideration with utmost importance [28]. Teachers and school administrators acknowledge that being able to identify students’ expectations and how those expectations affect student performance and persistence are essential for effective learning to take place [29]. Students’ expectations influence their course experience, and their attitude towards the experience influences the types of support they need [30]. In addition, it greatly contributes to their learning in terms of the depth of motivation, the extent of engagement, and the investment of effort [31]. It may not be the sole determinant of a students’ academic performance, but students’ expectations certainly have a great impact on their perception of the learning environment and consequently, their study behavior [26]. Expectations are the fundamental principles of human, the attainment of which affects one’s choice of subsequent behavior [19]. Ultimately, determining students’ online learning expectations is a crucial step in transitioning from face-to-face to the virtual set-up [32]. It should be tackled before introducing a new learning environment since they influence the students’ perceptions and, in turn, not meeting them negatively affects the learning-related student characteristics [31].

Having discussed the importance of assessing students’ expectations, it would be necessary to look into their presumption of what the pandemic is seemingly forcing them into, that is, online learning sometimes referred to as distance learning, e-learning, and web-based learning [32]-[35]. Of the aspects comprising students’ online learning expectations, course instructor, course content, social interaction, and course navigation have been widely identified [13], [19], [25], [36]-[42].

Considering many aspects, the teaching and learning process in a web-based environment is not entirely different from that of other educational context [43]. As the teacher in the face-to-face setup is recognized as the facilitator of learning, the course instructor in an online learning likewise takes on such role. Contradictory to a common misconception that an online classroom can stand on its own, the instructor must serve as an effective and efficient facilitator of online learning [36]. After all, what a student expects from a teacher in an online learning does not totally deviate from that of a teacher in a conventional classroom setting. An integral ingredient for an online learning to be successful is the way the instructor clearly communicates the goals of the course and the competencies the students shall aim to acquire [21]. In addition, students enrolled in e-learning rely on the instructor to provide a specific course schedule, for example, submission of course requirements. More importantly, providing constructive feedbacks to students in a timely manner [44], [45], encouraging the utilization of other means of communication, organizing online forums for students’ learning-related concerns, having an appropriate online tone, and being responsive to students’ tone in the course room are other traits an online instructor must possess. To sum it up, the teacher in an online learning
environment must cover all its dimensions by being actively involved in the students’ learning process.

Since majority, if not all, of the students have little to no experience when it comes to online learning, there is a glaring tendency for them to be excessively dependent on their online instructor. However, this can be prevented by utilizing a well-developed syllabus that will proactively cater to the course dynamics [36]. While the human component of online learning, the instructor, plays a vital role, an equally important element is the course design [44], [45], which primarily includes the content [42]. This must be adjusted to cater to the demands of the online learning environment while still ensuring that the students will similarly acquire the necessary competencies and develop the same level of mastery as they should in a face-to-face learning setup [36]. Hence, it should foster the creativity among students so that they can translate their learning into skillset necessary to be productive in the reality of their everyday living [46], [47].

An effective online course content encourages students’ self-reflection [48]. Being geographically dispersed, self-reflection provides the student a perfect avenue for understanding and making decisions in regard to one's own learning execution identified with critical thinking, extended agreement, or obtaining new points of view [49]. Unsurprisingly, students who reflect on their learning—whether face-to-face or online—perform better than those who do not [50]. Another vital component of the course content to maximize student engagement is promoting active learning among students. Active learning strategies proved to work with a variety of learning styles and address a wide range of learning needs making it an effective technique to enhance online learning during all phases of the teaching-learning process [51]. Moreover, students of online learning crave for a healthy balance between small and large group discussions as these enable them to have a venue for meaningful exchange of thoughts. Profound group discussions ignite reflective thinking when students brainstorm and provide constructive criticisms [52].

Learners in an online learning environment need social connections [37]. Such connections can be established through interacting with other stakeholders virtually. In online settings, social interactions are often described by one’s perceptions of presence of others [38]. Despite the physical separation, students expect to meet new people and create a community that values respect and positive relations with each other. Having a sense of connectedness has a massive impact on the students’ involvement, cohesiveness, and belongingness in an online learning community. In addition, social interaction exhibits positive linkage with learning outcomes [53] and student satisfaction [39].

