

**Dave E. Marcial**

Officer-in-Charge, College of Computer Studies  
Silliman University, Philippines  
*demarcial@su.edu.ph*

**Rey Dennis B. Caballero**

Cyberlibrary Supervisor  
Silliman University, Philippines  
*reybcaballero@su.edu.ph*

**Jeambe B. Rendal**

Student, Master in Information Systems, University Graduate Programs  
Silliman University, Philippines  
*jeambebrendal@su.edu.ph*

**Gereo A. Patrimonio**

IT Officer II, MIS Office  
Zamboanga del Norte Provincial Government, Philippines  
*gereopatrimonio@su.edu.ph*

## **“I AM OFFLINE”: MEASURING BARRIERS TO OPEN ONLINE LEARNING IN THE PHILIPPINES**

**Abstract.** Open online learning provides new opportunities for students and teachers. However, research shows that completion rates in open online courses are typically low. This paper presents an empirical analysis of the degree of the barriers to open online learning. The respondents are teachers at the tertiary level in the Philippines who experienced a full distance online learning. Responses from 44 respondents were included in the analysis using an adapted survey questionnaire. The study reveals that Internet cost and access and technical problems are substantial barriers to open online learning while social interaction is somewhat of a barrier. It is concluded that infrastructure and technical accessibility are the priority considerations in online learning.

**Keywords:** online learning; ICT in Education; open online learning.

### **1. INTRODUCTION**

**The problem setting.** Online learning is a very broad concept that is somewhat hard to define. Some prefer to distinguish the variations by describing online learning as “wholly” online learning (Oblinger&Oblinger, 2005), whereas others simply reference the technology medium or context with which it is used (Lowenthal, Wilson, & Parrish, 2009). Others display direct relationships between previously described modes and online learning by stating that one uses the technology utilized in the other (Rekkedal et al., 2003; Volery& Lord, 2000). Online learning is described by most authors as access to learning experiences via the use of any technology (Benson, 2002; Carliner, 2004; Conrad, 2002). On the other hand, both Benson (2002) and Conrad (2002) identify online learning as a more recent version of distance learning which improves access to educational opportunities for learners described as both non-traditional and disenfranchised. Other authors discuss not only the accessibility of online learning, but also its connectivity, flexibility and ability to promote varied interactions (Ally, 2004; Hiltz&Turoff, 2005; Oblinger&Oblinger, 2005).

Conversely, online learning can be used to refer to a broad range of programs that use the Internet to provide instructional materials and facilitate interactions between teachers and

students and in some cases among students as well. Online learning can be fully online, with all instruction taking place through the Internet, or online elements can be combined with face-to-face interactions in what is known as blended learning (Horn and Staker 2010). Nevertheless, the term online learning can be summarized and outlined in two words, “knowledge” and “technology”. Further, the NCA Higher Learning Commission (Keairns, 2003) definition of distance education as:

*"For the purposes of accreditation review, Distance Education is defined as a formal educational process in which the majority of the instruction occurs when student and instructor are not in the same place. Instruction may be synchronous or asynchronous. Distance education may employ correspondence study, audio, video, or computer technologies."*

**Analysis of recent studies and publications.** There are much enthusiasm and optimism regarding open online learning; however, there are significant barriers that learners still encounter in attempting to succeed in online courses. “Impediments to online teaching and learning can be situational, epistemological, philosophical, psychological, pedagogical, technical, social, and/or cultural” (Berge, 1998). Lloyd, Byrne & McCoy (2012) found interpersonal barriers, institutional barriers, training and technology barriers, and cost/benefits analysis are factors in the perceived barriers to online learning.

