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Vision and Mission of the IJODeL

Vision

To be a leading international academic journal that publishes and disseminates new knowledge and information, and innovatives best practices in open and distance electronic learning.

Mission

The IJODeL shall publish and disseminate new knowledge and information based on original research, book reviews, critical analyses of ODeL projects and undertakings from various researchers and experts in the Philippines, the ASEAN Region, and the world, and concept articles with the intention of presenting new ideas and innovative approaches to interpreting and implementing best practices in open and distance e-learning as alternative delivery mechanism for quality education.

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International Journal on Open and Distance eLearning



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Concretizing Open and Distance e-Learning in Management and Development Studies

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Recent developments in web-based technologies have offered opportunities for universities to get into online teaching. More and more institutions have begun offering online programs in professional fields such as management and development studies. The flexibility that open and distance e-learning provides to learners has made it more attractive to professional managers who cannot attend conventional delivery systems due to work commitments (Nguyen, 2015). In a fast changing world that demands work flexibility, professional managers are expected to regularly equip themselves throughout the course of their career and ODeL provides them with the opportunity to achieve that. The currency of information that is afforded by online learning also meant that learners are exposed to the latest knowledge resources in management or development studies (Dykman, et al., 2008).

In the Philippines, one institution that offers a wide range of online programs in management and development is the University of the Philippines Open University's Faculty of Management and Development Studies (FMDS). FMDS has offered, via open and distance e-learning, several degree and non-formal courses, ranging from management to environment and health. While these professional disciplines are diverse, they share certain commonalities: (1) the programs target busy working professionals; (2) students need to be trained in organizing, (3) real world perspectives need to be incorporated in the courses; and (4) the programs are imbued with the aim of contributing to societal development. These characteristics are more emphasized in some programs than others.

In this special issue of the International Journal on Open and Distance eLearning (IJODeL), six papers explore some of the teaching and learning issues, including affordances and challenges, in delivering online courses in management and development studies. Most of the papers examine how traditional instructional strategies (i.e., collaborative learning, practicum, graduate thesis) are implemented in the ODeL environment while the others focus on innovative practices developed specifically for the degree program (i.e., faculty externship). Some of the papers tackled an instructional strategy at the course or subject level (i.e., collaborative learning, practicum) while others' discussions were at the degree or program level (i.e., thesis administration, faculty externship.) Despite these differences, there were recurrent teaching and learning issues that can be gleaned from the articles and which are relevant to the quality of online courses and programs in these disciplines.

Exposure to real world conditions

As any other program that aims to develop professional managers and administrators, FMDS programs have provided opportunities for students to be exposed to real world conditions, either through graduate research or practicum. In Taylan and Muyco's paper on the field instruction in the Master of Social Work program, students were able to experience in concrete terms working in a host organization but also reflect on challenges they encountered and the realizations they experienced as social workers. Through the use of video conferencing tools, students were able to present and process their reflections together with their agency supervisor and teacher.

Garcia, Buno, and Bagos, on the other hand, discussed how graduate thesis is administered online. Their paper argues that despite the differences in the mode of delivery, thesis students at FMDS seem to experience the same problems as their residential counterparts. However, the time and space difference between the students and their thesis advisers require both parties to be comfortable in the use of technology to facilitate communication between them.

Gervacio, Cruz, and delos Reyes' article on faculty externship sheds light on the importance of exposing faculty members to how governance is done at the local level and how it could lead to the development of open educational resources that brings in real world conditions to the virtual classroom.

Interactivity and reflection

As Garcia, Reyes, and Veluz discussed, collaboration is seen by students in R&D management as an opportunity for learning in itself. For these students, collaborative learning allows them to learn from each other and broaden their perspective about certain issues and situations in management, despite the challenges associated with working together online. Taylan and Muyco also tackled how the reflection process in field instruction allows the learners to weigh in on their roles as professionals in the communities they serve. Habito, Serrano, and Ealdama discussed how an online online environment can support student reflection and reflexive practice, allowing them to bring out ideas and possible strategies for environmental advocacy.

Quality assurance

Oruga and Bagos argued about the importance of evaluation in maintaining quality in e-learning systems. In their paper, students in an international health course perceived it to be effective in terms of relevance, reflective thinking, tutor support, peer support, and interpretation. It appears that most of these criteria are the same qualities that students in the other papers find important and helpful in their learning process. For instance, a course is relevant if students find it applicable in their own personal and professional lives. In the papers of Taylan and Muyco and Gervacio, Cruz and Bagos, one can argue that students' as well as teacher's exposure to real world conditions contributes to bringing the online course closer to reality. The important function that reflective thinking plays in online learning is echoed by the participants in the field practice study while the need for peer support is highlighted by the paper on collaborative learning. As all the papers have indicated, teacher/tutor support remains crucial aspects on ODeL — from the design of learning activities to administering a program requirement like thesis.

Role of Technology

The papers in this special issue of IJODeL indicate that teaching management and development studies can be taught using the same instructional strategies that have been traditionally favored by teachers in these disciplines. However, the time and space and difference between the learners and their teachers meant that certain adjustments have to be made in terms of the way they are designed and delivered. One crucial aspect is the role technology plays in mediating communication between and among the teacher and learners. Technology has been instrumental in facilitating collaborative learning (Garcia, Reyes, and Veluz), reflective thinking (Taylan and Muyco; Habito, Serrano, and Ealdama), thesis administration (Garcia, Buno and Bagos), webinars and learning object development (Gervacio, Cruz, and delos Reyes) and quality assurance (Oruga and Bagos).

At the end of the day, management and development work is a relational practice (Gilbert, 2013). While the same can be said for other professions, the centrality of organizing in management and development work makes it more salient in these disciplines. While the papers in these special issue do not completely give us the complete picture of the pedagogical issues in teaching these disciplines online, they give us a glimpse into how open and distance e-learning is concretized in these areas.

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Table of Contents

Articles

Knowledge Sharing and Co-Creation: the UPOU's Master of Public Management	
Program's Innovation on Quality Assurance for ODeL	
Juvy Lizette M. Gervacio, Larry N. Cruz, and Joana Marie S. delos Reyes	<u>1</u>
Applysis of Students' Roflections and Ideation in an Opline Craduate Ecology Course	
Analysis of Students' Kellections and fuencion in an online Graduate Ecology Course	
Consuelo dL. Habito, Joane V. Serrano, and Susan Janette G. Laidama	<u>15</u>
Applying the E-learning Framework: Evaluating an E-learning Course toward	
the Improvement of Quality of ODeL Programs	
Myra D. Oruga and Jelaine R. Bagos	33
Online Facilitation of Field Instruction for the Social Work Programs	
of UP Open University	
Finaflor F. Taylan and Paula Grace M. Muyco	45
A Meta-Interpretation of Collaborative Learning Activities in an	
R&D Management Online Degree Program	
Primo G. Garcia, Jaine Cadoc-Reyes, and Ellaisa Ruth B. Veluz	57
Assessing the Practices for the Conduct of Graduate Students' Thesis	
at the Faculty of Management and Development Studies, LIP Open University	
Primo C. Carcia Crace Anne C. Buno, and Jelaine B. Bagos	81
	01
Book Review: Chib, May, & Barrantes. (2015). Impact of Information Society Research	
in the Global South. Singapore: Springer Singapore: Imprint: Springer.	
Jaime A. Manalo IV	105

Knowledge Sharing and Co-Creation: the UPOU's Master of Public Management Program's Innovation on Quality Assurance for ODeL

Juvy Lizette M. Gervacio¹, Larry N. Cruz², and Joana Marie S. delos Reyes³

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Abstract

Development in information and communications technology (ICT) has brought in new strategies and innovations to improve the quality of online courses and online teaching and learning. Further, it has enhanced institutional networking and collaboration and provided more opportunities for knowledge sharing and co-creation. This paper presents the innovation of the Master of Public Management (MPM) Program of the University of the Philippines Open University (UPOU) on quality assurance through learning visit/externship of MPM faculty members. Specifically, the paper a) discusses knowledge sharing and co-creation innovation for online resources; b) identifies the institutions where the MPM program has collaborated with; c) discusses the output of the innovation in relation to quality assurance; and d) identifies the challenges and prospects of the strategy.

Keywords: Quality assurance, open and distance e-learning, learning visit/externship, knowledge sharing and cocreation

Introduction

Quality assurance (QA) in the context of higher education, as indicated in Article 11 of the World Declaration on Higher Education for the Twenty-First Century (UNESCO, 1998), is a multidimensional concept which should embrace all its functions and activities: teaching and academic programs, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment.

In addition, Friend-Pereira, Lutz, and Heerens (2002) defined QA as the means by which an institution can guarantee with confidence and certainty, that the standards and quality of its educational provision are being maintained and enhanced.

As to Open and Distance e-Learning (ODeL), QA is an essential aspect because the development of information and communications technology (ICT) brought in new strategies and innovations in developing online course content, online teaching and learning, and enhancing institutional networking and collaboration. It has also provided opportunities for knowledge sharing and co-creation as one of the indicators of QA is the involvement of stakeholders in the development of online content. Collaboration and co-creation is one of the strategies that could improve it.

In terms of online teaching and learning, faculty members who are exposed to the study and practice of the discipline are expected to be more effective in the development of syllabus as well as in online teaching. This is because their knowledge about the subject matter is not only enhanced but they also get to know other perspectives.

The Master of Public Management (MPM) Program of the University of the Philippines Open University (UPOU) was introduced in 1997 through the then UP College of Public Administration (now the National College of Public Administration and Governance or NCPAG) with the support of the Civil Service Commission (CSC). The main objective of the MPM Program was to democratize access to graduate education among government practitioners who could not attend a regular University due to their work and tasks in their offices.

It has been 20 years since the MPM Program was initiated at the UPOU. It currently offers 22 courses with a Program Chair and a number of faculty affiliates and lecturers. The Program Chair is the only full-time faculty member of the UPOU while the rest come from the academe, public, and private sectors. Since they are located in different parts of the country, it is imperative to provide them with capacity development programs that would enhance their online teaching, learning capacity, and skills.

At present, the program has three specializations; Public Policy and Program Administration (PPPA); Local Government and Regional Administration (LGRA); and Voluntary Sector Management (VSM). It consists of 36 units of coursework with five mandatory courses and a comprehensive examination. It is designed for policy-makers, administrators, and managers of public, private, and non-governmental organizations; practitioners in local government and administration; and other individuals interested in good governance, and public policy and administration. The primary goal of the program is to upgrade the professional and management skills of administrators and practitioners at their own pace and time. In particular, the program aims to provide high level of competence in public policy, governance and administration; prepare its students to become better public servants and volunteers; and equip them with necessary skills and knowledge to manage and develop organizations that work for the welfare and interests of the Filipino people. The program produced a total of 239 graduates from 2001 to 2017.

Objectives

One of the challenges of the MPM program is the need to update the printed modules which were developed during the program's early years. The advent of the use of Open Educational Resources (OERs) has provided opportunity for the MPM Program to revise the modules. However, initial output indicates that only two module writers were able to finish their respective modules. Moreover, the OERs that are being used are based primarily on websites of government offices and reports from international donor agencies. This is because the field of public administration/ management is very much context-based. Hence, there are limited academic journals that could be utilized. The need to have more updated resources will improve the quality of materials that can be provided to students.

This paper presents the innovation of the Master of Public Management (MPM) Program of the University of the Philippines Open University on quality assurance through the learning visit/ externship of MPM faculty members. Specifically, the paper a) discusses knowledge sharing and

co-creation innovation for online resources; b) identifies the institutions where the MPM program has collaborated with; c) discusses the output of the innovation in relation to quality assurance; and d) determines the challenges and prospects of the strategy.

Methodology

The paper utilized existing documents related to the academic productivity improvement (API) of the MPM Program. Moreover, it also used the schedule of programs that were prepared for the learning visits or externships. Personal experiences of the authors were also mentioned in the study.

