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Online Learning Experience in the Graduate Level: An Exploratory Study

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Abstract

The purpose of this study is to identify perspectives of the graduate students at the Polytechnic University of the Philippines taking Master's in Public Administration on E-learning during the Coronavirus pandemic so that the E-learning system can be improved and strengthened. This study followed the constructivist learning theory in which learners evaluate and encode Information based on their perceptions and experiences. Descriptive-quantitative is used in this study to describe general or specific behaviors and attributes observed and measured. This study has made used of a researcher's made survey questionnaire to elicit student respondents' demographic characteristics and their perceptions on online teaching and learning. The results revealed that respondents occasionally encountered difficulties while courses were conducted online. This order of problems that arise in online learning changes the framework of the crisis caused by the pandemic. Dropping signals during videoconferences are followed by the teacher's lack of technical skills and their teaching style inappropriately tailored to the online situation. However, they rated a positive impact on the ability to learn and Integrate Information in the framework of solely online learning. Moreover, the respondents concluded that different platforms available for teaching online were useful.

Based on these findings, the researchers recommended addressing the technical problems encountered during the online class. Moreover, proper training for teachers must be considered to meet the skills needed in the conduct of the online class.

Keywords: graduate students, online learning, exploratory, graduate level, perception

Introduction

The coronavirus pandemic has altered the teaching-learning process in higher education institutions and the interactions between teachers and students. Universities were forced to conduct all their activities with students solely online due to the pandemic. Many governments made steps to prevent the virus from spreading and preserve the educational process's continuity and colleges worldwide implemented online learning. While most people think of web-based learning as an alternative to traditional learning, it became a vital part of school operations during the Coronavirus outbreak. Students' perceptions of this method of education may change because of this concept shift, and their perceptions may differ from those obtained in research before the epidemic.

E-learning can improve the educational process due to its complex qualities and different aspects. Teachers and students, on the other hand, must know how to properly incorporate into the teaching and learning process to impact collaboration and performance. Institutions, students, and technology all play a role in determining the effectiveness of E-learning. (Tham and Werner, 2005). Teachers that know how to use the technologies to improve learning, engage with students, and create a comfortable learning atmosphere are referred to as institutions—students who may feel iso-

lated due to a lack of physical companions. *Technology* is a tool that can be employed in the learning process.

E-learning, as opposed to face-to-face learning, has grown in popularity due to its flexibility in delivering education and gaining access to content and resources. E-learning eliminates boundaries of space and time due to its flexibility, as the user has access to an extensive range of knowledge. In addition, e-learning permits students to learn at their own pace and inspires them to work with their colleagues. Moreover, in the study conducted by Al-Dosari (2011), in his studies about the perception of the students and teachers on E-learning, he discovered that benefits such as accessibility, flexibility, focus on the students, and collaboration, respondents, considered accessibility to be the most significant benefit of online learning.

Previous studies have shown that e-learning has several advantages since it is student-centered, more flexible, and may promote engagement with students by providing asynchronous and synchronous tools such as emails, forums, chats, and videoconferences. Furthermore, internet technologies enable the simultaneous delivery of content to many users. Learners benefit from e-learning because they have more choice over the information and the amount of time they spend studying, and the process can be tailored to the learners' needs and goals.

Students' perceptions of online learning during the Coronavirus pandemic revealed that they had a positive attitude toward E-learning, believing it to be beneficial and valuable amid the pandemic's crisis (Allo, 2020).

Although few colleges had employed E-learning as a supplement before the Coronavirus pandemic, most were not prepared for a wholly online experience. As a result, optimizing the e-learning process is required to continue providing quality education. Furthermore, Sun et al. (2020) found that students believed that teachers should know how to adjust their presentations to the online environment, rather than simply transferring information that was previously taught traditionally, and that they should give a fair number of projects and assignments in their study of online courses.

Indeed, e-learning offers numerous advantages, but it also has certain disadvantages. Online students are more likely to become sidetracked, lose attention, and miss deadlines. E-learning relies on technology, such as the internet and computers, which students may not have, and during courses, disruptions or other system faults may occur. Students' capacity to organize how they study and the amount of time they spend learning can lead to a loss of motivation, and a lack of physical interaction and presence of colleagues can make students feel indifferent. The downsides of E-learning can be observed in terms of physical health, too.

