Readiness of Tertiary Level Students of Holy Angel University to Enroll in Online Learning

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ABSTRACT

Schools continue to enforce reforms by adapting technology in the teaching and learning process such as the use of internet in offering courses online so that students can study anytime, anywhere. However, the question persists if online learning is indeed for anybody who wishes to take advantage of this learning modality. While studies have shown that the attrition rate in online learning is higher compared to those enrolled in the traditional face-to-face program, students with high online learning readiness on the other hand have higher satisfaction and higher completion rate. Thus, this study was conducted to determine the online learning readiness of tertiary level students at Holy Angel University (HAU) based on their age, course, year level as well as their intention to enroll in an online learning mode. Results showed that HAU tertiary level students generally have moderately high readiness for online learning. Those with higher online learning readiness were female, older students as well as students in the higher year levels. Majority of the respondents would consider enrolling in online courses; although the difference with those who do not wish to enroll is minimal. Common reasons to enroll include accessibility and ease of technology use while for those who are not enrolling cites the absence of the physical presence of the teacher and the perception that online learning is not "real" learning. This study highly recommends proactive measures to address the issues and concerns of all stakeholders to ensure successful outcome for all online learning initiatives.

1. Introduction

With the evident ubiquity of technology in mainstream society, almost anybody could readily take advantage of the affordances of technology. In the education sector, schools continue to incorporate the use of technology to enhance the teaching and learning process. Some schools and universities use technology to deliver instruction beyond the four corners of the classroom via the online learning mode. Online learning is a kind of distance learning that delivers instruction mainly through the use of the internet.

Since its conception in the 80's, online learning continuous to be a buzz word until today and more students around the world take advantage of the convenience and flexibility of online learning. Online learning gives students the opportunity to study anytime and anywhere thus making it easy for them to obtain a degree, develop and update themselves on work related skills, and even engage in life-long learning. It allows learners to overcome traditional barriers to learning such as location, disabilities, time and financial constraints, and familial obligations.

Though the benefits of online learning are very promising, not everyone are successful in the online learning environment. Researchers like Colorado (2010), Kauffmann (2015) and Milligan and Buckenmeyer (2008), report that online learning may not be for everyone and that not everyone is ready for the new learning environment. Compared to the rate of enrolment in traditional schools, the enrolment rate in online learning is significantly higher but

the drop-out rate or the non-completion of the intended course of study is also very high (Kizilcec, 2015, Aversa, 2013 and Monteiro, 2016). Among the reasons for the high attrition rate in online learning schools are dissatisfaction in the online learning delivery (Yair, (2004), technology issues and the lack of human interaction, and communication problems (Willging, 2004). Monteiro, et.al. (2015) categorized the different factors that lead to student drop-out into three major categories: student factors which include academic background, relevant experiences, skills and psychological attributes; course/program factors which include course design, institutional supports and interactions; and environmental factors which include work commitments and supportive environments.

Finding out the online learning readiness of prospective students is very important. Online learning readiness is the "goodness-of-fit" that determines whether prospective students will be successful in the online learning mode. It is imperative for online schools and universities to check the intended learners' readiness for online learning before considering them to the online learning program. The determination of online learning readiness is a crucial success indicator both for the learner and the online learning provider.

Studies conducted by Geiger, et.als. (2013), Gunawardena and Duphorne (2000), Horzum,et.al.(2015), Kırmızı (2015) and Liaw (20017) report that online learning readiness correlates with students' perceived satisfaction and online learning success. Online learning readiness is

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measured by the intended learners' variables of life factors, individual attributes such as motivation and learning styles and technological readiness such as technical competency, technical knowledge, reading rate and recall, and typing speed and accuracy (Geiger, et.al., 2013). Other researchers like Lau and Shaikh (2012) categorized online learning readiness factors into four main factors including Technical Skills (TS), Learning Preferences (LP), Computer Self-Efficacy (CS-E), and Attitudes towards Computers (AC). Illagas and Gülbahar (2015) report that the three common factors to most studies about online learning readiness are individual properties, ICT competencies as well as access to technology, and motivation. Other factors include gender, age and locus of control (Yukselturk and Bulut ,2007), awareness of information available in the internet (Lee, et.a.l, 2002) and internet connection speed (Abbas, et.a.l.,2011).