Externship and Open Educational Practice

"Learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it." (Kolb, 1984, p. 41). This is affirmed by Mezirow and Freire in the early 1980's when they stressed that the heart of all learning lies in our critical reflection of experience. They characterized learning as a cycle that starts with experience, continues with reflection, and ends with action (Rogers, 1996).

In contrasting experiential learning with traditional learning, Keeton and Tate (1978) explained that the experiential learner is directly in touch with the realities being studied, while the traditional learner reads about, hears about, talks about, or writes about these realities but never comes into contact with them as part of the learning process.

Further, in an article by Eyler (2009), experiential learning was considered beneficial because it builds social skills, learning skills, work ethic, and practical expertise that are required in professionally oriented programs. This results to deeper understanding of the subject matter, more capacity for critical thinking, better application of knowledge, and the ability to engage in lifelong learning.

In terms of faculty externships, they are defined as short term experiential learning opportunities that benefit both university faculty and host industry ("Faculty Externships", 2018).

Advantages of externships for the faculty include the following: (1) it leads to a better grasp of the business environment related to the course or field the faculty are teaching, including workplace skills and competencies, labor market trends, and new technologies and scientific methods employed; (2) it helps to increase the faculty's ability to connect theory and practice and bring an understanding from the world of business into the classroom; (3) it facilitates integration of current workplace operations and employment skills into the curriculum; and (4) it becomes a starting point for stronger partnerships with the industry in the future. On the other hand, the advantages for the host are as follows: (1) it obtains an added scientific resource to complement its in-house R&D team at a fraction of the cost; (2) it helps to jumpstart new research projects, or contribute to coming up with fresh solutions to lingering technical problems; and (3) it helps motivate personnel ("Faculty Externships", 2018).

With the faculty's better grasp of the environment, increased ability to connect theory and practice, integrated workplace operations and employment skills into the curriculum and stronger partnerships attributed to externships, quality of educational provision is more or less assured.

Aside from the knowledge gained by the faculty from the externship, it is also important to have quality online materials. The use of Open Educational Resources (OERs) is one of the innovations that were pursued by the UPOU in recent years. OERs refer to any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them (Unesco. org, n.d.).

In an article by Krelja Kurelovic (2016, p. 138), she indicated that "OERs and open education will reduce the gap between different strata of society and between countries, improve the quality of education, accelerate knowledge flow, and improve the number of people in the educational process." They also have a positive impact on a student's attitude and perception towards learning (de los Arcos, Farrow, Pitt, Weller, and McAndrew, 2016).

There is, however, a new movement from mere course content towards course practices. According to the OPAL Project (Ehlers and Conole, 2011), such movement is needed to fully realize the potential of the materials. It suggests the shift from OER towards adopting Open Educational Practices (OEP).

OEP refers to practices that support the production, use and reuse of high quality open educational resources through institutional policies, which promote innovative pedagogical models, and respect and empower learners as co-producers ("Open Educational Resources", 2018).

This practice is very important especially for the field of public administration/management and governance which is very context-based. Other partners are also empowered in co-producing course materials.

The MPM's Externship as Innovation Strategy in ODeL

The need to constantly enhance the capacities of the MPM faculty members in online teaching and learning is crucial for the program to meet its goals. Hence, exposure and interaction with experts and practitioners will improve the quality of its online teaching and learning.

In order to address this need, the MPM Program has embarked on a strategy through the API to conduct a faculty externship for the program. An API funded externship is one of the tools that could be utilized to enhance a program. The API objectives are as follows:

- 1. To develop excellent research-, innovation-, and creative work-enriched academic programs;
- 2. To develop excellent academic programs that will serve as basis for knowledge-based public service and public policies;
- 3. To review and improve the academic content of courses and curricular programs, in relation to the constituent universities (CUs) niches, national priorities, recent discoveries or developments in the discipline, etc.;
- 4. To improve teaching-and-learning or pedagogy of academic degree programs by exploring innovative pedagogical methods; and
- 5. To develop high quality academic degree programs that meet national and international QA (quality assurance) standards (http://oat.upd.edu.ph/academic-program-improvement-api/).

The strategy of the MPM Program took was entitled: "Planning and training to establish collaboration with the local governance resource institutions through externships of faculty members in relevant sites."

Generally, the purpose of the externship is for the faculty members of the MPM Program to gain first-hand experience on the programs and projects of the national and local governments; including learning about good practices in local administration and governance. It is perceived that what was learned from these areas will enhance the course materials as well as the knowledge and understanding of faculty members regarding the courses that they handle. For the host universities, it is envisioned that their faculty members and students will benefit from the lecture provided by the MPM Faculty and from the local expert who could either be the governor, mayor or any government official. The combination of theory and practice makes an effective mechanism for co-creation of knowledge.

In addition, the partner university/institution also gains knowledge and understanding on how ODeL is being conducted. This leads to an increase in awareness of the local schools and universities about ODeL.

Another benefit for the host institution is the partnership offered by the UPOU. This is cited when seeking accreditation of their MPM related programs from the Commission on Higher Education (CHED). Moreover, since they are part of the activity, they are also aware that the resources are uploaded at the UPOU networks and their faculty and students can view the video resources anytime for free.

In choosing partners, one of the advantages of the MPM Program is its membership with the Association of Schools of Public Administration (ASPAP). The ASPAP is composed of various universities, schools and institutions, both, public and private which provide the relevant network for the Program. The Program Chair usually initiates the contact with the member school through a focal person; explain the proposed activities for collaboration through email and phone calls. After the initial discussion, a letter is formally sent to the university president including the prospective speakers from the UPOU and from the local partner. The topic should be related to public administration or management and governance while local programs and projects to visit are identified by the local partners.

There has been three externships that was done by the program in three different regions; namely: a) Ilocos Region (Region I) and Cordillera Administrative Region (CAR); b) Cagayan Valley (Region II); and c) Bicol Region (Region V).

a) Ilocos Region (Region I) and Cordillera Administrative Region (CAR)

The first study visit was conducted in May 2016 with the Department of Environment and Natural Resources (DENR) as the host institution for the program. During the visit in the Province of La Union and the City of Baguio, the participants were able to meet and learn more about the various programs in Region I and Cordillera Administrative Region, respectively. It was also able to conduct a program planning workshop to address administrative matters, such as course loading, payment of Faculties-in-Charge (FICs) and other issues related to online teaching. In particular activity, the participants were able to discuss the programs and projects of DENR Region 1; visited La Union

Timber Company and San Fernando Landfill; and observe a model barangay in Benguet Province and Baguio City. The program was able to produce online materials about the DENR's National Greening Program, Region I's protected areas, the challenges they faced, and the relevance of Higher Education Institutions (HEIs), all of which are now available for use as case studies in the MPM Program courses.

b) Cagayan Valley (Region 2)

Another externship was conducted in February 2017. The MPM Program decided to partner with the Nueva Vizcaya State University (NVSU), a member of the ASPAP. The participants interacted with the Provincial Governor's Office and the Nueva Vizcaya Provincial Tourism Office. The threeday activity included a courtesy call and an interview with Gov. Carlos M. Padilla of Nueva Vizcaya; and a visit to the local (provincial) government unit-managed Lower Magat Ecotourism Park. One of the highlights of the externship is the conduct of the "Let's Talk It Over" cum Public Forum on "Federalism and Local Governance".

The program invited Dr. Danilo R. Reyes of the UP-National Center of Public Administration and Governance (NCPAG) and UPOU affiliate faculty to lecture on the Local Government Code of the Philippines, decentralization and federalism. Dr. Benjamin Muego, a federalism expert which was recommended by the host institution, in turn expressed his perspective on how federalism works in the United States of America. Nueva Vizcaya Governor Padilla gave his views as local government official on federalism as well as his experiences in local governance. The forum was participated in by over a hundred NVSU students as well as local government officials and the event was broadcasted live via web stream. It was also accessed by graduate students from the Ateneo de Naga as well as the UPOU faculty members and staff who were based in Los Banos, Laguna through web streaming via the UPOU Networks. Hence, not only did the MPM Program able to share its resources, it was also able to showcase how ODeL is done.

The participants of both live coverage and web streaming contributed essential questions about the topic such as inquiries on personal opinion on federalizing the Philippines; the implication of federalism in foreign relations; and hypothetical questions of laws and policies that might be affected in the pursuance of a federal government. Also, the faculty members of the NVSU were given the opportunity to express their opinions about the issue.

c) Bicol Region (Region V)

Another externship/learning visit was conducted in November 2017 in coordination with Bicol University, City Government of Legazpi, Albay and the Department of Environment and Natural Resources Region V (DENR V). The activities included courtesy call and meeting with Bicol University officials as well as site visit to its community extension program in Barangay Oma Oma, Ligao City to learn more about contour farming. An interview with the city administrator of Legazpi, Mr. Carlos Ante was also recorded; including an orientation and briefing at DENR V and field visits to its projects and ecotourism sites like the Legazpi Landfill and Sumlang Lake.

Another "Let's Talk It Over" cum public forum was conducted on "Reengineering Local Government towards Climate Change: The Oragon Model" with Dr. Jocelyn C. Cuaresma, Associate Professor of the UP-NCPAG and affiliate faculty of the UPOU-MPM Program; and Mayor Noel E. Rosal of Legazpi City as resource persons. It was participated in by over 100 graduate students of Bicol University and live streamed through UPOU Networks.

Accomplishments of the MPM Learning Visits/Externships

The innovation that was implemented by the UPOU-MPM Program was able to accomplish several outputs and contributed to quality assurance of ODeL particularly in the learning design, online teaching and learning; and engagement of stakeholders.

The online videos are now utilized in the various courses of the MPM Program. In fact, in some of the forum discussion and paper of the students, one of the sources that was cited is the video that was produced through externship. In the case of Nueva Vizcaya, for example, one of the faculty members reported that she uses the videos in her classes.

The following are the immediate outputs of the externship:

a) Creation of Online Learning Materials

Figure 1 provides a summary of the activities of the faculty externship/learning visit of the MPM Program faculty and staff, including the output which is the open educational resources that are shared openly by UPOU and the Program. They are now being utilized primarily by the FICs of the MPM Program.

Date	Place	Activities/Program Accomplishments (Academic and Administrative)	Output (Open Educational Resources)
May 26-28, 2016	La Union and Baguio City	 Discussion with DENR about its Programs and Projects in Regivited La Union Timber Company (LATICO) Visited San Fernando Sanitary Landfill Visited community-based flower industry in Benguet and mocbarangay Baguio City Teambuilding among MPM faculty members and staff 	 MPM Program DENR Ilocos Region 1 (https://youtu.be/BRYyZJLCE4U?list=PLiqeNUxu5x 2FkW_4w6SFdMIH4QJ2bzwlt)
February 15-17, 2017	Nueva Vizcaya Province and Nueva Vizacaya State University (NVSU)	 Field visit and interview at Lower Magat Ecotourism Park on it maintenance and continuous development Interview with Gov. Carlos M. Padilla of Nueva Vizcaya on his thirteen-point agenda of the province labelled as PRAYERS N FAITH: Protect the environment; Reform the provincial government; Agriculture and food safety; Youth and sports; Education and skills training; Rural development and electrification; Social services, safety and security; Networking for development; Farm-to-market roads and infrastructure; Ar and culture; Indigenous people; Tourism; and Health and hous services. Conduct of "Let's Talk it Over" cum public forum on Federalist and Local Governance at the Nueva Vizcaya State University (NVSU) Livestream of the lecture and discussion with UPOU faculty, st and students; and Ateneo De Naga Graduate Students throug UPOU Networks Teambuilding among MPM faculty and staff 	 Video lecture of Dr. Danilo Dela Rosa Reyes' discussion on Local Government Code of the Philippines and Federalism (Part 1: https://www. youtube.com/watch?v=RHhqzzQXujg&list=PLiq eNUxu5x2G5bkys2hzdrxTw_nXSQ5hM&index=6 , Part 2: https://www.youtube.com/watch?v=Z RFuykLKNt&&list=PLiqeNUxu5x2G5bkys2hzdrx Tw_nXSQ5hM&index=7&t=245) Video lecture of Dr. Benjamin Muego's discussion on Federalism in the Philippines and the U.S. (https://www.youtube.com/watch?v=fk-kRw Wq9vg&list=PLiqeNUxu5x2G5bkys2hzdrxTw_ nXSQ5hM&index=1&t=375) Video lecture of Governor Carlos Padilla's experiences on local government and good governance as Local Chief Executive (https://www. youtube.com/watch?v=s2Vaib3oDLE&list=PLiqeNU xu5x2G5bkys2hzdrxTw_nXSQ5hM&index=4)