Finally, course navigation cannot be overlooked to ensure the success of online learning as logical structure and intuitive course navigation is supportive of effective and efficient student learning [54]. An effective course organization involves a straightforward course delivery system. It relies heavily on how the course is sequentially organized so that the students can easily navigate through them. This will give students an easy access to the topic titles, assigned tasks, course materials and deadlines. It is also a requirement for the course forums, as well as course instructions, to be clearly stated. All these are contributory in providing the students an organized atmosphere of the course. Students believe that a set of strong course organizational skills is needed by instructors in order to deliver successful online learning [55]. These skills include giving clear and precise assignment instructions, designing course delivery system that is easy to navigate and providing course materials that are easy to locate. Despite the expectations expressed by the students, [56] noted the underappreciation of the significance of having an organized course delivery among their instructors is still apparent. These inconsistencies in the course instruction and navigation in turn gives additional burden to students [57].

The challenges posted by online learning is evident in all levels. However, graduate students’ expectations and needs can be more complicated as they bring with them a set of social and organizational experiences different from that of the undergraduates [25]. Attrition rates in the graduate program especially in the distance education is high [58]. Therefore, the importance of assessing graduate and professional education expectations and proficiency with technology proves to be of utmost importance [16], [25]. Online graduate students’ expectations and experiences are important sources of information in understanding the effective ways by which instructors can successfully deliver online learning. This information and data advance the scholarship not only in the online graduate learning but as well as that of the undergraduate.

This study therefore aims to look into the expectations of the graduate students in their online learning in relation to their perceived technological proficiency as this could possibly allow the university to proactively plan on addressing concerns prior to the students’ entrance in the online program. This assumption is based from the premise of the Expectancy Theory. This theory proposes that an individual behaves or acts in a certain way that is motivated by anticipated results or consequences [59]. It is a motivational principle that is being used to explain consumer satisfaction after trying out a product. Over the years, researchers assimilated this theory in the educational context. This theory suggests that if there is a discrepancy between the process and the initial expectation of the consumer, that is, the results are lower than the expectations set, this will cause a degree of dissatisfaction with the entire experience [60]. Clearly, the outstanding concept in this theory is expectations. Students of an online learning educational environment attend classes with specific learning expectations that need to be addressed as a way of maximizing their learning experiences [61]. Having knowledge and understanding of student expectations and how those expectations impact student performance and persistence is the first step in developing programs for helping to students develop realistic expectations for online courses [62]. Indeed, listening to the voice of the students is essential, more so, making sure that the online learning environment is tailor-fit to respond to that expectation is a different and a more complex story [40]. Nevertheless, it is necessary to make sure online learning delivers quality education just as the face-to-face learning environment will.

Based from the previous literatures, baseline information
of students’ technology capabilities and online learning expectations are crucial in their success in web-based learning. However, these two aspects have received little attention [16], [19], [27]. Higher educational institutions should embrace the urgency to consider students’ perceptions and meet their expectations for a victorious online learning [62]. Furthermore, this scenario of shifting from traditional face-to-face to online distance learning is also true to the graduate level, which according to literature is not very well explored. The needs of the graduate students are often times overlooked based on the limited number of available researches focusing on their experiences and needs in an online environment [25]. While there have been studies concerning the needs and performance in the undergraduate program, these may not fully capture the learning experiences and knowledge-seeking process true to the graduate level. Though it is likely that platforms and approaches to online distance learning applied in both graduate and undergraduate level may be similar, graduate students’ unique sets of experiences, diverse nature of work environment and the varying amount of time spent in the professional practice may imply different sets of needs and expectations. The dearth of research on this area suggests a need to expand the conversation about how graduate students learn in an online environment, particularly how their perception of proficiency relates to the expectations they bring as they engage in the online learning opportunities.

III. METHODOLOGY

A. Research Design

For this study, descriptive and correlational method of quantitative research was used to describe the proficiency with technology and expectation of the students in online learning. Likewise, this method was also employed to determine if there is a significant association between the extent of students’ proficiency with technology and perceived online expectation level of the student-respondents. The research design used describe the parameters set in the study and later depict the relationship between and among them [63].

B. Respondents of the Study

The respondent pool was composed of 301 graduate students in a State University in Laguna. Purposive sampling technique was utilized in the enlistment of respondents for this study. This sampling technique is usually applied when the researcher is interested on explicit seating a capability profile of the respondents. The google form was provided to the targeted respondents through the assistance of the teachers of different subjects to effectively choose students that purposively fit the criteria. Table I below shows the distribution of the respondents according to field of specialization.

