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THE ICT LEVEL OF CONFIDENCE OF COURSE SPECIALISTS IN DISTANCE EDUCATION: THE POLYTECHNIC UNIVERSITY OF THE PHILIPPINES EXPERIENCE

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ABSTRACT

The study addressed two questions: what is the ICT level of confidence of the course specialists handling Open University classes, and to what extent do course specialists integrated ICT applications such as word processing, electronic spread sheet, presentation software, YouTube and etc. in their OUS classes? The instruments were administered to 130 OUS course specialists with 80 or 61.54% retrieval rate from those who attended the LMS training from April to May 15, 2015. The responses to the questionnaires were summarized using frequency and percentages. Results show that a high percentage of course specialists are fully confident in using computer applications such as; word documents, PDF documents, email, multi-media presentations, e-learning tools for submission of requirements, assessment of students performance, and other systems integrated in handling OUS classes through the DE system blended method of teaching, but the alarming reality revealed that a number of course specialists used the applications but need further practice/training while some are "not aware of the application" which can be deterrent in achieving the goal of the university to offer pure online strategy in the next few years. In Distance Education, technology is considered as an integral part of the learning process, thus, this study concludes that creating a long-term vision for the future of DE system in the country can be best achieved if DE providers or universities prepare the faculty members or the course specialists in teaching via online given proper training programs where technology is best utilized and makes a gratifying experience for both the students and course specialists.

Keywords: **ICT level of confidence, course specialists, distance education, elearning utilization, learning management system.**

INTRODUCTION

Teaching and learning in the 21st Century require both teachers and students to capitalize upon the relative advantage of using ICT to enhance curriculum, pedagogy, and assessment approaches. There has been profound change on approaches to education globally; new learning models have emerged in which technology has become an essential part on the delivery of education (White, 2010). ICT initiatives and integration to teachers' teaching has shown great impact among students, specifically the distance type students. In the Philippines, however, there were a number of educational

institutions which are patronizing an ideology that the researchers believed to be highly capitalizing on the ICT infrastructure for successful implementation of the program.

History of Distance Education in the Philippines

The rapid growth of distance education system has brought so many changes in the way education look at the philosophy of learning. From the simple traditional classroom set up to boundless types of educational ideology highly affiliated to information communication technology offers a new way of teaching and learning experience for both students and teachers.

This has resulted to Philippine Educational System to adapt and to put increasing pressure to its higher education institutions (HEIs) to adjust their mode of delivery systems in an effort to meet these changes. Distance Education (DE) has emerged as a legitimate alternative system to traditional educational strategies in a number of Higher Education Institution (HEIs) in the Philippines. With its alternative educational delivery system, DE provides a unique blend of practical and career related experiences with formal and academic learning. Addressing the needs of the DE mode of delivering education is important, yet is becoming an increasing challenge for institutions implementing Open and Distance Learning (ODL) due to various factors such as: the increasing number of students admitted in ODL, reduction of staff and resources as a result of budget cuts among State Universities and Colleges (SUCs), the hits and misses in the adoption of various ODL strategies which all contribute to the diminishing success of DE students in obtaining their degrees and in persisting in their studies.

It was also underscored that online education as an educational process that is delivered from a distance utilizing the tools and techniques of information technology (IT) is officially acknowledged as Open Learning (OL), Distance Education (DE), or Electronic-aided Learning (e-Learning). The point of convergence between the teacher and the student is no longer the physical structure of the traditional classroom; but the length and breadth of information highways traversed worldwide via the facilities of the internet, web nets, lineal and cellular bridges, broadcast media, among others.

The entry of Information Technologies (IT) encompassing computer hardware and software applications in the country in the mid-1980s led to the introduction of innovations in Philippine education. Tertiary and technical educational institutions began offering IT-aided degree courses through the broad range of curriculum, and specific degree courses in the fields of computer science and technology.