Globally, retention rates in online learning are low. Topdegreeonline.org asserts that in general, the retention rates for online courses have been calculated to be 10 to 20% lower than the retention rates for the face-to-face learning. In the same manner, the US News and World Report announced that the average retention rate among first-time part-time students is 39% (Burnsed, October 22, 2010). According to an article by Rob Jenkins in the Chronicle of Higher Education, cited by Luzer (March 16, 2012), “students were more likely to fail or withdraw from online courses than from face-to-face courses regardless of their initial level of preparation”. Koller, Ng, Do and Chen (June 3, 2013) assert “retention in massive open online courses (MOOC) should be viewed in the appropriate context, the apparently low retention in MOOCs is often reasonable”. They strongly recommended that there must be a consideration in the context of the learner intent. They revealed

*“In 2012, the typical Coursera enrolled between 40,000 and 60,000 students, of whom 50 to 60% returned for the first lecture. In classes with required programming or peer-graded assignments, around 15 to 20% of lecture-watchers submitted an assignment for grading. Of this group, approximately 45% successfully completed the course and earned a Statement of Accomplishment. In total, roughly 5% of students who signed up for a Coursera MOOC earned a credential signifying official completion of the course.”*

**The article's goal.** The study aimed to identify the barriers and challenges to online learning among teachers in higher education institutions. Specifically, this paper presents the degree of online learning barriers as experienced by the respondents. Barriers included in the study include administrative/instructor issues, social interactions, academic skills, technical skills, learner motivation, time and support for studies, cost and access to the Internet, and technical problems.

## 2. THE THEORETICAL BACKGROUNDS

Distance education has a history that spans almost two centuries (Spector, Merrill, Merriënboer, & Driscoll, 2008), and this period represents significant changes in how learning occurs and is communicated. Early distance education courses employed first and second Generation communication technologies. First generation in years the 1850s to 1960, was predominately one technology and consisted of print, radio, and television. As new media emerged, such as radio and television, these new technologies were integrated into distance education delivery methods. Meanwhile, in years 1960-1985, second-generation distance learning courses utilized multiple technologies without computers. The media used to deliver distance education in the second generation was through audiocassettes, television, videocassettes, fax, and print (Keairns, 2003). As a proof of this, scientists at the University of Illinois created a classroom system based on linked computer terminals. Their students were able to access informational resources while listening to a professor whose lectures were brought in remotely, via some form of television or audio device. Certainly not a form of “online learning” that stands up to the web learning of today, but it was the beginning of enhanced distance learning and the utilization of computer resources for educational purposes (Ann Smarty).

The establishment of the British Open University (1969) marked a significant development in the delivery of distance education by offering a mixed-media approach to distance learning technologies. Learning materials (text, audio & visuals) were sent to students by mail and supplemented by broadcast radio and television (Matthews, 1999 cited by Keairns, 2003). Multiple technologies including computers and computer networking make up the third generation in the years 1985 to 1995. According to the American InterContinental University (AIU), in the mid-1990s, software developers created programs such as WebCT, Mallard, and Pioneer to make course information more accessible to students. However, the technology of the time proved insufficient and often hampered instructional efforts.

Fourth generation technologies, the current generation, combines previous media but also incorporates high-bandwidth computer technologies including: desktop videoconferencing, two-way interactive real-time audio and video, web-based media, etc. were the types of distance education was Cyber Education, Online Education, Virtual Education, Technology-supported Education, Hybrid Education, Distributed Learning, E-learning, Web-based Education (Keairns, 2003). Each new generation of distance learning technologies increases opportunities for student-to-student and faculty-to-student contact and collaboration (Sherron and Boettcher, 1997).

Although there has been a long history of distance education, the creation of online education occurred just over a decade and a half ago—a relatively short time in academic terms. Early course delivery via the web had started by 1994, soon followed by a more structured approach using the new category of course management systems (Graziadei, et al.). According to the Online Education in the United States (2011), since that time, online education has slowly but steadily grown in popularity to the point that in the fall of 2010, almost one-third of U.S. postsecondary students were taking at least one course online.

People sometimes often interchange online learning with the terms e-learning, Web-based training, computer-based training, computer-based instruction, and technology-based instruction. However, according to Carliner (2014), each of these is a form of online learning and each term has a particular meaning, but some terms are synonymous. See table 1 for the summary.

