

LEARNERS' SATISFACTION LEVEL WITH ONLINE STUDENT PORTAL AS A SUPPORT SYSTEM IN AN OPEN AND DISTANCE eLEARNING ENVIRONMENT (ODeL)

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ABSTRACT

Learner support in an open, distance and online learning is defined as "all activities and elements in education that respond to a known learner or group of learners, and which are designed to assist in the cognitive, affective, and systemic realms of the learning process" (Brindley, et. al, 2004). Teaching and tutoring, advising and counseling, and information and administration are the main institutional systems involved in learner support. The UP Open University functions under an open and distance e-learning (ODeL) framework of distance education where most of its academic and non-academic processes are done through the Internet. It has developed an online Academic Information Management System (AIMS) which serves as the gateway to the University's academic operations. The Online Student Portal (OSP) is the component of the system for the students. OSP serves such functionalities as online registration, viewing of grades, request for their records, payment of fees, and information hub. The study analyzed the learners' satisfaction with the portal's functionality, efficiency, appearance, ease of use, and security. An online survey was conducted of continuing undergraduate and graduate students (n=147) who were admitted prior to the implementation of the portal and thus had experienced both the manual and online processes. The survey was conducted from September 26 to October 3, 2013.

In general, about 85 percent of those who participated in the survey were either very satisfied or satisfied with their overall experience of the portal. Ninety percent of the total participants found the portal cost-effective and informative. Overall, the participants identified the portal as a convenient and effective venue for getting accurate and immediate information about their performance, school activities, academic schedules, and other information relevant to their learning transactions. These features had made the portal an important student support tool that may enhance the learning experience of online learners.

Keywords: Learner support, online student portal, online registration, online learning, UP Open University, open and distance e-learning.

INTRODUCTION

Effective and responsive learner support services will help learners succeed in an open and distance e-learning (ODeL) environment as distance education students and ultimately achieve their learning goals. Learning support services are as important as providing learners with an excellent academic content to guarantee their educational achievement.

Student services are the “administrative backbone of higher education” and are oftentimes the first and last contact points of the students (Voorhis and Falkner, 2004).

Moreover, an adequate learner support services plays an essential role in creating a feeling of belonging to students who do not have access to traditional services (Usun, 2004)

Enrollment in online programs is fast increasing but retaining the students has been a huge challenge for institutions not successful enough to offer suitable support services to this progressive population (Bruso as mentioned in Floyd and Powell, 2004). Numerous studies have provided evidences that there is undeniably a high drop-out rate in online learning programs despite their increasing demand. White and Weight (2000), as cited in Steinbrown and Merideth (2003), reported that students leave because of isolation, accelerated pace, competing responsibilities and technical issues. This reality compels institutions with an ODeL structure to implement effective learner support practices to improve its retention and completion rates. Brindley et al. (2004) defined learner support in an open and distance learning as “all activities and elements in education that respond to a known learner or group of learners, and which are designed to assist in the cognitive, affective, and systemic realms of the learning process”. A study conducted by the Blackboard Institute (2010) among higher education institutions underscored the significance of effective learner support services in maintaining successful online learning experiences. In a similar manner, it described the student services as a “diverse set of offerings that institutions develop and deliver to enhance the student experience and improve learning outcomes”. These services range from admission and enrollment to student financial account and technical support.

As ODeL institutions expand their academic programs, their student population becomes more diverse, particularly in the students’ proficiency in technology (Floyd and Powell, 2004). The increasing diversity of students highlights the need to develop and implement support services that guarantee the students’ success. Essentially, online higher institutions should strive to provide adequate support services that are responsive to the academic and non-academic needs of the highly diverse and technologically oriented student population. A learner support system should likewise cater to “different cultures, different economic systems, different learners and different programs of study” (Mills, 2003). Otherwise, if institutions fail to provide quality learner support services, a decrease in learning achievement and satisfaction could be expected, and most likely, will lead to an increase in attrition (Nelson, 2007).