In the late 90s, this development has spawned yet another innovation in the areas of OL/DE, e-Learning or Online Education. In response to these changes in the educational landscape, the Commission on Higher Education (CHED), which is the highest governing body of tertiary and graduate education in the Philippines, encouraged institutions to explore OL/DE and e-Learning. The CHED is committed to the promotion of "quality higher education," in line with its mandate as set forth by Republic Act No. 7722 known as the Higher Education Act of 1994.

CHED Memorandum Order #35, series of 2000 (CMO 35, s. 2000) was then issued. It provided, among others, the updated Policies and Guidelines on Open Learning and Distance Education. This ruling also set the standards for qualifying Center of Excellence, Center of Development, and recognized Higher Education Institutions (HEIs) with Level III Accreditation as institutions fit to offer Open Learning and Distance Education (OL/DE) programs. CMO #30 s. 2004 further defined OL/DE as "alternative systems of education emphasizing the opening of opportunities by overcoming barriers that result from geographical isolation, personal or work commitments or conventional courses structures which have often prevented people from realizing their educational goals", "Open Learning is a philosophy of learning that is learner-centered and flexible, enabling learners to learn at the time, place, and pace which satisfies their circumstances and requirements, while DE is a mode of educational delivery whereby teacher and learner are

separated by time and space, and instruction is delivered through specially designed materials and methods supported by organizational and administrative structures and arrangements."

It is the CHED which provides the policy framework for operating OL/DE delivery of courses. Basically bound by the following guiding principles; 1) learning centeredness must focus on student needs and goals; 2) sound instructional design which can be compared well with face to face programs; 3) there must be transparency, that is, all information related to the program have to be made available; 4) there must be public responsibility and accountability for program impact and outcomes; and 5) there must be continuous monitoring, evaluation and upgrading of program content and delivery.

During the First Conference on e-Learning organized by CHED in August, 2002, online education was described as "a process wherein tie, distance, and geographic space are collapsed on the computer (internet)" -undefined by any physical barrier. The student acquires knowledge and skills by means of computerized learning modules that are accessed right within the confines of the home or the network station. The educator or teacher assumes a virtual, not visual presence. Teacher-student or peer-to-peer communication occurs within a designated venue at pre-arranged intervals only when the class assembles for face to face (F2F) sessions. Conventional teaching methods give way to modular approaches in course design. As a result, the student is allowed to progress at his own time and in his own place.

It was also in the said Conference on e-Learning where the Committee of Reviewers for the delivery of Open and Distance education that the formal definition of e-learning to guide all the HEIs was presented. This definition can be found in its Policy Framework for e-Learning in the Philippines as "a generic term for all technologically supported learning using an array of teaching and learning tools that utilizes electronic media such as phone bridging, audio and videotape, video teleconferencing, satellite broadcast, and the more commonly recognized forms of web-based training or computer-aided instruction commonly referred to as online courses."

CHED proceeds with the promotion of e-learning and distance programs with extreme caution for two reasons. The first reason has something to do with access. The Commission realized all too clearly that the availability of computers and the internet to students and teachers alike "as an instructional medium is a fairly recent phenomenon and had low penetration in the households of students" in tertiary levels. The second reason is only faculty and student preparedness prompting the CHED to presently confine the offering of online courses to HEIs and COEs.

As years go by, scientific developments and social changes have continuously sprouted. The use of technology has visibly shown greater impact on society in general and in education in particular. As a consequence, the emphasis of paradigm shift in education is highly dependent on the technology capital of an institution to offer Distance Education. According to Harasim in 2000 as mentioned by Bozkurt, et al., (2015) the invention of the web technologies made online education increasingly accessible, open, flexible which allowed new pedagogical models to emerge and reasoned the revolution in digital knowledge age that enabled greater and faster human communication and collaboration that led to fundamentally new forms of economic activity that produced the knowledge economy and required basic changes in education. This may bring increase for a more educational opportunities and inventions of new learning models and pedagogies.