Table 1

**Online Learning Terminologies**

<i>Online learning</i>	in its broadest form refers to all types of learning that takes place via computer.
<i>E-learning</i>	is often used to refer to online learning, but learning expert Marc Rosenberg contends that it is only e-learning if the computer is connected either to the Internet or to an intranet or extranet (private forms of the Internet that limit access to authorized users). Because learning materials are available through the Internet, they can be linked to resources outside the learning program, such as references, electronic mail, and discussions. Because they do not require that the computer be connected to the Internet, learning programs on CD and DVD are technically not forms of e-learning, although they are forms of online learning.
<i>Web-based Training</i>	is a synonym for e-learning.
<i>Computer-based Training</i> (also called <i>computer-based instruction</i> )	is an older term (used before the widespread availability of the Internet) and refers to courses presented on a computer. The course does not provide links to learning resources outside of the course. Often, learners take a computer-based training course on a computer that is not connected to a network.
<i>Technology-based Instruction</i>	has a broader meaning; it refers to learning through any medium other than the classroom. This includes computers, but also refers to television, audiotape, videotape, and print.

According to the U.S. Department of Education (2012), online learning can be delivered in two different approaches. It can be fully online or blended with face-to-face interactions or also commonly called as hybrid approach. Fully online learning is a form of distance education in which all instruction and assessment are carried out using online, Internet-based delivery (Picciano and Seaman 2009; U.S. Department of Education 2007). In this brief, both teacher-led instruction and resources designed to instruct without the presence of a teacher meet the definition of fully online learning if they include instructional environments accessed exclusively through the Internet.

On the other hand, hybrid approach allows students to receive significant portions of instruction through both face-to-face and online means. Researchers see blended learning in the middle of the spectrum between fully face-to-face and fully online instruction (Graham, Allen, and Ure 2005; U.S. Department of Education 2007; Watson et al. 2010 cited by U.S. Department of Education 2012).

Meanwhile, there are three technologies that support online learning (Carliner, 2004). First, “technologies for managing online programs” and as defined by Carliner it is primarily software. This type of technology performs the tasks of a registrar. It enrolls learners in courses (not just online courses, but also classroom courses), tracks their progress through courses (such as “attendance,” and progress on tests and other assessments), records completions, and sends notification of completions and certifications to other systems, and provides reports on learning. The second one is “technologies for developing learning programs”. The hardware and software

technology can help you create the learning materials, prepare them for “publication,” and exchange materials with other learning programs. The standards you might have heard about primarily affect the technology for developing and managing online learning programs. Moreover, the last one is “technologies for delivering the learning program”. These technologies include the computer hardware (most often a PC) and the software installed on it (such as the operating system that controls the computer) that lets learners use the learning materials. These technologies can also include specialized hardware and software for playing video and audio and for handling complex interactions between the student and the computer, the cables and software that connect the computers in a network, the protocols and standards or “smarts” that help computers accurately read information transmitted on the network, as well as specialized software such as database programs.

According to the study of Sife, A. S. Lwoga, E. T. and Sanga, C., (2007), functionally, e-learning includes a wide variety of learning strategies and ICT applications for exchanging information and gaining knowledge. Such ICT applications include television and radio; Compact Discs (CDs) and Digital Versatile Discs (DVDs); video conferencing; mobile technologies; web-based technologies; and electronic learning platforms.

### **3. RESEARCH METHODS**

The study implemented a descriptive and utilized a survey method. The study was conducted in the higher education institutions (HEIs) in the Philippines offering teacher education. Teacher education refers to degree programs in Education such as Bachelor of Science in Secondary Education and Bachelor of Science in Elementary Education offered in public and private HEIs. Respondents are 44 teacher educators who experienced at least one online learning class or training course. Ten is coming from Bohol, 2 from Cavite, 10 from Cebu, 1 from Cotabato, 6 from Manila, 1 from Negros Occidental, 8 from Negros Oriental and 1 from Zamboanga del Norte. There are 27 female respondents and 17 male respondents.