As the Holy Angel University (HAU) in Angeles City, Pampanga continue to provide quality and accessible education in the Central Luzon region, the administration is venturing on the possibility of making its educational programs and services even more accessible through online learning. At the moment, there is no existing data available on the state of readiness of its students for this kind of learning mode. It is therefore imperative for the university to find out the online learning readiness of its students so that it can have a picture of the characteristics of its students including their strengths and weaknesses, their differences and common characteristics. Data that can be gathered can be used to predict its prospective students' success in the online learning mode. Furthermore, the results of the test for online learning readiness of students can assist HAU online program developers in providing the best possible online learning experiences for their future students, (Searle and Waugh, nd). By using the data gathered in this study, HAU will be guided in its online learning initiatives, and will be able to avoid the high attrition rate that some online schools are reportedly experiencing, (Bawa, 2016).

To operationalize this undertaking, this study adapted Hung's (2010) Online Learning Readiness Scale (OLRS) with the following five dimensions: self-directed learning, motivation for learning, computer / internet self-efficacy, learner control, and online communication self-efficacy. Self-directed learning centers on the students' accountability for attaining their learning objectives; motivation for learning describes the attitude with regards to the online course delivery; learner control is the students' capability to exercise discipline over the learning process; and online communication self-efficacy refers to the ability to utilize the internet as a medium for online learning. Students with high readiness in the five dimensions are hypothesized by the author to most likely indicate their intention to enrol in online learning. Figure 01 illustrates the relationship between the individual attributes and their online learning readiness as determinants for their intention to enrol.
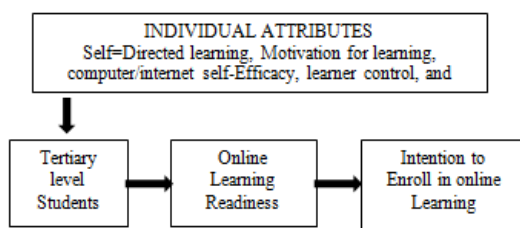

Figure 01. Online Learning Readiness and Intention to Enrol

2. Objectives

This study aimed to explore the online learning readiness of the Holy Angel University tertiary level students. Specifically, it aimed to:
1. Determine the demographic profile of the respondents in terms of the following:
 a. age
 b. sex
 c. course
 d. year level
2. Determine the online learning readiness of the students in terms of the following dimensions:
a. self-directed learning
b. motivation for learning
c. computer / internet self-efficacy
d. learner control
e. online communication self-efficacy
3. Determine the respondents' intention to enroll in online learning based on their online learning readiness.

3. Materials and methods

Since there is no existing data in HAU on the nature of the study variables i.e., online learning readiness and intention to enroll, the proponent is primarily interested in establishing baseline data hence the use of the descriptive exploratory research design. This study was conducted in Holy Angel University due to its reputation as one of the preferred university within the Central Luzon region as well as for its dynamic thrusts towards educational innovation and excellence. Respondents were tertiary level students from the various units of the Holy Angel University who were selected utilizing the stratified random sampling technique.

This study utilized a three-part self-administered questionnaire to generate the data required. Part I aimed to collect the demographic profile of the respondents in terms of: age, sex, course, college and year level. Part II was the Online Learning Readiness Scale (OLRS), an adapted instrument developed by Hung et als in 2010. This 18 item instrument measured the five dimensions of OLRS, i.e., self-directed learning, motivation for learning, computer / internet self-efficacy, learner control and online communication self-efficacy. Permission to use for non-commercial purposes had been granted to the researcher. Part III was a self-reported questionnaire that focused mainly on the intention to enroll in an online learning program. All instruments were pilot tested for validity and reliability.

Questionnaires were distributed through close coordination with the representatives as well as with the faculties of the different college units. Instrument retrieval rate was 90% of the total distributions. All retrieved instruments were encoded, processed and analyzed using the IBM SPSS v23 statistical software.

Respondents were assured that all information collected will remain confidential and secured. Further, they were given the option to write their name and signature on the form to signify that they voluntarily given their consent to participate in the study.