Course Specialists Preparation to Handle DE Courses through ICT Integration

The birth of distance education finds its way to totally engage academic sectors in technology integration practices in the country from its established roots as a form of instruction 150 years ago (Holmberg, 1986). Marcial (2012) stated that the level of prioritization in teaching and learning with technology integration takes high precedence, but moderately implemented

among HEIs. This has something to do with the premise that it has been put in place in Higher Education strategic planning, but has yet to be realized due to lack of resources and facilities. This is further supported by Rodrigo (2003) with his statement that the Philippines is one of the many developing nations that have turned to information and communication technology (ICT) as a tool to improve teaching and learning. Unfortunately, implementation suffers from several shortcomings; the absence of information on how ICT is actually used; a lack of coordination between public and private sector efforts; and insufficient teacher's preparation and further concludes "if teachers venture to use ICT without adequate training, they are likely to do so erroneously."

The term ICT is more than just computers. Many IT enthusiasts have provided the definitions following the different views and perspectives; Berce, et al (2008) "as a mixture of hardware (equipment), software (operating system, applications, etc.) and communication facilities (Local Area Networks, wide area and backbone networks, communication protocols, etc.); Wang and Woo (2007) defined ICT as a tool; that ICT can be hardware (such as computers, digital cameras), software (such as excel, discussion forums) or both. More importantly, ICT as defined in the educational context mainly refers to various resources and tools that help in enhancing student learning and, so too, realizing the learning objectives (Altun et al, 2011).

Therefore, DEIs necessitates redesigning the educational experience for the distance learners through the use of technology. Technology is a ubiquitous part of children's lives. It is transparent. Most homes have connected computers or Internet-enabled devices. As prices of technology drop, computers and digital devices may replace television as we know it. Pioneering educational technology advocate Jan Hawkins wrote an essay for Edutopia in 1997, "The World at Your Fingertips: Education Technology Opens Doors," about how technology brings the tools of empowerment into the hands and minds of those who use them, Hawkins couldn't have known her words would be even more relevant today. This is particularly true in the distance education implementation.

From face-to-face approach, through PUP's Pamantasang Bayan in the late 80's with its unique idea of bringing education to the doorstep of the target clients by sending faculty members in different OU centers, utilizing blended method of combining online and offline sessions. This has revolutionized the way classroom activities should be done; online sessions started only with the creation of yahoo groups and sending of assignments via online through email addresses, virtual classrooms utilization.

Now that PUP OUS has already designed a new way to accommodate even those who are living in far places to undergo quality education through the integration of the Moodle System–Mabini Portal, PUP's version of the Learning Management System (LMS), its purpose of integration in teaching and learning should be fully realized. But only a meager percentage of around 20% utilization was reported recently with the Master of Science in Information Technology and Post Baccalaureate Diploma in Information Technology course specialists exclusively utilizing the system. Jamieson-Proctor (2010) enumerated ICT at various dimensions and stages of integration as inherent methodological difficulties; obstacles to integration such as teacher ICT confidence, expertise and beliefs about the potential for ICT to make a difference to student learning; teacher professional development; school technological infrastructure and support; and the need for ICT leadership. Likewise, the ability of the course specialists or facilitators to handle distant subjects, classes or students and the DE system were also taken into consideration.

Thus, this study particularly investigated the extent of Learning Management System (LMS) utilization of PUP OU course specialists; underscoring on the extent of eLearning Utilization for Instructions and awareness on the application/use/functions of different e-learning materials, as well as, the identification of training ICT programs through the identification of obstacles and providing baseline information to ensure the 100% utilization and to effectively meet the goal of PUP OU in the successful implementation of the Distance Education.

RESEARCH METHODS AND TECHNIQUES

The study is an exploratory one that used a questionnaire. Therefore, it was not rigorous with respect to sampling. The sample of course specialists for the study was derived from different OUS Centers from Manila, Quezon City, Lopez, Maragondon, Sablayan, Sta. Rosa, Sto. Tomas, Taguig, and Unisan. All 130 CS were present during the LMS training from April to May, 2015 with retrieval rate of 61.54% or 80 course specialists where majority of the respondents were from Manila campus who have less than 5 years of teaching experience in the Master in Educational Management Program.