Considering the factors mentioned above, the researchers predict that switching to exclusively E-learning will significantly impact the educational process and students' perceptions of the online environment's role in teaching and learning. As a result, our research is based on these concepts. Thus, the purpose of this research is to document the existence of such shifts. Most of the studies earlier mentioned feature several characteristics related to the experiences of students and teachers when online learning and indirectly, E-learning programs were used as complementary means to the traditional process. Nevertheless, there are only few studies that point out the exclusive use of E-learning platforms, as it occurred during the pandemic when universities were compelled to utilize it and employ it as a major tool in the education process.

The purpose of this study is to identify students' perspectives on E-learning during the Coronavirus pandemic so that the E-learning system can be improved and strengthened. Furthermore, this

paper analyzes how the learning process was affected during this moment of crisis and student's perspectives on the use of E-learning platforms and how these technologies influence their understanding and assimilation of information.

Thus, our research can help advance the e-learning process by providing information on specific delivery methods, the time spent on assignments and projects, the course material, and students' disapprovals, recommendations, and preferences for teaching strategies.

Objectives of the Study

The purpose of this study is to identify students' perspectives on E-learning during the Coronavirus pandemic so that the E-learning system can be improved and strengthened. Furthermore, this paper analyzes how the learning process was affected during this moment of crisis and student's perspectives on the use of E-learning platforms and how these technologies influence their understanding and assimilation of information.

Specifically, the following questions will be discussed:

1. What is the perception of students on how the school has managed to give knowledge in the setting of solely online learning?
2. What is the perception of the students about the ability to learn and integrate information in the framework of solely online learning?
3. What is the perception of the students about the use of E-learning program in the practice of exclusively *online learning?*

***Theoretical* Framework**

Constructive Learning is the current learning theory trend, in which students develop new knowledge based on their existing knowledge and experiences while considering the surrounding contextual aspects in the learning scenarios at hand. This line of students actively participates in their learning activities, gradually establishing their own new knowledge.

Constructivists consider that knowledge is formed within oneself, as opposed to objectivism theory of learning, which thinks that knowledge is an autonomous, unchangeable thing that is passively conveyed from the instructor to the learner. Self-regulated active learning is stressed.

This study adheres to the constructivist learning theory. Learners evaluate and encode information based on their own perceptions and experiences, according to this idea. Learners carry a range of experiences with them that serve as the foundation for their education. Through the lens of their experiences, they evaluate, reason, synthesize, and produce new ideas or alter old ones. This indicates that learners learn more effectively when they can associate material with a personal meaning or relationship. The notion is applied in e-learning by offering learners with real-life perspectives through simulations or stories, giving them something to relate to or emotionally engage with.

Constructive learning environment can be improved by encouraging students to engage in more task-oriented activities, such as those seen in electronic aided learning. In exchange, electronic integration is expected to lead in a new learning trend in which the teacher's position is transformed into that of a coach, and students are actively participating in self-regulated learning, developing their own new knowledge internally.

Methodology

This study is quantitative-descriptive. Quantitative-descriptive is used to describe general or specific behaviors and attributes that are observed and measured. This study will use a researcher’s made survey questionnaire to elicit student-respondents’ demographic characteristics and their per-