4. Results

Results as well as analysis of the data collected and processed from the 995 respondents as it pertains to each of the research questions were as follows:

Demographic Profile

Most of the respondents were from the 17 and 18 year old age group comprising about 60.9% of the total respondents' population. 17.3% were from the 19 years, 8.2% were 21

years and older, and 6.3 % were from the 16 years and younger group. Table 01 presents the age distribution of the respondents from which can be generalized as relatively young and belonging to the millennials generation group. One defining attribute of this generation is the depth of understanding of the internet and ICT utilization in their daily activities of living.

Table 01. Distribution of Respondents According to Age in Years.

Respondents	Frequency	Percent (%)	Cumulative Percent (%)
17 years old and younger	362	36.3	36.4
18 years old	308	30.9	67.3
19 years old	172	17.3	84.6
20 years old	71	7.1	91.8
21 years old and older	82	8.2	100.0
Total	995	100.0	

Table 02. Distribution of Respondents According to Sex.

Respondents	Frequency	Percent (%)	Cumulative Percent (%)
Male	359	36	36
Female	612	62	98
Did not indicate sex	24	2	100
	995	100	

Table 03 shows the distribution of respondents according to the course they were taking. Five top respondent group were from the following courses: BS Accountancy with 13.2% (132/995) respondents, followed by students of BS Criminology with 13.0% (130/995), next were from BS Education with 11.9% (119/995) and BS Engineering with 11.8% (118/995). There were seven (7) respondents who did not indicate the course they were taking.

Table 03. Distribution of Respondents According to Course.

Respondents	Frequency	Percent (%)	Cumulative Percent (%)
BS Accountancy	132	13.3	13.3
BS Criminology	130	13.1	26.4
B Secondary Education	119	12.0	38.4
BS Engineering	118	11.9	50.3
BS Nursing	92	9.2	59.5
BS Med Tech	78	7.8	67.3
BS Information Technology	70	7.0	74.3
B Elementary Education	66	6.6	80.9
AB Psychology	52	5.2	86.1
BS Hotel Restaurant Mgt	46	4.6	90.7
BS Business Mgt	39	3.9	94.6
AB Comm	24	2.4	97
BS Architecture	22	2.2	99.2
Did not indicate course	7	0.7	99.9
Total	995	100	

With regards to the year level, Table 04 shows that majority 57.9% (577/995) respondents come from the second year level followed by those in the third year level at 25.8% (257/995), then followed by the fourth year level at 10.9% (109) and the irregular students at 4.2% (42/995). Ten students did not indicate their year level. Due to the K-12 transition in the Philippines, there are no freshmen students in HAU.

Table 04. Distribution of Respondents According to Year Level.

Respondents	Frequency	Percent (%)	Cumulative Percent (%)
Fourth Year	109	10.9	10.9
Third Year	257	25.8	36.7
Second Year	577	57.9	94.6
Irregular	42	4.2	98.8
Did not indicate year level	10	1.0	99.8
Total	995	100	

Online Learning Readiness

For the online learning readiness profile of the respondents, the following rating scale was used to interpret the respondents' level of readiness for online learning:

Score	Interpretation
1.00 to 2.00	Low readiness
2.01 to 3.00	Moderately low readiness
3.01 to 4.00	Moderately high readiness
4.01 to 5.00	High readiness

Low readiness would mean that the student is least comfortable in an online learning system, thus has minimal or no interest at all in this learning modality. Moderately low readiness would mean that there is interest but needs to motivate and continuously follow-up the students within this level. As for the moderately high readiness level, the students has the confidence and willingness though is slightly skeptic due to several factors. While the ones with high readiness score are those who are highly motivated and enthusiastic in taking advantage of the online learning delivery.

From Table 05 the dimensions of online learning readiness were presented and results showed that among the five dimensions, the respondents scored high in terms of their internet efficacy and learner control. In the other three dimensions, the respondents scored moderately high. All the other dimensions have almost the same variability having standard deviation of around 0.7 except for the respondents' sense of self direction which is a little lower in variability.

Table 05. Distribution of Respondents According to the Online Learning Readiness Dimensions.

Dimensions	N	Minimum	Maximum	Mean	Std. Deviation
Internet Efficiency	995	.33	5.00	**4.0637**	.74578
Self-Direction	995	1.00	5.00	**3.7361**	.62110
Learner Control	995	1.00	5.00	**4.2101**	.74983
Motivation for Learning	995	1.00	5.00	**3.6683**	.79675
Online Communication Efficacy	995	1.00	5.00	**3.6683**	.79675
Total	995				

While the Online Learning Readiness Scale is the aggregate score of the five dimensions, the overall score reflects the respondents readiness for online learning. Thus, the mean score of 3.8 as presented in Table 06 indicates that the collective readiness of the respondents for online learning was moderately high.