The opinion index used as questionnaire was divided into three (3) parts. The first part pertained to the profile of the respondents. The second part was an opinion index to measure the extent of e-Learning Utilization for Instruction in PUP Open University; subdivided into five (5) areas such as the use of electronic document files, use of multimedia presentations, use of e-learning tools for submission of requirements, use of 3-learning tools for assessments, and Learning Management System (LMS) tool features course specialists integrate to OU online classes. The third part elicited the needs of the course specialists to further enhance their ICTC competencies/proficiency in handling online classes. Frequency, percentages, and weighted mean were utilized to statistically analyze the results of the study. Weighted Mean range was analyzed using the Likert scale (Table 1).

Table: 1
Weighted mean range

Range	Numerical Interpretation	Verbal Interpretation
4.20 – 5.00	5	I am fully competent with this application/operation and could confidently explain it to others
3.40 – 4.19	4	I am regular and confident user of this application/operation
2.60 – 3.39	3	I have used/done this occasionally but need further practice/training to be confident
1.80 – 2.59	2	I am aware of this function/operation but not experienced it using/implementing it
1.00 – 1.79	1	I am not aware of this application/function/operation

RESEARCH FINDINGS

With the problem posted, the researchers derived with the following findings:

Profile

Table: 2
Open university pamantasang bayan centers with their corresponding number of participants in the Moodle rehash conducted

Centers	# of Participants in the Moodle Rehash Conducted	Percentage
Manila Center	61	76.25%
Quezon City	9	11.25%
Other Centers (Lopez, Maragondon, Sablayan, Sta. Rosa, Sto. Tomas, Taguig and Unisan, Quezon)	10	12%
Total	80	100%

There were 80 or 61.54% course specialists participated in the survey from the 130 total attendees of May and April 2015 activities. Majority of the respondents (76.25%) were affiliated in the Manila campus; followed by 11.25% from Quezon City Campus, and 12% were distributed from other centers far from the main campus such as Lopez, Maragondon, Sablayan, Sta. Rosa, Sto. Tomas, Taguig, and Unisan Quezon.

The Polytechnic University of the Philippines as one of the leading institutions in terms of providing quality Distance Education in the country has already spread DE practices all over the archipelago.

Table: 3
Number of years teaching in PUP Open University

Centers	Frequency	Percentage
16 to 25 years	12	15%
6 to 15 years	29	36.25%
less than 5 years	21	26.25%
No Response	18	22.5%
Total	80	100%

In terms of the number of years in teaching in PUP Open University, 36.25% or majority of the course specialists have 6 to 15 years teaching experience. This was followed by those who already have less than 5 years of teaching with only around 26.25%, while those who have been teaching in PUP OU from 16 to 25 years which included majority of retirees and special lecturers in the university with 15% of the total number of respondents. There were also around 22.5% who never indicated their answer to this item.

The History Distance education can be traced back in mid-19th century of Europe and the United States. It can also recall that the pioneers of distance education used the best technology of their day, the postal system, to open educational opportunities to people who wanted to learn but were not able to attend conventional schools. People who most benefited from such correspondence education included those with physical disabilities, women who were not allowed to enroll in educational institutions open only to men, people who had jobs during normal school hours, and those who lived in remote regions where schools did not exist (California Distance Learning Project).

This is particularly the same with what PUP OU has already been established for in the Philippines. As it was already been serving out-of-school youths in late 90s and now flourishing more to serve graduate students in its 26 years of existence.

