Students' Readiness for Online and Distance Education at the Nueva Vizcaya State University

Micah Ryan B. Ramel, PhD & LPT [1,2]

[1] Associate Professor, College of Business Education, Nueva Vizcaya State University, Nueva Vizcaya, Philippines
[2] Former Director, Center for Alternative Education, Nueva Vizcaya State University, Nueva Vizcaya, Philippines, micahryan_76@yahoo.com

Abstract

Utilizing quantitative research through the survey method as the means of gathering data, this study harnessed a researcher-developed questionnaire to draw the responses of 38 graduating students from the Accountancy, Business and Management Track of the Nueva Vizcaya State University College of Teacher Education Senior High School program, to assess their readiness for online and distance education.

Results showed that the graduating students from the SHS ABM Track have favorable overall attitudes towards e-learning and are ready for online and distance education. Moreover, the students are competent in the use of offline computer-based technologies, are competent in the use of mobile-based technologies, and are competent in the use of Internet-based technologies.

The results manifest the following: (1) there is a very significant and positive correlation between students' activities in computer-based technologies (offline) and their attitudes towards learning; (2) there is a significant and positive correlation between students' mobile Internet activity and their attitudes towards e-learning; and, (3) a very significant and positive correlation between the students' Internet-based activities and their attitudes towards e-learning.

Based on the strengths of the results, recommendations on how the University may be able to strengthen its ODE capability and to respond to the needs of prospective students were placed forward for consideration by the administration.

Keywords: *Open and Distance Education, students readiness, computer-based technologies, attitudes towards learning, attitudes towards e-learning, Internet-based activities, self-directed learning & control*

Introduction

Background of the Study

Lane (2014) has explained that there is an iron triangle that must be modified to reflect the perspective of the prospective learner rather than the educational institution. According to Lane, the learner's level of confidence or preparedness is one of three factors that can be measured through surveys, especially within the context of costs that is associated to their educational provision. It is situated in a broader social mission and social returns of investment, as a means of enhancing reputation or visibility, especially in the case of publicly funded educational institutions. Further, Lane's (pp. 6-7) interaction engagement equivalency theorem emphasized that the high levels of motivation, organization, or preparedness on the part of the student can offset lower levels in others.

More importantly, it is in the context of harnessing the positivist research paradigm (Kivunja and Kuyini, 2017, p. 37) to consolidate, test and, utilize a survey tool that is derived from a comprehensive review of existing related literature. The survey tool must be based on eight studies published online that utilized empirical research to be able to establish the importance of looking into the readiness of students for online and distance education (OLDE). It must be one of the bases of a school to consider shifting from the traditional campus-based education to online and/or dual-mode academic institutions.

One academic institution in the Philippines which has recently set its projectile towards internationalization is the Nueva Vizcaya State University (NVSU). A merger between the former Nueva Vizcaya State Institute of Technology (NVSIT) of Bayombong and the Nueva Vizcaya Polytechnic College of Bambang, the NVSU is considered as a dominant higher education institution in the province of Nueva Vizcaya and having been part of the formation for more than a century.

Having previously received its ISO certification and passed the Civil Services Commission (CSC) high accreditation, this academic institution which has, most recently, had been elevated to Level IV State University and College (SUC), all within the initial term of a dynamic and courageous university president, Dr. Andres Z. Taguiam, as emboldened by the new vision of becoming "A Premier University in a Global Community" by transforming itself as a reliable provider of high-quality Open Distance Education (ODE) programs as a dual-mode institution for Filipinos and other Learners anywhere in the world.

Thus, this topic of student readiness for online and distance education has sufficient empirical background and is of interest to NVSU's various stakeholders.

Objectives

This research assessed the readiness for online and distance education of selected incoming freshmen students at Nueva Vizcaya State University.
Specifically this research sought to:

1.Describe the profile of incoming freshmen students in terms of their:
1.1 Demographic & Academic characteristics;
1.2 Prior experience & training in e-learning/online and distance learning;
1.3 Degree of confidence in using ICT Tools;
1.4 Access to, frequency of use, & ownership of ICT/digital tools; and
1.5 Means of access to the internet when inside and/or outside the university.
2. Describe incoming freshmen students' online & distance education readiness in terms of:
2.1 Activities using computer-based, mobile-based and web-based technologies;
2.2 Self-directed learning & control; and,
2.3 Overall attitudes towards e-learning
3. Test for significant relationships between and among the profile variables and the measures of online & distance education readiness.

Conceptual Framework

Table 1. Concepts and Variables Utilized

Concepts and Variables	References
Demographic and academic profile characteristics	Byungura et al., 2018, Simmiyu, 2014; and Davis, 2006
Ownership and access to digital tools	Byungura, et al., 2018, Simiyu, 2014
Prior experience	Byungura et al., 2018; Davis, 2006
Previous computer training	Byungura et al., 2018
Use of digital tools	Byungura, et al., 2018
	To be continued

From previous page..(Table 1, page 52)	
Mobile-based technology activities	Byungura et al., 2018
Character/traits for online class	Davis, 2006
Web-based technology activities	Byungura, et al., 2018
Computer-based technology activities	Byungura, et al., 2018
Computer skills level	Vasileska, et al. 2017
Technology usage and skills	Zabadi and Alawi, 2016
Confidence on using ICT tools	Byungura et al., 2018

This study utilized eight published paper to establish its framework. Three of which highlighted the need to establish demographic and academic profile characteristics (Byungura et al., 2018, Simmiyu, 2014; and Davis, 2006); two for ownership and access to digital tools (Byungura, et al., 2018, Simiyu, 2014) and prior experience (Byungura et al., 2018; Davis, 2006), while one presented the need to establish previous computer training (Byunugra et al., 2018), frequency of use of digital tools (Byungura, et al., 2018), mobile-based technology activities (Byungura et al., 2018), character/traits for an online class (Davis, 2006), web-based technology activities (Byungura, et al., 2018), computer-based technology activities (Byungura et al., 2018), computer skills level (Vasileska, et al. 2017), technology usage and skills (Zabadi and Alawi, 2016), degree of confidence on using ICT tools (Byungura et al., 2018). With regard to online and distance education readiness of students, it was found that three of the eight related studies focused on online learning readiness (Hung et al., 2010; Doe et al., 2017; Kirmizi, 2015), while one study each delved on online readiness (Doe et al., 2017), character traits for online class success (Davis, 2006) and overall attitudes towards e-learning (Zabadi, et al., 2016).

Methodology

Data Collection Instrument

A self-administered survey questionnaire, adopted and consolidated from the various concepts and variables was subjected into several tests before it was utilized in the study. Particularly it underwent the following:

Instrument validity and reliability

To ensure its validity, the developed survey questionnaire was subjected to several phases of refinement including merging and consolidating repetitive and similar constructs, questionnaire items, etc. to arrive at its final form, and subjected to an item review by fellow academics.

To establish its reliability, the survey instrument was subjected to tryout data gathering on 38 graduating students from the Senior High School ABM track. The following describe the details, including the number of items of the parts of the questionnaire and results of the reliability test using Cronbach's alpha (Table 2).

Table 2. Results of Test of Reliability of Questionnaire Items via Cronbach's Alpha

Construct	Number of Items	Correlation	Remarks
Degree of confidence in using ICT tools	9	.800	Reliable
Level of access to ICT tools	13	.764	Reliable
Use of computer-based technologies (offline)	21	.917	Reliable
Use of mobile-based technology	12	.874	Reliable
Use of internet-based technology	28	.918	Reliable
Self- directed learning and learner control	36	.946	Reliable
Overall attitudes to e-learning	10	.885	Reliable

The results confirm that all the research constructs presented above are reliable for each has passed the threshold value of 0.700, which is acceptable for Cronbach's alpha (Gliem and Gliem, 2003, p. 87). The constructs which did not immediately meet the threshold and/or were found to have too few responses were revised accordingly.

Data Gathering Procedure

The survey questionnaire was floated to the ABM graduating students with the assistance of the assigned/cooperating teacher in the Senior High School program, and after permission was granted by the University President, through the Vice President for Academic Affairs and the Principal.

The researcher was at hand to provide clarifications to the respondents during the period of data gathering.

Treatment of Data

The Statistical Package for Social Science Researches (SPSS) version 16 was utilized to process the gathered data presented in Table 3 below.

Table 3. Objectives-Variables-Data Analysis Plan

Objectives	Variables	Data Analysis
1. Describe the profile of freshmen students	1.1 Demographic & Academic characteristics; 1.2 Prior experience & training in e-learning/online and distance learning; 1.3 Degree of confidence in using ICT Tools; 1.4 Access to, frequency of use, & ownership of ICT/digital tools; and, 1.5 Means of access to the internet when inside and/or outside the university.	
		To be continued..

From previous page.. (Table 3, page 54)		
2. Describe the freshmen students online and distance education readiness	2.1 Activities using computer-based, mobile-based and web-based technologies; 2.2 Self-directed learning and control; and 2.3 Overall attitudes towards e-learning.	Means, percentages, standard deviation, and variances
3. Test for significant correlation between and among students' profile and the measures of online and distance education readiness	Same variables identified for objectives 1 & 2 above	Pearson's correlation

Table 4. Data Interpretation Scale

Scale	Mean Range	Qualitative Description	OLDE Readiness Interpretation
4	3.50-4.00	Very Confident/ Unlimited/ Always/ Very competent/ Very favorable	Ready on their own, needing very little intervention
3	2.50-3.49	Quite Confident/ Open but limited/ Often/ Competent Favorable	Ready but still needs some interventions
2	1.50-2.49	A little Confident/ Open but very limited/ Sometimes/ Nearing Competent Somewhat Favorable	Somewhat ready but needs a lot of interventions
1	1.00-1.49	Not Confident/ No access/ Never/ Not competent Not favorable	Nearly ready

Profile of the Respondents

Table 5. Respondent's Profile

Profile Variables	Frequency	Percent
Sex		
Male	5	13.2%
Female	33	86.8%
Total	38	100%
		To be continued

Variable	Frequency	Percent
From previous page...(Table 5, page 55)		
Year of Birth		
2000	17	44.7%
2001	21	55.3%
Total	38	100%
With OLDE Experience	18	47.4%
Degree of Experience		
Very Difficult	1	6.3%
Quite Difficult	8	50%
Quite Easy	7	43.8%
Total	16	100%
Kind of online and distance learning experience		
Part of subject	17	100%
Utilization of OLDE competencies		
A little	4	28.6%
Every now and then	5	35.7%
Most of the time	5	35.7%
Total	14	100%
Place of Access		
At Home	12	85.7%
At Computer Shops	1	7.1%
Free Wi-Fi sites	1	7.1%
Total	14	100%

The results presented in Table 1 describe the participants of the study in terms of their personal profile (sex and year of birth), and academic profile, (OLDE experience, degree of difficulty and kind, utilization of OLDE competencies, place of access of online course).