As shown in the table, most of the respondents in this study are educational management students with 75 (24.9 %), followed by English major students (51; 16.9%), Science major students (43; 14.3%), Filipino major students (34; 11.3%), Social science students (31;10.3%), Physical Education major students (23; 7.6%), Mathematics major students (20; 6.6%), Guidance and Counseling major students (16;5.3%) and TLE/HE/TVL major students (8;2.7%).

| Major                      | Frequency | Percent |
|----------------------------|-----------|---------|
| Educational Management     | 75        | 24.9    |
| English                    | 51        | 16.9    |
| Filipino                   | 34        | 11.3    |
| Guidance and Counseling    | 16        | 5.3     |
| Mathematics                | 20        | 6.6     |
| Physical Education         | 23        | 7.6     |
| Science                    | 43        | 14.3    |
| Social Science             | 31        | 10.3    |
| TLE/HE/TVL                 | 8         | 2.7     |
| Total                      | 301       | 100.0   |

C. Instrumentation and Data Collection

Students Expectations of Online Learning Survey (SEOLS) by [19] was utilized in this study. The indicators were fully adopted based from the constructs of the SEOLS proponents. As a result of their reliability test it was found out that the items in each of the parameter posted an excellent internal consistency. The parameters on proficiency with technology, expectations of the course instructor, course content, social interaction and course design posted Cronbach’s alpha of 0.95, 0.92, 0.90, 0.86 and 0.95 respectively. The data collected through an online survey which lasted for a month. The researchers received 301 usable surveys with a response rate of 68% from the total number of students in the campus for master’s level.

D. Data Analysis

Descriptive statistics such as frequency, percentage, mean and standard deviations were used in this study. The students’ perception of proficiency with technology and perceived expectation level was tested for normality using the Shapiro Wilk test which reveals a normally distributed assessment.

Since these data sets did not violate the assumption of normality, then the Pearson-Product Moment Correlation was the most appropriate to use to determine the significant association between proficiency with technology and online learning expectations.

IV. RESULTS

This section presents the students’ description on the level of proficiency with technology and perceived expectation level of students in online learning.

A. On Proficiency with Technology

Table II shows the extent of students’ description of their proficiency with technology. It is notable that the students are proficient in using Microsoft Word Program with a mean of 3.26 and sd of 0.60. However, the student-respondents are moderately proficient on trouble shootings such as computer software (x̄=2.33) and basic technical problems hardware (x̄=2.32). Over-all, graduate students are considered in the technologically proficient (x̄=2.96) level.
This implies that graduate student-respondents are capable in utilizing the technology in terms of the areas listed. Likewise, it is evident that the respondents are only moderately proficient in terms of troubleshooting. This may be surprising given that these technological tools, processes and online platforms are commonly used by graduate students in their educational teaching and learning process. Not to mention that they themselves were generally teachers in their own areas who are expected to be using technology in their classroom, whether in the traditional in-classroom setting or in the online learning set-up. Additionally, classroom teachers are expected to integrate technology in their K-12 classrooms [64]. In the Philippine setting, graduate students who were teachers by profession and respondents of this study, are expected to adhere to the Philippine Professional Standards for Teachers (PPST) in which specific strands such as Strand 1.3 -Positive use of ICT and Strand 4.5 Teaching and learning resources including ICT, expects if not imposes, that they should be at a certain level of proficiency in terms of “educational technology”, in general. However, as revealed in the findings, the greatest height of proficiency with technology, in the context of education, was still not yet achieved based from their self-reports.

Furthermore, several studies have documented the prevalent use of technology use by teachers in facilitating teaching and learning including Power Point [65], internet or web-based applications [66], [67] tablet, iPads or mobile devices [68]-[70], social media networking [71], virtual classroom [72], and game-based applications [73]. Further, in the review conducted by [74], it was revealed that teachers are using technology in variety of purposes whether instructional and administrative. Specifically, teachers are expected to be using technology in instructional preparation, teacher-directed instructional delivery, student homework and instructional assessment [75]. From this, literature suggests that teachers who were the respondents of the study were generally expected to have achieved a high level of proficiency in terms of technology use.