Figure 1. Activities and Accomplishments of the MPM Program's Faculty Externship/Learning Visit

(On going editing)																		
Courtesy call and interview with the City Administrator of	Legazpi, Mr. Carlos M. Ante on the plans, programs and projects of city; approaches and strategies that lead to the success of the	programs and how challenges were addressed.	 Field visit to a community extension project of Bicol University 	College of Agriculture in Barangay Oma Oma, Ligao City. The	community shared their experiences on contour farming.	Orientation with DENR V Planning Officer Ms. Eda Paje on the	department's plan, programs and projects for the region. One of	the highlights of their success is the complete surveyed map of the	region.	Site visit of DENR V projects and maintained sites, namely: Landfill	Facility of Legazpi City and Sumlang Lake	Conduct of "Let's Talk it Over" cum public forum on	"Reengineering Local Government towards Climate Change: The	Oragon Model" with Dr. Jocelyn C. Cuaresma, Associate Professor	of UP-NCPAG and affiliate faculty of UPOU-MPM; and Mayor Noel	E. Rosal of Legazpi City as resource persons.	Livestream of the public forum through UPOU Networks	Teambuilding among MPM faculty and staff
•			•			•				•		•					•	•
							Legazpi City	and Bicol	University	(BU)								
								November	16 – 18, 2017									

b) Developed Capacities of the MPM Faculty Members and Staff

The exposure of the MPM faculty members and staff to the lectures and places that were visited is expected to enhance their knowledge on the field of public administration/management and governance. Moreover, based on the informal feedback from the participants, the learning visits gave them more information on how public administration/management and good governance is practiced at the local level. Moreover, the places that were visited made them see the actual situation as well as notice the development that takes place in the area such as solid waste management, disaster risk reduction, management innovation, performance-based mechanism for employees, and contour farming.

c) Fostering Partnership and Collaboration with Other Institutions

The said activities led to the expansion of the networks of the MPM Program as well as of the UPOU. The program was able to establish partnership and collaboration with local government units and sectors, particularly the Department of Environment and Natural Resources Region I (DENR I); model barangays in Baguio City and Benguet; Nueva Vizcaya Provincial Government; Nueva Vizcaya State University (NVSU); City Government of Legazpi; Bicol University; and the Department of Environment and Natural Resources Region V (DENR V). The collaboration benefitted not only the MPM program but also the partner LGUs and SUCs. The projects that had been initiated by the LGUs were featured and properly documented while the students and faculty of the SUCs were able to enhance their knowledge on contemporary issues through lectures and public fora.

d) Team Building and Program Planning

The learning visit/externship helped the faculty members and staff resolve academic and administrative matters and processes through program planning. Furthermore, they were able to develop and discourse their corresponding courses on face-to-face basis.

e) UPOU Technical Team's increased awareness on other technical challenges and issues

The UPOU technical team from the Multimedia Center also learned the importance of coordination with the technical team of the partner University in order to minimize technical glitches.

Issues and Challenges

The faculty externship/learning visit also has some issues and challenges.

Online Course Materials. The gathered video materials during the interviews and public forum have to be edited to make sure that the videos are fit as educational resources. Some of the videos are too long and they should be edited so that only the main notes will be included.

Online Teaching and Learning – Not all FICs could attend the learning visit because of geographical constraints and conflict of schedules. This could be addressed by sending invitations at least two months before the event. Another way of addressing this issue is to provide the FICs regular updates as to the status of the program. This way, they can adjust their schedules better.

Field Issues – Some study sites have no stable internet connectivity, hence, it is important to ensure live/web streaming. This is an issue that needs to be addressed through increase in awareness and discussion with the technical team.

Selection of Partners – The selection of partners was limited only to regions in Luzon because of limited funding. The MPM Program continues to link with other possible partners in order to conduct site visits in other parts of the country like the Visayas and Mindanao.

Feedback and Evaluation – So far, the feedback from partners regarding willingness to collaborate is very positive. Getting feedbacks from the participants and students will also be relevant in the long run.

Lessons, Recommendations and Prospects

The externship/learning visit will help the MPM faculty and staff improve the syllabus/coverage and subject matter/content of MPM courses through observation tours and field exposures. It is important that the faculty members are able to stay grounded and updated on what is going on in the field through the first-hand insights and experiences.

Some of the lessons include the following:

Quality Assurance. Content co-creation is vital to ensure quality in ODeL. This innovation resulted to the following levels of quality assurance.

- Quality of content and network. In the case of the MPM, it is necessary that the key experts/practitioners could share their own knowledge and experiences about the management of government programs and projects. Moreover, the activity resulted to the establishment of partnerships with other state colleges and universities which could build their portfolio for accreditation of programs by the Commission on Higher Education.
- 2. Knowledge sharing and co-creation ensures the quality of the MPM Programs. As a priority area in the API, externship of faculty members is proving to be an effective strategy in improving teaching performance which is one of the items in the University of the Philippines' internal Academic Assessment and Development System (iAADS) conducted every three years. This is because the faculty members become grounded and updated on what is going on in the field, thus, gaining a better grasp of the environment relevant to the course they are teaching. The activity also increased the faculty members' ability to connect theory and practice; they are better able to integrate current workplace situations and employment skills into the course and it develops stronger linkages with the collaborators for future undertakings.

As regards prospects of the learning visit, it is important to note that more institutions are now willing to partner with UPOU in order to host the externship and forum. In terms of the open educational practice, it is envisioned that the MPM will soon develop its own playlist of MPM related videos which anyone can access.

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Analysis of Students' Reflections and Ideation in an Online Graduate Ecology Course

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Abstract

Plastics have become one of the biggest environmental and societal problems that affect land, oceans, waterways, living organisms, and humans. The three countries that have the largest contributions to plastic wastes in the oceans are China, Indonesia, and the Philippines. (Jambeck et al., 2015). These countries are identified as rapidly developing countries that are engaging in investments from wealthier foreign investors. "Megacities" in these developing countries have populations exceeding 10 million (Tibbetts, 2015). Among the factors for the continued use of plastics despite the advocacies of various sectors are the mindset and knowledge gap that plastics are easily recycled (Miller, Soulliere, Sawyer-Beaulieu, Tseng, and Tam, 2014) and the need for education, awareness, sharing of educational resources on reducing plastics, and working closely with industries producing plastics (Jambeck et al., 2017). Hence, educational institutions all over the world must integrate in their lessons and in their class activities various ways on how to help stop the worldwide problem of plastic pollution. Students and their generation at large are seen as having the greatest capacity of enacting environmental advocacies. The aim of this study was to explore a teaching approach using the reflections and ideation of the ENRM 223 students about the plastic pollution-solution issue. This study also examined how reflexive practice can bring out ideas and possible strategies and practical actions for environmental advocacy. The study focused on two major questions: 1) How did the students apply concepts from the course in their reflections on the video in terms of authorship, purpose, economics, impact, response, content, techniques, interpretation, and context? and 2) How did the video's message influence the students' ideations and turn these into practical applications? The analysis of the responses was intended to contribute toward theory-building on effective long-term approaches to strengthening environmental advocacy strategies in online teaching and learning. Recommendations include identifying the mix of individual and contextual factors that best address the need; evaluating the intervention and verifying the strategy; and tightening the link in strategic environmental advocacy planning, program design, and program implementation in order to achieve long-term sustainable environmental outcomes.

Keywords: environmental advocacy, media literacy, quality assurance

Introduction

Plastics have become one of the biggest environmental problems that modern society faces. They affect not just land, oceans, and waterways but also living organisms. Among the negative effects of plastics is the impact on the environment, water contamination, flooding due to blocked drainage, and pollution. There has been increasing evidence that the growing problem on plastic pollution can have negative effects on human health. These include risks from physical injury, infection, transmission of diseases, and other effects on psychological and emotional health (Yukalang, Clarke, and Ross, 2017). Particularly, toxic waste from landfills are known to increase the risks of respiratory diseases, reproductive disorders, birth defects, and cancer (Porta, Milani, Lazzarino, Perucci, and Forastiere, 2009). Moreover, poor solid waste management systems significantly increase the costs of waste management and disposal (Klundert and Anschütz, 2001).

Some developed countries, such as the UK, Germany, as well as Scandinavian countries, have put in place measures to regulate the use of petrochemicals and plastics by the business sector. However, these countries are among the least contributors to the global plastic mismanagement. On the other hand, the Philippines, although a very small country, has been named as one of the major contributors to plastic waste. This, despite the passage of the Ecological Solid Waste Management Act, which was enacted in December 2000 almost two decades ago. According to a study by the Ocean Conservancy and McKinsey Center for Business and Environment, only five Asian countries account for 60% of the plastic displaced in the world's oceans: China, Indonesia, the Philippines, Thailand, and Vietnam (Chow, 2015). Another study by Jambeck and colleagues (2015) cited three Asian countries to have the largest contributions to plastic wastes in the oceans -- China, Indonesia, and the Philippines. These rapidly developing countries are engaging in expansive growth and investments from wealthier foreign investors. "Megacities" in these developing countries have populations exceeding 10 million with about 75% of megacity growth estimated to "occur outside the formal planning process," and about a third of these constitute slums or informal settlements (Tibbetts, 2015). These conditions, matched with poor and uninformed waste management practices, together with the absence of waste management infrastructure, have abetted large-scale plastic pollution. The rising consumer population has fueled the demand for small-volume goods packed in more plastic. According to Jambeck and colleagues (2015), the population density within 50 kilometers of the coast of a country is a main basis of its contribution to plastic pollution in the oceans. For instance, the 2014 country populations by the World Population Review in 2015 estimated that about 83% of the Philippines' population is located in coastal regions. Sadly, the dire situation is likely to get worse. According to an estimate by Tibbetts (2015), the volume of plastic pollutants dumped into the world's oceans could increase by more than 100% by 2025, that is, if current trends in plastics use would continue.

Despite the alarming global trends on plastic pollution in land and in the oceans, the response of governments have been dwarfed by the magnitude of the problem. National laws and international agreements and treaties have not been effectively implemented and as a result, the plastics problem continues to grow unabated in countries around the world. This is compounded by the lack of media literacy awareness about the plastics problem among government and non-government organizations as well as in the general population. However, some advocacy initiatives appear to have gained some momentum. For instance, in January 2010, the city government of Muntinlupa was the first to enact a policy on regulating the use of plastic bags and styrofoam in business establishments through City Ordinance 10-109. Since then, other large cities including Manila, Quezon City, Caloocan, Pasig, Makati, Marikina, Las Pinas, Pasay, and Pasig have also passed ordinances that prohibit most plastic, styrofoam, or polystyrene packaging materials in business and retail outlets. Another example is "The Plastic Solution" environmental advocacy where used plastic bottles compacted with other types of plastic waste are made into "ecobricks" for schools and other uses.

Among the factors for the continued use of plastics despite the advocacies of various sectors is the knowledge gap and the mindset that plastics are easily recycled (Miller et al., 2014). The need for education, awareness, and dissemination of educational resources on reducing the use of plastics thus becomes highly obvious. Moreover, efforts to promote understanding and closer work with industries that produce plastics must be pursued (Jambeck et al., 2017). In this regard, educational institutions all over the world have a prominent role to play. Schools and learning institutions are well-placed to provide a conducive environment for the study and practice of evidence-based environmental advocacy. Specifically, there is a need to integrate lessons and class activities

that improve knowledge on various ways that can help stop the world-wide problem of plastic pollution. Students and young and middle-level professionals have a large potential for enacting environmental advocacies.