Sex. Of the 38 graduating Senior High School students of the Accountancy, Business and Management (ABM) strand who participated in the study, five (13.20%) of them were males while 33 (86.80%) were females.

Year of birth. In terms of birth year, 21 of the 38 respondents (55.30%) were born in the year 2001, while 17 (44.70%) were born in the year 2000, thus, all respondents may be said to be coming from the millennial generation.
OLDE experience. There were 18 respondents (47.40%) who acknowledged that they had some experience in OLDE.

Difficulty of OLDE experience. Of the 16 respondents who described the degree of difficulty of their experiences, eight (50.00%) said it was quite difficult, seven (43.80%) thought it was quite easy, and only one (6.30%) assessed his/her experience as very difficult.

<u>Kind of OLDE experience.</u> All of the 17 respondents (100.00%) who provided data said that their experience with OLDE was part of a subject or course during their time in the Senior High School in the University.

<u>Utilization of OLDE competencies.</u> Of the 14 students who responded to the question of whether or not they are able to utilize the competencies learned from the OLDE course, five and five (or about 35.70%, respectively), claimed that they indeed used it every now and then and/or most of the time. However, four respondents or 28.60 percent said they were only able to use those competencies to a little extent.

<u>Place of access.</u> The 12 of the 14 respondents, or 85.70 percent, who identified the places of access to their OLDE course said they did it at home, while one respondent each, or about 7.10 percent, respectively, utilized either computer shops and/or free Wi-Fi sites.

Table 6. Respondents' Degree of Confidence in Using ICT Tools

ICT Tools	N	Mean	Std. Deviation	Variance
E-learning systems	36	2.4167	.64918	.421
Word processing	38	3.1053	.79829	.637
Excel spreadsheets	37	2.5946	.59905	.359
PowerPoint	38	3.3684	.63335	.401
MS Access	38	2.4737	.79651	.634
Email systems	38	2.3947	.67941	.462
Online forum chats	38	2.4211	.82631	.683
Browsing	38	3.4474	.64504	.416
Web-based research tools	38	2.8947	.64889	.421
Overall, Confidence	**38**	**2.7935**	**.44234**	**.196**

Legend: Not Confident: 1 (1.00-1.49); A Little Confident: 2 (1.50-2.49); Quite Confident 3 (2.50-3.49); Very Confident: 4 (3.50-4.00).

The respondents' degree of confidence in using ICT tools is described in terms of their use of E-learning systems, Word processing, Excel spreadsheets, PowerPoint presentations, MS Access, email systems, online forum chats, browsing, and web-based research tools.

On the other hand, the results show that students are a little confident when using e-learning systems, MS Access, e-mail systems, and online forum chats. On the other hand, they are quite confident in word processing, excel spreadsheets, PowerPoint, browsing, and web-based research tools. Overall, however, the respondents are only a little confident of their use of ICT tools, which may indicate that the University may still need to provide some interventions to further enhance their ICT competencies.

Table 7. Respondents' Level of Access to ICT Tools and Technology

ICT Tools	N	Mean	Std. Deviation	Variance
Desktop computer	38	2.6053	.78978	.624
Laptop computer	38	3.0000	.86992	.757
Tablet	38	1.9474	1.08919	1.186
Smart phone	37	3.5676	.89878	.808
				To be continued..

From previous page.. (Table 7, page 57)				
PDA	35	1.5143	.74247	.551
Audio Recorder	38	2.5263	1.15634	1.337
Television	38	3.4474	.92114	.849
Radio	38	3.0263	1.05233	1.107
CD/DVD Player	38	2.8684	1.11915	1.252
Flash drive/disk	38	3.2895	.95600	.914
Wi-Fi Internet	38	3.0000	1.13899	1.297
Cable Internet	38	2.4211	1.28676	1.656
Data Internet	38	3.5526	.92114	849
Overall, Access to ICT	38	2.8365	.53332	.284

The results show that respondents consider themselves to have little access to the use of tablets, PDAs, and Cable internet. The respondents reported open but limited access, a 3 out of the 4-point Likert scale, in their use of the following ICT tools: desktop computer, laptop computer, audio recorder, television, radio, CD/DVD player, flash drive. However, the respondents also admitted that they are very confident in the use of smartphones and data internet.

Overall, the reported access to ICT by the respondents is open but limited with 3 of the 4-point Likert scale.

Table 8. Respondents' Frequency of Use of ICT Tools and Technology

ICT Tools	N	Mean	Std. Deviation	Variance
Desktop computer	37	2.5676	.68882	.474
Laptop computer	37	3.0541	.77981	.608
Tablet	37	2.0541	1.02594	1.053
Smart phone	38	3.6842	.87318	.762
PDA	33	1.6061	.74747	.559
Audio Recorder	35	2.3143	.93215	.869
Television	36	3.5278	.90982	.828
Radio	36	2.8611	1.09942	1.209
CD/DVD Player	37	2.3784	1.00971	1.020
Flash drive/disk	37	3.1892	.96718	.935
Wi-Fi Internet	37	3.0811	.98258	.965
Cable Internet	37	2.3243	1.20310	1.447
Data Internet	37	3.5676	.86732	.752
Overall, Use of ICT Tools	**38**	**2.7887**	**.45392**	**.206**

The survey results show that the respondents sometimes utilize the following ICT tools and technology, namely: tablet, PDA, audio recorder, CD/DVD player, and cable internet. The respondents also reported that they often used the desktop computer, laptop computer, radio, flash drive/disk, and Wi-Fi internet. These students also always use the data internet, television, and smart phones. Overall results show that respondents often used ICT tools, a 3 of 4 on the Likert scale.

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Table 9. Respondents' Means of Internet Access Inside the University

Access the Internet when Inside the University	N	Mean	Std. Deviation	Variance
Free Wi-Fi	37	2.5676	.86732	.752
Cyber Café	37	1.4595	.69100	.477
Load/Data	38	3.5000	.76229	.581
Computer Lab	38	2.0526	.65543	.430
Cable-Internet	38	1.6053	.85549	.732
Overall, ICT Access within the University	38	2.2408	.46816	.219

In terms of students' means of internet access, while they are inside the University, the report shows that they have unlimited access when utilizing their own load/data while they have open but limited access through University free wi-fi. Moreover, they also believe that they have open but very limited access to the internet through the computer laboratories, cable-internet, and cyber-café while they are inside the University. Finally, students rated their overall ICT access within the University as open but very limited, 2 out of 4 on the Likert scale. It may indicate that the University would need to consider enhancing its ICT capability through building better facilities, by improving the quality of the services of existing ICT means, and by expanding its network to new and/or better providers.

Table 10. Respondents' Means of Internet Access Outside the University

Access to the Internet When Outside the University	N	Mean	Std. Deviation	Variance
Free Wi-Fi	38	2.3947	.88652	.786
Cyber Café	38	1.6316	.67468	.455
Load/Data	38	3.4737	.76182	.580
Computer Lab	37	1.8108	.70071	.491
Cable-Internet	38	1.6579	.78072	.610
Overall, Internet Access When Outside the University	**38**	**2.2000**	**.45322**	**.205**

The report on Table 10 shows how students regard their access to the internet when they are outside the University. The results show that students believe that they have open but limited access when utilizing their own load/data. Moreover, they also have open but very limited access when utilizing the University's free Wi-Fi, cyber café, computer laboratories, and cable internet services. In general, the respondents declared that their access to the internet is open but very limited, a 2 of 4 on the Likert scale.

The current result mirrors the respondents' perspective that they also have open but very limited access to ICT even when they are inside the University (see Table 9). The overall results suggest that the University may need to develop strategies that would address its would-be freshman students' limitations in accessing the web. These strategies would let the institution become a reliable academic institution in terms of e-learning, dual-mode learning, and/or open, and distance learning/ education.

Incoming Freshmen Students' Online and Distance Education Readiness

Table 11. Respondents' Activities Using Offline Computer-Based Technologies

Competence Offline Computer-based Activities	N	Mean	Std. Deviation	Variance
Employ computers in learning, projects & assignments	38	3.1053	.60580	.367
Format a report for paper on word processing program	38	2.8947	.68928	.475
Open files from a specific file folder in a computer	38	3.1842	.80052	.641
Record information	38	2.9737	.82156	.675
Read and analyze study materials	38	3.0789	.58732	.345
Use basic and office programs	38	3.0526	.80362	.646
Use computers to play electronic games	38	2.4211	1.00355	1.007
Use graphic editors such as CorelDraw	38	2.0000	.73521	.541
Use MS Access to create small databases	38	2.4474	.76042	.578
Use MS Excel to create tables	38	3.0789	.71212	.507
Use MS PowerPoint to create presentations	38	3.4474	.64504	.416
Use MS Word to create documents	38	3.5000	.72597	.527
Use operating systems	38	2.6579	.87846	.772
Use software to create video and audio files	38	3.0263	.71610	.513
Create graphs, charts, diagrams, tables, presentations and reports	38	3.3421	.78072	.610
Take digital photos	38	3.0789	.78436	.615
Use software to create web pages	38	2.4211	.94816	.899
Use word processors, calculator, games	38	2.8947	.89411	.799
Utilize CMS for advertising specialists	38	1.9474	.73328	.538
Utilize data bases for web designers	38	2.0526	.76925	.592
Work with computer technologies	35	2.8571	.77242	.597
Overall Competence, Offline Computer-based Technologies	38	2.8330	.47855	.229

The results show that respondents believe themselves to be competent in 14 offline computer-based activities, particularly: employing computers in learning, projects & assignments, formatting reports on word processing program, opening files in a computer, recording information, reading and analyzing study materials, using basic and office programs, using MS Powerpoint, using operating systems, using software to create video and audio, creating graphs, charts, diagrams, tables, presentations, and reports, taking digital photos, using word processors, calculator, & games, and working with computer technologies.