To address this issue, it is important that student services should be made available to learners at the time and place most convenient to them. This could potentially be achieved by putting these services on the web. Establishing online support services is a way of ensuring immediacy. According to Mehrabian (1969) in Bozkaya and Erdem Aydin (2007), immediacy is “conceptualized as those nonverbal behaviors that reduce physical and/or psychological distance in interpersonal communication.” As reported by Bozkaya and Erdem Aydin (2007), immediacy as perceived by the learner in a distance learning environment can be viewed as an indicator of a reduced feeling of isolation. Such feeling of isolation should be reduced, if not eradicated, since it demotivates learners to continue their study. The growing accessibility of ICTs and their increasing sophistication may greatly contribute to the reduction of isolation. When support services are made online, they are made available to students anytime, anywhere (Kenworthy, 2003), and, thereby, ensure immediacy. The online student portal was framed within this concept.

OSP is an internet-based application that offers a variety of services. It provides students a 24/7 “centralized point of access to information and services” and it is designed as a one-stop site in providing personalized services to students, faculty and staff (Presley and Presley, 2009). Liao et al. (2011) emphasized the importance of constantly improving the usefulness of portals to meet the demands of users and in order to promote portal loyalty, users must be provided with “increasing and pleasurable experience”.

Though OSP offers a great potential in reducing the effect of isolation in distance education, it should be developed in a manner that satisfies certain needs of the learners. According to Hara and Kling (1999), poorly developed and structured web-based applications cause learners to be frustrated. Their frustrations will inhibit the learners' education opportunities (Hara and Kling, 1999).

As Reber (1985), in Hara and Kling (1999), indicated, sustained frustrations interfere with pursuing learning goals. According to Darke (1988) in Hara and Kling (1999), students with high levels of anxiety have reduced storage and processing capacity of their working memory, and thereby, are unable to make inferences. Jonassen and Grabowski (1993) also cited that high frustration could demotivate students. Since distance education requires that students be self-regulated, it is necessary that they should be provided with an online support system that could minimize their frustrations, and thereby, motivate them to stay in their program.

The concepts of immediacy and motivation guided the study. It was conducted to analyze learners' satisfaction of the existing online student portal as a tool that provides immediate information to learners, and as a form of student support system in the University of the Philippines Open University (UPOU). Five elements of the OSP were being evaluated, namely: functionality, efficiency, appearance, ease of use and security. To improve the portal, the survey also asked the learners to suggest features that can be added to the existing functionalities to maximize their experience as ODeL learners.

METHOD

The UP Open University and Its Academic Information Management System

The study was conducted in the University of the Philippines Open University (UPOU), which is the fifth constituent university of the University of the Philippines System. Established on 23 February 1995, it is mandated to provide wider access to quality higher education. UPOU offers one pre-baccalaureate program, two baccalaureate programs, ten post-baccalaureate diploma programs, 13 master's programs, two doctoral programs, and 10 non-formal courses by distance education. During the first term of the Academic Year 2013-2014, UPOU had a total enrollment of 2,890. Majority of the students are enrolled in the graduate programs (74 percent) while the rest are enrolled in undergraduate (17 percent) and certification programs (8 percent). Geographically, about 20 percent of the enrolled students are based outside the country while 34 percent reside in Metro Manila. The remaining 46 percent live in the different provinces of the country.

UPOU established several learning centers across the country. These centers provide various forms of support services to students. In the early years of the University, all academic and non-academic processes were conducted in these centers with the help of a learning center coordinator. Learners go to the learning center to register, submit their assignments, request for documents, get their grades and course materials, attend a general orientation, take examinations, and sometimes, participate in a face-to-face study session. The learning centers also provide a limited library service where learners borrow learning modules, volume readers, or even references used in their courses. To date, UPOU has 7 learning centers, 22 testing centers and one virtual learning center that cater to students who are based outside the country.

In recent years, UPOU functions under the ODeL framework of distance education where most of its academic and administrative processes and services are done through the Internet. In support of this thrust, the Office of the University Registrar conceptualized and later developed an online Academic Information Management System (AIMS), which serves as a one-stop site for the needs of all the University's constituents. AIMS consists of five portals (Figure 1), each of which serves different users. Among these portals, the Online Student Portal (OSP) is the AIMS component that serves the students. OSP was rolled out in 2012, and has undergone several revisions to allow more self-service transactions. It is designed to become a one-stop-shop online system that provides customized services to the students.

