

DISTANCE LEARNING AMID CRISES: A QUANTITATIVE ANALYSIS OF STUDENTS' LEARNING EXPERIENCES IN A PHILIPPINE STATE COLLEGE

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ABSTRACT: Distance learning, especially online learning modalities have been increasingly recommended, particularly during times of post-covid crises. This change is to keep learners and educators safe and make sure learning continuity is ensured. This study aimed to assess and determine students' learning experiences on distance learning in the State College of Agriculture and Technology. This is to find out the students' needs amidst crisis to address them accordingly and to evaluate the processes and services offered by the institution. The study utilized a quantitative research method coupled with descriptive statistics to answer the research problems. The findings indicated that students were moderately satisfied on the implementation of distance learning and that they prefer face-to-face than distance learning. The design quality of both online and modular distance learning did not convey a positive experience for the students. Additionally, there was a poor interaction between the students and the instructors, which led to the difficulties experienced by the students in their learning process; this implied that the students are interaction-driven learners. With these, it is recommended that the institution conduct firm class monitoring as well as training and workshops related to the development of instructional materials for both online and modular.

Keywords: Distance learning, Learner's Experiences, Learner's Satisfaction.

INTRODUCTION

Background of the Study

Education can change a person's perspectives in life, and according to Nelson Mandela, it can also change the world, considering it as the most powerful weapon. The delightful thing is that it cannot be taken away from you by anybody. But what if the world will change and challenge that weapon? Is everybody ready and flexible enough to cope with trends? Just like the present time, wherein the educational system transforms itself as it continues to strive for excellence despite the pandemic that the world is now facing, and it has implemented the so-called distance learning. In its understandable form, it is when the instructional process happens through technology, wherein the instructor and the learners are not face-to-face in a classroom during the discussion and giving of instruction [1]. It was classified into three types by Llego [2]: the Modular Distance Learning (MDL), wherein the mode of giving instruction is through printed or digitized learning materials, such as module or course learning packets. Online Distance Learning (ODL) wherein the discussion and interaction between the teacher and the students is through the different social media platforms like Zoom, Google Meet, etc., which could also be synchronous or asynchronous in form, and TV/Radio-Based Instruction.

Educators now must exert extra effort to facilitate learning and formulate an alternative mode of learning that would accommodate the needs and capacities of the learners. According to Song [3], teachers are encouraged as much as possible to maximize the utilization of these new technological developments. In the case of the students, they are not exempted to make adjustments in facing flexible learning environments where being independent is most probably a must. This process of learning could also be the stepping stone to education 4.0 [4].

But not all students have enough access to technology and stable internet connection, so how can they change the world if acquiring that weapon will seem to be impossible. Unstable internet connection is also a common scenario in Agusan del Sur where most students of Agusan del Sur State College of Agriculture and Technology reside.

Students' play a significant role in educational system. According to Fletcher [5], students' can be a facilitator, a researcher, and even a very important contributor in the policy making and in designing a curriculum. It is very important to assess them in order to know and understand their needs so that they will be addressed accordingly. Specially nowadays where distance learning was implemented and this is very new to most of the students and it affect everyone in different ways. Thus, this study which is to assess students' learning experiences on distance learning in the new normal in Agusan del Sur State College of Agriculture and Technology was conducted.

Statement of the Problem

This study focused on exploring students' learning experiences on distance learning in Agusan del Sur State College of Agriculture and Technology.

Specifically, it aimed to answer the following questions:

1. What are the learning experiences of the students on distance learning in the new normal in terms of:

1.1. Quality of distance learning

1.2 Design quality

1.3 Information quality

1.4 Service interaction quality

1.5 Instructor interaction quality?

2. What is the extent of the students' satisfaction with distance learning?

3. Is there a significant difference in students' learning experiences on the distance learning in the new normal in terms of quality, usefulness, and satisfaction when grouped according to their profiles?