Table: 4
Program assigned to teach in the Open University

OU Programs	Frequency	Percentage
Master in Educational Management	24	30.00%
Master in Public Administration	5	6.25%
Master in Communication	1	1.25%
Master in Construction Management	1	1.25%
Master of Science in Information Technology	1	1.25%
Bachelor in Broadcast Communication	25	31.25%
Bachelor in Entrepreneurial Management	23	28.75%
Total	80	100%

A number of course specialists teach in Master in Educational Management graduate program which corresponds to 30.00% from among other graduate programs indicated herein. This is due to the fact the biggest pool of course specialists teach in MEM

program. In addition, the undergraduate programs in Broadcast Communication and Entrepreneurial Management Programs constituted around 31.71% and 29.27% of the respondents respectively.

The PUPOU has already been providing education to both of the graduate and undergraduate programs in the Philippines. Likewise, majority of its clients came from the education sector or catered to teachers who are said to be very busy with their work and may not able to pursue education under the traditional method.

Table: 5
Confidence in the Use of Electronic Document Files

Items	Frequency and Percentage					Weighted Mean
	5	4	3	2	1	
Write in digital documents for your Lessons (Word Documents)	75.25% (61)	13.75% (11)	10.00% (8)	0	0	4.66
Write in digital documents for your Lessons (PDF Documents)	61.25% (49)	11.25% (9)	27.5% (22)	0	0	4.34
Write in digital documents for your Lessons (Presentation Files)	51.25% (41)	35% (28)	10% (8)	0	1.25% (1)	4.28
Send files to your students for lectures or additional references	60% (48)	26.25% (21)	10% (8)	1.25% (1)	0	4.38
Send announcement through E-mail or group posts	65% (52)	26.25% (21)	8.75% (7)	0	0	4.56
Use file sharing sites for distributing large files? (i.e Google Drive, Facebook, Yahoo Group, etc)	45% (36)	30% (24)	21.25% (17)	3.75% (3)	0	4.16
Grand Total	59.63%	19.38%	14.58%	5%	1.25%	4.40

The said opinion index were used to evaluate the respondents' skills in terms of the use of electronic document files, use of multimedia presentations, use of e-learning tools for submission of requirements, use of the learning tools for assessments, and Learning Management System (LMS) tool features that the course specialists integrate to OU Online Classes.

From among the items shown in the table, "write in digital documents for lessons, particularly word documents" got the highest mean score of 4.66 which the course specialists can confidently use and can explain the use to others. While the lowest mean score respondents are just regularly user of was provided to item "use file sharing sites for distributing large files? (i.e Google Drive, Facebook, Yahoo Group, etc) with 4.16 mean score.

Of the number of Course specialists who attended the training said that they are fully competent in writing digital documents for lessons in file formats such as word documents(75.25%); while 13.75% answered that they are regular and confident user of this program, and a minimal 10% or 8 responded that they have used/done the mentioned programs occsionally but need further practice/training to be confident.

Meanwhile, Course Specialists find the use of electronic document files as highly indispensable with 61.25% of the respondents claiming to be fully competent in writing digital documents for lessons using pdf documents and could confidently explain it to others. This implies that a large portion of the course specialists in the Open University can maximize the use of pdf documents in teaching.

On the other hand, in sending the files to students for lectures or additional references, yielded to 45% of the respondents who are fully competent at it, while a 30% are regular and confident user of this application, and 30% have used or done it occasionally but need further practice/training to be confident.

While, in making use of electronic document files to aid course specialists in lectures and presentations, only an average of 45% said that they are fully competent with sending announcements through e-mail or group-sent files to students for lectures or additional references, and use file sharing sites for distributing large files (i.e. Google Drive, Facebook, Yahoo group, etc.).