Further, exploration of the OLRS and the demographic profile of respondents revealed the highest readiness scores were among the female respondents (OLRS=3.9), respondents who were 19 years old (OLRS=3.9), respondents

in the 4th year level (OLRS=3.9), and respondents from the Business Management course (OLRS=4.0).

Table 06. Respondents Online Learning Readiness Score.

	N	Minimum	Maximum	Mean	Std. Deviation
OLRS	995	1.00	5.00	**3.8693**	.57783
Total	995				

Finally, the respondents were asked regarding their intention to enroll in an online learning program, and based on the responses presented in Table 07, there were 34.5% who did not indicate their intention to enroll. Although the difference was minimal, those who signified their intention to enroll (34.9%) were more than those who will not enroll (30.4%).

Table 07. Distribution of Respondents According to Intention to Enroll.

Intention to Enroll	Frequency	Percent	Valid Percent	Cum. Percent
Did not indicate intent	344	34.5	34.5	34.7
Will not enroll	303	30.4	30.4	65.1
Will enroll	348	34.9	34.9	100.0
Total	997	100.0	100.0	

5. Discussion

This study was conducted primarily to establish baseline data on the readiness of HAU tertiary level students which could serve as basis for the strategic initiatives on online learning. While this study relatively met its objectives, there were still various issues and concerns which needs to be addressed by future researchers utilizing better methodologies.

From the demographic profile, the course and year level provided valuable insights on the readiness level for online learning as it indicates the potential sector to be tapped for online learning. With the moderately high readiness result, this study was able to determine the potential reality for the establishment of online learning courses at Holy Angel University.

Thus, this study shows that older students and students in higher level tend to have higher online learning readiness. This is consistent with previously reported studies about demographics that relate to student success that students in online learning tend to be adult students, Moore & Kearsley (as cited by Colorado, 2010). Malcom Knowles described adults learners to be self-directed, internally motivated, ready to learn and focused on applying what he or she learned which are essentially part of the five dimensions of the OLRS used in this study, (Pappas, 2013).

Further, this study also showed that female students have higher readiness than their male counterparts. A study conducted in the Philippines by Bana, et.al.in 2016 reported that female students scored higher in technological skills and in time management but lower in attitude which included study habits, abilities and motivation than male students. Students really differ in their learning characteristics and the differences may be attributed from factors such as gender, age, and others. Hence, in developing instructional experiences for students especially in the learning delivery mode that is different from what the students are used to, it will help providers to take these differences in consideration.

In terms of the course of the student-respondents, the students from the Business Management scored the highest in online learning readiness. The US National Center for Education Statistics (2012) listed Business Management as one of the courses with the most number of students enrolled online. Though there is no study that says Business Management course is best offered online, this might be noteworthy for future research.

Generally, the students of HAU scored high in internet efficiency and learner control. The use of the internet to enhance learning and for research assignments is part of the students' coursework in HAU so the readiness results in these two dimensions are indicative of students' everyday experiences. Of the five dimensions, the students of HAU scored low in motivation for learning and online communication efficacy. The score may not indicate low readiness but this finding should prompt the university to revisit how the students are being prepared to communicate globally. Online communication is one of the essential 21st century skills and it is therefore imperative for HAU to make sure that its students can confidently communicate across countries and languages and across all types of modalities. Thus, in preparation for the offering of online courses in HAU, the course developers must start examining the curricular content and methodology used in teaching communication so as to include effective communication in an online learning environment.

The score on motivation which is also lower than the scores in the other dimensions should also prompt the university to facilitate learning in such a way that students own their learning and within themselves maintain high engagement in the learning process. Motivation is a stable personal characteristic that is always identified to be an important trait of successful online learners and it is as well identified as one decisive factor why students withdraw from online learning, (Artino 2008; Keller 2008; and Yukselturk and Bulut, 2007). Knowing that motivation is crucial in online learning success, the relatively low score of HAU students in motivation should prompt the university to identify what motivates the prospective students in learning and consider the data in the process of creating courses online.