Moreover, the moderate proficiency in software and hardware troubleshooting reported in the study also reveals an area of discussion as this too are important component of one’s proficiency with technology. However, this may be justified by the limited opportunity to engage in these aspects of technology use, that is, seldom use has led to decrease in the capability to employ these technological processes [76]. Another area of concern that could be raised is the teacher’s training in handling technical problems in both hardware and software. In reality, troubleshooting is normally handled by the schools’ technical support. Given this scenario, it is significant that universities take initiative in conducting technology needs assessment and survey of technology proficiency among students even in the graduate level [16]. Guiding online students is a unique challenge considering diverse student profiles, communication methods, technological competencies, and the integration of technology for communicating and collaborating with students [77].

### TABLE II: PROFICIENCY WITH TECHNOLOGY

| Indicators                                                                 | Mean | SD  | Interpretation |
|---------------------------------------------------------------------------|------|-----|----------------|
| 1. I am proficient in using a computer on my own.                         | 2.99 | 0.55| Proficient     |
| 2. I am proficient in using a word processing software program like Microsoft Word on my own. | 3.26 | 0.60| Proficient     |
| 3. I am proficient in using email on my own.                              | 3.18 | 0.57| Proficient     |
| 4. I am proficient in attaching files to email messages on my own.        | 3.23 | 0.60| Proficient     |
| 5. I am proficient in using the internet on my own.                       | 3.12 | 0.59| Proficient     |
| 6. I am proficient in doing internet searches for personal reasons on my own. | 3.18 | 0.55| Proficient     |
| 7. I am proficient in doing internet searches for school work on my own.  | 3.17 | 0.56| Proficient     |
| 8. I am proficient in utilizing Google Classroom.                         | 2.82 | 0.60| Proficient     |
| 9. I am proficient in computer software troubleshooting.                  | 2.33 | 0.76| Moderately Proficient |
| 10. I am proficient in basic technical problems (hardware) troubleshooting. | 2.32 | 0.80| Moderately Proficient |
| Overall                                                                  | 2.96 | 0.46| Proficient     |

Legend: 3.50-4.00- Very High Proficiency (VHE), 2.50-3.49- High Proficiency (HP), 1.50-2.49- Moderately High Proficiency (MHP), 1.00-1.49- Not Proficient

### B. On Online Learning Expectations

It can be gleaned from Table III that graduate students have a very high expectation for their online instructor ($\overline{x} = 3.76$). That is, they are of the supposition that the instructor will promote supportive online learning environment, set clear goals of the course, give time-bound requirements, and provide prompt feedback on those. Additionally, graduate students expect their online instructors to have appropriate online tone, to be responsive to student’s tone and to ensure their presence in discussion forums.

### TABLE III: EXPECTATIONS FOR THE ONLINE INSTRUCTORS

| Indicators                                                                 | Mean | SD  | Interpretation |
|---------------------------------------------------------------------------|------|-----|----------------|
| I expect the course instructor…                                           |      |     |                |
| 1. to be clear in communicating the goals of the course.                  | 3.80 | 0.4 | VHE            |
| 2. to be clear in communicating expectations of me.                       | 3.74 | 0.4 | VHE            |
| 3. to post course requirements within an agreed upon time.                | 3.79 | 0.4 | VHE            |
| 4. to provide constructive feedback on assignments                        | 3.77 | 0.4 | VHE            |
| 5. to have a consistent presence in the discussion forums.               | 3.75 | 0.4 | VHE            |
| 6. to promote a supportive online learning environment.                   | 3.81 | 0.4 | VHE            |
| 7. to have an appropriate online tone.                                    | 3.71 | 0.4 | VHE            |
| 8. to be responsive to students’ tone in the course room.                 | 3.71 | 0.4 | VHE            |
| 9. to provide instructor contact information to students.                 | 3.78 | 0.4 | VHE            |
| Overall                                                                  | 3.76 | 0.3 | 7 VHE          |

Legend: 3.50-4.00- Very High Expectation (VHE), 2.50-3.49- Moderately High Expectation (MHE), 1.50-2.49- Moderately Low Expectation (MLE), 1.00-1.49- Very Low Expectation (VLE)