However, respondents regard themselves as nearing competent only in terms of using computers to play electronic games, graphic editors, in using MS Access to create small databases, the creation of web pages, utilization of CMS for advertising specialists, utilizing databases for web designers. On the other hand, the respondents believe that they are very competent in using MS Word to create documents.

Finally, the respondents overall regard themselves to be competent in offline computer-based technologies, a 3 of 4 on the Likert scale. This indicates that the incoming freshmen students are ready for OLDE but would need some interventions to ensure success.

Table 12. Respondents' Activities Using Mobile-based Technology

Mobile-based Technology Activities	N	Mean	Std. Deviation	Variance
Access social media (Facebook, Instagram, etc.)	38	3.6579	.58246	.339
Address problems in using the internet	38	2.7105	.86705	.752
Address the threats or effects of computer technologies	38	2.5789	.75808	.575
Call friends, clients, classmates, etc.	38	3.5263	.72548	.526
Create blogs on social media	38	2.2895	1.01096	1.022
Engage in Leisure activities	38	2.6053	.82329	.678
Handle operating systems at the level of the system administrator	38	2.2105	.87481	.765
Make live calls	38	3.0789	1.02355	1.048
Organize calendar of activities	38	2.9474	.92845	.862
Send and receive messages	38	3.7632	.43085	.186
Transfer the educational materials	38	3.0526	.80362	.646
Use different educational blogs for interaction	38	2.3947	1.02771	1.056
Overall, Use of Mobile-based Technology	**38**	**2.9013**	**.54348**	**.295**

The report of the respondents' level of competence in utilizing mobile-based technology activities showed that the students believe that they are competent in the six categories. Specifically, the students are competent in addressing problems in using the internet, in addressing the threats or effects of computer technologies, engaging in leisure activities, making live calls, organizing the calendar of activities, and transferring educational materials.

However, respondents also believe that they were nearing competent only in using the following mobile-based technology, namely: creating blogs on social media, handling operating systems at the level of the system administration, and using different educational blogs. More importantly, respondents reported that they were very competent in accessing social media, calling friends, clients, classmates, etc., and sending and receiving messages.

Lastly, the overall assessment of use mobile-based technology by respondents is reported as competent, a 3 out of 4 on the Likert scale. It indicates that the incoming freshmen are ready for OLDE but may still need some interventions to ensure their success.

Table 13. Respondents' Activities Using Internet-based Technology

Activities	N	Mean	Std. Deviation	Variance
Access e-books	38	2.5789	.91921	.845
Attend Web conference	38	1.8947	.92384	.853
Buy and sell products/services	38	2.7632	.91339	.834
Check and send emails w/ attachments	38	2.9474	.76925	.592
Communicate online via email, messenger, etc.	38	3.6842	.47107	.222
Conduct an internet search for data	38	3.2368	.71411	.510
Conduct money transactions online	38	2.1579	.97333	.947
Dedicate 4-6 hours per week for an online course	38	2.1842	.98242	.965
Download audios, videos, pictures and graphs	38	3.3421	.78072	.610
Download computer programs	38	2.7368	.82803	.686
Download plug-ins for the computer	38	2.5000	.97952	.959
Download reports, assignments , course materials, presentations	38	3.3421	.70811	.501
Express emotions through forums, blogs, messaging, etc. online	38	3.2105	.84335	.711
Get the same value of education from an online course	38	2.5263	.76182	.580
Have a reliable device and internet service to use for an online course	38	2.6316	.85174	.725
Have lower education cost	38	2.2895	.61106	.373
Join chats on social media	38	3.0789	.91183	.831
Knowledge and skills of how to manage software for online learning	38	2.9737	.85383	.729
Learn new skills for an online course	38	2.8684	.84377	.712
No obligation for everyday lecture attendance	38	2.2105	.77661	.603
Opportunity to start studies anytime	38	2.8158	.89610	.803
Perform the functions MS Word, MS Excel, and MS PowerPoint)	38	3.4474	.72400	.524
Post and manage blogs	38	2.5526	.97807	.957
Post questions in online discussions	38	2.4737	.95115	.905
Read information from Websites, online news & comments	38	3.0526	.83658	.700
Use electronic library in my self-study	38	2.5000	.95153	.905
Use online tools to effectively communicate with others	38	3.1579	.88612	.785
Use the internet to find or gather info for online learning	38	3.2895	.69391	.482
Overall, Respondents' Use of Internet-based Technology	**38**	**2.8017**	**.46815**	**.219**

In terms of using internet-based technology in their activities, the results show that respondents are nearing competent in the four activities, namely: (1) attending web conferences, (2) conducting

money transactions online, (3) dedicating 4-6 hours a week for online courses, and (4) discovering ways to lower education cost.

Moreover, results also show that respondents believe they were competent in 21 activities where they utilize internet-based technology, namely: accessing e-books, buying and selling products/ services, checking and sending emails with attachments, conducting an internet search for data, downloading audios, videos, pictures, and graphs, downloading computer programs, downloading plug-ins for the computer, downloading reports, assignments, course materials, etc., expressing emotions, getting the value of education from the online course, joining chats on social media, managing software for online learning, learning new skills for online courses, performing the Microsoft Office functions (Word, Excel, PowerPoint), reading information from websites, etc., using an electronic library, using online tools, and using the internet for online learning.

More importantly, the respondents rated themselves as competent overall in the use of internet-based technology, a 3 of 4 on the Likert scale. This indicates that the incoming freshmen are ready for OLDE but may still need some interventions to ensure their success.

Table 14. Respondents' Self-directed Learning & Control

Self-directed Learning & Control Elements	N	Mean	Std. Deviation	Variance
Being organized	36	2.8056	.85589	.733
Being patient	38	2.9211	.81809	.669
Combine work and studies	38	2.9474	.73328	.538
Direct my own learning progress	38	2.9737	.63616	.405
Distracted by other online activities when learning online	38	2.6842	.93304	.871
Higher expectations for my learning performance	38	2.5789	.68306	.467
Improve from my mistakes	38	3.0263	.67731	.459
Manage time well	38	3.0263	.78798	.621
Motivated to learn	38	3.3947	.67941	.462
Not quit even when things get difficult	38	3.2105	.74100	.549
Open to new ideas	38	3.5263	.55687	.310
Preferring an immediate answer to class-related questions	38	2.8684	.70408	.496
Preferring to complete course work using a computer	38	3.7105	6.57147	43.184
Preferring to hear/listen to an instructor	38	3.2368	.71411	.510
Preferring to read course materials from a computer screen	38	2.7895	.74100	.549
Preferring to read course materials in printed from	38	3.1579	.67888	.461
Receive constructive feedback	38	2.6053	.63839	.408
Repeat the online instructional materials on the basis of my needs	38	2.7368	.64449	.415
Seek assistance when facing learning problems	38	2.8947	.83146	.691
Self-disciplined who gets things done on time	38	3.0000	.80539	.649

To be continued..

From Previous page... .(Table 14, page 63)

Self-motivated	38	3.3421	.66886	.447
Set up my learning goals	38	3.2368	.78617	.618
Share my ideas to others	38	3.1579	.67888	.461
Study according to individual plan	38	2.9211	.85049	.723
Study independently using electronic resources	38	2.7895	.74100	.549
Task-oriented	38	2.8947	.83146	.691
Think through a problem before answering	38	3.1579	.71759	.515
Think through a problem before asking for help	38	3.1316	.74148	.550
Turn in assignments in early	38	3.0263	.75290	.567
Understand technology	38	3.2895	.56511	.319
Willing to ask my classmates and instructors questions	38	3.1053	.64889	.421
Willing to ask questions via technology	38	2.9211	.67310	.453
Willing to complete assignments prior to the due date	38	3.1579	.71759	.515
Work in a group	38	2.9211	.67310	.453
Work independently	38	2.8947	.68928	.475
Working on career development	38	2.6579	.81461	.664
Overall, Self-directed Learning & Control	**38**	**3.0212**	**.52884**	**.280**

The report on self-directed learning and control shows that of the 36 aspects which compose the construct self-directed learning & control of open and distance education readiness, respondents believe they often encounter situations that make them engage in self-directed learning and control. Particularly: being organized, being patient, combining work and studies, directing own learning progress, managing distractions, gaining higher expectations, improving from mistakes, managing time well, motivating self to learn, preferring immediate answers to class-related questions, preferring to hear/listen, preferring to read course materials via computer screen, and reading course materials in printed form, receiving constructive feedback, repeating online instructional materials, seeing assistance, having self-discipline, being self-motivated, setting up learning goals, sharing ideas, studying according to plan, studying independently, being task-oriented, thinking through a problem before answering, thinking through a problem before asking help, turning in assignments early, understanding technology, willing to ask questions with classmates and instructors, willing to ask questions via technology, willing to complete assignments prior to due date, working in a group, working independently, and working on career development. However, respondents reported being always engaged in terms of being open to new ideas and preferring to complete course work using a computer.

Finally, the overall assessment of respondents' self-directed learning and control is reported to be often, 3 out of 4 on the Likert scale. This indicates that the incoming freshmen are ready for OLDE but may still need some interventions to ensure their success.

Table 15. Respondents' Overall Attitudes towards E-learning

Aspects of Students' Attitudes	N	Mean	Std. Deviation	Variance
E-learning environment needs advanced technical knowledge	38	2.8421	.63783	.407
E-learning is efficient as a learning method	38	2.4211	.68306	.467
Having courses on the internet makes learning more efficient	38	2.8158	.72987	.533
I am interested in studying some courses that utilize e-learning	38	2.7105	.86705	.752
I am positive about e-learning	38	2.7368	.82803	.686
I intend to use e-learning tools during the semester, if available	38	2.5000	.72597	.527
I think that e-learning promotes my learning experiences	37	2.5135	.76817	.590
I would prefer to have some courses on the internet rather than in the classroom	38	2.1579	.85507	.731
Online learning is a favorable alternative to the pen-paper based systems	38	2.3684	.75053	.563
Overall, I prefer e-learning and I believe that it is better than traditional method of learning	38	2.3158	.87318	.762
Overall, Students' Attitudes toward E-learning	**38**	**2.5371**	**.54174**	**.293**

In terms of overall attitudes towards e-learning, the results show that among the indicators (10), there were six which were assessed to be indulged favorably into by the respondents, specifically: Advanced technical knowledge, more efficient learning through the internet, interest in studying through e-learning, being positive about e-learning, the intent to use e-learning tools, and the promotion of learning experiences through e-learning.