The instrument used in data gathering to accomplish the specific objectives of the study was a survey questionnaire which was adapted from Muilenburg & Berge (2005). Respondents were asked to rate each barrier identified by Muilenburg & Berge (2005) according to the five-point Likert scale choices: 1 –not a barrier (it is not a barrier to online learning), 2 - somewhat of a barrier(it is not a barrier to online learning), 3 - a barrier(26–50% barrier to online learning), 4 – a strong barrier (51–75% barrier to online learning) and 5 – a very strong barrier(76–100% barrier to online learning). The survey administration process was done online using Google Form. The survey administration was done on February 1- March 30, 2014. The statistical tool employed in the data processing is the weighted mean for measuring the competency level.

### **4. THE RESULTS AND DISCUSSION**

Of the so many classifications of the impediments, let us look at the results of this study, which used a survey questionnaire that was adapted from Muilenburg & Berge (2005).

The factor “administrative and instructor issues” is defined by Muilenburg & Berge (2005) as “barriers that administrators and instructors control,” like late delivery of course materials, lack of sufficient academic advisors online, and lack of timely feedback from the instructor. With the 11-item administrative/instructor issues, the overall rating, as can be seen in table2, has a

mean of 3.02. This is equivalent to “a barrier” standing or consideration. It implies that administration and instructors are not competent enough in handling online learning facility. Nine items are all considered “a barrier,” implying that administration and instructors are not competent, with the exception of “insufficient training to use the delivery system,” which is perceived as “a strong barrier” (weighted mean, 3.14), and “class size is not right for online learning,” which is perceived as “somewhat of a barrier” (weighted mean, 2.48). This perceived “strong barrier” for “insufficient training to use the delivery system” implies that administration and instructors are very incompetent, whereas the “somewhat of a barrier” perception of “class size is not right for online learning” implies competence in the part of the administration and the instructors of online learning.

Dabaj (2011) had the same interpretation of administrative issues. In the study, these issues were related to cost, course availability, obtaining course materials, and administrative support.” Allen and Seaman (2007) also pointed out that in their previous studies, academic leaders (which of course includes administrators and instructors of online learning) have consistently commented that faculty often devalue online learning and that it takes “more time and effort to teach an online course.” and demotivated faculty and devaluing of online learning by faculty may be partly the cause of some if not many of the administrative/instructor issues of online learning.

Table 2.

#### Administrative/Instructor Issues

Issues	Weighted Mean	Description
Lack of sufficient academic advisors in the online training course	3.07	A barrier
Training course materials are not always delivered on time	2.89	A barrier
Instructors do not know how to teach online	3.16	A barrier
Lack of clear expectations/instructions	3.11	A barrier
Difficulty contacting academic or administrative staff	2.89	A barrier
Lack of timely feedback from the instructor	2.80	A barrier
Lack of access to an expert in online learning	3.32	A barrier
Lack of support services such as tutors	3.07	A barrier
Lower quality materials/instruction online	3.05	A barrier
Insufficient training to use the delivery system	3.41	A strong barrier
Class size is not right for online learning	2.48	Somewhat of a barrier
<b>Overall Mean</b>	<b>3.02</b>	<b>A barrier</b>

Table 3 lists items about social interaction issues of online learning. According to Muilenburg & Berge (2005), social interaction refers to the “learning environment that is created for learning online.” The environment should be friendly and social, and one in which learning is promoted, promoting “human relationships, developing group cohesiveness, maintaining the group as a unit, and in other ways helping participants to work together for a mutual cause.” Some

students have trouble with online courses because they prefer to study in a social environment rather than individually.