The study of Kim and Bonk as cited by Colorado (2010),identified the following factors that can improve student success in online learning: 1) teaching students to self-regulate their learning, 2) better measures for student readiness, and 3) better learning management systems to track student learning (Kim & Bonk, 2006).Colorado (2010) added that examining student demographics prior to online program enrollment can help predict student success in the online learning environment.

Though the difference between the intention and no-intention to enroll is minimal, the respondents' feedback should be taken into consideration. Common reasons to enrol include accessibility and ease of technology use while for those who are not enrolling, they cite the absence of the physical presence of the teacher and classmates who the respondents believed to be important in the learning process, and the perception that online learning, because of the lack of interaction with teachers and classmates, is not "real" learning.

Filipinos has high regard with teachers as do their Asian neighbor Chinese who ranked number one in the social status of teachers survey, (Klein, 2013). Filipinos depend on teachers for their learning and are more confident in learning when there is teacher affirmation. It is therefore not surprising that though HAU respondents are moderately high in online

learning readiness, the intent to enroll in online courses may not follow. As HAU considers the offering of online learning courses in the future, it must design its courses in such a way that teacher-student interaction will be emphasized as much as the student-student and student-content interactions.

In the literature review cited by Preisman (nd) numerous studies report that students have positive perception about their online learning and perform better when there is high teaching presence. Anderson, Rourke, Garrison, and Archer (2001) defines teaching presence as the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes which begins before the course commences as the teacher, acting as the instructional designer, plans and prepares the course of studies, and it continues during the course, as the instructor facilitates the discourse and provides direct instruction when required.

To ensure high teaching presence, Lowenthal and Parscal (2008), listed down strategies related to instructional design, teaching, and student learning for creating teaching and social presence in their research. Some strategies under instructional design include the creation of course overviews, the use of multimedia in instructional delivery and the use of authentic assessments. Under strategies for teaching, they listed down regular contribution to discussion forum, prompt giving of feedback and answer to emails as well as posting due dates for requirements; and under student learning, the ability to contribute to discussion forum, sharing personal stories and asking questions among others.

This study uncovered that HAU students who themselves are also prospective students of HAU's future online learning initiatives, have misconceptions about online learning. In proper venues, HAU must orient its current students about what online learning is and how that online learning as a legitimate education modality as do residential schools. Before taking-in students in the online learning program, HAU must also make sure that prospective students understand the new teaching and learning environments so that they will not be dissuaded from pursuing their online education. Hence, creative and innovative strategies to promote awareness and end user buy-in for online learning should be undertaken.

Essential proactive measures would be the engagement of vital stakeholders i.e., key decision makers, faculties and as well as the student body for the phased integration of online learning modalities in the current course delivery system. Through the key decision makers, policies as well as practice protocols can be drafted and disseminated emphasizing the utilization of system infrastructures that would be put into place. Moreover, existing system capabilities can be also be realigned towards accommodating the needs for online learning. Further, provision of training and development to empower as well as engage the faculty to start transitioning part of their courses into online learning mode.

6. Conclusion

This study revealed that the state of readiness for online learning could be considered as a significant indicator for successful outcome of online learning initiatives. Major challenges include breaking down barriers from the level of the stakeholders i.e., their issues and concerns on the operationalization as well as utilization of the online learning modality:

For key decision makers, demystifying the concept of online learning as well as the selection of an acceptable and appropriate design of the online learning platform is vital. In addition, it is imperative that formulation of administrative policies, standards and protocols to ensure acceptability, quality, and compliance should be undertaken.

For the faculty, who will serve as course providers and subject matter experts - sustainable capability development and training, including a suitable transition timeline should be top priority. Setting up of a transition help desk or team to address the immediate resolution of faculty issues and concerns is a must.

For potential students, comprehensive information dissemination on the benefits of online learning would be a worthwhile undertaking. Development of an online learning readiness program to ensure the smooth entry of students into the system should be integral in all the development efforts.

As this study uncovered new questions and directions for online learning, there is a need to extend or explore in future research especially that this study was limited to the HAU community.

As such, future investigations on the stakeholders' capability to engage and sustain online learning initiatives should also be considered, as this study focused mainly on the students who will utilize the system. Other major challenges for future studies would include delving into the online learning providers' implementation preferences and competencies as well as the determination of other factors for successful program outcome.

7. Acknowledgements

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