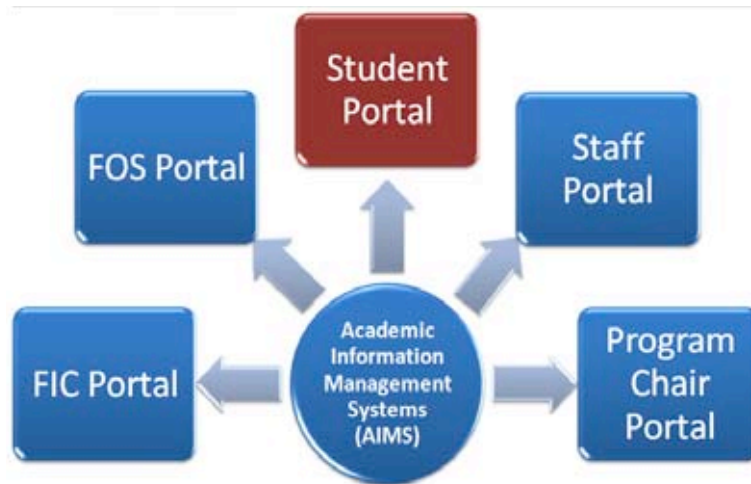


Figure: 1
Academic Information Management System Structure

As a learner support system, OSP enables the students to do the following activities online: enrollment, viewing of grades, payment, request for documents, and academic advisement. In addition, OSP also provides links to other systems in the university including the learning management system called the Myportal, e-library system, students' evaluation of teachers system, the University's website, and the UPOU networks (Figure: 2).

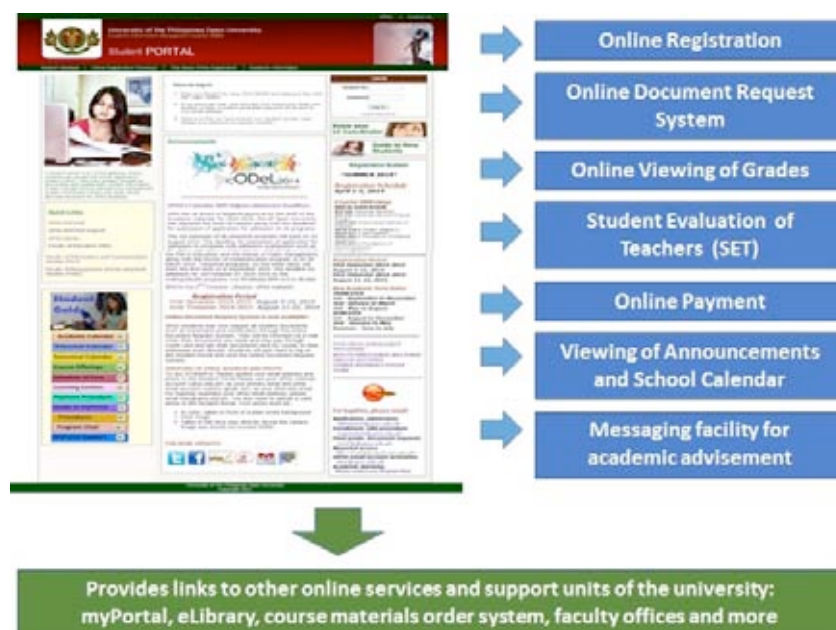


Figure: 2
Support services in the UPOU Online Student Portal

Data Collection, Analysis, and Visualization

An online survey was administered from September 26 to October 3, 2013, to continuing undergraduate and graduate students who were admitted prior to the implementation of the online student portal and had experienced the manual and online registration process, viewing of grades, request for documents, and the like.

The survey aimed to assess the students' satisfaction with the online student portal's usefulness, functionality, efficiency, appearance, ease of use, completeness and security. It

also looked into the student’s assessment of the administrative and technical support as well as the student’s overall satisfaction with the online system as compared to the manual system. The survey instrument consists of 14 items distributed as follows: eight questions about the learner’s profile; three items to determine the learner’s satisfaction and frequency of use, and three questions about their personal views and suggestions.

