

Assessing Perceived Effectiveness on Teaching of Training on the Development and Application of Interactive Learning Materials for New Faculty Members of the University of the Philippines Los Baños

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Abstract - The regular weeklong training programs conducted by the Interactive Learning Center (ILC) of the University of the Philippines Los Baños (UPLB) on the development and application of interactive learning materials for new faculty members was assessed for perceived effectiveness on teaching. The trainings were undertaken to: (1) benchmark the new faculty members' knowledge of current interactive learning trends; (2) introduce them to emerging technologies and methods in teaching and learning; and (3) identify areas of weaknesses where more training could be useful. Post-training feedback data from the training participants indicated perceived high relevance and usefulness of the knowledge and skills gained from the training for their teaching function. The data also showed participants' expressed interest for more intensive trainings focused on specific learning/teaching tools such as Flash Animation, Video Presentations, Vodcasting and Powerpoint Presentations; platforms like MOODLE (Modular Object-Oriented Dynamic Learning Environment), Edmodo, and gamification as delivery techniques.

Keywords - E-Learning, Interactive Learning, UPLB Faculty Members, Training Program

I. INTRODUCTION

The traditional role of universities is to produce, distribute, and apply. Research, education, and service to the larger academy and greater society are major functions of most universities. However, in the present era of knowledge-based societies, universities should: 1) move beyond the roles of research, education and service and be a knowledge server engaged in producing, conserving, distributing, and applying knowledge to different contexts; 2) serve as learning communities for teachers, learners, and graduates by preparing them to engage in life-long learning; and 3) change organizations into learner-centered systems wherein learners determine and control what, when, where, how, and with whom to learn. Tremendous effort will be needed to achieve these goals. However, this can only be achieved through the provision and application of information and communication technology (ICT) designed to establish universities as both knowledge servers and learning communities [1]. Universities should evolve to become

learner-centered educational entities. In this effort to innovate universities, the introduction and utilization of new teaching and learning technologies are critical components.

In 2003, in light of the revitalization of the General Education Program and the numerous pedagogical applications of new technologies, the University of the Philippines Board of Regents on its 1175th Meeting approved the establishment of the Interactive Learning Center (ILC) in every constituent university [2]. Consequently, the Interactive Learning Center at the University of the Philippines Los Baños (UPLB) was inaugurated on January 26, 2005. ILC-UPLB serves as the interactive learning focal point for UPLB faculty and students. The center's main function is to develop faculty expertise and assist faculty in the development of multimedia instructional materials. Training programs for faculty members, research and extension staff (REPS) were undertaken as early as 2007. It has been conducting training workshops regularly at least twice a year, usually in middle of October and during summer [3].

In 2014, ILC-UPLB organized a training program, "Training-Workshop on the Development/Application of Interactive Learning Materials", specifically for new faculty members in cooperation with the Office of the Vice-Chancellor for Academic Affairs. The training-workshop aims to impart the latest and recent trends on e-learning practices and develop skills and capabilities for the development/application of interactive materials with the following components: Interactive Learning and the Paradigm Shift in Tertiary Education, Technology and Instruction in Today's Classroom, Modular Object-Oriented Dynamic Learning Environment or MOODLE, Edmodo Social Learning Platform, Learning Object Development/ Packaging, and Alternative Tools for Teaching and Learning. Before the start of every semester, new faculty members are required to attend and complete the five-day training workshop. Each training workshop session has 20 new faculty members as participants, with resource persons as

lecturer-trainers on various topics. To date, four (4) training workshops have been conducted. Out of 108, 76 newly hired faculty have already attended the training workshops.

This paper reports on the assessment of the perceived effectiveness on teaching of the Training on the Development/Application of Interactive Learning Materials conducted by the Interactive Learning Center (ILC-UPLB) among the new faculty members of the University of the Philippines Los Baños.

II. METHODOLOGY

In order to assess the perceived effectiveness of training programs of the center, post training feedback forms were distributed to the participants every training workshop. Descriptive statistics were used to interpret the results.