Table: 6
Confidence in the Use of Multi-media Presentations

Items	Frequency and Percentage					Weighted Mean
	5	4	3	2	1	
Compose and use digital slides such as powerpoint	65% (52)	21.25% (17)	10.00% (8)	0	3.75% (3)	4.40
Use video presentations or tutorials as additional materials and distribute to your students	43.75% (35)	32.75% (26)	20% (16)	3.75% (3)	0	3.73
Suggest video links such as in YouTube and the like to be viewed by your students	38.75% (31)	25% (20)	28.75% (23)	7.5% (6)	0	3.95
Use digital infographics (Pictures with labelled information) for illustrations in your lessons	36.25% (29)	21.25% (17)	21.25% (17)	6.25% (5)	3.75% (3)	3.46
Grand Total	45.94%	25.06%	20%	5.83%	7.5%	3.89

On the average, 45.94% respondents are fully competent in the use of Multi-Media presentations and can share to others compositions and digital slides utilizing different modes as revealed in the following: Powerpoint with 65%, video presentations with 43.75%, YouTube with 38.25%, and digital infographics with 36.25%. However, there were around 28.75% who have used YouTube and similar sites occasionally but need further training on this application

Likewise, an average of 55% of the respondents can be concluded that either regular user (25.06%); used it occasionally but need further training (20%); and those who are aware of the program but not using or utilizing it as part of their teaching techniques; plus with a meager percentage of 7.5% who are either not aware or using the program.

The highest mean score of 4.40 was provided to item "compose and use digital slides such as powerpoint" while the lowest mean score was assigned to "use of digital infographics (pictures with labelled information) for illustrations in the lessons" with 3.46. The grand mean computed of 3.89 implies that though majority of the course specialists are a regular and confident user of these applications; further practice and training are still of consideration when confidence level has to be reached.

This only showed that the need of training in relation to the use of multimedia presentations is highly needed among the course specialists, as ACEC 2010 Award Winning Paper "ACT to improve ICT Use for Learning: Synthesize Teacher Confidence in Using ICT in two Queensland schooling systems,' that accordingly, ICT is integral to learning as ICT is expanding exponentially worldwide, it alone does not guarantee teacher's ICT use for teaching and learning by which this particular paper is putting emphasis on.

Table: 7
Confidence in the Use of e-Learning Tools for Submission of Requirements

Items	Frequency and Percentage					Weighted Mean
	5	4	3	2	1	
Require students to use computer text, editing tools in submitting work documents	37.5% (30)	31.25% (25)	17.5% 14	12.5% 10	1.25% (1)	3.91
Require students to submit assignments through the use of internet	46.25% (37)	25% (20)	20% (16)	7.5% (6)	1.25% (1)	4.08
Ask students to submit their work burn in a CD or a DVD	36.25% (29)	22.5% (18)	37.5% (30)	0	3.75% (3)	4.63
Use social networking sites such as fb to announce requirements' submission and the likes	50% (40)	27.5% (22)	22.5% (18)	0	0	4.28
Grand Total	42.5%	26.56%	24.38%	10%	2.08%	4.23

On the average, a total of 42.5% or 4.23 mean score of the course specialists feel confident using for the submission of the student requirements. About 46.25%of the respondents require students to submit assignments through the internet; 50% of them use social networking sites such as FB to announce requirements submission and deadline; 37.5% of their total number require students to use computer text editing tools in submitting documents; and 35.80%of the course specialists ask students to submit their work burned in a CD or DVD. An average of 10% has used/done such means occasionally but need further practice/training to be confident.

Among the following items, the use of social networking sites such as fb to announce requirements' submission and the likes has the highest number of respondents who feels confident or fully competent using at for the submission of the students' requirements (50% or 40); while a certain 36.25% or 29 as the lowest number of respondents who answered competent at using at is through the submission through CD or a DVD, but it can also be noted that the highest mean score of 4.63 registered in this item which mean that on the average this application is more of likely used by the respondents than the other applications enumerated.

The lowest mean score was provided on the item "require students to use compuer text, editing tools in submitting work documents" with 3.91; followed by 4.08 for item "require students to submit assignments through the use of internet"; and, item "use social networking sites such as fb to announce requirements' submission and the likes" with 4.28 which means that the course specialists are regular and confident users of these applications.