These may seem demanding on the instructors’ parts; however, these same findings were supported by earlier researches. For instance, [25] suggest that graduate students expect more than the timely and regular feedback from the faculty but also the thoughtful evaluation of their
performance delivered in a positive and encouraging context which in turn motivates them to engage in online learning. This is especially true when graduate students were at the transitioning stage from the traditional face to face to online setting. It may as well be in this context that they set very high expectations from their instructors to be present to guide them throughout the course thus ensuring that they were learning the materials correctly. This is also parallel to the nature of student-faculty connectedness in the graduate level as described by [78] as a mentoring relationship with clear expectations on teacher accessibility, engagement and grading practices. Here, the graduate student being more novice member of the professional community seeks for guidance and advice for professional development from the relatively more seasoned practitioner, who is the faculty, which in turn provides supporting and encouraging advice from his or her experience. This may also justify why they highly expect their online instructor to be consistently present in the discussion forums and even provide their personal contact information where they could be reached when needed. Indeed, it is evident in this study that graduate students highly expect their online instructor to be virtually present during online education [79], whether synchronous or asynchronous. There is a need for students to believe that their instructors were fully engaged in the course or asynchronous. There is a need for students to believe that their instructors were fully engaged in the course communication in general to guarantee learner engagement in the online learning [80]. Finally, with the overall expectation rated being very high on the scale, this study along with that of Garrison [81] supports that online instructor plays a key role in student’s online experience.

Table IV displays the online expectation of the students on the course content. It reveals that students have a very high expectation (\( \bar{x} = 3.53 \)) on the course that would provide opportunities that are substantial and relevant to their daily living (\( \bar{x} = 3.64 \)). The students also expected that the materials provided would enable them to be active in learning (\( \bar{x} = 3.63 \)). Results showed that students learned better when courses and assignments were relevant to real life; designed to improve their reflections, critical thinking, and problem-solving skills; and supported with a variety of tools including discussion forums, videos, videoconferencing, and online library research [25].

![Table IV: Expectations about the Course Content](image)

It is also affirmed that students who find the learning materials challenging and meaningful are more likely to value their learning [82]. Graduate students, being in the practice of their profession would practically be more engaged and mindful of the authentic activities that will give them opportunity to apply theories into practice in their respective fields. To achieve these, online courses within the curriculum must be anchored on the varying needs and interest of learners that would link their learning to real-world experiences.

Conversely, it is found that respondents have moderate expectations in online discussions, whether small group or large group discussions. Though online discussions could serve as venue for professional interaction with peers and colleagues of the same profession, the learning environment where graduate students are immersed offers unique barriers in making connections with peers [83], including challenges associated with creating relationships at a distance. Thus, collaborative work and effort should be imposed in the course organization that would attain meaningful connections in each discipline.

Furthermore, the lowest mean expectation was that of an online course being as rigorous as face-to-face courses (mean=3.33). Online and face-to-face learning have been found to be at par in terms of academic and professional outcomes [84] yet disparity within the methods may influence the graduate students’ experiences and their views on academic workload. Relative to this, despite the stress-related concerns given by online learning, graduate students’ preferences for online learning courses have the potential to provide a clear and coherent structure of the learning material, and to encourage self-regulated learning in dealing with course content.

Table V shows the online learning expectations of the graduate students on social interaction. It reveals graduate students’ belief that comments should be delivered in a respectful manner (\( \bar{x} = 3.82 \)) given that the class is composed of educators who are well-guided by the ethics of teaching profession.

![Table V: Expectations about Social Interaction](image)

On the other hand, their low agreement on some of the statements suggest that the respondents do not highly expect
their interaction to be as frequent as it would be in a traditional face-to-face setting. This leads them to have a moderate expectation that they will also have a limited opportunity to engage in activities that will help them know their online peers better. Practically, establishing social interaction is a challenge for online instructors and students alike since the interaction will be purely dependent on the activities tailored by the faculty to promote communication and interaction. In contrast to the face-to-face setting, in an online set-up, students lack informal spaces [85] such as hallways, library, and cafeteria which most often serves as the space where students get to know each other while doing collaborative activities.