METHODOLOGY

This study employed a quantitative descriptive research design to examine the learning experiences of students in distance learning during the new normal. The study was conducted in the province of Agusan del Sur, where the majority of students enrolled at Agusan del Sur State University reside. The province consists of fourteen (14) municipalities, namely Sibagat, Bayugan City, Esperanza, San Luis, Talacogon, La Paz, Loreto, Prosperidad, San Francisco, Rosario, Bunawan, Vuela, Sta. Josefa, and Trento. The participants comprised 368 students enrolled in different year levels and academic programs of the university. The required sample size was determined using Slovin's formula, while stratified sampling was employed to ensure proportional representation of students from the different colleges and programs. This sampling approach increased the representativeness of the respondents and minimized sampling bias by allowing each academic group to be adequately represented in the study.

Data were gathered using a modified survey questionnaire adapted from the study of Song [3] entitled "E-learning: Investigating Students' Acceptance of Online Learning in Hospitality Programs". Before its administration, the instrument underwent pilot testing among students of Agusan del Sur State College of Agriculture and Technology to establish its reliability. Internal consistency was assessed using Cronbach's alpha, yielding a coefficient of 0.959, which indicates excellent reliability of the instrument. Responses were measured using a 5-point Likert scale to assess students' perceptions of distance learning in terms of quality, usefulness, and satisfaction, following the parameter scale suggested by

Ruetzler [6]. The collected data were analyzed using descriptive statistics, including frequency counts, percentages, weighted mean, and standard deviation, to summarize and interpret the responses of the participants. This methodological approach enabled the researchers to present a comprehensive description of students' learning experiences and provided reliable quantitative evidence to address the objectives of the study.

RESULTS AND DISCUSSION

Table 1. Learning experiences of the students on distance learning in the new normal

Indicators	Mean	Descriptive Response
Design Quality-Modular	2.30	Slightly not appropriate design
Design Quality-Online	2.34	Slightly not appropriate design
Information Quality	3.21	Fairly accurate information
Service Interaction Quality	3.27	Fairly accessible services
Instructor Interaction Quality	3.40	Sometimes available
Usefulness of distance learning	3.23	Fairly useful

Table 1 provides the learning experiences of the students regarding distance learning in the new normal in six categories: design quality, information quality, service interaction quality, instructor interaction quality, and usefulness of distance learning.

It was found out that the design quality of the modular learning ($M = 2.30$) and design quality of online learning ($M = 2.34$) were slightly not appropriate. This is a suggestion that the students were dissatisfied with the instructional design of both modalities of learning. This means that the learning materials and online activities were quite hard to understand, navigate, and lack elements which would allow learners to engage well. Based on the results, it is possible to assume that the design of the learning environment was not sufficient enough for the needs of students and was not able to support their learning experience or motivate and make students feel confident. Mayer [7] pointed out that instructional materials should be developed with the use of learner-centered approaches which decrease cognitive load and facilitate meaningful learning. In turn, according to the McClarry [8], the distance learning depends not only on the presence of learning materials but also on their quality, clarity, accessibility, and organization.

Regarding information quality, the respondents scored a mean value of 3.21, which can be considered as fairly accurate information. In other words, students saw learning materials and course information as fairly accurate, relevant, timely, and understandable. Still, the moderate score means that there is room for improvement in order to maintain consistency in the quality of instructional information. In the process of conducting the survey, several students have stated that they used online resources like Google in the process of studying because some of the learning materials did not have enough explanations and examples. Some others expressed the idea that the quantity of learning activities was too high to be able to understand the material properly. These results confirm the ideas of Smith and Smith [9] about distance learning as an educational resource that depends on the quality of instructional materials provided.

The service interaction quality received a mean score of 3.27, indicating relatively accessible services. It means that the university's services were perceived by students as relatively accessible, reliable, and providing academic support. The university was considered capable of maintaining communication with

the students and securing their personal data. However, the moderate score also implies some issues with regard to communication and information delivery. Some participants proposed creating a more efficient mechanism for monitoring the faculty members' performance and facilitating communication in academic matters. Institutional support is an essential part of effective online learning since students need reliable administrative services, technical support, and effective communication [10].