However, four indicators are sometimes engaged in by the respondents only, which seem to indicate that these are only favorable to a little extent to e-learning. These are: e-learning is efficient as a learning method, preference for some courses via the internet, online learning as a favorable alternative, and e-learning as better than traditional methods.

Finally, the report shows that overall; the respondents believe that they often have attitudes that are favorable to a moderate extent towards e-learning, a 3 of 4 on the Likert scale. This indicates that the incoming freshmen are ready for OLDE but may still need some interventions to ensure their success.

The Significant Correlation between Selected Profile and Online & Distance Education Readiness Variables

Table 16. Correlation Between the Respondents' Access to the Internet Inside the University and Self-directed Learning & Control

		Free Wi-Fi	Cyber Café	Load Data	Comp Lab	Cable Net	Overall, Access Within
SLLC1. Being organized	Pearson Correlation	.230	-.096	-.375*	-.092	.095	-.044
	Sig. (2-tailed)	.185	.581	.024	.593	.581	.800
	N	35	35	36	36	36	36
SLLC5. Not Distracted	Pearson Correlation	-.265	-.148	-.152	.028	-.330*	-.301
	Sig. (2-tailed)	.112	.381	.362	.868	.043	.067
	N	37	37	38	38	38	38
SLLC8. Manage time	Pearson Correlation	.287	.379*	-.247	-.055	.016	.118
	Sig. (2-tailed)	.085	.021	.134	.743	.925	.481
	N	37	37	38	38	38	38
SLLC13. Course work using computer	Pearson Correlation	-.107	.372*	.089	.217	-.131	.110
	Sig. (2-tailed)	.527	.023	.595	.191	.431	.512
	N	37	37	38	38	38	38
SLLC14. Hear/listen to instructor	Pearson Correlation	.021	.215	-.174	-.085	-.329*	-.139
	Sig. (2-tailed)	.903	.201	.297	.611	.043	.406
	N	37	37	38	38	38	38
SLLC16. Read printed materials	Pearson Correlation	-.087	-.077	-.418**	-.262	-.262	-.348*
	Sig. (2-tailed)	.607	.649	.009	.112	.112	.032
	N	37	37	38	38	38	38
SLLC18. Repeat online instructional materials	Pearson Correlation	.168	.037	-.385*	-.222	.052	-.102
	Sig. (2-tailed)	.320	.829	.017	.180	.758	.541
	N	37	37	38	38	38	38
SLLC31. Willingness to ask questions	Pearson Correlation	-.135	-.019	-.109	-.395*	-.118	-.268
	Sig. (2-tailed)	.425	.911	.514	.014	.481	.104
	N	37	37	38	38	38	38
SLLC35. Work independently	Pearson Correlation	-.079	.081	-.051	-.047	-.347*	-.179
	Sig. (2-tailed)	.641	.633	.759	.778	.033	.282
	N	37	37	38	38	38	38
SLLC Mean (Total)	Pearson Correlation	-.020	.264	-.157	-.079	-.134	-.063
	Sig. (2-tailed)	.905	.115	.346	.637	.423	.709
	N	37	37	38	38	38	38

*. Correlation is significant at the 0.05 level (2-tailed).

The results gleaned from Table 16 shows that there is no significant correlation between students' access to the internet in the University overall and their self-directed learning and control overall. However, when tested for correlation at the level of each statement for both constructs, the following was found:

In terms of the test of correlation between access to the internet inside the University and self-directed learning and control of students, result showed that: (1) Being organized correlates negatively and significantly with the use of load data; (2) Not distracted correlates negatively and significantly with the use of cable internet; (3) Time management correlates positively and significantly with cyber café; (4) course work using computer correlates positively and significantly with cyber café; (5) hearing/listening to instructor correlates significantly and negatively with use of cable internet; (6) Reading printed materials correlates significantly and negatively to both use of load data and overall internet access inside the University; (7) Repeating online instructional materials correlates significantly and negatively to use of computer laboratories; (8) Willingness to ask questions correlates significantly and negatively to the use of computer laboratory; (9) Working independently correlates significantly and negatively with the use of cable internet.

Table 17. Correlation Between the Respondents' Access to the Internet Inside the University and Overall Attitudes Towards E-learning Readiness

		Free Wi-fi	Cyber Café	Load Data	Comp Lab	Cable Net	Overall, Access Within
OATEL2. E-learning is efficient	Pearson Correlation	-.024	-.170	-.363*	-.051	-.170	-.245
	Sig. (2-tailed)	.888	.316	.025	.762	.306	.138
	N	37	37	38	38	38	38
OATEL10. Prefer e-learning, it is better	Pearson Correlation	.023	.227	-.122	.348*	.171	.209
	Sig. (2-tailed)	.891	.178	.466	.032	.304	.208
	N	37	37	38	38	38	38
OATEL, Total	Pearson Correlation	-.078	.084	-.171	.048	.125	.004
	Sig. (2-tailed)	.648	.623	.304	.776	.454	.979
	N	37	37	38	38	38	38

*. Correlation is significant at the 0.05 level (2-tailed)

Table 17 shows that in the overall results, there is no significant correlation between students' access to the internet inside the University and their attitudes towards e-learning readiness.

However, the details of the results gleaned from Table 17 also show that there are significant relationships between students' access to the internet inside the University and their overall attitudes towards e-learning readiness. In particular, there exists a significant and negative correlation between efficient e-learning (OATEL2) and access to the internet via load data; and a significant positive correlation between preference for e-learning for being better (OATEL10) and utilization of the university's computer laboratories.

Table 18. Correlation Between the Access to the Internet Outside the University and Self-directed Learning & Control

		Free Wi -Fi	Cyber Café	Load Data	Comp Lab	Cable Net	Overall, Access Within
SLLC1. Being organized	Pearson Correlation	-.335*	-.229	-.211	.020	-.006	-.261
	Sig. (2-tailed)	.046	.179	.216	.911	.973	.124
	N	36	36	36	35	36	36
SLLC16. Read printed materials	Pearson Correlation	-.331*	-.165	-.253	-.161	-.150	-.387*
	Sig. (2-tailed)	.042	.323	.125	.342	.368	.017
	N	38	38	38	37	38	38
SLLC17. Receive constructive feedback	Pearson Correlation	-.147	.092	-.328*	-.288	-.170	-.299
	Sig. (2-tailed)	.378	.581	.045	.083	.308	.068
	N	38	38	38	37	38	38
SLLC, Total	Pearson Correlation	-.220	-.011	.001	.054	-.124	-.111
	Sig. (2-tailed)	.184	.947	.997	.752	.459	.507
	N	38	38	38	37	38	38

*. Correlation is significant at the 0.05 level (2-taied)

Table 18 shows that there is no significant correlation between access to the internet outside the University and self-directed learning & control. However, the same table shows the presence of a significant correlation between respondents' access to the internet outside the University and their self-directed learning and self-control, as reflected in the specific statements.

In particular, being organized (SLLC1) is significant and negatively correlated to students' access to free Wi-Fi. Reading printed materials (SLLC16) is significant and negatively correlated to free Wi-Fi; SLLC16 has also been found to be significant and negatively correlated to the overall access to the internet outside the University. Finally, receiving constructive feedback (SLLC17) has been found to have a significant and negative correlation to students' use of load data when accessing the internet outside the University.

The results seem to indicate how students' learning attitudes may be negatively affected by internet access that they pay for (load data) and/or free access (free Wi-fi), pointing to a potential weakness in terms of time management from the client's end. However, since even the overall access is significant and negatively correlated to the obligation of students to read printed learning materials (since this is not going to be fully eliminated from any academic program), this result may be harnessed as an opportunity by the University to be able to develop and inculcate efficient time management skills in seminar sessions as a requirement for those prospective clients who would choose to access the forthcoming e-learning, online and distance education courses.

Table 19. Correlation Between the Respondents' Access to the Internet Outside the University and Overall Attitudes towards e-learning Readiness

		Free Wi -Fi	Cyber Café	Load Data	Comp Lab	Cable Net	Overall, Access Within
OATEL2. E-learning is efficient	Pearson Correlation	-.237	-.123	-.394*	-.056	-.331*	-.402*
	Sig. (2-tailed)	.151	.460	.014	.742	.043	.012
	N	38	38	38	37	38	38
OATEL4. Interested in courses utilizing e-learning	Pearson Correlation	-.164	-.049	-.073	.005	.049	-.096
	Sig. (2-tailed)	.326	.772	.662	.977	.768	.565
	N	38	38	38	37	38	38
OATEL8. Prefer courses on the internet	Pearson Correlation	.049	-.131	-.076	.418*	-.079	.014
	Sig. (2-tailed)	.771	.434	.648	.010	.638	.934
	N	38	38	38	37	38	38
SLLC, Total	Pearson Correlation	-.138	-.022	-.117	.200	-.078	-.078
	Sig. (2-tailed)	.408	.898	.486	.236	.639	.642
	N	38	38	38	37	38	38

*. Correlation is significant at the 0.05 level (2-tailed)

Table 19 shows that there is no significant correlation between respondents' access to the internet overall and their attitudes towards e-learning overall. However, Table 19 also shows that results of the test of correlation between specific statements of the respondents' access to the internet outside the University and the specific statements of the overall attitudes towards e-learning readiness yielded significant relationships.

For instance:
1. E-learning efficiency (OATEL2) is found to have a significant and negative correlation to the use of load data; There is a significant and positive correlation between OATEL2 and the access to Cable Internet outside the University, and there is a significant and positive correlation of OATEL2 on the overall internet access outside the University; and
2. The preference for courses on the internet (OATEL8) is significantly and positively correlated to the use of the University's computer laboratories.