Nevertheless, the respondents of this study generally expressed a very high expectation (\(\bar{x} = 3.59\)) to social interaction thus showing a strong belief that individual’s perception on the connectedness with the learners is an imperative aspect of online learning. This view is similar to previous findings which indicated that both the students and the faculty agreed that social interaction in the course was important [86]. Specifically, the importance of social interaction in an online learning experience among graduate students was highlighted stating that interactions with peers, as well as with instructors, is one of the five major themes in a graduate students’ online experience [25]. Thus, social interaction needs to be extended in virtual setting as it enhances higher order thinking [87]. Perceptions of social interaction are influenced by the involvement, cohesiveness and belongingness of each individual in an online learning community [88]. Furthermore, intimacy, immediacy and group cohesion are the vital constructs of perceived social presence. Online social presence may not be the sole essential factor in motivating students to learn but students’ perception of teacher presence was found to play a huge role [89].

| Indicators                                      | Mean | SD  | Interpretation |
|------------------------------------------------|------|-----|---------------|
| 1. delivery system to be easy to navigate      | 3.43 | 0.5 | MHE           |
| 2. forum names to be clearly stated            | 3.30 | 0.6 | MHE           |
| 3. topic titles to be clearly stated           | 3.30 | 0.6 | MHE           |
| 4. materials to be easy to locate             | 3.40 | 0.6 | MHE           |
| 5. instructions to be clearly stated           | 3.42 | 0.6 | MHE           |
| Overall                                        | 3.59 | 0.4 | MHE           |

**Legend:** 3.50-4.00- Very High Expectation (VHE), 2.50-3.49- Moderately High Expectation (MHE), 1.50-2.49- Moderately Low Expectation (MLE), 1.00-1.49- Very Low Expectation (VLE)

Table VI presents that student-respondents rated their expectation about course navigation as moderately high (\(\bar{x} = 3.59\)). It can be surmised that graduate students have a belief that online course could offer a fairly organize course material that is easy to navigate. This moderately high expectation could be rooted in their cognizance that the pandemic has forced most institutions to shift from traditional to online delivery mode. Similarly, the institution considered in this study is on its maiden years of offering graduate course via online delivery mode. An effective course navigation relies heavily on the organized sequencing of the course material which students can easily navigate. According to [87], students believe that a set of strong course organizational skills is needed by instructors in order to deliver successful online learning. These skills include giving clear and precise assignment instructions, designing course delivery system that is easy to navigate and providing course materials that are easy to locate. Thus, course navigation cannot be overlooked to ensure the success of online learning that is supportive of effective and efficient student learning.

**C. On Association of Proficiency with Technology and Perceived Online Learning Expectations**

Table VII summarizes the correlational results between students’ description of proficiency with Technology and Perceived Online Learning Expectations at the \(p > 0.01\) level. Findings suggest that proficiency with technology is significantly associated with the perceived expectations of the students in terms of Online Instructor (\(r = 0.248\)), Course Content (\(r = 0.235\)), Social Interaction (\(r = 0.237\)) and Course Navigation (\(r = 0.280\)). Correlational Analysis implies that being proficient with technology indicates a high expectation on the successful implementation of online learning courses. This signifies that the capability to use technological tools and processes when students are to be exposed in an online learning delivery influences their expectations which become their standards and bases in evaluating their overall learning experience. This is in coherence [31][90] that when students set high expectations of the aspects they want to achieve they enroll in an institution and the specific outcomes they want to attain; it becomes the drive that pushes the achievement of such proficiency. Students tend to persist in online learning when the expectations set are met which in turn could lead to learning satisfaction [19].

**TABLE VII: TEST OF SIGNIFICANT ASSOCIATION**

| Variables under Study                      | 1  | 2  | 3  | 4  | 5  | 6  |
|-------------------------------------------|----|----|----|----|----|----|
| 1. Proficiency with Technology            | 1  |    |    |    |    |    |
| 2. Expectations for the Online Instructor | .248*| 1  |    |    |    |    |
| 3. Expectations about Course Content      | .235*| .672*| 1  |    |    |    |
| 4. Expectations about Social Interaction  | .237*| .602*| .786*| 1  |    |    |
| 5. Expectations about Course Navigation  | .280*| .462*| .637*| .585*| 1  |    |

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

**V. LIMITATIONS**

It is important to note that there were some limitations of the study including the absence of random selection with
The majority of the respondents being educational management students. Since the data gathered were self-reported using survey forms, further studies may include an exploration of sources of expectations. Moreover, qualitative research design could be suggested for future study to provide an intensive information of students’ online learning expectations and needs.