Of all the variables analyzed, instructor interaction quality received the highest mean score ($M = 3.40$) and was characterized as sometimes available. This means that instructors were somewhat accessible to the students because of their feedback, assistance in answering the learners' queries, and provision of academic guidance. However, despite the high mean value, the results of the study suggest that not all students had consistent access to instructor support. Qualitative data pointed to issues related to the delayed replies to the learners' questions and absence of clarity in grading procedures. All the previous literature proves that the presence of instructors and their prompt responses are highly correlated with the learners' motivation, engagement, and overall satisfaction in the online setting [11].

Finally, the use of distance learning was rated a mean score of 3.23 which is quite useful. In this regard, students have perceived that distance learning was somewhat useful in improving academic knowledge, communication skills, independent learning, and career preparations. Several participants have indicated that distance learning assisted them in becoming more responsible, autonomous, and able to manage themselves. Others stated that they were able to learn new technology and learning skills through distance learning. These findings support the work of Firat [12], who claimed that the use of distance education promotes learner autonomy since distance learners should be responsible for their own learning processes. Moreover, Hodges et al. [13], revealed that even though emergency remote teaching brought many difficulties during the COVID-19 outbreak, it allowed developing such qualities as self-regulation, adaptability, and digital skills among students.

All in all, from the findings of this research, one can conclude that the students have perceived distance learning as useful and positive, however, there are considerable aspects that should be improved in the future in order to make distance learning more useful and effective.

Students' satisfaction on distance learning was also assessed. Table 2 presents the extent of students' satisfaction towards distance learning. As can be seen in the table, the overall mean score of 3.33 which means Fairly Satisfied in distance learning.

Table 2. The Extent of Students' Satisfaction on distance learning.

Statements	Mean	Descriptive Interpretation
My experience with the distance learning was better than I expected.	3.20	Fairly Satisfied
The learning experience provided by the distance learning was better than I expected.	3.17	Fairly Satisfied
Overall, most of my expectation with the distance learning were confirmed.	3.33	Fairly Satisfied
The distance learning program in our department compares favourably to other institutions around the country.	3.27	Fairly Satisfied
I am generally satisfied with the quality of the distance learning in our department.	3.36	Fairly Satisfied
I feel I am getting my money's worth from the distance learning program.	3.26	Fairly Satisfied
Overall, the quality of the distance learning offered by our department is excellent.	3.47	Fairly Satisfied
Overall, I am very satisfied with the implementation of distance learning in our department.	3.42	Fairly Satisfied

Overall, I am satisfied with the faculty offering the distance learning in our department.	3.46	Fairly Satisfied
Overall	3.33	Fairly Satisfied

This indicates that the students were fairly satisfied with their experiences and expectations toward the implementation of distance learning in their respected departments. Fairly satisfied means that the students were not totally satisfied. Some of their expectations were met with fairly satisfaction, and the implementation of distance learning was fairly satisfying, as well as the quality of the distance learning offered by the department. Since students were simply satisfied fairly, it can also be implied that distance learning has still a room for improvement in order for the students to have a more meaningful learning experience. The study of Song [3] showed that student satisfaction with online courses or distance learning is interaction-driven rather than information-and-system-driven quality.

The extent of student's satisfaction on distance learning differs from one another considering that no two individuals are the same. But in this study, there were indicators being used in order to assess the student's satisfaction on distance learning.

Table 3. Test of significant difference on students' learning experiences on the distance learning in a new normal when grouped according to their profile.