III. RESULTS

A. Profile of the Participants

TABLE I
THE PARTICIPANTS BY GENDER

	Jul 2014	Sept 2014	Jan 2015	Jul 2015	TOTAL
FEMALE	13	8	6	5	32
MALE	13	14	10	7	44
					76

TABLE II
THE PARTICIPANTS BY COLLEGE

	Jul 2014	Sept 2014	Jan 2015	Jul 2015	TOTAL
CAS	21	16	2	7	46
CEM	2	3	1		6
CHE	2		1	1	4
SESAM	1				1
CEAT		1	6		7
CA		2	3	2	7
CVM			2		2
CDC			1	1	2
CFNR				1	1
					76

**TABLE III
THE PARTICIPANTS BY RANK/DESIGNATION**

	Jul 2014	Sept 2014	Jan 2015	Jul 2015	TOTAL
Instructor	16	17	9	5	47
Assistant Prof.	9	5	7	5	26
Associate Prof.					0
Prof.	1			1	2
URA				1	1
					76

**TABLE IV
THE PARTICIPANTS BY DEPARTMENT**

	Jul 2014	Sept 2014	Jan 2015	Jul 2015	TOTAL
DSS	12	1			13
DHUM		3			3
IBS	5		2	1	8
IMSP		4			4
ICS		3		3	6
INSTAT	4				4
UPRHS		5		3	8
ECON	2				2
DAME		3			3
ICOPED			1		1
SDS	2				2
DCERP			1		1
IHNF				1	1
SESAM	1				1
IE		1			1
ES			2		2
DCE			3		3
DEE			1		1
CPC		1	3		4
CSC		1			1
FSC				2	2
CVM			2		2
DDBT			1		1
DDJ				1	1
IRNR				1	1
					76

Seventy-six (76) participants were trained within the study period, 32 female and 44 male (Table I). Most participants (46) were from the College of Arts and Sciences (CAS) while the

least numbers came from the College of Forestry and Natural Resources (CFNR) and the School of Environment Science and Management (SESAM), with only one participant each (Table II). Majority of the participants has the rank of Instructor (47), followed by Assistant Professors (26). One University Research Associate (URA) also participated in the trainings. The most number of participants by department came from the Department of Social Studies (DSS), with a total of 13. The Institute of Cooperatives and Bio-Enterprise Development (ICOPED), Department of Community and Environmental Resource Planning (DCERP), Institute of Human Nutrition and Food (IHNF), School of Environment Science and Management (SESAM), Department of Industrial Engineering (DIE), Department of Electrical Engineering (DEE), Crop Science Cluster (CSC), Department of Development Broadcasting and Telecommunication (DDBT), Department of Development Journalism (DDJ), and the Institute of Renewable and Natural Resources (IRNR) had only one participant each.

B. Usefulness of the Training Program

**TABLE V
USEFULNESS OF THE TRAINING PROGRAM**

	Number	Percent
Yes	76	100
No	0	0
Total	76	100

All (100%) of the participants find the knowledge/skills covered in the training workshop will be useful in their work as faculty members. Participants elaborated that today's classroom are different, teachers need to make adjustments to be more effective in teaching. Thus, the training program will enhance the learning process of their students through interaction, connection and, communication. The participants also perceived that the tools discussed such as MOODLE, Edmodo and Learning Objects will be very useful in teaching their students. They expressed that these will be very useful in class to increase students' participation, enrich

learning of concepts and even encourage the students to learn more because of the interactive learning styles. The participants felt that they became more updated on recent trends in technology and education and that they gained more knowledge on modern technologies, teaching strategies and tools suitable to the iGen, the new generation of students.

C. Perceptions on the Conduct of the Training Program

On the participants' perception of the training program, Table VI shows that almost 24% of the participants said that the training program was a great learning experience. It reportedly inspired them to improve their teaching skills by learning interactive management systems, be more creative and learner-centered. On the other hand, 22% said that it was very informative, effective, well planned and organized. They found learning to be so much enjoyable and fun since it was well managed as to time, topics, and venue. The participants also mentioned that they learned a lot about educational technologies, new applications and bits of knowledge that are interesting, substantial and applicable for today's classroom setup.