The UP Open University, through the Faculty of Management and Development Studies (FMDS), is among these educational institutions that have vigorously pushed for environmental advocacy through its research, partnerships, and extension programs. Since 1999, FMDS has administered the Master of Environment and Natural Resources Management (MENRM) program. To date, the postgraduate program has attracted approximately 1,142 online students from the Philippines and abroad. Enrollees are predominantly environment professionals and those involved in environment-related responsibilities in government agencies or non-government organizations.

A core course in the degree program is ENRM 223: Ecosystem Structure and Dynamics. This course deals with the fundamental tenets of ecology and environmental biology --- considered the core in the interdisciplinary study of the environment and natural resource management. A compilation of 242 students' responses over a period of four years (2013-2017) provided an opportunity to retrospectively evaluate perceptions on environmental advocacy in relation to the global plastics problem. Specifically, this study focused on one module of ENRM 223 - Module 13: The World as an Ecosystem. Two of Module 13's goals are for the students to identify major global problems and to explain the concept of sustainable development. One of the activities in this module was to view a video and undertake a Home Quiz. The video discussed production and consumption patterns and the connections between social and environmental issues. It touched on the untold story behind the global plastic problem.

The aim of this study was to explore a teaching approach using the reflections and ideation of the ENRM 223 students about the plastic pollution-solution issue. This study also examined how reflexive practice can bring out ideas and possible strategies and practical actions for environmental advocacy. The study focused on two major questions: 1) How did the students apply concepts from the course in their reflections on the video in terms of authorship, purpose, economics, impact, response, content, techniques, interpretation and context? and 2) How did the video's message influence the students' ideations and turn these into practical applications? The analysis of the responses was intended to contribute toward theory-building on effective long-term approaches to strengthening environmental advocacy strategies in online teaching and learning.

Review of Related Studies

Media Literacy

Media Literacy Framework

Potter's Theory of Media Literacy (Potter, 2004) was used as a primary theoretical framework in drafting the Home Quiz, which was also used in this study to guide the researchers in evaluating data. The theory laid out the structure for the Home Quiz upon which the researchers gauged the depth of each student's understanding of the plastic pollution-solution issue. This adheres to the recommendation of the National Association for Media Literacy Education (NAMLE) that teachers and trainers in the environmental fields should train students in considering the following key questions when analyzing media messages (NAMLE, 2017).

Who made these messages? (Authorship)
Why was this made? Who is the target audience (and how do you know)? (Purpose)
Who paid for this? (Economics)
Who might benefit from this message? Who might be harmed by it? Why might this message matter to me? (Impact)
What kinds of actions might I take in response to this message? (Response)
What ideas, values, information, and/or points of view are overt? Implied? What is left out of this message that might be important to know? (Content)
What techniques are used? Why were those techniques used? How do they communicate the message? (Techniques)
How might different people understand this message differently? What is my interpretation

of this and what do I learn about myself from my reaction or interpretation? (Interpretations) When was this made? Where or how was it shared with the public? (Context)

An example that shows how the Theory of Media Literacy is relevant to this study is how the theory may be used in deconstructing media messages, especially those proliferated by plastic bottled water producers who mask as pro-health/environment advocates (Potter, 2004). According to Kupersmidt, Scull, and Austin (2010), educators would agree that education must be intended to help students develop critical thinking skills. They added that media literacy education encourages pedagogical practices that facilitate the practices that allow the development of critical thinking abilities because they provide students with critical filters that help them interpret media messages and images. Kupersmidt, Scull, and Austin (2010) also mentioned one particular set of critical thinking abilities that must be emphasized when teaching media literacy - deconstruction.

According to Fisher as cited in Kupersmidt, Scull, and Austin (2010), teachers must challenge students to question the target text since media literacy education is largely about developing media skepticism. Moreover, teachers must also motivate students to reflect upon the skills and theories they learn and participate in "thinking about thinking," also called as metacognition (Burke, Williams, and Skinner in Kupersmidt, Scull, and Austin, 2010).

Indeed, media literacy is an important component that must be incorporated in education. Hence, students need to be equipped with knowledge on geopolitical trends and how these trends influence media content as part of a political economy. This also traces the explanations behind the representation and framing of realities through the media; why the use of plastic water bottles are always rendered harmless and ubiquitous and why the destructive effects of plastic on the environment are never depicted through the mainstream media (Lim and Nekmat, 2008).

Media messages always have commercial and economic implications. Thus, media literacy is essential in controlling not only how viewers interpret media messages but also in how they respond to these messages, mainly by consuming. Sramova (2014) asserted that in today's increasingly consumerist society, the target age groups of media messages become younger and younger. Hence, it is important that media literacy is taught to children from the years leading to the formation of consumer behavior (Sramova, 2014).

Global consumerism behavior and the plastics industry has largely contributed to various environmental problems such as plastic pollution. This is compounded by the ease, portability and reduced cost of single use packaging materials versus cumbersome, more expensive and reusable materials such as glass. Geyer, Jambeck, and Law (2017) estimates that of about 8300 million metric tons (MT) of plastics produced, 76% are now plastic waste. Consumers often fail to calculate or even consider the long-term costs of plastic use (Rochman et al., 2013) in their purchases.

Lewis (2013) cited that corporate media conglomerates have produced an intense consumer culture by saturating viewers with marketing and advertising techniques that draw consumers into overconsumption whilst diverting them from political issues. Lewis (2013) traced the beginnings of consumer capitalism as the advertising industry developed in the United States during the 1920s, leading to the commodity capitalism seen during the corporate era that started around the 1950s. He further argued that since then, promotional culture has intensified and the public sphere was hollowed out and unable to face up to the environmental issues of today. Thus, media literacy programs should take a critical look at media producers' financial and political motives, reasons, and paradigms (Rosenbaum, Beentjes, and Konig, 2008). The deconstruction of media messages -- in this case, those about plastic water bottles -- must consider how messages are influenced by money, power, space and time exigencies, as well as ability, class, gender, mobility, racial, and sexual differences (Lewis and Jhally, 1998).

Ideation for Behavior Change

Ideation pertains to the way new attitudes or behaviors are dispersed through a community using communication and social interaction. Behavior is shaped by several psychological and social factors, in addition to environmental conditions and skills that facilitate the formation of behavior.

Ideation is the "process of generating fresh ideas that can be transformed into innovative solutions" ("What is Ideation", 2018). It is useful in predicting behavior change, especially in environmental advocacy. It is divided into three (3) categories: cognitive, emotional, and social ideation. According to Kincaid (2000), instructive communication is effective in teaching skills and knowledge. Directive communication (one-way influence) and nondirective communication (entertainment, counseling and interpersonal) mainly affect ideational factors. Lastly, Public communication (such as advocacy) are seen to affect environmental factors the most. Kincaid (2000) added that the effect of communication on ideation and environment consequently determine change in behavior.

There are three categories of ideational factors: cognitive, emotional and social. Cognitive ideation refers to an individual's beliefs, values, perceived risks, subjective norms, and self-image (Kincaid, 2000). Cognitive ideation, when applied to environmental advocacy, refers to the campaigning that either resonates with the target audience's beliefs, values, perceived risk, subjective norms, and self-image, or make them doubt dominant media (deconstruction). Emotional ideation on the other hand include emotional response, empathy, and self-efficacy (Kincaid, 2000). Techniques used in environmental advocacy deal with appeal to human emotion. Positively, it can motivate a person towards a good action step. Negatively, it can also manipulate an audience towards something they are not aware of. Lastly, social ideation includes social interactions (such as support and influence) as well as the behavioral effect of persuading others to adopt one's behavior (personal advocacy) (Kincaid, 2000). Social ideation variables such as support and influence of trusted family and friends affect the quality of environmental advocacy. Personal advocacy uses testimonials of family-like, friendly endorsers.

Methodology

The focus of this study was the critical reflections of graduate ecology students in an online class setting on the plastic pollution-solution issue. As part of the class requirements, the students were given a Home Quiz activity wherein they were required to watch a video about the less known facts surrounding the plastic bottled water industry. After watching the video, the students were asked to write their reflections about the plastic pollution-solution issue.

With inspiration from the frameworks on media literacy and ideation for behaviour change, the reflections of the students were analyzed. Through archival analysis, the 242 reflection outputs of 242 students from seven (7) semesters (from Academic Year 2013-2014 to 2017-2018) were analyzed. Two major questions were considered in the analysis: 1) How did the students apply concepts from the course in their reflections of the media or video in terms of authorship, purpose, economics, impact, response, content, techniques, interpretation and context? and 2) How did the video's message influence the students' ideations? The reflections were categorized based on the three categories of ideation. These categories served as the basis for selecting exact quotations from students' reflections to support empirical assertions. In selecting quotations to support the theme, researchers also looked for points of conflict, tension and contradiction, those that do not quite fit and out of the ordinary (Janesick, 2004).

Results and Discussions

Analyses of the online reflections of the students resulted in several themes. The themes that emerged were categorized into the following: cognitive ideation (beliefs, values, perceived risk, subjective norms, self-image); emotional ideation (emotional response, empathy, self-efficacy); and social ideation (support and influence, personal advocacy). The reflections of the students reflected how an assessment in an online environment supported reflexive practice encouraging creative and critical reflections and ideation as can be seen in their posts.

Cognitive Ideation

Cognitive ideation in this study resonated with the students' perceived risk brought about by the use of plastics in their lives. As students of an environmental program, they are equipped with the scientific knowledge about the risks in using plastics. The topic on plastic is discussed in the online course wherein it is explained how the problem on plastic affects the whole ecosystem. In analysing the understanding about certain concepts such as the plastic pollution issue, it is important to consider their contexts as this influence their interpretation of the issue. This is in line with the basic tenet of the media literacy framework. This excerpt shows the student's reflection on the plastic waste generated:

"As a mining engineer, I know that all of these products/gadgets are made of minerals found in the earth's surface. Different minerals and chemicals are being combined to produce a single product. Most businessmen/industrialists only focus on the profit, as per the video they produced a product that is easily broken and the lifespan is very short while chemicals that are being used are very dangerous to human health. Moreover, minerals that are being mined are also increasing." Student 20 (2017) Another reflection was very much grounded on the student's personal experiences. This reflection shows the broader understanding that plastic has indirect negative effects on food production which eventually affects health of families. One of the greatest risks connected to use of plastic is the contamination of soils and groundwaters which are needed for food production. He said:

"As a family of having a kid, when we buy food in malls or markets we make sure that it is toxic free (sic), we preferred to buy organic vegetables and avoid processed foods." Student 3 (2017)

Cognitive ideation also resonated on values and subjective norms. In the reflections of the students, they surfaced the need for people with common ideas and values to work together in order to achieve the change that they desire. Environmental movements play an important role in making more people aware about the perils and hazard of plastics and eventually change how people behave about plastic. As Cooper and Ternes (2016) noted, environmental movements are necessary for global environmental progress. Students need to be trained "in the activist and alternative media movements that seek to challenge mainstream media norms" (Duran, Yousman, Walsh, and Longhore, 2008: 51). Even in online setting, students are able to issue a call to come together to instill environmental awareness. This excerpt shows the realization that change will not come from government or non-government organizations alone but from the people themselves who are affected by plastic problems:

"Right now we also need a movement that will create change. With common idea and values, and commitment to work together, we can start with instilling environmental knowledge and awareness to people. Making real change takes all kinds of citizens, not just protesters. And if they hear what we want, they will provide it." Student 1 (2015)

Cognitive ideation also reflects on the self-image as a result of using plastic. Oftentimes, people's understanding about plastic is limited to its negative effects to the environment as well as health-related issues, but based on the reflections of the students in this study, plastic also reflect on one's self-image. It is important to note that even in an online environment, students are able to reflect on the concept of self-image. The reflection also shows the personal action taken on by the student in terms of not using plastic in the workplace. One student wrote:

"Beauty-wise, repeated sipping up from the straw causes the risk of having lip lines and wrinkles. So ditch the bottled water and straw and gulp more on water from your own water bottle. I personally have a water bottle and coffee mugs in the office that I use everyday." Student 2 (2015)

Cognitive ideation also resonated in the student's beliefs. Students' reflections also shows tensions and conflicts in their beliefs. As we are living in a developing country where there exists a "tingi" (buying in sachets) culture or system mostly because of poverty and people living on subsistence. Sy-Chanco, Pornpitakpan, Singh, and Bonilla (2011) noted that the three factors for low-income families favoring the use of sachets are: affordability or minimal cash-out; portability or convenience of smaller packs; and control over the dosage or content. This is one of the major reasons that hinder most people from choosing more environmentally friendly options. An excerpt from the student's reflections stated:

"Individuals who are living with a daily budget need to allocate money for daily supplies such as food and toiletries. Goods in sachet packets are easily accessible and within the budget of low-income families." Student 19 (2017)

Social Ideation

Social ideation has been described as those that "include insights, sentiments, and imaginations about the social world, self, and social life" and originates from the conscious reactions of social agents as they interact with social structures and events (Hosseini, 2012). Information is acquired and processed through the process of learning, and together with the insights gained through introspection and reflection, social ideation is formed. Through the meanings and sentiments that take shape, a better understanding of daily experiences and social systems emerges.