VI. CONCLUSIONS AND RECOMMENDATIONS

As the online education continues to grow exponentially, rigorous and intensive study of students’ perceptions of their proficiency with technology and expectations in online courses cannot be overemphasized. Assessing students’ needs and meeting their expectations in an online learning is indispensable for their success. In this study, graduate students rated a very high expectation on their online instructors, course content and social interaction. They perceived that the virtual presence of the instructor which is manifested in the communicative aspects of online learning is imperative in a meaningful learning experience. Prompt, timely and constructive feedback is required to create a supportive online learning environment. Likewise, results from this study also confirmed that interaction between the “learners-learners” and “instructor-learners” is highly expected to be felt in this educational set-up. Therefore, emphasis on improving social interaction should be given a paramount attention. On the other hand, students are in consensus that the course materials should provide real-life context that would enable active learning. Accessibility and availability of the course materials are also expected by the students to obtain a mastery of the learning outcomes. Additionally, a clear and consistent course navigation and organization should be taken into consideration. Moreover, it was found out that there is a significant relationship between proficiency with technology and online learning expectations of graduate students. Thus, the ability to use technology is associated to the graduate students’ online learning expectations which become the bases for judging the quality of their academic experience.

The outcome of this study recommends that a deeper understanding and awareness of graduate students’ expectations could aid higher educational institution in planning, designing and modifying online courses. Since students are the key elements of online learning, attaining a quality course delivery system involves ensuring that their expectations are aligned to the actual experience offered to them. Furthermore, for an institution to be responsive, it should meet if not exceed the expectations of their students. Bridging the gap between students’ expectations and the actual experiences they come to acquire is vital in ensuring that teaching-learning outcomes are achieved.

CONFLICT OF INTEREST

The authors declare no conflict of interest in the conduct of this study.

AUTHOR CONTRIBUTIONS

JFDP organized the group to work a research paper and works on the analysis and interpretation based from the results of the study. RRA & LBF wrote the research abstract, introduction, methodology, limitation and conclusions. DAC searched the research instrument, messaged the proponents for permission, had the data collection and statistical treatment and works on the technical editing of the paper.

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D. Ruggiero and C. J. Mong, “The teacher technology integration experience: Practice and reflection in the classroom,” Journal of Information Technology Education, vol. 14, 2015.
Julie Fe D. Panoy is a tertiary educator and aspiring researcher from Laguna State Polytechnic University-San Pablo City Campus. She earned her BS elementary education major in general science (2007) and MA in teaching science and technology (2010) at LSPU-SPC Campus while she finished the doctor of philosophy in science education (2020) at Philippine Normal University-Manila. At present, she serves as the associate dean of the College of Arts and Sciences and a faculty member of the College of Teacher Education-Graduate level at LSPU where she teaches research and science-related courses. Her fields of interests include science education, educational technology and instructional material development.

Rose R. Andrade is the research implementing unit and mathematics instructor in the College of Teacher Education of Laguna State Polytechnic University, San Pablo City Campus. She teaches mathematics and professional subjects in the undergraduate program, statistics and methods of research in the graduate program. She served as panel expert and thesis adviser to students majoring mathematics. She earned her bachelor's degree of secondary education major in mathematics in Laguna College and Master’s degree in mathematics education in Philippine Normal University. She is a lecturer in licensure examination for teachers under St. Louis Review Center. She has published research articles on mathematical engagement, collaborative approach problem-solving and mathematical creativity in an ASEAN Citation Indexed (ACI) and Scopus-indexed journals.

Lorraine B. Feber is a Grade 10 Mathematics Teacher at Prudencia D. Fule Memorial National High School. She is one of the research coordinators at the same school. She is currently enrolled at Laguna State Polytechnic University – San Pablo City Campus for her Master of Education major in Mathematics degree. She presented one of the researches she co-authored in the Conference of Basic Education Researchers – Southeast Asia in 2018.

Delon A. Ching, is the chairperson for Research and Development Office and Mathematics Instructor in the College of Teacher Education of Laguna State Polytechnic University, San Pablo City Campus. He teaches mathematics and professional subjects in the undergraduate program, statistics and methods of research in the graduate program. He served as panel expert and thesis adviser to students majoring mathematics and educational management. He earned his bachelor’s degree in Manuel S. Enverga University Foundation, master’s degree in Southern Luzon State University and doctorate degree in Laguna State Polytechnic University.