An invitation and the link to the online survey were sent to students through email. An announcement about the ongoing survey was also posted on the student portal. A total of 147 students completed the survey representing a 16.3 percent response rate. The respondents’ profile was presented in a table and the learners’ responses in terms of their satisfaction with the OSP with its various parameters were presented in graphs. Descriptive statistics such as mean, ranges, percentages, and the like were computed and used to describe the satisfaction level and assessment of learners of the OSP. Data were visualized as tables and graphs.

RESULTS

Survey Participants’ Profile

Table: 1 summarizes the distribution of participants (n=147) according to gender, age, place of residence, and program classification.

Table: 1
Profile of Respondents (n=147)

Characteristics	Frequency	Percentage
Gender		
Male	57	39%
Female	90	61%
Age		
Below 20	2	1%
21-30	50	34%
31-40	56	38%
41-50	25	17%
51-60	13	9%
Above 60	1	1%
Residence		
Philippine-based	126	86%
Offshore	21	14%
Program Classification		
Undergraduate	31	12%
Graduate	111	85%
Certification	5	3%

As indicated in Table: 1, majority of the participants were female (61 percent) and the rest were male (39 percent). Of the total, about 65 percent were adult learners with ages from 31 years old and above. Though UPOU’s students are dispersed in various countries, most of them (86 percent) were currently residing in the Philippines.

As expected, more participants (85 percent) belong to the graduate programs of the University while the rest are taking undergraduate (12 percent) and certification programs (3 percent). As cited above, the University offers more graduate than undergraduate programs.

Learners’ Access to the Portal

Figure: 3 indicates that survey participants used the portal for several activities such as enrollment, viewing of grades, requesting for documents, reading announcements, accessing the learning management system, and the like. More than 80 percent reported that they always visited the portal for online registration. Online registration is a feature of the portal that allows learners to choose what courses to enroll in a term, to enroll them, pay the matriculation fees, and access the online system for making an order for their course learning materials. This feature has allowed efficient and immediate confirmation of learners’ enrollment, and generation of course lists. Likewise, it can generate immediately a list of enrolled learners at the end of the registration period. The list is necessary for the enrollment of registered learners in the learning management system. It is essential that enrollment data be made available to all concerned units in the university as soon as the enrollment ends so as not to impede all other administrative operations such as creation of course sites, dispatch of materials and the like.

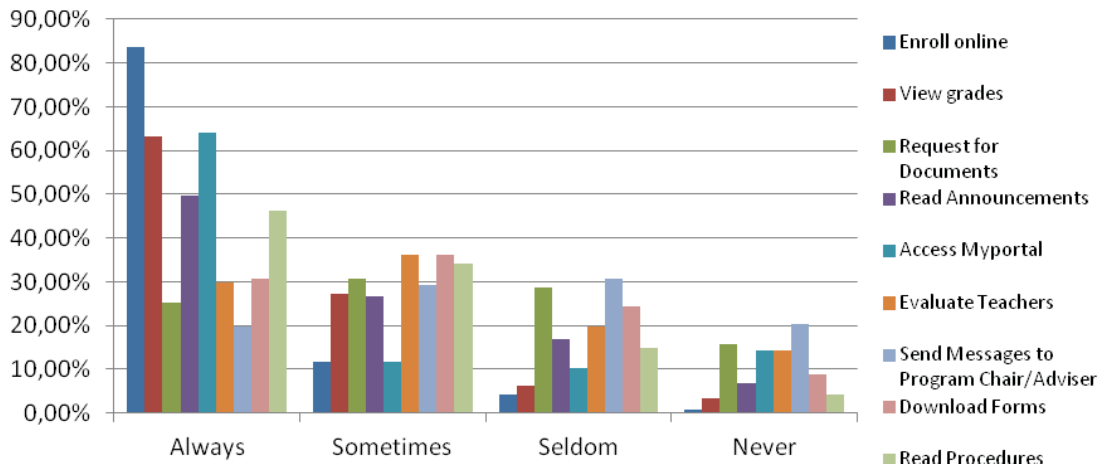


Figure: 3
Percentage of portal visits and online activities of the respondents

The items ‘viewing of grades’ and ‘access Myportal’ appear to come after online enrollment in terms of frequency of use (Figure 3). In fact, more than 60 percent of the respondents indicated that they are always using the portal for these activities. Online viewing of grades is a feature of the portal that may enhance learners’ motivation.