Social ideation, as exemplified by the narrator of the video about plastic bottled water, used personal advocacy through the testimonials of family or friendly endorsers. This is consistent with other studies that cited social support, social influence, interpersonal communication (e.g. communication with a spouse, friends, or relatives), personal advocacy, and social networks are strong influences in social ideation (Kincaid, 2000). The following statements were extracted from the responses of the ENRM 233 students from different semesters. Themes related to the aforementioned social elements manifested in the responses and introspective inputs from the students.

When it comes to social ideation's personal advocacy, an online learner mentioned:

"proper waste handling in my workplace, help in saving forests by not leaving any trash when I join my friends in visiting forest areas, cleaner production (in the case of industrial firms), conscious consuming for myself and educating my family as well, supporting government efforts to reduce, reuse and recycle waste, do and promote Zero Waste where feasible, close-loop production (businesses), and most of all practice simple living in order to avoid contributing to voluminous thrash typical of today's consumer society." Student 3, 2015

Another graduate student affirmed personal advocacy and said:

"I realized the 'externalize cost' are not counted from the extraction of resources and to the workers you really work hard for it, and because its too cheap and not of good quality it is easy for disposal 'design for the dump'." Student 4, 2015

Moreover, personal advocacy rang strong in another reflection:

"My knowledge about plastics has broadened and I pledge to begin to get rid of plastics. I'm not sure if it will be possible to completely end my use of plastics, but I'll definitely reduce my plastic usage especially those related to food and personal care products. Being a conscious consumer is the key. It'll definitely save our health and the environment." Student 5, 2015

An infographic was included by a student who agreed about the need to change the approach:

Student 14, 2016 showed an illustration that shows how dangerous chemicals from toxic waste can seep into the soil, affect rainwater, vegetation, livestock, and in turn, human health:



Figure 1. Infographics posted by student 14 showing the negative effects of plastic

Furthermore, in line with Social Ideation's support and influence factor, a practical list was itemized by one of the students:

"As a person and family: Create a sustainable lifestyle

- 1.1 For Store Shopping:
 - 1.1.1 Prepare a list of what you really need prior to buying
 - 1.1.2 Choose a store that sells in bulk like S&R, etc. Go for bulk purchases
 - **1.1.3** Bring your own "recyclable or eco-friendly" bags instead of using plastic bags
 - 1.1.4 Go for beverages in reusable glass bottles
 - 1.1.5 Give up bottled water
 - 1.1.6 Use reusable bottles and cups"

Student 7, 2015

This excerpt from a student's reflections shows how the video influenced her understanding of the plastic problem. As the video showed the complexity of the problem, it has achieved its intended effect of allowing the student see her contribution to the problem. This shows that online environment allows for this kind of engagement and reflexive thinking on the part of the students.

"I have not suspected that pollution, natural resources degradation and the 'system' that makes it happen is such a complicated thing and has a complicated effects as well. All the information presented has a point. I have somehow realized that I am a great contributor of pollution without actually knowing it." Student 10, 2016

Media literacy is defined as the "ability to understand, analyze, evaluate, and create media messages". Media literacy training increases the individuals' doubt about media content (Austin, Chen, Pinkleton, and Quintero, 2006). After all, existence of the individuals with high media literacy leads to increase in the media quality because such individuals require more realistic messages of higher quality (Ulaş, Epçaçan, and Koçak et al., 2012).

"I do think I may be part of a brainwashed culture that finds significance and meaning in having or buying more things. I agree that in a materialist culture, the value of a person does get judged by how much he buys or consumes. I find it reprehensible that firms may manufacture things which do not really last and there are firms which find ways of forcing people to buy their new products especially when it comes to computers and cellphones. While the green solutions are appealing, my personal opinion is that these relatively remain drowned by a materialist culture which remains strong even with the urgent problems and issues in the environment at hand." Student 11, 2016

Thackeray (2010) argued that although personal advocacy efforts do help, collective action by a group of more individuals is generally more effective. He suggested that creating a network of individuals is one of the first steps for people who intend to forward environmental advocacy. This is also seen in some of the students' responses.

Student 3, 2017 also mentioned:

"As a community, business establishments today already practice green operation such as in fast food or restaurants, using of straw, plastic spoon fork are regulated. Instead,, they allowed only their customers to use recyclable cups and reusable spoon and forks. Coffee cups now are made of abaca, instead of using styrofoam, because it is only natural materials that can resist high temperatures and decompose."

Student 4, 2017 re-established the role of the family as a basic social unit. She said,

"Culture and attitude always start within a family. What the family customarily do will be instilled in the mind of an individual person."

The influence of family on behavior is seen in the response of Student 18, 2016, in which she stated: "I now passed on to my daughter the habit of bringing our own filled water bottle whenever going out. Aside from reducing trash, it will definitely save me some money if we do not buy bottled water and it will leave me at peace assured that she is drinking clean water. I also encouraged the students from her school in an IEC to have their own water bottle and likewise discouraged buying juices and other bottled drinks. An MRF was also placed in the school and it was reported that plastic bottle wastes significantly declined. The project expansion to the whole town site is set in 2017 wherein we will also be banning the use of plastics."

Student 9, 2017 offered simple solutions that supposedly aims to start the change from within every individual. The suggested process was slow yet easier. This reflection shows that even in an online environment, students are able to come up with specific doable actions to solve the plastic pollution issue and share these with the online classmates. He offered specifics steps such as:

Doable actions as a person:

- a. Saying no to bottled water and other drinks
- b. Using re-usable bottles
- c. Saying to plastic bags
- d. Being organized and planning
- e. Making a list
Doable actions as a family:

- a. Buying food in bulk
- b. Planning food for the week
- c. Selling in bulk
- d. Making a shopping list
- e. Bringing containers and bags

Doable as a community:

a. Growing your own food

Student 3, 2017 discussed that:

"Definitely, the linear configuration of the materials economy is a problem at first glance. Annie Leotard is right in saying that 'one cannot run a linear system on a finite planet,' since its resources will certainly run out. The process of extraction, production, distribution, consumption, and disposal is a flawed system developed under the context of pleasing the one-percenters. In an ideal state, governments should be 'of the people, by the people, and for the people.' It should be the one to protect, regulate, and oversee that the materials economy is beneficial not just to the extremely rich and powerful, but to all. However, in reality, the government acts more as a henchman, ensuring specific corporations to stay in supremacy."

In summary, the social ideation of graduate students highlighted a strong influence of human agency within social structures and events. Despite the physical constraints for socialization and face-to-face interaction in an e-learning environment, the exercise demonstrated that reflexive processes can change and influence social behavior among a group of students and the social networks.

Emotional Ideation

Affect is the experience of feeling or emotion, and its role as a key mediating factor in the ideation process has been cited (Kollman and Lomberg, 2014). Affect can be positive or negative, but in response to the video that the students watched, most emotional responses included sadness, anger, and guilt. With regard to taking action, there are studies that suggest that negative emotions and past behaviour can influence the desire to engage in pro-environmental action (Carrus, Passafaro, and Bonnes, 2008). Examples of negative emotions are illustrated from three of the students:

"I felt a little guilt because I promote buying bottled water over soft drinks since the later can cause blood sugar related diseases but now after I watch the video; neither of them is good because they are totally bad for our health and environment." Student 3, 2017

"Sadly, because of a very strong marketing crusade to boost sales, bottled water eventually outdid tap water for drinking especially in the United States as the nation is currently consuming half a billion bottled water in a week and as stated in the video, this is enough to circle the globe five times." Student 15, 2016 "I hate that so many people don't even think twice about them, particularly in conferences and events where they come in tiny bottles with the most plastic packaging. In my field events, I always tell participants to bring their own bottle, and that refills will be made available. But I cannot control events I do not organize, and I feel there have already been enough awareness campaigns going on. It saddens me to think that the bottomline is, people just don't care." Student 10, 2017

Visser and Kouprie (2009) defined empathy as "a person's ability to identify with and understand another person's feelings, ideas and circumstances" (Visser and Kouprie, 2009). Empathy was also promoted in the video documentary through dramatic visual images of innocent aquatic animals who perished due to plastic ingestion or entanglement.

Although Student 1, 2017 introduced her accounts with pieces of logical reasoning, it was evident from her tone that her opinions were driven by emotion and how she, as a person, was affected by the documentary. It became fully explicit that her response was more emotional than logical as she became wrapped up her reflection, in which she said:

"All of these thoughts made me think of wishing to see the past and wished that all problems in our environment will not come. If I am going to be asked if what particular thing I wish not be invented, I will not say it's a thing but, I would rather wish that heartless people doesn't exist." Student 1, 2017

Her emotional ideation continued as she presented her proposed action where she wrote:

"I think one of the best ways to resolve problems in the environment is through Information Education Campaign or IEC for the youth because I believe that educating the youth will make them realize the importance of protecting and conserving the environment at their young age so that everything will not be too late for them to help because we already planted seeds of environmentalism in their hearts and minds." Student 1, 2017

Student 2, 2017 cited that:

"What is important is family, friends and leisure time. These things make us happy. However, in real life, this is not the case. We tire ourselves to work and since we are already tired, our only leisure is to watch television and 'shop.' Then, we work again to pay for what we shopped. This never-ending process makes us unhappy and tired. It is draining the life out of us."

Student 24, 2017's reflection resonated mostly from self-efficacy. He stated that:

"The video directly explains everything what's really happening in the business sector. From the unearthing of every gadget's raw materials, to the factory, to the designs, intentional life span designs, to the consumer, to disposal, to shipping, to the merging countries for disposal. Everything is very well explained. This is where also I realized that buying gadgets of inferior quality makes me one of the culprits in the destruction of the mother earth."

Furthermore, this study found a striking viewpoint that has not yet found mass appeal in the country. Research participants shared a common newfound desire to begin getting rid of or minimize plastics in their food consumption (like plastic water bottles) and personal care products, with the hope of totally ending their use of plastics someday. This came with the realization that

they, as students and professionals, are in a position to make a contribution to finding viable solutions to the immense plastics problem. Through personal integrity, professional competence, and strong media literacy, there was a perception that there is a role for them for protecting the environment by helping to discern anti-environment information and actions and to mobilize positive actions within their social networks.

Although many environmental advocacy organizations exist in the Philippines, dubious members of these groups are rarely scrutinized before and during their membership for their hidden agenda behind so-called "corporate social responsibility" (CSR) campaigns to lessen pollution. While they propose seemingly safer habits such as drinking from plastic bottled water, a few may actually be benefiting from this new income stream and worsening the worldwide pollution problem.