Table 20. Correlation Between the Respondents' Offline Activities and Self-directed Learning & Control

		Offline Act1	Offline Act2	Offline Act3	Offline Act4	Offline Act5	Offline Act6	Offline Act8	Offline Act9	Offline Act10	Offline Act11	Offline Act12	Offline Act13	Offline Act14	Offline Act15	Offline Act16	Offline Act17	Offline Act21	Overall Offline
SLLC5. Not distracted when learning online.	Pearson Correlation	.156	.451**	.369*	.341*	.145	.455**	-.158	-.062	.242	.376*	.359*	.095	.377*	.560**	.367*	-.121	.261	.284
	Sig. (2-tailed)	.350	.004	.022	.036	.384	.004	.345	.711	.143	.020	.027	.569	.020	.000	.023	.471	.129	.084
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC11. Open to new ideas	Pearson Correlation	-.008	-.063	.201	.386*	.365*	.420**	.132	.195	.369*	.305	.267	.323*	.371*	.445**	.397*	.234	.377*	.434**
	Sig. (2-tailed)	.960	.707	.226	.017	.024	.009	.429	.241	.022	.063	.105	.048	.022	.005	.014	.157	.025	.006
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC12. Immediate answer to questions	Pearson Correlation	.350*	.249	.284	.227	.353*	.442**	-.157	-.039	.237	.312	.344*	.406*	.436**	.379*	.362*	.085	.115	.313
	Sig. (2-tailed)	.031	.131	.084	.170	.030	.005	.348	.818	.152	.057	.035	.011	.006	.019	.026	.611	.509	.056
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC20. Self-disciplined, gets things done	Pearson Correlation	.332*	.049	.126	.245	.343*	.418**	.091	.088	.094	.208	.277	.306	.328*	.387*	.342*	.354*	.132	.358*
	Sig. (2-tailed)	.041	.772	.452	.138	.035	.009	.586	.598	.574	.210	.092	.062	.044	.016	.035	.029	.448	.027
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC29. Turn in assignments early	Pearson Correlation	.290	.318	.216	.438**	.301	.355*	.049	.168	-.054	.309	.321*	.341*	.299	.260	.317	.363*	.348*	.397*
	Sig. (2-tailed)	.077	.052	.193	.006	.067	.029	.771	.314	.746	.059	.049	.036	.068	.115	.053	.025	.041	.014
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC30. Understand technology	Pearson Correlation	.224	.150	.178	.308	.418**	.382*	-.065	-.068	.210	.228	.296	.423**	.515**	.382*	.435**	.170	.228	.391*
	Sig. (2-tailed)	.176	.370	.286	.060	.009	.018	.698	.686	.205	.168	.071	.008	.001	.018	.006	.308	.188	.015
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
SLLC31. Willing to ask questions	Pearson Correlation	.246	.146	.274	.360*	.332*	.507**	-.057	.012	.099	.272	.402*	.444**	.517**	.407*	.514**	.234	.198	.433**
	Sig. (2-tailed)	.136	.381	.096	.026	.042	.001	.735	.945	.556	.099	.012	.005	.001	.011	.001	.158	.254	.007
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
Overall, SLLCR	Pearson Correlation	.243	.076	.256	.338*	.437**	.409*	-.170	-.073	.055	.198	.363*	.364*	.312	.415**	.370*	.220	.191	.310
	Sig. (2-tailed)	.141	.649	.120	.038	.006	.011	.308	.664	.742	.233	.025	.025	.057	.010	.022	.185	.273	.058
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed)

The results are shown in Table 20 to report that overall, there are no significant correlation between the students' self-directed learning and control and utilization of computer-based technologies (offline). However, the results also confirm the existence of significant relationships between respondents' specific computer-based offline activities and their specific self-directed learning & control readiness. The results manifest the following correlations:

1. A very significant and positive correlation between not being distracted when learning online (SLLC5) and Offline Act2; A significant positive correlation exists between SLLC5 and Offline Act3; A significant positive correlation exists between SLLC5 and Offline Act4; A very significant and positive correlation exists between SLLC5 and Offline Act6; A significant positive correlation exists between SLLC5 and Offline Act11; A significant positive correlation exists between SLLC5 and Offline Act12; A significant positive correlation exists between SLLC5 and Offline Act14; A very significant positive correlation exists between SLLC5 and Offline Act15; and, a significant positive correlation exists between SLLC5 and Offline Act 16.

2. A significant and positive correlation between being open to new ideas (SLLC11) and Offline Act4; A significant and positive correlation between SLLC11 and Offline Act5; A very significant and positive correlation between SLLC11 and Offline Act10; A significant and positive correlation between SLLC 11 and Offline Act13; A significant and positive correlation between SLLC 11 and Offline Act14; A very significant and positive correlation between SLLC 11 and Offline Act15; A significant and positive correlation between SLLC 11 and Offline Act16; A significant and positive correlation between SLLC 11 and Offline Act21; A significant and positive correlation between SLLC 11 and Offline Act21; and a very positive and significant correlation between SLLC 11 and Overall use of offline computer-based technologies.

3. A significant and positive correlation between immediately answering questions (SLLC 12) and Offline Act1; A significant and positive correlation between SLLC 12 and Offline Act5; A significant and positive correlation between SLLC 12 and Offline Act12; A significant and positive correlation between SLLC12 and Offline Act13; A very significant and positive correlation between SLLLC12 and Offline Act14; A significant and positive correlation between SLLC12 and Offline Act15; A significant and positive correlation between SLLC12 and Offline Act16.

4. A significant and positive correlation between being self-disciplined, getting things done (SSLC20) and Offline Act1; A significant and positive correlation between SLLC20 and Offline Act5; A very significant and positive correlation between SLLC20 and Offline Act6; A significant and positive correlation between SLLC20 and Offline Act14; A significant and positive relationship between SLLC20 and Offline Act 15; A significant and positive correlation between SLLC20 and Offline Act16; A significant and positive relationship between SLLC18 and Offline Act17; and a significant and positive relationship between SLLC20 and Overall use of offline computer-based technologies.

5. A very significant and positive correlation between turning in assignments early (SLLC29) and Offline Act4; A significant and positive correlation between SLLC29 and Offline Act6; A significant and positive correlation between SLLC29 and Offline Act12; A significant and positive relationship between SLLC29 and Offline Act13; A significant and positive relationship between SLLC 29 and Offline Act17; A significant and positive correlation between SLLC29 and Offline Act21; and a significant and positive correlation between SLLC29 and Overall use of computer-based technologies offline (Overall Offline).

6. A very significant and positive correlation between understanding technology (SLLC30) and Offline Act5; A significant and positive correlation between SLLC30 and Offline Act6. A very significant and positive correlation between SLLC30 and Offline Act13; A very significant and positive correlation between SLLC30 and Offline Act14; A significant and positive correlation

between SLLC30 and Offline Act15; A very significant and positive correlation between SLLC30 and Offline Act16; and a significant and positive correlation between SLLC30 and Overall use of computer-based technologies offline (Overall Offline).

7. A significant and positive correlation between willingness to ask questions (SLLC31) and Offline Act4; A significant and positive correlation between SLLC31 and Offline Act5; A very significant and positive correlation between SLLC31 and Offline Act6; A significant and positive correlation between SLLC31 and Offline Act12; a very significant and positive correlation between SLLC31 and Offline Act13; a very significant and positive correlation between SLLC31 and Offline Act14; A significant and positive correlation between SLLC31 and Offline Act15; A very significant and positive correlation between SLLC31 and Offline Act16; and a very significant and positive correlation between SLC31 and Overall use of computer-based technology offline (Overall Offline).

8. A significant and positive correlation between the overall, SLLCR and Offline Act4; A very significant and positive correlation between Overall SLLCR and Offline Act5; A significant and positive correlation exists between Overall SLLCR and Offline Act6; A significant and positive correlation between Overall SLLCR and Offline Act12; A significant and positive correlation exists between Overall, SLLCR, and Offline Act 13; A very significant and positive correlation exists between Overall, SLLCR and Offline Act15; and A significant and positive correlation exists between Overall, SLLCR and Offline Act16.

Table 21. Correlation Between the Respondents' Offline Activities and Overall Attitudes towards e-learning

		Offline Act1	Offline Act4	Offline Act5	Offline Act6	Offline Act7	Offline Act9	Offline Act10	Offline Act11	Offline Act12	Offline Act13	Offline Act15	Offline Act16	Offline Act17	Offline Act18	Offline Act20	Offline Act21	Offline Total
OATEL1. Advanced technical knowledge.	Pearson Correlation	.324*	.559**	.323*	.544**	.444**	.428**	.445**	.308	.350*	.528**	.437**	.458**	.381*	.491**	.293	.467**	.645**
	Sig. (2-tailed)	.047	.000	.048	.000	.005	.007	.005	.060	.031	.001	.006	.004	.018	.002	.074	.005	.000
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
OATEL3. Internet courses more efficient	Pearson Correlation	.228	.397*	.413**	.340*	.330*	.201	.133	.237	.230	.489**	.256	.215	.310	.011	-.030	.357*	.394*
	Sig. (2-tailed)	.168	.014	.010	.037	.043	.226	.427	.152	.166	.002	.121	.195	.058	.948	.856	.035	.014
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
OATEL4. Studying courses w/c utilize e-learning	Pearson Correlation	.162	.520**	.365*	.294	.423**	.407*	.301	.238	.236	.363*	.390*	.233	.350*	.204	.186	.536**	.492**
	Sig. (2-tailed)	.330	.001	.024	.073	.008	.011	.067	.151	.153	.025	.016	.159	.031	.220	.265	.001	.002
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
OATEL5. Positive about e-learning	Pearson Correlation	.164	.427**	.266	.184	.397*	.321*	.265	.176	.225	.244	.268	.324*	.351*	.327*	.234	.477**	.443**
	Sig. (2-tailed)	.324	.008	.106	.269	.014	.050	.107	.291	.175	.139	.103	.047	.030	.045	.156	.004	.005
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38
Overall, OATEL	Pearson Correlation	.333*	.433**	.279	.306	.437**	.438**	.265	.175	.191	.340*	.326*	.247	.395*	.231	.306	.544**	.502**
	Sig. (2-tailed)	.041	.007	.089	.062	.006	.006	.107	.292	.250	.037	.046	.134	.014	.163	.061	.001	.001
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35	38

*. Correlation is significant at the 0.05 level (2-taied); **. Correlation is significant at the 0.01 level (2-taied)

The report in Table 21 shows that overall, there is a very significant and positive correlation between respondents' activities on offline computer-based technologies and their attitudes towards e-learning. Moreover, the detailed results in Table 21 show that there are significant relationships between respondents' offline computer-based activities and their attitudes towards e-learning. The detailed results show as follows:

1. A significant and positive correlation between advanced technical knowledge (OATEL1) and Offline Act1; a Very significant and positive correlation between OATEL1 and Offline Act4; Significant and positive correlation between OATEL1 and Offline Act5; a Very significant and positive correlation between OATEL1 and Offline Act6; a Very significant and positive correlation between OATEL1 and Offline Act7; a Very significant and positive correlation between OATEL1 and Offline Act9; a Very significant and positive correlation between OATEL1 and Offline Act10; Significant and positive correlation between OATEL1 and Offline Act12; a Very significant and positive correlation between OATEL1 and Offline Act13; a Very significant and positive correlation between OATEL1 and Offline Act15; a Very significant and positive correlation between OATEL1 and Offline Act16; Significant and positive correlation between OATEL1 and Offline Act17; a Very significant and positive correlation between OATEL1 and Offline Act18; and very significant and positive correlation between OATEL1 and the overall computer-based activities technologies when offline (Offline Total).