After the faculty-in-charge or the professor submits his/her grades through the faculty portal, the grades become visible to learners, and thus the portal provides an immediate feedback to learners’ performance. With immediate feedback, students are motivated to continue their studies and/or perform better in their next learning transactions. In a study conducted by Lemley et al. (2005), it was noted that learners who were given immediate feedback with regard to their academic performance had significantly greater amount of time to complete their coursework. Online viewing of grades hastens the process of informing the students of their performance.

This online viewing of grades is beneficial to students because they can immediately keep track of their academic progress, and, therefore, they would be able to plan for their coursework in the succeeding terms. On the other hand, delayed information may cause frustration and may demotivate the students to enroll again and continue their studies.

Cases were reported cases of some UPOU students who did not enroll in the succeeding term because they had not yet seen their grades.

Students also make portal visits to access the course site Myportal, read announcements, read the course catalog, and download forms. Links to these services are also found in UPOU’s main website. There are some students who access these sites and information through the website other than the OSP. Pullan (2011) underscored the importance of availability of timely information about specific requirements to make sure that the learners are enrolling in courses that are applicable to their degrees. The detailed information permits the learners to make informed decisions.

Activities such as requests for documents and teacher evaluation showed slight portal visits as these are considered as optional processes. Students are not required to do them. With the online document request system, however, there is a significant reduction in the time spent by students to perform this activity. This is also beneficial to students because they would have more time for learning and studying, or accomplishing other academic tasks.

The program chair messaging activity notably has the least portal visits. This messaging functionality was made available in the portal to aid in the academic advisement, especially during registration. Currently, some programs have their own micro-sites and self-advising checklists to aid academic advisement. Some students directly contact their Program Chair/Adviser through email for inquiries and consequently students rely less on the OSP for that purpose.

Technical and administrative services are crucial in an online student portal to provide adequate and meaningful learner support experiences. Even as the students are capable of doing self-help transactions online, there are still other administrative matters that need to be provided to the students through helpdesks. To help address these concerns, links to other administrative support areas such as faculty office, library, management information system office, dispatch units and other service units are also available in the student portal. Moreover, as a web-based facility, the portals are available 24/7 and therefore ensure reliability of networks and asynchronous access, which are essential features of a student portal. A summary of answers to frequently asked questions (AFAQs) about enrollment is also available on the OSP. Such a summary immediately addresses the learners’ inquiries and needs for assistance during enrollment.

OSP vs. Manual System

Figure: 4 summarizes students’ responses on the items that compare the online student portal and the manual system of performing non-academic processes.

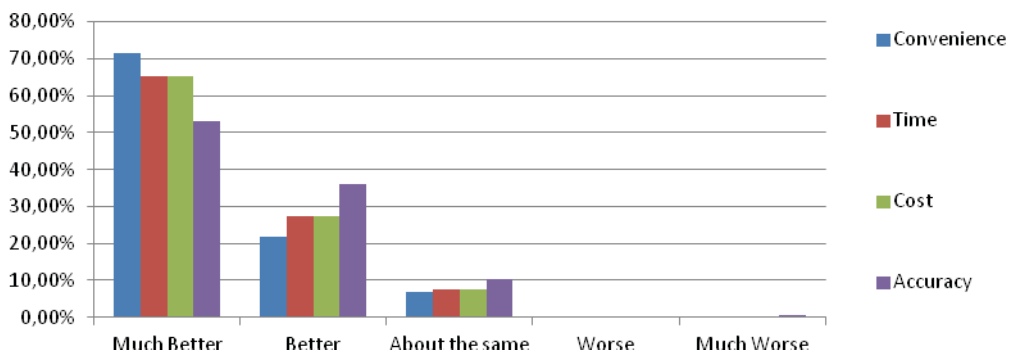


Figure: 4
A comparison of the students’ assessment of the current OSP and the manual system in percentage

About 90 percent of the total participants believed that OSP is more convenient, more cost-effective and more time-efficient than going to the learning center to carry out certain non-academic processes. Only 10 percent responded otherwise. The convenience, accuracy, time-saving and cost-saving features that learner support services provide may help reduce the learner's anxiety and enable the learner to devote more time and attention to more essential things, such as studying.