Quality Assessment

The particular Home Quiz mentioned is an important kind of assessment in terms of quality assurance (QA) for the course. As there are already formative, interim and summative types of assessment in the course, the Home Quiz assures that the offering is complete. Assessment is not limited to a tool for measuring student's know-how, but as an ongoing exchange between teacher and student in the wider scope of the learning process. Having a wide menu of assessment types allows students to be holistically evaluated. It minimizes unnecessary penalizing of students whose strengths may not be in the 1-2 teacher-preferred assessments. Through the Home Quiz, students are given a chance to speak from their own viewpoint, deconstruct and reconstruct environmental issues in the way that is meaningful to them. To ensure that this strategy is implemented effectively, there is a Discussion Forum solely dedicated to it.

Conclusion

Graduate students of environmental management are at the forefront of successful planning, implementation, and evaluation of future-friendly environmental advocacies such as resolving the world-wide plastic problem. However, they must be given opportunities and spaces for reflexivity. This puts the online students of a graduate ecology course in a unique position that allows them to make critical reflections and come up with practical solutions since they are situated in various locations and exposed to various situations. This study analyzed the reflections and ideation of the ENRM 223 students about the plastic pollution-solution issue. This study also examined how reflexive practice can bring out ideas and possible strategies and practical actions for environmental advocacy. Ecosystem structure and dynamics should not be limited to dialogues about ecology and biology, but include the sociology and psychology of various stakeholders involved. Critical reflections of research participants in this study showed that many of them learned about this trap of inauthentic advocates only for the first time.

Mainstreaming environmental advocacy entails effectively embedding it in online courses. Audio-visual advocacy materials have consistently shown better learning outcomes than mere print materials due to their multi-sensory dynamics. Through a reflective-reflexive online course requirement, deconstruction of false information about the plastic problem-plastic solution issue was addressed. Ideation is a good starting point for personal action plans of students, and its ripple effect extends beyond what the instructor aimed for. Thus, quality assurance is promoted and expanded.

Recommendations

Based on the findings, this study recommends the following quality assurance assessment requirements of online environmental courses. First, it is suggested that a mix of individual and contextual factors of ideation be identified. This pertains to those that best address the need for demystifying multi-layered media paraphernalia of public relations departments of giant business enterprises. This will involve psychological and sociological approaches in ideation deconstruction, construction, and reconstruction.

Second, tightening the link in strategic environmental advocacy planning, program design, and program implementation is proposed in order to achieve long-term sustainable environmental outcomes in online courses.

Third and most importantly, the most significant recommendation that can be gleaned from this study is the call for a 21st century approach to environmental advocacy in teaching and learning. Environmental advocacy, as summed up in United Nations Environment Assembly (UNEA)'s mission, is the provision of leadership and encouragement of partnership in taking care of the environment by "inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations" ("U.S. Legal", 2017). UNEA is the world's highest-level decision-making body focused on the environmental issues faced by the planet at present, which includes a resolve to deliver the 2030 Agenda for Sustainable Development ("U.S. Legal", 2017). The 2030 Agenda acts as a paradigm shift from unsustainable economic profit models to equitable economies. It promotes increased public participation in making decisions, consistent with the Rio Declaration on Environment and Development - Principle 10.

Traditional top-down approaches in environmental advocacy rely heavily on experts who are expected to do most of the planning and implementing. On the contrary, bottom-up approaches begin at the individual level, where meaning-making and action-taking is made personally relevant to non-experts. The slogan, "the personal is political," (popularized by second wave feminism of the 1960s) underscores the link between personal experience and bigger socio-political structures.

Furthermore, it would be helpful if there is a systematic intervention evaluation of assessments, and a strategy verification of the teaching-learning process when it comes to personalized environmental advocacy among online graduate students. Doing this will aid in authentic internalization of environmental principles and assured hands-on practice of sustainable day-to-day habits. Instilling this kind of paradigm among graduate students will foster in them the same kind of groundedness when it comes to applying ecological policies in their fieldwork with different strata of society.

Consequently, creativity plays an important role in conducting environmental advocacy in online courses. Convergent thinking alone tries to resolve environmental problems using a singularly identified correct solution or "answer." Its opposite, divergent thinking, solves problems using a wide variety of possibilities. Creativity is the inspiration behind divergent thinking which leads to fresh, original, unique, and effective solutions to environmental problems like those arising from the improper disposal and accumulation of plastics from large-scale production and consumption of bottled water.

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Applying the E-learning Framework: Evaluating an E-learning Course toward the Improvement of Quality of ODeL Programs

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Abstract

Anchored on Khan's Eight-Dimensional E-Learning Framework, this cross-sectional study evaluated IH 213 (Health Promotion for Equity and Sustainable Development) course—an e-learning course under the Diploma in/Master of International Health Program of the Faculty of Management and Development Studies, University of the Philippines Open University. Guided by the Evaluation Dimension of the E-learning Framework, the core objective of the study was to evaluate the course through assessment of international health learners and evaluation of the instruction and the learning environment. Thirty-three (33) international health learners enrolled in the course during the 2nd semester of A.Y. 2016-2017 served as the respondents of the study. The study used the survey research design to gather data from the respondents. Data were analyzed using descriptive statistics. Recommendations were also presented.

Keywords: Evaluation, e-learning course, international health students, health promotion, distance education

Introduction

Open and Distance E-learning (ODeL)

Open and distance e-learning can be viewed as an innovative approach for delivering well-designed, learner-centered, interactive, and facilitated learning environment to anyone, anyplace, anytime, by utilising the attributes and resources of various digital technologies along with other forms of learning materials suited for open and distributed learning environment.

Evaluation in ODeL

Success in an e-learning system involves a systematic process of planning, designing, implementing, and of course, evaluating the online learning environments where learning is actively fostered and supported. According to Land and Hannafin (1996), the more open the learning environment, the more complex the planning, management, and evaluation of it.

Evaluation of an e-learning course or program is necessary to "buy" better understanding of how the program or a specific e-learning course is working – feedback. It can help make decisions on operations as it provides factual basis for corrective adjustments. Thus, it helps in improving the course and creating more meaningful learning environment (Khan, 2010; Torres and and Velasco, 2005; Attwell, 2006)

Khan's Eight-Dimensional E-learning Framework

The study utilized Khan's Eight-Dimensional E-Learning Framework as it is one of the most widely used frameworks when it comes to designing, developing, implementing, and evaluating an open and distributed learning systems and e-learning programs or courses (Doyle, n.d.). Several studies conducted to review e-learning programs, resources and tools (Khan, 2007; Khan & Smith, 2007; Romiszowski, 2004; Singh, 2003; Chin & Kon, 2003; Kuchi, Gardner, & Tipton, 2003; Mello, 2002; Barry, 2002; Goodear, 2001; Khan, Waddill, & McDonald, 2001; Dabbagh, Bannan-Ritland, & Silc, 2001; Khan & Ealy, 2001; El-Tigi & Khan, 2001) found the various issues within the eight dimensions of the framework useful.

Khan (2010) have long been communicating with learners, instructors, trainers, administrators, and technical and other support services staff involved in e-learning in both academic (K12 and higher education) and corporate settings from all over the world. He has researched critical e-learning issues discussed in professional discussion forums, and have designed and taught online courses. He also reviewed literatures on e-learning. As the editor of Web-Based Instruction (1997), Web-Based Training (2001), and Flexible Learning (2007), he had the opportunity to work closely on e-learning issues with about two hundred authors from all over the world who contributed chapters in these books (Khan, 2010).

The e-learning framework encompasses various online learning issues, including: pedagogical, technological, interface design, evaluation, management, resource support, ethical and institutional needed in the planning, implementation and evaluation of the e-learning system. It can provide guidance in (Khan, 2010 in Doyle, n.d.):

- planning and designing e-learning and blended-learning materials (e.g., online courses, MOOCs, mobile learning);
- organizing resources for e-learning environment and blended-learning materials;
- designing distributed learning systems, corporate universities, virtual universities and cyberschools;
- designing LMS, LCMS and comprehensive authoring systems;
- evaluating e-learning, blended-learning courses, and programs; and
- evaluating e-learning authoring tools/systems, LMS and LCMS.

The study applied the Evaluation dimension of the framework as it will only evaluate one of the e-learning courses of the Diploma in/Master of International Health Program of the Faculty of Management and Development Studies of the UP Open University. Specifically, the study looked at the following variables: Reflexivity, Reflective Thinking, Interactivity, Tutor Support, Peer Support, and Interpretation.

Objectives

Anchored on the Evaluation Dimension of Khan's E-learning Framework, the study aimed to evaluate one of the e-learning courses of the Faculty of Management and Development Studies' Diploma in/Master of International Health Program—IH 213 (Health Promotion for Equity and Sustainable Development) course.

Specifically, the study sought to:

- 1. Identify the relevance of the e-learning course to the respondents;
- 2. Determine the respondents' reflective thinking as they take the e-learning course;
- 3. Assess the respondents' level of interactivity in the e-learning course;
- 4. Evaluate tutor support in the e-learning course;
- 5. Assess peer support in the e-learning course; and
- 6. Analyze respondents' interpretation of their instructors' and co-learners' messages as they exchange ideas/thoughts regarding the topics in the course.



Conceptual/Theoretical Framework

Figure 1. Framework of the study

As can be seen in the framework of the study (Figure 1), the first section was adapted from the Evaluation Dimension of Khan's E-learning framework. It includes Assessment of Learners, Evaluation of the Instruction, and Evaluation of the Learning Environment. Under Assessment of Learners are the constructs: Relevance and Reflective Thinking. Evaluation of the Instruction is composed of Tutor Support, while Evaluation of the Learning Environment includes Interactivity, Peer Support, and Interpretation.

Based on the results of the evaluation, the e-learning course can either be effective or ineffective as perceived by the students or the respondents.

Methodology

The study used the survey research design to gather data from the respondents. It was deemed appropriate, as the study aimed to obtain evaluation. According to Librero (1996) a survey is done by collecting data that will later on be utilized as basis in evaluating a certain phenomenon.

Thirty-three (33) international health learners enrolled in the course during the 2nd semester of A.Y. 2016-2017 served as the respondents of the study. An online evaluation questionnaire created via google forms was used as data gathering instrument. It is composed of 24 favorable statements answerable by Almost Never, Seldom, Sometimes, Often, and Almost Always. There are four statements per construct—Relevance, Reflective Thinking, Tutor Support, Interactivity, Peer Support, and Interpretation. The statements were adopted from the Moodle Self Assessment Tool embedded in the MyPortal course site. As stated in an article written by Frederic Nevers, it is a useful tool for students' self assessment. An assessment tool is important in effective teaching and learning (Nevers, 2011). Nevers has been teaching using moodle and he found the tool to be beneficial for both students and teachers as it helps improve the teaching and learning styles, among others. The University of New South Wales has also been using this tool to their students ("MOOCS @ UNSW", n.d.).

Prior to the use of the tool in the study, the researchers sought permission from the moodle administrator via email. Before the actual use of the questionnaire, pretesting was also done to determine its effectiveness. A total of 15 students who were not part of the actual respondents of the study answered the questionnaire. Data from the pretest were then subjected to reliability analysis using the cronbach's alpha test obtaining a value of 94.7516% which indicates that the questionnaire is reliable. This is above the acceptable level thus implying high internal consistency on the question constructs. Their feedbacks regarding the questionnaire were also asked qualitatively. They have revealed that the question format, wording, and order were all clear and that the response options were exhaustive. None of the respondents have relayed negative comments.

After checking the questionnaire's validity and reliability, the link to the online questionnaire was made available in the course site for IH 213 students' access. To eliminate response bias, the study also ensured anonymity and confidentiality of the responses. Other ethical issues such as informed consent, beneficence, and non-maleficence were also taken into consideration.

Data from the online questionnaires were analyzed using descriptive statistics such as frequency counts and percentages and measures of central tendency (median, mode).

Clearance from the ethical review board of the FMDS was sought prior to the implementation of the research.