Furthermore, the participants commended ILC for having an excellent training team. Twenty-one percent (21%) of the participants shared that the resource speakers were all credible, knowledgeable, engaging, inspiring and very accommodating in answering questions. They found the speakers to be very good in delivering their lectures, generous in sharing their knowledge and interesting in giving examples from real-life experiences. They said that the training is highly commendable to other faculty members since all was topnotch: interesting topics, very good speakers, supportive and approachable staff, and good venue.

However, the participants suggested that ILC-UPLB must have a more reliable Internet connection from an independent e-server with better speed since most of the topics on MOODLE, Edmodo and other alternative tools

for teaching and learning are basically on technology use and requires hands on application.

**TABLE VI
PERCEPTIONS/OBSERVATIONS/ COMMENTS
ABOUT THE TRAINING PROGRAM**

	Number	Percent
Great learning experience/ Inspiring / Fun	18	23.6
Very Informative/ Effective and Well planned/organized	17	22.3
Knowledgeable/Great Speakers	16	21.1
Secure a reliable Internet Connectivity	6	7.9
Approachable Staff	5	6.6
Great Facilities	5	6.6
Delicious Food	5	6.6
No Answer	4	5.3
TOTAL	76	100

The list of suggested training workshops that ILC-UPLB should conduct is presented in Table VII. Majority of the participants said that it would be very helpful to all the faculty members if ILC will conduct more detailed/ extensive hands-on training workshops conducted in small groups. Some of the topics that were highly suggested are on video editing, graphic design, development and production of learning objects, gamification and learning management systems (MOODLE/ Edmodo).

**TABLE VII
LIST OF SUGGESTED OTHER TRAINING/
WORKSHOPS THAT ILC-UPLB
SHOULD CONDUCT**

Video Editing/Video presentations
Graphic Design/Photoshop
Development and Production of Learning Objects
Gamification
Vodcast/Podcast
Audacity
Screencasting
Prezi Presentations
MOOCs
Intensive training on Other Learning Management Systems
Website Development and Management
Flash Animation
Java Application

Basics in Programming
Advance course on PowerPoint Presentations
Hands-On Training on using Mac, Digital Laboratory
Writing and Designing of Educational Materials
Storyboard Making
Application of Hyperlinks
Blog Design

D. Recommendations to Further Improve the Conduct of the Training Program

The participants shared that the training itself was perfectly designed and that ILC-UPLB is heading in the right direction. However, “what need to catch up is the hardware/infrastructure and institutional support funds, policies and people to bring this forward in broad scale. These have to go together with the training to make it relevant and functional beyond individual capacity building.” Chief among these is the provision of more stable Internet connection. While the training reiterates that Internet connectivity is not a requirement for any material or method to be considered interactive, it is still essential for both teacher and learner since it makes research and dissemination easier. Participants also viewed that lecture materials/advanced handouts must be provided. This would allow them to focus more on the resource speaker and could also serve as a guide when they are creating their output. Also in line with this, they suggested that the training should require an output that builds up every meeting rather than have a single output in the end. For this, they believe that there should be more hands-on exercises and that sessions should be more intensive/focused on specific learning management and learning tools. Strict observance of time was also raised, although this was largely due to an unforeseen power outage during one of the training sessions.

IV. CONCLUSION

Results indicate that although most of the participants were aware of current interactive learning trends, tools and strategies, the training provided them with more insights and a better working knowledge of the topics that were discussed. It gave them more options in

tailor-fitting their lessons to the needs of their students. They shared that the training showed them ways by which they can “refine (their) presentation skills” by being aware of the types of learners they are dealing with and the ways to connect with them. They also believe that the use of such tools and methods can greatly help students visualize and appreciate difficult topics. Apart from the bigger issue of Internet connectivity, the participants also opined that although ample time was provided to introduce them to different learning tools and strategies available, the allotted week for the whole training was only enough to let them grasp the very basic skills needed to use the tools and strategies presented to them. They expressed interest in participating in more trainings focused on specific tools such as learning object development, video editing and graphic design, among others. It is notable that although the training workshops were not intended as full-blown courses, the ILC’s effort in providing such training was still viewed as a positive step in addressing the demand for new technologies in classroom instruction in the 21st century.

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(Arranged in the order of citation in the same fashion as the case of Footnotes.)

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