Profile	t/F-value	p-value	Remarks
Age	0.784 ^a	0.950	Not Significant
Civil Status	0.269 ^b	0.764	Not Significant
Year Level	1.329 ^b	0.027	Significant
Family Income	1.126 ^b	0.211	Not Significant
Ethnicity	0.909 ^b	0.741	Not Significant
Type of Modality	0.039 ^b	0.969	Not Significant

a=t-value result

b=F-value result

In Table 3, there is the test of significant differences between the learning experiences of students with respect to distance learning depending on the demographic profile of the students. It was seen that there was no statistical difference between students based on almost all the variables as the p-value was greater than the level of significance, which is 0.05. This means that students had the same kind of experiences of distance learning irrespective of the variable of the demographic profile like age, sex, ethnicity, civil status, family income, and place of residence, which means that the students faced equal advantages or disadvantages of distance learning irrespective of their profile. This observation is in line with the work of Aristovnik et al. [14], who observed that higher education students belonging to different demographic profiles face similar difficulties while adopting distance learning during the COVID-19 pandemic period. However, a statistically significant difference was observed when respondents were grouped according to year level, as evidenced by a p-value less than 0.05. Such an outcome shows that the academic standing of students affected their experience of learning at a distance, which may be due to different academic requirements, learning maturity, self-regulation, and technological readiness for learning between different year levels. Such an outcome is in line with the results found by Martin et al. [10], who pointed out the effect of educational experience on students' readiness for online education.

Table 4. Test of significant relationship between student's satisfaction on distance learning and learning experiences of the students on distance learning in the new normal

Learning Experiences	r-value	p-value	Remarks
Design Quality-Modular	0.380**	0.000	Significant

Design Quality-Online	0.321**	0.000	Significant
Information Quality	0.624**	0.000	Significant
Service Interaction Quality	0.683**	0.000	Significant
Instructor Interaction Quality	0.454**	0.000	Significant
Usefulness of distance learning	0.659**	0.000	Significant
Overall	0.724**	0.000	Significant

**Correlation is significant at the 0.01 level

With regards to the relationship between the two variables was measured in the study, table 4 shows that the overall r-value of 0.724 with a p-value lower than the 0.05 level of significance indicated the null hypotheses rejected. The results suggested that student's satisfaction on distance learning is significantly related to learning experiences of the students on distance learning in the new normal.

The result implies that any changes in the level of student's learning experiences on distance learning does have a corresponding change in satisfaction of the students on distance learning in the new normal. Moreover, these results suggests that the more meaningful learning experiences of the students in distance learning the more they are satisfied on distance learning. Also, the study of Muzammil, Sutawijaya, and Harsasi [15] showed that student satisfaction with online courses or distance education is interaction-driven rather than information-and-system-driven quality.

CONCLUSION

This study concludes that even though distance learning was instrumental in keeping the education process going on during the times of energy crises and other problems, it did not offer the students of Agusan del Sur State University an optimal learning experience. Distance learning is assessed by the students as of moderate quality and usefulness, and its lowest ratings are given to both the content of learning materials and their design. It can be seen from the findings that the majority of students had difficulties in comprehension and participation in the learning process due to the nature of the materials and the activities they were supposed to engage in, thus lowering their learning experience. While information delivered through distance learning is seen as accurate enough and the institutional services are regarded as accessible, this advantage was not enough to compensate for the disadvantages that the students faced. In addition to this, it has been found that interaction with instructors, which got the highest score among all the indicators measured in the survey, is still assessed by the students as only "sometimes available."

The research also showed that students were only moderately satisfied with the use of distance learning because they still preferred conventional learning due to the increased possibilities for collaboration and communication. However, despite all the difficulties, some students realized that distance learning taught them to be more responsible, independent, and able to manage themselves and their learning process. Thus, it means that the modality enabled the students to develop skills which will help them learn throughout life. Moreover, it should be noted that students' demographic variables, including age, ethnicity, family income, civil status, and residential location, did not have a great impact on the way they learned and that distance learning influenced them in the same way. Differences were identified based on the year levels in the study, which suggested that the academic level of the learners may play a role in determining their reaction and adaptation to distance learning.

The research indicated that the satisfaction of the learners was closely related to the quality of their learning experience, especially the degree of interaction with their teachers and the quality of the learning environment. These results highlight the need for improvement in instructional design and making the faculty more responsive to such emergencies, along with implementing monitoring and professional development programs to increase the efficiency of distance education especially during times of energy

crises.

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