Results and Discussions

This part of the paper presents the results and discussion of the study.

Relevance



Figure 2. Distribution of reactions to the 'relevance' statements

One domain that must be considered in evaluating an e-learning course is Relevance. The more the students find their learnings in a specific course relevant to their lives or their professional work, the more it is likely for the e-learning course to be effective. Figure 2 shows that majority of the students often or almost always find that their learnings in the course are important to their work or professional practice and that their learnings focus on issues that interest them. Such findings suggest that the e-learning course is perceived to be effective in terms of relevance.

Reflective Thinking



Figure 3. Distribution of reactions to the 'reflective thinking' statements

Kaveti (2012) defined Reflective thinking as "conscious thinking by examining or absorbing an issue which triggers a past experience and helps to gain fresh insights into a new knowledge or skill. It enables learners to build on their prior knowledge. It plays an important role in personal development programs and in understanding the experiential learning process. Before reacting to a situation, reflective learners think about new information and they try to figure out a solution to a problem on their own." Figure 3 reveals that most of the respondents almost always or often think critically about how they learn, about their own ideas, about the other students' ideas, as well as the ideas in the readings. Thus, in terms of Reflective Thinking, the course is perceived to be effective by the students.

Interactivity



Figure 4. Distribution of reactions to the 'interactivity' statements

Interactivity plays an important role in e-learning. It is a key element of the actual eLearning course design process, and it has proven to be a practice that adds outstanding value to the eLearning course. It involves forms of action or reaction on learners' behalf, in order for them to achieve results or reach a conclusion.

Three out of the 4 statements under this construct were answered sometimes by majority of the respondents as shown in Figure 4. They only sometimes ask other students to explain their ideas. Their classmates also only sometimes ask them to explain their ideas and only sometimes respond to their ideas. This shows that interactivity is a bit low in the e-learning course. Students must be encouraged to interact more with their classmates and give feedback to their co-learners' ideas in order to have fruitful discussions and learn from each other.

Tutor Support



Figure 5. Distribution of reactions to the 'tutor support' statements

As can be seen in Figure 5, most of the students responded that often or almost always, the tutor stimulates their thinking, encourages them to participate, and models good discourse and critical self-reflection. This suggests how well the tutor also known as the faculty-in-charge designed and executed the course. According to McPherson, Nunes, and Zafeiriou (2003), online tutoring and leadership has been widely considered as a crucial factor in the success of computer-mediated collaborative learning activities.

Peer Support



Figure 6. Distribution of reactions to the 'peer support' statements

Another construct is Peer Support. Figure 6 shows that majority of their classmates often encourage their participation, praise and value their contribution, and empathise with their struggle to learn. They motivate one another to learn and participate more. Thus, the course is perceived to be effective in terms of peer support.

Interpretation



Figure 7. Distribution of reactions to the 'interpretation' statements

Figure 7 shows that often the students make good sense of other students' messages and their tutors' messages, likewise, their classmates and the tutor also make good sense of their messages. Thus, in terms of interpretation, the course is also perceived to be effective.

Conclusions and Recommendations

Generally, the e-learning course was perceived to be effective in terms of Relevance, Reflective Thinking, Tutor Support, Peer Support, and Interpretation as most of the respondents answered often or almost always in all the statements under the said constructs. Only the statements under Interactivity were mostly answered sometimes by the respondent, thus, the e-learning course can still be improved in terms of interactivity in the virtual classroom.

Based on the results, the study recommends the following:

- To encourage interactivity in the e-learning course, the faculty-in-charge or FIC of the course can add more discussion forums that are graded or have incentives. Activities such as debates and other group works that require students to respond to their classmates' ideas can also be done.
- The evaluation tool can also be used in other courses other than IH213.
- Evaluation can also be done university-wide, or program wide per academic year to find out the trend.
- Socio-demographic characteristics of the respondents can serve as intervening variables in future researches. Correlation between the socio demographic characteristics and the evaluation dimension can be explored to know whether it affects their responses.

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Online Facilitation of Field Instruction for the Social Work Programs of UP Open University

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Abstract

Experiential education refers to programs that are created to widen the learning experiences of individuals beyond the four walls of the classroom and extending to work and community context. Internship programs, in particular, are seen by studies as beneficial to graduate study programs and develop practice skills and enable the transition from theories to practice. The University of the Philippines Open University, a pioneer and advocate of online teaching and learning and distance e-learning in the Philippines, has the Social Work program under the Faculty of Management and Development Studies that requires its students to undergo internship inside reputable institutions. These courses are supervised and guided online by the faculty-in-charge via the MyPortal course site. However, there are few studies addressing the effectiveness of clinical preparation of students especially with online facilitated programs. The study aimed to identify emerging themes in the reflective outputs vis-à-vis the fieldwork experiences of Social Work students in UPOU given its online mode of facilitation. A review of relevant practicum and field instruction documents and records as well as an analysis of learner's reflections based on twelve reflection videos and integrative papers of the social work students were conducted.

Results of the study on students' reflective outputs show that students went throzugh the cycle of concrete experience, reflective observation, abstract conceptualization and active experimentation. Reflections of the students were also made in reference to the self (as a human being), the profession (as a social worker), and their multiple responsibilities (as an online learner).

Keywords: online learning, experiential education, field instruction, social work

Introduction

Field experiences are seen as a means to develop practice skills and enable the transition from theories to practice (National Association of Colleges and Employers, 2008). Internship programs, in particular, are seen by studies as beneficial to graduate study programs (Dotson and Bian, 2013). Initially, internship programs were created for the field of business and medicine. However, with the increasing interest in these programs, internships were also offered in different disciplines such as in the social sciences (Spradlin, 2009). Today, universities have created internships to benefit the students by including course credits and as a way for students to have the work experience which can help them become a choice by future employers. It also gave students a chance to try out possible careers for their future (Spradlin, 2009). It is also a means to transition to the workplace which is also vital in terms of job placement (National Association of Colleges and Employers, 2008). Research conducted on internship and service learning schemes show students that constantly reflect during their field experience are seen to be more capable of conveying a strategic learning orientation to new challenges (Eyler, 1993).

With the rise of programs facilitated online to address the changing needs of learners, internships within academic programs were also facilitated online. The effectiveness of such online facilitation of field internships are necessary to be documented and assessed to ensure that online academic programs with internships facilitated online are as effective, at the very least, as face to face counterpart. Dotson and Bian (2013) cited that there are a few studies addressing the effectiveness of clinical preparation of students especially with online facilitated programs.

The Diploma in/Master of Social Work (D/MSW) program of UPOU is a very relevant academic program which necessitates fieldwork to apply and generate knowledge systems with clientele and communities. The program's students are located in various areas in the Philippines and even around the world, which then suggest the need to have an effective online program, particularly the fieldwork component of the curriculum. There is a need then to document and assess the online facilitation of fieldwork of the Social Work program of UPOU, leading to the development of effective strategies for online facilitation of fieldwork, in pursuit of UPOU's mission and leader in open and distance e- in the Philippines.

Objective of the Study

The objective of the study was to identify emerging themes in the reflective outputs vis-à-vis the fieldwork experiences of Social Work students in UPOU given its online mode of facilitation.

Review of Related Studies

In 1938, Dewey stated that there was a close and essential connection between actual experiences and education. He suggested that progressive education required academic content to have experiential elements. His view posited that content alone hindered the opportunity for students to generate their views regarding concepts according to their interaction with knowledge. Experiential elements were likewise different for diverse students as it was influenced by their past experiences.

The term experiential education, as defined by Miller (1982), referred to programs that were created to widen the learning experiences of individuals beyond the four walls of the classroom and extending to work and community context. These programs also utilized planned experiences to build linkages with academic institutions and other sectors of the society such as with businesses, government institutions, community, and industry. Other definitions of experiential learning included education that was acquired through direct participation in life's events (Houle, 1980) and direct experience of concepts studied and not just an idea about a concept or a discussion on the possible experience with the concept (Borzak, 1981).

According to Coffey (2009), experiential education sees ideal learning as a function of experience. It is the combination of active learning and experiences, concepts, and reflection where students are encouraged to participate actively in practical opportunities and must integrate content of their studies to their life.

Experiential education enables students to engage actively in pursuing questions they believe is relevant and significant which can lead to knowledge. Teachers in this approach are not the traditional source of knowledge but rather students are seen to be capable of generating valid and significant ideas based on their experiences. This type of learning is seen as more meaningful compared with accepting conclusions made by other people about other people's lives (Chapman, McPhee, and Proudman, 1995).

The advantages of experiential learning includes in depth understanding of concepts beyond the institution, capacity for critical thinking and application of knowledge in difficult situations, and capacity to participate in lifelong learning as well as workplace learning. Experiential education also enables students to learn to finish their tasks not as students but as workers or as part of the community. This is in direct contrast with students who learn to take and pass their exam (Eyler, 2009).

A vital part of experiential learning is the feedback and reflection (Eyler, 2009). An effective learning experience merges direct experience that holds significance to the student with guided reflection and analysis. This process is seen as student centered, active, and challenging that drives students to take the lead, take responsibility, and make decisions (Chapman, McPhee, and Proudman, 1995). Reflection allows students to connect the abstract ideas to concrete situations, as well as their reflection with actions. It is a vital practice in experiential learning as it assists the students in connecting their experiences with theories which leads to a deeper understanding of the topic and develop their capacity to utilize their own wisdom (Eyler, 2009).

Grise-Owens and Crum (2012) cites journaling and agency supervisory consultation as means for social work students to practice reflection when they are doing their field practicum. These reflections are specifically on significant client issues that impacted their view on their personal effectiveness and their practice (Jamissen, et. al., 2017).

Furthermore, Proudman (1992) noted that experiential education is defined by the various two way and active relationships the student has. These relationships include learner and the self, learner and the teacher, and the learner to the learning environment.

The first relationship, learner and self refers to the individuals' sense making of their experiences. This includes guided and structured reflection of their experiences. An example where this relationship is practiced is through journaling or any task that requires introspection and self-reflection.

The second relationship, learner and teacher refer to the interaction with which the teacher delineates the parameters of the learner's interaction with the environment. The teacher would need to ensure the physical, emotional, and intellectual safety of the learners. Also, the teachers function as someone who poses a problem, a mediator and coach.

The third relationship is learner and learning environment. The latter refers to the content, the physical environment, as well as the people involved whether directly or indirectly with the learner and their relationships. The interaction within this relationship between the learner and the wider coverage of the learning environment differs in terms of intensity (Proudman, 1992).

The broad scope of experiential education encompasses different types of learning schemes such as community service learning, experiential learning, service learning internship, cooperative education program, academic service learning, applied practicum, and internship programs (Miller, 1982).

Using experiential learning as a lens, it will be a good learning opportunity for an academic program manager to document and assess experiential education of the Social Work program of UPOU through fieldwork particularly the feedbacking and reflections of UPOU Social Work students, the various relationships present, and how these are facilitated to ensure the effectiveness of the whole fieldwork experience, an important component of a curriculum.

Internship Programs in UP Open University

One of the three faculties of studies in UPOU was the Faculty of Management and Development Studies (FMDS). Under FMDS is the Diploma in/Master of Social Work (DMSW) which requires its students to undergo internship inside reputable agencies. The internship courses are supervised and guided online by the faculty-in-charge via the MyPortal course site which serves as the virtual classroom.

In a study conducted by Taylan (2015) on the experiences and lessons of UPOU regarding the technologies used by the Social Work program with its FI courses, ICT was seen as a vital component in facilitating communication and instruction between the FIC and the students especially as both are located in different parts of the world. These technologies enable the students to access continuing education towards professional and personal growth regardless of their location or time zone. The conduct of the FI also allows the student to contribute to social transformation through the agencies where they will be placed and their experiences during these placements will contribute greatly to the discipline and practice.