As indicated by the results of the survey, the portal is better than the manual system which was previously practiced by the University. With the online portal, students are freed from the hassles of lining up during enrollment and payment of matriculation fees. Moreover, it offers more convenience to the learners since the system is available 24/7 anywhere, including offshore students who have different time zones from those who are based in the Philippines. This is evident in learners' responses when asked to compare OSP and the manual system (Figure 4). More than 70 percent of the respondents identified the online portal as more convenient than the manual system. In addition, respondents avoided the costs of visiting the learning center. In the manual enrollment system, the learners incurred two forms of costs, namely, transportation and opportunity costs of the time lost when they left from their work. It is noted that most of the learners in UPOU are working people. With the manual system of enrollment, they needed to leave their work to go to their learning centers. The costs may be huge when their work posts are far from the learning center. Though there seems to be paucity of information on the effects of cost-savings in the students' learning process, the avoidance of costs by the learners with OSP may improve learners' motivation, and thus, may improve learning outcomes. Baker (2012) indicated that aggregate measures of per-pupil spending are positively associated with learning outcomes. In some cases, additional funding appears to matter for some students (Baker, 2012). This can be the reason why there were more participants in the survey who evaluated the portal to be much better than the manual system in terms of time and cost efficiency (Figure 4).

Learners' Satisfaction Level with the Use of the Portal

Figure: 5 shows the learners' level of satisfaction with the use of the portal in terms of its access and content.

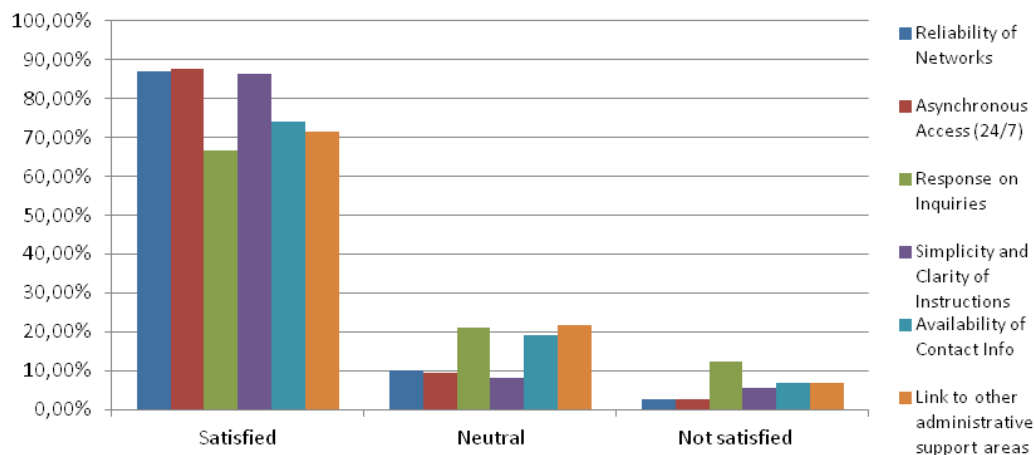


Figure: 5
Learners' satisfaction level with the portal's accessibility and content

As indicated in Figure 5, the three leading features of the portal based on the students' evaluation were its reliability, accessibility, and simplicity and clarity of instructions. More than 80 percent of the participants were satisfied with the said features of the portal. These features are important for ODeL students because they usually do their academic activities outside of their work schedules (Nelson, 2007). The 24/7 availability and accessibility of the

system helps the learners save time and money in fulfilling their learning tasks. The clarity and simplicity of the portal's instructions had also reduced the navigational time that each learner spent in performing certain tasks in the portal.

Consequently, this has increased the available time that they can spend in achieving the learning tasks of their courses. Though there is no hard data available for this, the time spent in going to their learning center to do the same tasks may be saved, and potentially may be used instead for doing their assignments or studying their lessons.