“Social interactions” factor gets an overall mean of 2.53 and is perceived “somewhat of a barrier.” The result implies that users of the online learning system feel somewhat isolated. The item with the highest weighted mean value is “lack of interaction/communication among co-learners” (weighted mean, 2.86), which is perceived as “a barrier.” This score implies isolation. As for the lowest in social interaction, “online learning seems impersonal” has a weighted mean of 2.20 and is perceived “somewhat of a barrier.” The result implies that users are somewhat isolated. The same implication (somewhat isolated) is true for all other items with a perceived “somewhat of a barrier”, whereas “a barrier” items implies isolation. In this study, “social interactions” factor ranks as the “least severe barrier” (overall mean, 2.53) of the eight factors, although this ranking is very opposite to Muilenburg & Berge (2005) results because this factor ranks first or is the most severe barrier ( $\bar{x} = 2.36$ ): “the single most important barrier to students learning online was a lack of social interaction.” The study further discusses that social interaction is strongly related to enjoyment in online learning, effectiveness of learning online, and the possibility of taking another online course. Therefore, improving online learning social interaction would lead to a more effective and enjoyable educational experience. Song et al (2004) also found that participants of the study who were not that satisfied with online learning as compared with traditional classroom learning felt that a lack of community (71%) within the online environment was a challenge.

Table 3.

### Social Interactions

Issues	Weighted Mean	Description
Lack of interaction/communication among co-learners	2.86	A barrier
Online learning seems impersonal	2.20	Somewhat of a barrier
Afraid my feelings are isolated	2.32	Somewhat of a barrier
Lack of social context cues	2.52	Somewhat of a barrier
Lack of co-learner/trainee collaboration	2.80	A barrier
Prefer to learn in person	2.45	Somewhat of a barrier
<b>Overall Mean</b>	<b>2.53</b>	<b>Somewhat of a barrier</b>

“Academic skills” factor refers to research respondents’ perceived barriers to online learning due to their lack of academic skills in areas like writing, reading, or communication (Muilenburg & Berge, 2005). All six items for academic skills (table 3) are perceived as “a barrier,” with an overall mean of 2.67. This score implies lack of academic skills for online learning. Academic skills needed are language, writing, reading, communication, typing, and confidence, as enumerated in the items. “Lack language skills for online learning” scores the highest ( $\bar{x} = 2.75$ ), whereas both “lack communication skills for online learning” and “shy or lack of confidence in online learning” score the lowest ( $\bar{x} = 2.61$ ). In Muilenburg & Berge (2005), the academic skills factor was the least severe barrier of the eight ( $\bar{x} = 1.22$ ) compared with this study where it ranks third in the last (overall mean, 2.67).

Table 4.

**Academic Skills**

Issues	Weighted Mean	Description
Lack language skills for online learning	2.75	A barrier
Lack writing skills for online learning	2.70	A barrier
Lack reading skills for online learning	2.68	A barrier
Lack communication skills for online learning	2.61	A barrier
Lack typing skills for online learning	2.64	A barrier
Shy or lack of confidence in online learning	2.61	A barrier
<b>Overall Mean</b>	<b>2.67</b>	<b>A barrier</b>

Perceived barriers to online learning of the respondents due to their lack of technical skills like “fearing new tools for online learning, lack of software skills, or their unfamiliarity with online learning technical tools” are the “technical skills” factor (Mullenburg & Berge, 2005). Technical skills (table 5) overall mean is 3.11 (perceived to be “a barrier” as well), which also implies the lack of technical skills for online learning. All items are perceived to be “a barrier.” Highest is “unfamiliar with online learning technical tools” ( $\bar{x} = 3.39$ ) and lowest “fear computers and technology” ( $\bar{x} = 2.75$ ). Items for technical skills include the following: fear of new tools ( $\bar{x} = 3.0$ ), fear of computers and technology ( $\bar{x} = 2.75$ ), lack of online learning software skills ( $\bar{x} = 3.20$ ), lack skills for using the delivery system ( $\bar{x} = 3.30$ ), unfamiliar with online learning technical tools ( $\bar{x} = 3.39$ ), and fear of different learning methods used ( $\bar{x} = 3.0$ ). In Mullenburg & Berge (2005), technical skill was ranked second to the last least severe barrier ( $\bar{x} = 1.30$ ), whereas in this study, this ranks second most severe barrier (overall mean, 3.11).