2. A significant and positive correlation between more efficient internet courses (OATEL3) and Offline Act4; A very significant and positive correlation between 33OATEL3 and Offline Act5; A very significant and positive correlation between OATEL3 and Offline Act6; A significant and positive correlation between OATEL3 and Offline Act7; A significant and positive correlation between OATEL3 and Offline and Offline Act21; A significant and positive correlation between OATEL 3 and Offline Total.

3. A very significant and positive correlation between studying courses which utilize e-learning (OATEL4) and Offline Act4; A significant and positive correlation between OATEL4 and Offline Act5; A very significant and positive correlation between OATEL 4 and Offline Act7; A significant and positive correlation between OATEL4 and Offline Act9; A significant and positive correlation between OATEL4 and Offline Act13; A significant and positive correlation between OATEL4 and Offline Act15; A significant and positive correlation between OATEL4 and Offline Act17; A very significant and positive correlation between OATEL4 and Offline Act 21; and a very significant and positive correlation between OATEL4 and Offline Total.

4. A very significant and positive correlation between being positive about e-learning (OATEL5) and Offline Act4; A significant and positive correlation between OATEL5 and Offline Act7; A significant and positive correlation between OATEL5 and Offline Act9; A significant and positive correlation between OATEL5 and Offline Act16; A significant and positive correlation between OATEL5 and Offline Act17; A significant and positive correlation between OATEL5 and Offline Act18; A very significant and positive correlation between OATEL5 and Offline Act21; and a very significant and positive correlation between OATEL5 and Offline Total.

5. A significant and positive correlation between Overall OATEL and Offline Act1; A very significant and positive correlation between Overall, OATEL and Offline Act4; A very significant and positive correlation between Overall, OATEL and Offline Act7; A very significant and positive correlation between Overall, AOATEL and Offline Act9; A significant and positive correlation between Overall, OATEL and Offline Act13; A significant and positive correlation between Overall, OATEL and Offline Act15; A very significant and positive correlation between Overall, OATEL and Offline Act21; and a very significant and positive correlation between Overall, OATEL and Offline Total.

Table 22. Correlation Between the Respondents' Mobile Internet Activities and Self-directed Learning and Control

		Mobile Act1	Mobile Act2	Mobile Act3	Mobile Act4	Mobile Act5	Mobile Act6	Mobile Act7	Mobile Act8	Mobile Act9	Mobile Act10	Mobile Act11	Mobile Act12	Mobile Total
SLLC11. Open to new ideas	Pearson Correlation	.070	.324*	.347*	.165	.154	.053	.155	.067	.264	-.030	-.480**	-.336*	.318
	Sig. (2-tailed)	.675	.047	.033	.321	.356	.753	.354	.688	.109	.860	.002	.039	.052
	N	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC24. Study according to individual plan	Pearson Correlation	.053	.225	.366*	.201	-.067	-.123	.096	.349*	.371*	.021	.283	.098	.246
	Sig. (2-tailed)	.751	.175	.024	.227	.689	.462	.568	.032	.022	.899	.085	.556	.137
	N	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC25. Study independently using e-resources	Pearson Correlation	.204	.323*	.415**	.212	.156	.126	.070	-.414**	-.298	.094	.201	.254	.361*
	Sig. (2-tailed)	.218	.048	.010	.202	.351	.451	.675	.010	.069	.576	.227	.124	.026
	N	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC31. Ask questions	Pearson Correlation	.241	.344*	.422**	.396*	.035	.029	.008	.231	.413**	-.005	.352*	.058	.318
	Sig. (2-tailed)	.145	.035	.008	.014	.836	.861	.964	.162	.010	.976	.030	.731	.052
	N	38	38	38	38	38	38	38	38	38	38	38	38	38
Overall, SLLC	Pearson Correlation	.151	.240	.349*	.287	.001	.039	-.012	.065	.261	.105	.195	.129	.220
	Sig. (2-tailed)	.366	.147	.032	.080	.996	.818	.945	.699	.114	.530	.240	.439	.185
	N	38	38	38	38	38	38	38	38	38	38	38	38	38

*. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed)

The report of results in Table 22 shows that overall, there is no significant correlation between the respondents' mobile activities and their self-directed learning and control. However, the results in Table 22 show the existence of significant relationships between respondents' mobile internet activities and their self-directed learning and control. These include:

1. A significant and positive correlation between being open to new ideas (SLLC11) and Mobile Act2; a significant and positive relationship between SLLC11 and Mobile Act 3; a very significant and positive relationship between SLLC11 and Mobile Act11; and a significant and positive correlation between SLLC11 and Mobile Act12.

2. A significant and positive correlation between studying according to plan (SLLC24) and Mobile Act3; A significant and positive correlation between SLLC24 and Mobile Act8; and a significant and positive correlation between SLLC24 and Mobile Act9.

3. A significant and positive correlation between studying independently using e-resources (SLLC25) and Mobile Act2; A very significant and positive correlation between SLLC25 and Mobile Act3; A very significant and positive correlation between SLLC25 and Mobile Act8; and a significant and positive correlation between SLLC25 and Mobile Total.

4. A significant and positive correlation between asking questions (SLLC31) AND Mobile Act2; a very significant and positive correlation between SLLC31 and Mobile Act3; A significant and positive correlation between SLLC31 and Mobile Act4; A significant and positive correlation between SLLC31 and Mobile Act9; and a significant and positive correlation between SLLC31 and Mobile Act11.

Table 23. Correlation Between the Respondents' Mobile Internet Activity and Overall Attitudes Towards E-learning		Mobile Act1	Mobile Act2	Mobile Act3	Mobile Act4	Mobile Act6	Mobile Act7	Mobile Act8	Mobile Act9	Mobile Act10	Mobile Act11	Mobile Total
OATEL1. Advanced technical knowledge	Pearson Correlation	.069	.355*	.250	.243	.341*	.352*	.351*	.305	.254	.544**	.500**
	Sig. (2-tailed)	.681	.029	.130	.142	.036	.030	.031	.063	.124	.000	.001
	N	38	38	38	38	38	38	38	38	38	38	38
OATEL3. Courses in internet make learning efficient	Pearson Correlation	.229	.469**	.491**	.392*	.011	.274	.418**	.384*	.201	.340*	.470**
	Sig. (2-tailed)	.166	.003	.002	.015	.949	.096	.009	.017	.226	.037	.003
	N	38	38	38	38	38	38	38	38	38	38	38
OATEL4. Interested in studying via e-learning	Pearson Correlation	.387*	.533**	.385*	.421**	.252	.154	.422**	.249	.390*	.372*	.502**
	Sig. (2-tailed)	.016	.001	.017	.009	.127	.357	.008	.131	.015	.022	.001
	N	38	38	38	38	38	38	38	38	38	38	38
Overall, OATEL	Pearson Correlation	.245	.396*	.236	.300	.136	.160	.325*	.105	.257	.324*	.359*
	Sig. (2-tailed)	.138	.014	.154	.068	.415	.338	.046	.528	.119	.047	.027
	N	38	38	38	38	38	38	38	38	38	38	38
*. Correlation is significant at the 0.05 level (2-taied); **. Correlation is significant at the 0.01 level (2-taied)												

The results presented in Table 23 show that overall; there exists a significant and positive correlation between the respondents' mobile internet activity and their attitudes towards e-learning. Furthermore, the report contained in Table 23 shows the existence of significant relationships between respondents' mobile internet activities and their overall attitudes towards e-learning. The following are the most frequent, among others:

1. A significant and positive correlation between Advanced technical knowledge (OATEL1) and Mobile Act2; A significant and positive relationship between OATEL1 and Mobile Act6; A significant and positive relationship between OATEL1 and Mobile Act7; A significant and positive correlation between OATEL 1 and Mobile8; A very significant and positive relationship between OATEL1 and Mobile Act11; and a very significant and positive relationship between OATEL1 and Mobile Total.
2. A very significant and positive relationship between internet-based courses making learning efficient (OATEL3) and Mobile Act2; A very significant and positive correlation between OATEL3 and Mobile Act3; and a significant and positive correlation between OATEL3 and Mobile Act4; A very significant and positive correlation between OATEL3 and Mobile Act8; A significant and positive correlation between OATEL 3 and Mobile Act10; A significant and positive correlation between OATEL3 and Mobile Act11; and a very significant and positive correlation between OATEL3 and Mobile Total.
3. A significant and positive correlation between being interested in studying via e-learning and Mobile Act1; A very significant and positive correlation between OATEL4 and Mobile Act2; A significant and positive correlation between OATEL4 and Mobile Act3; A very significant and positive correlation between OATEL4 and Mobile Act4; A very significant and positive correlation between OATEL4 and Mobile Act8; A significant and positive correlation between OATEL4 and Mobile Act10; a significant and positive correlation between OATEL4 and Mobile Act11; and A very significant and positive correlation between OATEL4 and Mobile Total.
4. A significant and positive correlation between Overall, OATEL, and Mobile Act2; A significant and positive correlation between Overall, OATEL, and Mobile Act8; a significant and positive correlation between Overall, OATEL, and Mobile Act11; and a significant positive correlation between Overall, OATEL, and Mobile Total.