Learners' Satisfaction with the Portal as a Web-based Support System

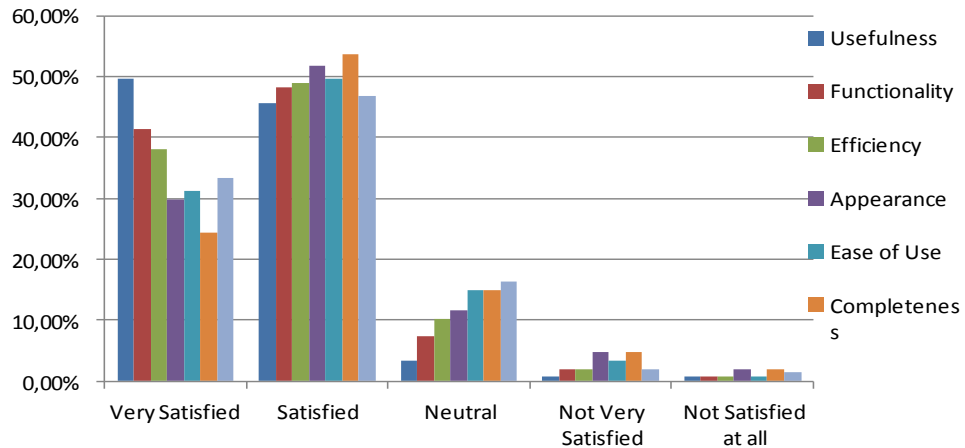


Figure: 6
Learners' satisfaction of the portal as a web-based support system

Figure 6 shows that more than 60 percent of the participants reported that they are satisfied with the usefulness, functionality, efficiency, appearance, ease of use, completeness, and security of the portal as a support system. About 30 to 70 percent had indicated a very satisfactory experience with the system vis-à-vis the parameters investigated. The rest were either neutral or not satisfied with the system.

The result is important for it will help improve some features of the portal and make it more attractive to the students as it gives valuable support to them.

The system needs to be enhanced in order to increase the University's efficiency in its student-related administrative activities. As more students use the portal frequently, the University may reduce its face-to-face or manual procedures, and thereby, save the costs associated with them. As reported by Amer (2012), students will be satisfied with the system if it is "user's friendly, secure, easy to use and visibly attractive to users." He further argued that students' high satisfaction level would lead to high University efficiency. Liao (2011) also pointed out that portals should be attractive and able to provide an increasing and pleasurable experience to students so that they would be able to develop loyalty, and use it more frequently. When asked which functionality of the system they found useful to them as online learners, the participants indicated the following:

I love the Online request for documents.

Messaging

The "Advanced Credentials" part.

Announcements (mentioned above) but specifically about student-related activities

The news posted in the student portal is also useful because we became aware with what is happening in UP system.

I find all the support system available very helpful

I was able to use that option where I could send a message to the program chair from the site itself. This is very useful because it saves us time in looking for the email addresses in case it isn't yet saved in our profiles.

Suggested Additional Features

To further enhance the usability of the portal as a web-based support system, the participants were asked to identify or suggest additional features that they think can help them perform their administrative transactions in the University. Some of the features suggested were as follows: integration of OSP with the learning management system (MyPortal), alert or reminder system for important activities, compatibility with tablets and other mobile devices and gadgets, provision of a chat/messaging feature with peers and classmates, and availability of links to online journal resources. Some of the responses are shown below:

1. integration of OSP with the learning management system (MyPortal):

"Another feature that I feel should be included in the Student Portal is integrating it with moodle so a student like me doesn't have to log into different websites in order to do various activities for school".

2. inclusion or alerts and reminders for important activities:

"Is it possible to have a pop up alert on our deficiencies?"

"Reminders for enrollment or any other important dates."

3. availability of resources for online journals and the link:

"Easier, faster access to UPOU Library"

"More updated journals, research papers and the like"

"One-stop access center for online journals".

4. provision of a chat/messaging feature with peers and classmates:

"A lounge? Where students can interact with administration, live?"

"Coordination and interaction with peers / classmates"

"Create yahoo groups or on line groups within the portal if possible."

5. compatibility with tablets and other mobile devices and gadgets:

"I think it is okay, I have no complaints except when I am using my tablet just to browse for updates on my courses the mobile version is a bit challenging to manage."