Table: 8
Use of e-Learning Tools for Assessment

Items	Frequency	Percentage
Send quizzes or activities online	46	57.5%
Use sites with autoquiz checking	15	18.75%
Use MS Excel or other spreadsheet program in recording and computing scores of quizzes	38	47.5%
Use MS Excel webpages to create interactive quizzes	30	37.5%

Of the items provided on the use of e-Learning Tools or Assessment, 57.5% (46) send quizzes or activities online; followed by those who use MS Excel or other spreadsheet program in recording and computing scores of quizzes with 47.5% (38); a few who can use MS Excel webpages to create interactive quizzes with 37.5 (30) and a handful of 15 or 18.75% declared to use sites with autoquiz checking.

It only indicates that to maximize the use of this program, a training can be proposed on the use of e-Learning Tools for assessment for OU course specialists. One of the programs that can barely use in the implementation of online classes is the proper use of e-learning tools for assessment, simply because of not enough knowledge on how to use the program whereas majority of the course specialists are having problem in the submission of the final rating or the gradesheets. The proper use of this learning tools will help to simplify the problem and eventually may not be able to meet in the future years in PUP Open University.

Table: 9
Learning Management System (LMS) Tool Features being Integrated in OU Cyber Classe

Items	Frequency	Percentage
Create e-groups or classes	31	38.75%
Post announcements and other course information	30	37.5%
Show calendar of events	20	25%
Create online submission of assignment through eMabini Portal	16	20%
Create webpages for lecture notes and handouts	10	12.5%
Upload files to publish and support material for lessons	20	25%
Create and administer quizzes	9	11.25%
Provide automated checking of quizzes	11	13.75%
Provide automated quiz results	12	15%
Post relevant website links for topic areas	23	28.75%
Create forums for online class discussion	20	25%
Allow blogging	14	17.5%
Allow chat messages to all students	14	17.5%
Post final grades through eMabini portal	14	17.5%
Host wikis' online resources	9	11.25%

An average of 21.58% of the course specialists is involved with the application of LMS as a tool integrated to OU Cyber Classes. A few from the respondents where barely use the various features of LMS thus integrating them in OU online classes reflective of their answers: create e-groups or classes with 38.75%; post announcements and other course information with 37.5%; show calendar of events with 25%; create online submission of assignment through eMabini portal having 20%; create web pages for lecture notes and handouts having 12.5%; upload files to publish and support material for lessons with 25.00%; post relevant website links for topic areas, and create forums for online class discussion with 28.75%. While items under the following features reflect these results:

create and administer quizzes (11.25%), allow blogging and post final grades through eMabini portal got 17.50%; and Hosting wikis (online resources) with 11.25% and 20% below for the following features "provide automated checking of quizzes (13.75%); allow chat messages to all students (17.5%); and provide automated quiz results with 15. This indicates that only course specialists need to be trained in these activities as it allows too many activities that could be done by both of course specialists and the students if properly educated in these areas.

Table: 10
Course Specialists Needs for the Enhancement of ICTC Competencies/ Proficiency in Handling OU Classes

Items	Frequency	Percentage
Learning Management System i.e. Moodle	75	93.75%
Basic and advance use of courseware (powerpoint, word processing sofrtware, and electronic spreadsheet software	48	60%

Investigating on specialized trainings, it is noted that advanced training on the use of open source Learning Management System (LMS) i.e. Moodle with noticeably percentage of (93.75%) of the respondents need further to enhance their ICTC competencies/proficiencies in handling OU online classes, while an average of 60% of the courses specialists answered that they need training on basic and advance use of the following: Course ware i.e. PowerPoint for teaching, Open source Learning Management Systems (LMS) i.e. Moodle, Word Processing Software, Electronic Spreadsheet Software.

Synthesis of Course Specialists Responses

A close study on the quality of responses rendered by course specialists to the questions, statements, and ideas posted to them in the survey instrument yielded a pulse characterizing their knowledge, competencies, and proficiencies to fully maximize the use of LMS in the PUP Open University System.