ceptions on online teaching and learning. Informed Consent formed was provided to the respondents prior to their participation in the survey. The survey questionnaire will be delivered online via google forms. Series of revision has been made on the questionnaire to observe its reliability and validity. The population was comprised of the 101 graduate students at the Polytechnic University of the Philippines taking Master's in Public Administration and Doctor in Public Administration. The data gathered were tabulated, analyzed, and interpreted using descriptive statistics such as frequency counts, percentage, standard deviation, and the mean. To interpret the results of the respondents' perceptions on the extent among the difficulties while courses were conducted online and the extent on the use of the different means available for teaching online on the E-learning platform, the following scale was used: 4.20 – 5.00 = Very frequently; 3.40 – 4.19 =Frequently; 2.60 – 3.39 = Nor rarely, nor frequently; 1.80 – 2.59 =Rarely; and 1.00 – 1.79 = Not at all. To interpret the results of the respondents' perception about their ability to learn and integrate information in the framework of solely online learning. Furthermore, the following scale was used: 4.20 – 5.00 = Very Useful; 3.40 – 4.19 = Useful; 2.60 – 3.39 = Nor Useful, Nor Useful; 1.80 – 2.59 = Somewhat useful; and 1.00 – 1.79 = Not at all useful, to interpret the usefulness of the different platforms used in teaching online. In addition, the following scale was used: 4.20 – 5.00 = Strongly Agree; 3.40 – 4.19 = Agree; 2.60 – 3.39 = Nor Agree, Nor Disagree; 1.80 – 2.59 = Disagree; and 1.00 – 1.79 = Strongly Disagree, to interpret the perception of the students about the ability to learn and integrate information in the framework of solely online Learning**.**

Results

Table 1. Difficulties Encountered by the Students While the Courses Were Conducted Online

Difficulties Encountered by the Students	**Mean**	**SD**	**Interpretation**
Problems while connecting to the platform	2.86	0.98	Nor rarely, nor frequently
Dropping signal during videoconferences	3.00	0.99	Nor rarely, nor frequently
Late visualization of messages conveyed on the platform	2.76	1.10	Nor rarely, nor frequently
The sound is not clear (there are interruptions).	2.84	0.87	Nor rarely, nor frequently
Other Difficulties	2.57	0.73	Rarely
Overall Mean	**2.81**	**0.93**	**Nor Rarely, Nor Frequently**

Table 1 explains the difficulties encountered by the students while the course was conducted online. Overall, they neither rarely nor frequently encountered problems with a mean score ranging from 2.57 (Rarely) to 3.00 (Nor rarely, nor frequently). More specifically, the students rarely experienced other difficulties such as power failure and device malfunction. On the other hand, the students neither rarely nor frequently experienced problems while connecting to the platform. Majority (4 out of 5 indicators) of the students' responses per indicator classified that they neither rarely nor

frequently encountered problems while online classes were conducted. Greater variability in the scores assigned by the students was also observed (SD = 0.93).

Table 2. Extent of Use on the Different Means Available for Teaching Online on the E-learning platform

Different Means Available for Teaching Online	Mean	SD	Interpretation
Audioconference	3.36	0.74	Nor rarely, nor frequently
Videoconference	4.64	0.77	Very frequently
Documents uploaded on the platform (word, pdf, power point, etc.)	4.45	0.84	Very frequently
Forum Discussions	4.02	1.13	Frequently
Chat Discussions	4.00	1.04	Frequently
URL /web addresses (to other web resources)	3.69	1.08	Frequently
Graded activities where the whole class could work at the same time.	3.72	1.04	Frequently
Submission of individual/group assignments on the platform	4.14	1.1	Frequently
Overall Mean	**4.00**	**0.97**	**Frequently**

Table 3. The Perception of the Students about the Ability to Learn and Integrate Information in the framework of Solely online Learning

Students' Perception	Mean	SD	Interpretation
I believe that the online environment is appropriate for graduate-level education and training.	3.90	1.02	Agree
When it comes to student-teacher interaction, I prefer to respond to the teacher's inquiries by reciting the answer during videoconference.	3.84	0.97	Agree
When it comes to student-teacher interaction, I prefer to respond to the teacher's inquiries by offering a written answer on forum/chat.	3.55	1.06	Agree
Compared to presenting a project in the classrooms, it is easier to present a project online.	3.67	1.11	Agree
Considering the acquisition and incorporation of information conveyed by the teacher in the online environment, it is easier to process the information when it is held with audio and video.	3.76	1.08	Agree
Compared to face-to-face trained courses, during online courses, it is easier to learn information.	3.38	0.75	Nor Agree, Nor Disagree
Generally, I am satisfied with my experience in the online teaching method on the E-learning platform.	4.02	0.93	Agree
Overall Mean	**3.72**	**0.99**	**Agree**

Table 2 shows the extent of use on the different means available for teaching online in the e-learning platform. The students frequently used the different e-learning platforms available for online class with mean scores ranging from 3.36 to 4.64. More exactly, the respondents very frequently used Videoconferences. However, students neither rarely nor frequently used audioconferences. Most (5 out of 8 indicators) of the students' responses per indicator classified that they frequently used the different platforms for purely online class. It is also noticed that greater variability in the scores were set by the students (SD = 0.97).