"Student portal version suitable for mobile devices/ gadgets"

While most of the respondents expressed satisfaction with the current OSP, other features were suggested to improve the services of the portal. One respondent proposed the OSP's integration with Myportal, the learning management system of the university, to avoid multiple sign-ons by the students when accessing these sites.

Others emphasized the creation of online groups where learners can interact with the teacher, staff and fellow learners to promote social interaction. Bandalaria (2011) concluded that "learning communities in ODeL not only address the issue of attrition or persistence by providing learners with the sense of belonging but importantly help address or ensure quality of education..."

Results further revealed that learners are not only satisfied with the current system, but are also looking forward to a more personalized and mobile form of support. This is understandable because learners are full-time workers and at the same time are mobile. Others, however, may have less access to an Internet facility; for this reason, mobile facilities may reduce time spent looking for the facility, and thus gain more time for their learning activities. In general, students' learning will be made effective if the time spent for administrative activities will be reduced significantly

Though OSP could not provide solutions to all the needs of the learners, its availability in the web and accessibility 24/7 anywhere has improved learners' transactions with the University. Their levels of satisfaction indicate that the portal has made a significant contribution to their learning experience in the University. If sustained or improved, the portal may be used as a tool to improve learners' retention.

DISCUSSION

This study investigated the UPOU students' satisfaction with the current features of the OSP. In general, results show that the level of satisfaction on the OSP in providing learner support is relatively high. Many respondents expressed their opinion that the current features of the OSP are sufficient in meet their needed support services. A few suggestions were also presented to further improve the portal.

The use of an online student portal is now becoming an essential part of the learners in an ODeL environment. For this reason, it is crucial that continuous evaluation of the learner's satisfaction be done to determine if this kind of learner support system is successful in giving the students meaningful learning experiences in the university. It must be "redefined and implemented systematically" to guarantee satisfaction and success among all students. It must also be learner-centered and user friendly (Floyd and Powell, 2004).

In the development of the OSP, the learners were given the utmost significant consideration. Their needs, expectations and uniqueness were considered in the development stage of the portal. Continuous improvement is being undertaken based on the students and other users' accumulated experiences. In his study, Abuhamdieh (2007) mentioned that while portal system vendors offer a full-featured package, a "phased portal implementation and adding features as user's experiences grow and accumulate is favorable to a full implementation

that could otherwise be perceived as overwhelming and draw unintended negative reactions”.

In the implementation of a student portal, it is not only crucial to provide the process requirements. Usability testing must also be conducted to identify errors and bugs during development (Voorhis and Falkner, 2004). Continuous search for ways to improve the services must be undertaken to guarantee that the portal meets the changing needs of the learners.

To sum it up, learners take the center stage in an ODeL environment. The learners are the important users of the student portal, and thus it is imperative that their welfare be given utmost attention. Learners and staff should be involved in the development of the student portal to ensure that all the elements available in the portal are really crucial and useful to all its users. Acknowledging the significance of a learner-centered support system is essential to providing the students opportunities to succeed in an ODeL environment.

CONCLUSION

The study determined the satisfaction level of the learners who used the existing online student portal (OSP) of the University of the Philippines Open University. The study conducted a purposive online survey involving learners who have experienced both the manual and online systems. Participants (n=147) indicated a high satisfaction level with the portal's accessibility and availability, content, and appearance. Likewise, they were also satisfied with the current elements of the portal (i.e. usefulness, functionality, efficiency, appearance, ease of use, completeness, and security). They evaluated the portal based on their experience in using it during enrollment, viewing of grades, requesting for documents, reading announcements, accessing the learning management system, and the like. Online registration and viewing of grades are two important functionalities of the portal that maximize the learning experience of the learners in the University. These functionalities provide immediate feedback to the learners in their transactions with the University. The online registration gives them immediate confirmation of their registration while the online viewing of grades allows them to know their performance immediately at the end of the term.

Learners have also suggested features that can be added to the existing functionalities of the portal. These features include the integration of the portal to the learning management system of the University, alert or reminder system for important activities, compatibility with tablets and other mobile devices and gadgets, provision of a chat/messaging feature with peers and classmates, and availability of links to online journal resources. They saw how these features would help maximize their learning experiences and/or help them in their learning transactions with the University.

If the portal is improved, it may be used as a tool to increase retention of learners in their programs of study.

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