Table 24. Correlation Between the Respondents' Mobile Internet Activity and Overall Attitudes towards e-learning Readiness

		Internet Act1	Internet Act2	Internet Act3	Internet Act4	Internet Act5	Internet Act6	Internet Act7	Internet Act8	Internet Act9	Internet Act10	Internet Act11	Internet Act12	Internet Act13	Internet Act14	Internet Act15
SLLC1. Being organized	Pearson Correlation	.189	.407*	.221	.321	.133	.262	-.113	.343*	.044	.248	.333*	-.022	-.033	.159	.269
	Sig. (2-tailed)	.271	.014	.195	.056	.439	.122	.511	.041	.798	.145	.047	.900	.849	.353	.113
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
SLLC5. Not distracted when learning online	Pearson Correlation	.440**	.023	.290	.428**	.320*	.156	.146	-.023	.115	.379*	.089	.127	.190	.012	.088
	Sig. (2-tailed)	.006	.890	.077	.007	.050	.350	.383	.890	.491	.019	.596	.447	.254	.943	.601
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC11. Open to new ideas	Pearson Correlation	.286	.321*	.199	.256	.033	.018	.042	-.083	.010	.308	.347*	.148	.391*	.030	.078
	Sig. (2-tailed)	.081	.050	.232	.121	.846	.915	.802	.619	.953	.060	.033	.376	.015	.857	.642
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC21. Self-motivated	Pearson Correlation	.021	.279	.402*	.351*	.095	-.004	.081	.148	.132	.362*	.227	.203	.252	.274	.085
	Sig. (2-tailed)	.901	.090	.012	.031	.571	.979	.629	.374	.429	.025	.171	.222	.127	.097	.612
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC25. Study independently using electronic resources	Pearson Correlation	.184	.204	.563**	.359*	.114	.148	.235	.389*	.128	.348*	.298	.038	.116	.489**	.302
	Sig. (2-tailed)	.269	.220	.000	.027	.495	.376	.156	.016	.444	.032	.069	.821	.488	.002	.065
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC34. Work in a group	Pearson Correlation	.338*	.247	.189	.148	.175	.321*	.061	-.182	.001	.253	.102	.228	.363*	.031	-.146
	Sig. (2-tailed)	.038	.135	.257	.374	.293	.049	.717	.275	.994	.126	.540	.168	.025	.856	.380
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38

*. Correlation is significant at the 0.05 level (2-taied); **. Correlation is significant at the 0.01 level (2-taied)

The results in Table 24 show that overall; there is no significant correlation between the respondents' mobile internet activity and their attitudes towards e-learning. However, the same report from Table 24 contains significant relationships between the incoming students' mobile internet activities and their overall attitudes towards e-learning readiness. These include:

1. A significant and positive correlation between being organized (SLLC1) and Internet Act2; a significant and positive correlation between SLLC1 and Internet Act8; A significant and positive correlation between SLLC1 and Internet Act11.
2. A very significant and positive correlation between not being distracted (SLLC5) and Internet Act1; A very significant and positive correlation between SLLC5 and Internet Act4; A significant and positive correlation between SLLC5 and Internet Act5; A significant and positive correlation between SLLC5 and Internet Act10;
3. A significant and positive correlation between being open to new ideas (SLLC11) and Internet Act2; A significant and positive correlation between SLLC11 an Internet Act11; and a significant and positive correlation between SLLC11 and Internet Act13.
4. A significant and positive correlation between being self-motivated (SLLC21) and Internet Act3; A significant and positive correlation between SLLC21 and Internet Act4; A significant and positive correlation between SLLC21 and Internet Act10.
5. A very significant and positive correlation between studying independently using e-resources (SLLC25) and Internet Act3; A significant and positive correlation between SLLC25 and Internet Act4; A significant and positive correlation between SLLC25 and Internet Act10; and a very significant and positive correlation between SLLC25 and Internet Act14.
6. A significant and positive correlation between working in a group (SLLC34) and Internet Act1; A significant and positive correlation between SLLC34 Internet Act6; A significant and positive correlation between SLLC34 and Internet Act13.

Table 25. Correlation Between the Respondents' Internet Based Activities and Self-directed Learning & Control

		Internet Act16	Internet Act17	Internet Act18	Internet Act19	Internet Act20	Internet Act21	Internet Act22	Internet Act23	Internet Act24	Internet Act25	Internet Act26	Internet Act27	Internet Act28	Internet Total
SLLC2. Being patient	Pearson Correlation	.371*	.154	.152	.180	-.058	.127	.518**	.428**	.292	.441**	.226	-.057	.089	.323*
	Sig. (2-tailed)	.022	.358	.363	.279	.728	.447	.001	.007	.075	.006	.173	.734	.595	.048
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC3. Combine work and studies	Pearson Correlation	.457**	.370*	.257	.251	.067	.314	.300	.532**	.463**	.401*	.271	.138	.243	.427**
	Sig. (2-tailed)	.004	.022	.120	.129	.687	.055	.067	.001	.003	.013	.100	.409	.141	.007
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC9. Motivated to learn	Pearson Correlation	.433**	.210	.345*	.329*	.094	.345*	.236	.395*	.330*	.248	.272	-.061	.152	.286
	Sig. (2-tailed)	.007	.205	.034	.044	.573	.034	.154	.014	.043	.134	.099	.714	.361	.082
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC11. Open to new ideas	Pearson Correlation	.255	.395*	.087	.266	.299	.416**	.339*	.394*	.333*	.287	.153	.101	-.125	.367*
	Sig. (2-tailed)	.122	.014	.604	.106	.068	.009	.038	.014	.041	.081	.359	.547	.454	.024
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC18. Repeat the online materials	Pearson Correlation	.336*	.082	.184	.283	-.048	.288	.375*	.237	.165	.327*	.353*	.311	.175	.334*
	Sig. (2-tailed)	.039	.623	.270	.086	.773	.079	.020	.152	.323	.045	.030	.057	.293	.040
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC21. Self-motivated	Pearson Correlation	.412*	.309	.300	.321*	.118	.379*	.289	.323*	.333*	.257	.191	.089	.130	.407*
	Sig. (2-tailed)	.010	.059	.067	.049	.481	.019	.078	.048	.041	.120	.250	.596	.436	.011
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
SLLC36. Work on career development	Pearson Correlation	.313	.074	.220	.169	.031	.096	.175	.210	.389*	.265	.296	-.035	.036	.336*
	Sig. (2-tailed)	.056	.660	.185	.311	.851	.565	.294	.206	.016	.108	.071	.833	.828	.039
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Overall, SLLC	Pearson Correlation	.336*	.281	.222	.240	.000	.316	.369*	.330*	.351*	.271	.168	.052	.108	.353*
	Sig. (2-tailed)	.039	.087	.179	.146	1.000	.053	.023	.043	.031	.100	.313	.756	.520	.030
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38

*. Correlation is significant at the 0.05 level (2-taied); **. Correlation is significant at the 0.01 level (2-taied)

The overall results in Table 25 show that there exists a significant and positive correlation between internet-based activities and the self-directed learning & control of the respondents. Moreover, the detailed results contained in Table 25 also show the existence of significant relationships between the respondents' specific internet-based activities and their specific self-directed learning. Specifically, these include:

1. A significant and positive correlation between being patient (SLLC2) and Internet Act16; A very significant and positive correlation between SLLC2 and Internet Act22; A very significant and positive correlation between SLLC2 and Internet Act23; A significant and positive correlation between SLLC2 and Internet Act24; a very significant and positive correlation between SLLC2 and Internet Act25; and a significant and positive correlation between SLLC2 and Internet Total.

2. A very significant and positive correlation between combining work and studies (SLLC3) and Internet Act16; A significant and positive correlation between SLLC3 and Internet Act17; a very significant and positive correlation between SLLC3 and Internet Act23; a very significant and positive correlation between SLLC3 and Internet Act24; a significant and positive correlation between SLLC3 and Internet Act25; A very significant and positive correlation between SLLC3 and Internet Total.

3. A very significant and positive correlation between being motivated to learn (SLLC9) and Internet Act16; A significant and positive correlation between SLLC9 and Intent Act18; A significant and positive correlation between SLLC9 and Internet Act19; A significant and positive correlation between SLLC9 and Internet Act21; a significant and positive correlation between SLLC9 and Internet Act23; A significant and positive correlation between SLLC9 and Internet Act24.

4. A significant and positive correlation between Repeating the online instructional materials (SLLC18) and Internet Act16; a significant and positive relationship between SLLC18 and Internet Act22; A significant and positive correlation between SLLC18 and Internet Act25; a significant and positive correlation between SLLC18 and Internet Act26; and a significant and positive correlation between SLLC18 and Internet Total.

5. A significant and positive correlation between being self-motivated (SLLC21) and Internet Act16; A significant and positive relationship between SLLC21 and Internet Act19; A significant and positive correlation between SLLC21 and Internet Act 21; a significant and positive relationship between SLLC21 and Internet Act23; a significant and positive correlation between SLLC21 and Internet Act24; and a significant and positive correlation between SLLC21 and Internet Total.

6. A significant and positive correlation between Overall, SLLC and Internet Act16, A significant and positive correlation between Overall SLLC and Internet Act22; A significant and positive correlation between Overall, SLLC and Internet Act23; A significant and positive correlation between Overall, SLLC and Internet Act24; and a significant and positive correlation between Overall, SLLC and Internet Total.