Majority of the respondents were from Manila campus with less than 5 years of teaching experience in Open University teaching under the Master in Educational Management Program.

Generally, Course Specialists find the use of electronic document files as highly indispensable as they are fully competent in writing digital documents for lessons using word documents, PDF, electronic document files to aid course them in lecture and presentations, sending announcement through e-mail or group-sent files to students for lectures or additional references, and using file sharing sites for distributing large files (i.e. Google Drive, Facebook, Yahoo group, etc.,

As for the use of e-learning tools for submission of requirements, respondents are fully competent with the application requiring students to use computer text, editing tools in submitting work documents, likewise, requiring students to submit assignments through the use of internet.

As to the use of multimedia presentations, a number of respondents said that they are fully competent on composing and using digital slides such as PowerPoint and the like, also creating video presentations or tutorials as additional materials and distribute them to students, suggesting video links such as in YouTube and others, and utilizing digital inforgraphics for illustrations.

Course specialists rely on various internet means where they are competent with when it comes to the submission of the requirements. Many of them require students to submit assignments through the internet. To illustrate, they employ social networking such as FB to announce requirements submission and deadlines, computer text editing tools in submitting work documents and burned documents/files in a CD or DVD.

Course specialists include the application of LMS as a tool that integrates OU online classes. Respondents were fully competent with the following features that they already integrated in OU online classes: create e-groups or classes, post announcements and other course information, show calendar of events, create online submission of assignment through eMabini portal, create web pages for lecture notes and handouts, upload files to publish and support material for lessons, and post relevant website links for topic areas and create forums for online class discussion. While items like "create and administer quizzes, allow blogging, and post final grades through eMabini portal," and Hosting wikis (online resources), while provide automated checking of quizzes , allow chat messages to all students , and provide automated quiz results were also included as features of ICT where the respondents are said to be competent with. Moreover, the respondents mentioned that they need training on the use of open source Learning Management System (LMS) i.e. Moodle, while other course specialists need to have basic training on use of Course ware for teaching i.e. PowerPoint, Word Processing Software, Electronic Spreadsheet Software, and advanced training on how to use Electronic Spreadsheet software.

RECOMMENDATIONS

Distance Education can be effective if the system creates a truly independent environment with self-motivated, participative, and interactive course specialists who have a clear understanding of the nature of e-learning or the Open Learning theory backed-up with supportive organizational leaders who believe and patronize the theory underlying the system. The authors raised certain ethical issues that could affect the successful implementation of the system; such as the course specialists' capability to maintain a strong virtual presence, democratization approach of extending service access to as many persons as possible, standard norms to address cheating and other abuses, and the need to intensify human interaction through LMS as facilitated by the course specialists.

It is likewise suggested that the PUP Open University System must first put in place an overriding Enterprise Architecture, or simply an Information Technology strategic plan utilizing critical variables – Organizational support, ICT network, course specialists continuous training, and other provisions that would benefit the distance teacher in general and the distance learner in particular.

With this in place, it is strongly proposed that PUP OUS development plan be put into action. This system implementation plan consists of three keys and integrated components – the School Management System, the Distance Learning system and the Learning Management System together with its course specialists.

It is also suggested that the Learning Management System raise the general computer literacy among the OUS Course Specialists by conducting training on the different applications such as MS, PPT, YouTube and etc. or the conduct of a series of "ICT Boot Camps" which entail grouping the same level-of-ICT confidence course specialists to a workable level needed for the successful implementation of LMS endeavor in the University.

Organize an overall core group for LMS Course Development Coordination and Consulting team that will help create the strategy and guidelines for distance learning in the form of Guidelines which shall be followed by OUS Course Specialists.

Mentor the next level cluster of LMS team composed of the LMS Chief and subject experts in developing online programs and content. The Researchers believed that course specialists who felt more confident to use ICT with their students for teaching and learning have the greater possibility of having students to use ICT more than the students of less confident teachers.

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