Table 5.

**Technical Skills**

Issues	Weighted Mean	Description
Fear new tools for online learning	3.00	A barrier
Fear computers and technology	2.75	A barrier
Lack online learning software skills	3.20	A barrier
Lack skills for using the delivery system	3.30	A barrier
Unfamiliar with online learning technical tools.	3.39	A barrier
Fear different learning methods used for online learning.	3.00	A barrier
<b>Overall Mean</b>	<b>3.11</b>	<b>A barrier</b>

Table 6 is about learner motivation. This is the desire of teacher educators to use online learning, or as defined by Mullenburg & Berge (2005), teacher educators’ characteristics that would affect motivation in online courses such as whether they “procrastinate, choose easier aspects of an assignment to complete, or feel the online learning environment is not inherently motivating.” There are five factors considered. Overall mean is 2.78, perceived by teacher educator respondents as “a barrier.” This implies that learners are unmotivated to use open online learning.



The highest rating is “lack personal motivation for online learning” (3.14). Personal motivation or internal motivation is the driving force of our behavior (Sullo, 2007). Sullo (2007) puts it this way — “internal control psychology is based on the belief that people are internally, not externally, motivated.” Further, two items are rated the lowest ( $\bar{x} = 2.50$ ) and are perceived as “somewhat of a barrier”: “choose easier, less demanding aspects of assignments,” and “online learning environment is not inherently motivating.” The perception of “somewhat of a barrier” equally implies a somewhat unmotivated status in the use of open online learning.

Table 6.

### Learner Motivation

Issues	Weighted Mean	Description
Procrastinate, cannot get started	3.09	A barrier
Lack personal motivation for online learning	3.14	A barrier
Must take on more responsibility for learning	2.68	A barrier
Choose easier, less demanding aspects of assignments	2.50	Somewhat of a barrier
The online learning environment is not inherently motivating	2.50	Somewhat of a barrier
<b>Overall Mean</b>	<b>2.78</b>	<b>A barrier</b>

Time and support for studies are fundamental factors as well. “This factor concerns the respondents’ perspectives on whether a lack of time or support from family, friends, or people in the workplace causes barriers to their online learning” (Mullenburg & Berge, 2005). In table 7, “insufficient time to learn during online training courses” has a weighted mean of 3.16, which is perceived as “a barrier” and the highest rating of the five items. This implies a limited time for learning. The lowest is “lack of support from family, friends, and employer,” which scored a 2.23 weighted mean (“somewhat of a barrier”) and implies that family, friends, and employer are somewhat unsupportive of open online learning. Overall mean for time and support of studies is 2.61. This is perceived as “a barrier” and implies unsupported online learning.

Table 7.

### Time and Support for Studies

Issues	Weighted Mean	Description
Fear family life will be disrupted	2.25	Somewhat of a barrier
Online learning cuts into my personal time	2.57	Somewhat of a barrier
Lack of support from family, friends, and employer	2.23	Somewhat of a barrier
Significant interruptions during my study at home/work	2.84	A barrier
Insufficient time to learn during online training courses	3.16	A barrier
<b>Overall Mean</b>	<b>2.61</b>	<b>A barrier</b>