Table 26. Correlation Between the Respondents' Internet Based Activities and Overall Attitudes towards e-learning

		Internet Act16	Internet Act17	Internet Act18	Internet Act19	Internet Act20	Internet Act21	Internet Act22	Internet Act23	Internet Act24	Internet Act25	Internet Act26	Internet Act27	Internet Act28	Internet Total
OATEL1. Advanced technical knowledge	Pearson Correlation	.398*	.347*	.290	.312	.178	.421**	.391*	.317	.305	.269	.000	.380*	.350*	.568**
	Sig. (2-tailed)	.013	.033	.077	.057	.285	.009	.015	.053	.063	.102	1.000	.019	.031	.000
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
OATEL2. E-learning is efficient as a learning method	Pearson Correlation	.412*	.162	.112	.239	.134	.218	.374*	.330*	.267	.480**	.291	.244	.306	.365*
	Sig. (2-tailed)	.010	.331	.502	.148	.422	.188	.021	.043	.105	.002	.076	.139	.062	.024
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
OATEL4. I am interested in studying some courses that utilize e-learning	Pearson Correlation	.417**	.440**	.355*	.353*	.374*	.277	.427**	.353*	.466**	.282	.016	.131	.233	.563**
	Sig. (2-tailed)	.009	.006	.029	.030	.021	.092	.007	.030	.003	.086	.922	.431	.159	.000
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
OATEL5. I am positive about e-learning	Pearson Correlation	.368*	.386*	.181	.336*	.341*	.261	.337*	.318	.334*	.138	.034	.132	.230	.452**
	Sig. (2-tailed)	.023	.017	.277	.039	.036	.114	.039	.052	.040	.410	.838	.430	.164	.004
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Overall, OATEL	Pearson Correlation	.424**	.354*	.311	.430**	.354*	.309	.431**	.287	.337*	.234	.010	.212	.366*	.567**
	Sig. (2-tailed)	.008	.029	.057	.007	.029	.059	.007	.081	.038	.157	.952	.201	.024	.000
	N	38	38	38	38	38	38	38	38	38	38	38	38	38	38

*. Correlation is significant at the 0.05 level (2-taied); **. Correlation is significant at the 0.01 level (2-taied)

Table 26 presents that overall; there exists a very significant and positive correlation between the respondents' internet-based activities and their attitudes towards e-learning. Furthermore, the detailed report made available by Table 26 show that there indeed are significant relationships present between the specific internet-based activities and specific respondents' attitudes toward e-learning readiness. These include, but are not limited to:

1. A significant and positive correlation between the need for advanced technical knowledge (OATEL1) and Internet Act16; A significant and positive correlation between OATEL1 and Internet Act17; A very significant and positive correlation between OATEL1 and Internet Act21; a significant and positive correlation between OATEL1 and Internet Act22; A significant and positive correlation between OATEL1 and Internet Act27; A significant and positive correlation between OATEL1 and Internet Act28; a very significant and positive correlation between OATEL1 and Internet Total.

2. A significant and positive correlation between believing that e-learning is efficient as a learning method (OATEL2) and Internet Act16; A significant and positive correlation between OATEL2 and Internet Act22; A significant and positive correlation between OATEL2 and Internet Act23; A very significant and positive correlation between OATEL2 and Internet Act25; and a significant and positive correlation between OATEL2 and Internet Total.

3. A very significant and positive correlation between the interest to study courses via e-learning (OATEL4) and Internet Act16; A very significant and positive correlation of OATEL4 and Internet Act17; A significant and positive correlation between OATEL4 and Internet Act18; A significant and positive correlation between OATEL4 and Internet Act19; a significant and positive correlation between OATEL4 and Internet Act20; a very significant and positive correlation between OATEL4 and Internet Act22; A significant and positive correlation between OATEL4 and Internet Act23; a very significant and positive correlation between OATEL4 and Internet Act24; and a very significant and positive correlation between OATEL4 and Internet Total.

4. A significant and positive correlation between being positive about e-learning (OATEL5) and Internet Act16; a significant and positive correlation between OATEL5 and Internet Act17; A significant and positive correlation between OATEL5 and Internet Act19; A significant and positive correlation between OATEL5 and Internet Act20; a significant and positive correlation between OATEL5 and Internet Act22; A significant and positive correlation between OATEL5 and Internet Act24; and a very significant and positive correlation between OATEL5 and Internet, Total.

5. There is a very significant and positive correlation between Overall, OATEL with Internet Act16; a significant and positive correlation between Overall, OATEL and Internet Act17; A very significant and positive correlation between Overall, OATEL and Internet Act19; A significant and positive correlation between Overall, OATEL and Internet Act20; a very significant and positive correlation between Overall, OATEL and Internet Act22; a significant and positive correlation between

Overall, OATEL and Internet Act24; a significant and positive correlation between Overall, OATEL and Internet Act28; and a very significant and positive correlation between Overall, OATEL and Internet Total.

Summary, Conclusions and Recommendations

Summary

1. Personal and Academic Profile of incoming freshmen students
    1.1 Sex. 13.20 percent were males and 86.80 percent were females;
    1.2 Year of birth. About 55.30 percent were born in the year 2001, while 44.70 percent were born in the year 2000;
    1.3 OLDE experience. About 47.40 percent had some experience in OLDE;
    1.4 Difficulty of OLDE experience. 50.00 percent said that OLDE is quite difficult while 43.80 percent thought it was quite easy;
    1.5 Kind of OLDE experience. 100.00 percent of the respondents said their experience with OLDE part of a subject or course in SHS;
    1.6 Utilization of OLDE competencies. 35.70 percent claimed that they used the competencies every now and then and/or most of the time, while 28.60 percent said they were only able to use it to a little extent; and
    1.7 Place of access. 85.70 percent who underwent the OLDE course said they did it at home.

2. Incoming Freshmen Students' Online and Distance Education Readiness
    2.1 Use of offline computer-based technologies is rated as competent, a 3 of 4 in the Likert scale;
    2.2 Use of mobile-based technologies is rated as competent, a 3 of 4 in the Likert scale;
    2.3 Use of internet-based technologies is rated as competent, a 3 of 4 in the Likert scale;
    2.4 Self-directed learning and control is rated as often, a 3 of 4 in the Likert scale; and
    2.5 Overall attitudes towards e-learning is rated as favorable, a 3 of 4 in the Likert scale.

3. Results of test of correlation between and among selected profile and online & distance education readiness variables
    3.1 There is no significant correlation between students' access to the internet inside the University overall and their self-directed learning and control overall. However, there exists significant correlation between the specific statements of students' access to the internet inside the University and the specific statements of self-directed learning and control;
    3.2 There is no significant correlation between students' access to the internet inside the University overall and their attitudes towards e-learning readiness overall. However, there exists significant correlation between the specific statements of students' access to the internet inside the University and the specific attitudes towards e-learning readiness.
    3.3 There is no significant correlation between the students' access to the internet outside the University overall and their self-directed learning & control overall. However, there exists significant correlation between the specific statements of the students' access to the internet outside the University and the self-directed learning & control.
    3.4 There is no significant correlation between students' access to the internet overall and their attitudes towards e-learning overall. However, there are significant correlations that exist between the specific statements of the students' access to the internet and the specific attitudes towards e-learning readiness.
    3.5 There is no significant correlation between students' self-directed learning and control overall and their utilization of computer-based technologies (offline) overall. However, there exists a significant correlation between the specific statements of self-directed learning & control and the utilization of computer-based technologies (offline).
    3.6 There exists a very significant and positive correlation between students' activities in

computer-based technologies (offline) and their attitudes towards learning overall. Moreover, there exists a significant correlation between the specific statements of computer-based technologies (offline) and students' attitudes toward learning.

3.7 There is no significant correlation between students' mobile activities overall and their self-directed learning & control overall. However, there exists significant correlation in the specific statements of students' mobile activities and self-directed learning and control.

3.8 There exists a significant and positive correlation between the students mobile internet activity overall and their attitudes towards e-learning overall. Moreover, significant correlation exists also in the specific statements of students' mobile internet activity and attitudes towards e-learning.

3.9 There is no significant correlation between students' mobile internet activity overall and their attitudes towards e-learning readiness overall. However, there exists significant correlation in the specific statements of students' mobile internet activities and their attitudes towards e-learning readiness.

3.10 Based on the overall results, there exists a significant and positive correlation between students' internet-based activities and their self-directed learning & control. Moreover, there exists significant correlation in the specific statements of students' internet-based activities and their self-directed learning & control.

3.11 There exists a very significant and positive correlation between the students' internet-based activities overall and their attitudes towards e-learning overall. Moreover, there are significant correlations that exist between the specific internet-based activities and students' attitudes toward e-learning readiness.

Conclusions

Based on the summary of findings, the following conclusions are drawn:

1. The incoming freshman CBE student is a graduating Accountancy, Business & Management (ABM) strand student from the NVSU Senior High School who is a female, born in the year 2001, with some experience in open learning and distance education, which is quite difficult, as part of their subject that they accessed from home, with the learned competencies being used most of the time and/or every now and then.

2. The incoming freshman student is competent in the use of offline computer-based technologies, competent in mobile-based technologies, and competent in internet-based technologies. She is often self-directed in learning & control, and has favorable overall attitude towards e-learning.

3. There exists no significant correlation between the following:
   • Students' access to the internet inside the University and their self-directed learning & control overall;
   • Students' access to the internet inside the University and their e-learning readiness overall;
   • Students' access to the internet outside the University and their self-directed learning & control overall;
   • Students' access to the internet and their attitudes towards e-learning overall;
   • Students' self-directed learning & control overall and their utilization of computer-based technologies (offline);
   • Students' mobile activities overall and their self-directed learning & control overall;

4. Based on the overall results, there exists significant relationships between the following:
   • A very significant and positive correlation between students' activities in computer-based technologies (offline) and their attitudes towards learning;

- A significant and positive correlation between students' internet-based activities and their self-directed learning & control.
- A very significant and positive correlation between the students' internet-based activities and their attitudes towards e-learning overall.

Recommendations

Based on the discussions and findings, the following recommendations are placed forward to the University's administration for their consideration:

1. That the University would continue to enhance its ICT capability, especially in terms of the needed resources and various infrastructure to improve the internet service delivery and related services for the incoming CBE freshmen students when they finally enter the undergraduate program of the University.
2. Based on the reported experiences of the respondents who were students in other SHS courses that have e-learning components, the University should set the direction towards shifting the delivery of some topics within the conventional courses across degree programs. The University should transition from the traditional face-to-face lecture to online or e-learning modalities but shall not exceed 25 percent of the total contact hours.
3. The shift to online delivery or e-learning modalities should be done on a staggered basis, to ensure the build-up of e-learning materials per course, within the framework of a University-wide Learning Management System (LMS).

Corollary to this, the University may create an LMS project team with members coming from across the cross-section of the organization, coordinated by a Secretariat. This means for instance that key personnel coming from offices and units under the Office of the Vice President for Academic Affairs, the Office of the Vice President for Finance and Administration, the Office of the Vice President for Research, Extension, and Training, and the Office of the Vice President for Planning and Information Systems should be activated for the shared responsibility and accountability to jumpstart the planning stage for the various sub-projects.

1. That the identified LMS project team members be designated to work on the LMS project proposal where the various needed physical, technical financial and human resources, including that for personnel selection, identification, orientation, and training-capacitating shall be packaged and submitted through channels, for consideration by the University and its prospective partners.

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