Table 3 explains the students' perception about the ability to learn and integrate information in the framework of solely online learning. Overall, students agree that they were able to learn and integrate information in the framework of exclusively online learning with mean scores ranging from 3.38(Nor agree, nor disagree) to 4.02 (Agree). The students were satisfied with their experience in online teaching method on the e-learning platform. On the other hand, it is observed that they did not agree nor disagree that e-learning is easier to learn than face-to-face class. Nevertheless, most (6 out of 7 indicators) of the students' responses per indicator categorized that they agree that they were able to learn and integrate information in the framework of solely online learning. Greater variability in the scores assigned by the students (SD = 0.99) is also noted.

Table 4. Usefulness of the Different Platforms Available for Teaching Online

Different Means Available for Teaching Online	Mean	SD	Interpretation
Audioconference	3.36	0.91	Nor Useful, Nor Useless
Videoconference	4.64	0.99	Very Useful
Documents uploaded on the platform (word, pdf, power point, etc.)	4.45	0.94	Very Useful
Forum Discussions	4.02	0.99	Useful
Chat Discussions	4.00	0.98	Useful
URL /web addresses (to other web resources)	3.69	1.03	Useful
Graded activities where the whole class could work at the same time.	3.72	0.94	Useful
Submission of individual/group assignments on the platform	4.14	0.95	Useful
Overall Mean	**4.00**	**0.97**	**Useful**

Table 4 summarizes the usefulness of the different platforms available for teaching online. Overall, students found the different platforms to be useful with mean scores ranging from 3.36(Nor Useful, Nor useless) to 4.64 (Very useful). Specifically, they considered videoconference as very useful platform for teaching online. On the other hand, neither find useful nor useless audioconference as platform for online teaching. Most (5 out of 8 indicators) of the students' responses per indicator considered the different platforms to be useful platform for online teaching. Greater variability in the scores assigned by the students (SD = 0.97) is also observed.

Discussions

The current study examined the perception of graduate students on online teaching and learning. The findings indicated that the students *neither rarely nor frequently* encountered difficulties

while the courses were conducted online. In reference to earlier studies on the assessment of online teaching and learning (Fedenich et al., 2015; Taylor & Maor, 2000), interaction was identified as the lowest level of satisfaction that lead to frequently encountered challenges while classes were conducted online.

On the other hand, students *agreed* that they were able to learn and integrate knowledge in the framework of solely online learning. Al-Dosari (2011), in his study about the perception of the students and teachers on E-learning, he discovered that benefits such as accessibility, flexibility, focus on the students, and collaboration, respondents, considered accessibility to be the most significant benefit of online learning. Moreover, students' perceptions of online learning during the Coronavirus pandemic revealed that they had a positive attitude toward E-learning, believing it to be beneficial and valuable amid the pandemic's crisis (Allo, 2020).

Conclusion and Recommendations

This study described the perception of the graduate students on online teaching and learning. Overall findings suggests that students have found the different platforms for online teaching as useful, and they agreed that learning is possible in the framework of solely online learning. However, students encountered difficulties while the classes were conducted online. These results were predominantly characterized to rapid change of mode of learning brought about by the pandemic. Essentially, the data suggests that understanding the features of positive online programs can provide suggestions for teachers and students to aid improved online learning experiences.

Universities could create training sessions for teachers or could develop programs whose role would be to motivate teachers' performance and completely the quality of the educational process.

Universities should address technical issues to improve the way the E-learning platforms work and offer programs to students to ease the learning process for students in these situations. It is recommended that the school must select e-learning platforms that would minimally encounter difficulties while courses were conducted online. It is also recommended that series of trainings pertaining to technological literacy, communication skills, time management skills, assessment, and evaluation skills, and teaching the students to apply the concept, must be given to teachers to make them technologically prepared as they conduct online teaching to students.

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