Table 7 is about cost and access to the Internet, which concerns whether the respondents “find access to the Internet too expensive, fear the loss of privacy, confidence, or property rights,

or otherwise find access to the Internet limited to the point of raising barriers to them” (Muilenburg & Berge, 2005). Three items were asked to teacher educators. Overall mean for cost and access to the Internet is 3.68, which means “a strong barrier.” This implies that the Internet is very inaccessible. Two items are perceived to be “a strong barrier,” whereas one item is perceived to be “a barrier.” The highest weighted mean among the three is “lack of adequate Internet access” ( $\bar{x}$  = 4.05), followed by “needed technology is not available” ( $\bar{x}$  = 3.75), and the lowest is “online learning technology costs too much” ( $\bar{x}$  = 3.25). Of the eight factors, the “cost and access to the Internet” factor has the highest overall mean ( $\bar{x}$  = 3.68). This is equivalent to a “most severe barrier” ranking in Muilenburg & Berge (2005). Cost and access to the Internet only ranked sixth in the study model. In the book by Allen and Seaman (2007), which is the fifth annual report on online learning in US higher education, another conclusion is given relating to cost and access to the Internet issue: “higher costs for online development and delivery are seen as barriers among those who are planning online offerings, but not among those who have online offerings.”

Table 8.

### Cost and Access to the Internet

Issues	Weighted Mean	Description
Lack adequate Internet access	4.05	A strong barrier
Online learning technology costs too much	3.25	A barrier
Needed technology is not available	3.75	A strong barrier
<b>Over-all Mean</b>	<b>3.68</b>	<b>A strong barrier</b>

Technical problem is a factor about the “lack of consistent platforms, browsers, and software, or the lack of technical assistance that causes obstacles to online learning” (Muilenburg & Berge 2005). Table 9 (technical problems) has three items as well. All three are perceived “a strong barrier.” “Lack technical assistance” is rated the highest, with a weighted mean of 3.57. Second is “incompatibility creates technical problems” ( $\bar{x}$  = 3.50). Rated least is “lack of consistent platforms, browsers, and software” (3.43). Song et al (2004) found technical problems as one of three challenges in online learning experiences. Fifty percent (50%) of the study participants indicated technical problems as a barrier. This was the biggest challenge reported by study participants (58%): a challenge to participants who were more satisfied with online learning (75%), and those that were equally satisfied with online learning (54%) as compared with traditional classroom learning.

Table 9.

### Technical Problems

Issues	Weighted Mean	Description
Lack of consistent platforms, browsers, and software	3.43	A strong barrier
Incompatibility creates technical problems	3.50	A strong barrier
Lack technical assistance	3.57	A strong barrier
<b>Overall Mean</b>	<b>3.50</b>	<b>A strong barrier</b>

Table 10.

### Summary of Results

Issues	Weighted Mean	Description
Cost and Access to the Internet	3.68	A strong barrier
Technical Problems	3.50	A strong barrier
Technical Skills	3.11	A barrier
Administrative/Instructor Issues	3.02	A barrier
Learner Motivation	2.78	A barrier
Academic Skills	2.67	A barrier
Time and Support for Studies	2.61	A barrier
Social Interactions	2.53	Somewhat of a barrier
<b>Mean of Means</b>	<b>2.99</b>	<b>A barrier</b>

The summary of results (table10) shows the ranking from most severe barrier to least severe barrier as perceived by the respondents. The most severe barrier is the issue of cost and access to the Internet (overall mean, 3.68 – a strong barrier), and the least severe barrier is the issue of social interactions (overall mean, 2.53 – somewhat of a barrier). The study reveals that aside from the issue of the cost and access to the Internet, technical problems issue ranks second high barrier to open online learning, with a weighted mean of 3.50. To note, in Muilenburg & Berge (2005), cost and access to the Internet ranked only sixth, whereas social interactions issue ranked first or most severe barrier. Both became of opposite poles to the results in this study. The overall mean of the eight barriers considered for this study is 2.99 – a barrier. Furthermore, administrative or instructor issues, academic skills, technical skills, learner motivation, and time and support for studies are barriers to online learning.

## 5. CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

There is a need to invest in infrastructure and internet bandwidth. Similarly, there is a need to increase awareness about online learning among teachers in higher education institutions. Teachers must take advantage of the many massive open online courses (MOOCs) available. Moreover, qualified and trained online facilitators and technical support must be formed before any online learning.

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## **"Я ПОЗА ІНТЕРНЕТОМ": ВИМІРЮЮЧИ ПЕРЕШКОДИ ДЛЯ ОНЛАЙН НАВЧАННЯ НА ФІЛІППІНАХ**

**Дейв І. Марціал**

виконуючий обов'язки декана, Коледж комп'ютерних досліджень  
Університет Сіліман, Філіппіни  
[demarcial@su.edu.ph](mailto:demarcial@su.edu.ph)

**Рей Денніс Б. Кабальєро**

адміністратор Кібербібліотеки  
Університет Сіліман, Філіппіни  
[reybcaballero@su.edu.ph](mailto:reybcaballero@su.edu.ph)

**Джімбе Б. Рендал**

аспірант, магістр з інформаційних систем  
Університет Сіліман, Філіппіни  
[jeambebrendal@su.edu.ph](mailto:jeambebrendal@su.edu.ph)

**Джеро А. Патрімоніо**

ІТ співробітник  
Офіс Інформаційної системи менеджменту, Північна Замбоанга, Філіппіни  
[gereoapatrimonio@su.edu.ph](mailto:gereoapatrimonio@su.edu.ph)

**Анотація.** Відкрите онлайн навчання надає нові можливості для студентів і викладачів. Тим не менш, дослідження показує, що процент студентів, які закінчили онлайн курси досить низький. Ця стаття представляє емпіричний аналіз ступеня бар'єрів для того, щоб започаткувати онлайн-навчання. Респондентами виступили вчителі системи вищої освіти на Філіппінах, які пройшли повний курс дистанційного навчання. Аналіз включає відповіді 44 респондентів на запитання підготовленої для дослідження анкети. Результати дослідження показують, що значними перешкодами для започаткування онлайн-навчання є вартість і доступ до мережі Інтернет, технічні проблеми пов'язані з цим, окрім того, певним бар'єром є соціальна взаємодія. Зроблено

висновки, що інфраструктура та доступність з технічної точки зору є пріоритетними для розвитку онлайн-навчання.

**Ключові слова:** онлайн навчання; ІКТ в освіті; відкрите онлайн навчання.

## **"Я ВНЕ ИНТЕРНЕТА": ИЗМЕРЯЯ ПРЕПЯТСТВИЯ ДЛЯ ОНЛАЙН ОБУЧЕНИЯ НА ФИЛИППИНАХ**

### **Дэйв И. Марциал**

исполняющий обязанности декана, Колледж компьютерных исследований  
Университет Силиман, Филиппины  
*demarcial@su.edu.ph*

### **Рэй Деннис Б. Кабальеро**

администратор Кибербиблиотеки  
Университет Силиман, Филиппины  
*reycaballero@su.edu.ph*

### **Джимбо Б. Рэндал**

аспирант, магистр информационных систем  
Университет Силиман, Филиппины  
*jeambebrendal@su.edu.ph*

### **Джеро А. Патримонио**

ИТ сотрудник  
Офис Информационной системы менеджмента, Северная Замбоанга, Филиппины  
*gereopatrimonio@su.edu.ph*

**Аннотация.** Открытое онлайн обучение предоставляет новые возможности для студентов и преподавателей. Тем не менее, исследование показывает, что процент студентов, которые закончили онлайн курсы достаточно низкий. Эта статья представляет эмпирический анализ степени барьеров для того, чтобы открыть онлайн-обучения. Респондентами выступили учителя системы высшего образования на Филиппинах, которые прошли полный курс дистанционного обучения. Анализ включает ответы 44 респондентов на вопросы подготовленной для исследования анкеты. Результаты исследования показывают, что значительные препятствия для онлайн-обучения является стоимость и доступ к сети Интернет, технические проблемы, связанные с этим, кроме того, определенным барьером является социальное взаимодействие. Сделаны выводы, что инфраструктура и доступность, с технической точки зрения, являются приоритетными для развития онлайн-обучения.

**Ключевые слова:** онлайн обучение; ИКТ в образовании; открытое онлайн обучение.