Internship Courses Under the Social Work Program of FMDS

All courses in D/MSW are administered online. However, Field Instruction courses require learners to physically integrate and work in approved agencies for 320 hours or 10 hours per week for each FI course in a semester. The FI courses are seen as a way to integrate the analysis, application and assessment of the learner's existing knowledge as well as their competencies, their capacity to develop new knowledge and practice, and the enhancement of their self-identity and commitment to the social work profession.

Besides this rationale behind the offering of FI courses, the Philippine government also mandates all social work students to undergo supervised practical training to be permitted to take the licensure examination for social workers by the Professional Regulation Commission. The Republic Act 4373 in 1965 also known as an Act to Regulate the Practice of Social Work and the Operation of Social Work Agencies in the Philippines and for Other Purposes states that a minimum span of 1,000 hours should be accomplished in any established social work agency and supervised by a qualified and trained social worker. An amendment to this Act has been made in 2016 under Republic Act No.10847 which lowered the age requirement for applicants taking the exam to 18 years old (Philippines, 2016).

Experiential Learning Cycle

The study was guided by Kolb and Fry (1974) Experiential Learning Cycle which sees the experiential learning theory as the creation of knowledge through transformation of experience where knowledge is the function of combining the grasping and transformation of experiences.

In this cycle, the learner undergoes the concrete experience referring to encountering a new situation as well as a reinterpretation of past experiences. This is followed by reflective observation where the learner reviews and reflects on what he or she has experienced which will show consistencies or inconsistencies between experience and understanding. Abstract conceptualization refers to the learner gaining new knowledge and ideas from the reflection as they learn new things from the experience. Last is active experimentation where the newly acquired learnings are applied in the real world to generate outcomes.



Fig. 1 Kolb and Fry (1974) Experiential Learning Cycle

The study operated on the framework that stages of experience, reflection, conceptualization, and testing are practiced by the students as presented in their practicum/field experience outputs. These are the themes that will be looked into in the reflective outputs of the students.

Discussions

The study used thematic analysis of the learner's reflections as indicated in their Final Sharing video and their Field Instruction (FI) integrative paper. These outputs are part of the final requirements of the students. The final sharing may be done through a synchronous video conferencing among the agency supervisor, the FIC, and the student. Taking into consideration the challenges faced by students with multiple responsibilities, a recording of the final sharing may be developed for an asynchronous presentation to be posted in the course site. The content of the final sharing video includes information about the agency, the field instruction framework used to assess the experience and/or the framework recommended based on the learning outcomes of the student, semestral plan and accomplishments, lessons and insights learned, challenges encountered, and overall recommendations. This same outline of contents was used for the integrative paper which is a narrative of the students' overall FI experience with annexes of accomplishments and relevant documents included upon submission. Students are also given the option to email their submissions to the FIC for confidentiality rather than posting it in the course site. The study analyzed 12 final sharing outputs submitted for SW 280 and SW 281 during AY 2016-2017 by Social Work FI students of UPOU. The qualitative design of the research allowed deeper analysis of the reflections of the students which cannot be extracted from surveys and questionnaires. In addition, the reflections were made as the students were conducting their internship.

Emerging Themes from the Final Sharing Videos and Integrative Paper

Based from these results and the supporting reflections extracted from the final sharing videos and integrative papers of the students and following the Experiential Learning Cycle, further categories emerged under the experiential learning cycle:

Concrete Experience

• Framework, Agency, Activities and Accomplishments

Reflective Observation

- Challenges (Emotional, Multiple Responsibilities, Practice)
- Realizations (Academic discipline and profession, competencies, roles/ niche, frameworks, self)

Abstract Conceptualization

• Technical Knowledge and Life Skills (new practice framework)

Active Experimentation

• Recommendations and students' plans

Discussions and results of the analysis follow:

In terms of the Concrete Experience stage, all students were able to provide exhaustive details of their field instruction experience. Details such as agency profile, mission, vision, goals, organizational structure, stakeholders, and current situation were discussed at the start of the video. Besides details about the agency, the students also discussed the process of starting their field instruction course such as with choosing ang agency and conducting a trialogue with the faculty of the online course, the supervisor from the agency, and the student. A framework which guided their field instruction practice was also discussed in the video and how it was applied in the activities conducted by the students. For the actual field instruction experience, the students' accounts are organized into categories based on their semestral plan: objective, activity done to meet this objective, outcomes, and recommendations.

In terms of the Reflective Observation, the students' reflections of their field instruction experiences were divided into two themes: reflections on the challenges they encountered and realizations or learnings from what they experienced. Reflections on the challenges encountered are further subdivided into three themes: emotional challenges, challenges brought by multiple responsibilities, and practice-related challenges. Emotional challenges include statements about the students' fear "Sometimes I fear to become a social work administrator someday" and "I'm afraid to share my observations", doubts "However, we are doubtful that we cannot make it until year 2020 since the programs are still not yet institutionalized", and hesitations "the student was hesitant to take her Field Instruction I at...."

Multiple responsibilities of the students were also mentioned in the reflections "multiple and equally pressing demands from work and FI/school requirements", "time management between work demands and deliverables versus FI/school requirements" and "limited immersion and in-depth exposure due to the location of the FI agency and the student's place of work and residence".

Practice related challenges reflected upon by the students include their minimal training in terms of handling clients and cases "difficulties such as minimal training on providing intervention to very young children" and interaction with their stakeholders "find it hard to establish a better relationship towards our stakeholders".

Realizations held by the students according to their final sharing outputs discussed the social work's role and niche in society, social workers' competencies, the need for advanced framework, the importance of self-awareness, and praxis as detailed below:

Social work's role and niche in society:

"As social workers we must not be "crippled" by the method or approach that we want to do rather we must be guided by the need of the organization."

"she realized that there are many more things to be done in relation to social administration", and "she hopes that she was able to help in this aspect"

"we cannot put "ourselves in a box" and say that this is what we are just mandated to do."

Social worker's competencies:

"as social worker we must be conscious enough to take care of ourselves, face and settle our own issues and concerns and to consciously develop ourselves as a social worker."

"she realized that it is important to adapt to the informal culture of the agency."

"she was able to assess her competencies"

"she realized that she can be a competent advanced generalist social worker armed with all the right knowledge, attitude and skills."

Frameworks:

"realized that the social welfare policy development cycle is similar to the helping process but its target system is on a higher scale."

Self-awareness:

"we must first settle our personal issues or concerns."

"she discovered more about herself in order to become an advanced social worker", "experience had been more of a self discovery"

"she realized that she has tendencies to become too comfortable asking what others think "

Praxis:

"the student was able to translate theories learned in her two (02) social administration courses into practice"

In terms of Abstract Conceptualization, the students' accounts of new things they learned include technical knowledge and skills they acquired based on the field instruction placement and its influence to their lives such as "learning many things about social administration can make me a different person than before because I became more knowledgeable about my work", "student generally learned about Social Work Administration particularly social welfare policy development

cycle.", "FI experience has given me different exposures and paradigms about our profession.", "It gives me higher understanding and clearer paradigms in the integration of social work theories and knowledge vis-à-vis the actual social work we perform.", "Throughout the experience, the student realized six (o6) important points that differentiates a social administrator from the rank and file.", "The student was able to gain knowledge about the social administration process in a residential care facility.", "The attitudes that the student developed during her field instruction experience are anchored in the agency's values of respect for human dignity, integrity and service excellence."

In addition, the students were able to generate practice frameworks according to their experiences based on the various reflections and learnings or insights as stipulated above. The mentioned practice frameworks are usually narrated in the context of their FI focus in the agency context and presented in a form of a diagram or matrix.

In terms of Active Experimentation, the students' reflections included their recommendations and plans. Their recommendations included what the agency can do to improve its programs, services, administration, and functions and the social work profession: *"I have the basis already on what are the things that I will be defending in relation to my work in the social welfare field."*. With regards to DMSW's administration of its FI course, the students cited difficulty when facilitating requirements such as bilateral agreements with the agencies and recommended for the program to require its students to submit their proposed agency at least one semester before they take the course to accomplish the needed requirements on time. Also, the students recommended for the institution to come up with partner agencies with long term agreements to have available placements and prevent delays caused by searching for possible agencies and facilitating MOUs.

In terms of plans, some of the students expressed their desire to continue working with the clients even after the field instruction course was finished "even after the semester is finished I will continue (my work with) the girls of the Aftercare. This is to finish with them what have been started and to continue the plans which we have set together." while others were willing to have their plans adapted by the agency for sustainability: "since the FI worker will eventually have to leave the Center at the end of the semester, remaining planned activities have to be turned over to the Center social worker and the house parents who may continue with the group work activities."



Fig 3. Emerging categories from the Experiential Learning Cycle according to the reflections made by the Field Instruction students of the Social Work program for AY 2016-2017

Figure 3 provides the diagram of the themes extracted from the students' outputs based on their reflections and facilitated through the strategies employed by the supervisors particularly the faculty-in-charge, within the open and distance e-learning context.

Conclusions

In conclusion, based on the students' reflective outputs, the videos detailed their concrete experience, reflective observation, abstract conceptualization and active experimentation. Their reflections were also made in reference to the self (as a human being), the profession (as a social worker), and their multiple responsibilities (as an online learner). In addition, their reflections under realizations were further subdivided into realizations about the social work discipline and profession and realizations about themselves.

Indeed, the online nature of the FI courses and the online strategies used paved the way for the facilitation of FI amidst geographical limitations and learners' changing needs. The open and distance e-learning as a framework was able to maximize the experiential learning of the students through their reflection and learning that will help them become better practitioners and contributors to social transformation.

Recommendations

As co-creators of knowledge, the students' inputs should be considered as part of the regular Social Work program review and improvement of FI courses of Social Work in UPOU. Further and continuous studies about the FI program are necessary to be conducted to help in the sustained effectiveness of the experiential learning of the students. More updated and varied strategies and technologies can be explored as a result of these researches.

In relation to the Social Work curriculum, it is further recommended for Social Work program to develop additional and updated modules per area of specialization (Social Administration, Clinical Practice, Community Organizing) through the Resource Based Course Package (RBCP) format. These modules may be based on the existing study guides per area of specialization developed by the FIC. In addition, FI courses that have not yet been offered since the program's creation should have its own module, course guide, and study guide in preparation for future students who might be required to take the courses, specifically those coming from the Diploma track and proceeding to the Master's program. As for the practicum guide of existing FI courses, this must be reviewed and finalized to be formally used during the regular offering of FI courses as part of the materials available for the students, agency, and the FIC.

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A Meta-Interpretation of Collaborative Learning Activities in an R&D Management Online Degree Program

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Abstract

Collaborative learning has been a commonly used instructional strategy in management education. To further understand the teaching and learning issues in adopting collaborative learning inOpen and Distance e-Learning (ODeL), this study adopted meta-interpretation to identify the themes that constitute learners' views and experiences in the collaborative learning activities in two courses offered in the Diploma in Research & Development Management at UP Open University as reported in the literature, and from these, teaching and learning implications on collaborative learning in management in the ODeL environment were derived. The study also recommends some approaches to designing and delivering online collaborative learning in these contexts.

Keywords: Collaborative learning, WebQuest, Research and Development Management, meta-interpretation

Introduction

One of the professional management programs being offered at the University of the Philippines Open University (UPOU) is the Diploma in Research and Development Management (DR&DM). The DR&DM program is directed to provide and equip students with adequate skills and knowledge in planning Research & Development (R&D) programs, develop and promote technologies for utilization, and manage human and organizational relations in R&D systems. Moreover, it aims to enable students to formulate and implement R&D strategies and programs, apply new perspectives on R&D and on technology development; evaluation; promotion; and commercialization, conceptualize and implement commercialization and technology utilization schemes, and apply newly acquired skills in managing human and organizational relations in R&D systems.

The main goal of the program is to nurture professional managers and leaders in the field of R&D. Some DR&DM teachers have incorporated collaborative work in their courses, on the assumption that management itself is a relational practice (Gilbert, 2013, p. 26). A commonly used instructional approach in management education (Kimber, 2007), collaborative learning is found to be useful in enhancing and training professional managers since it is said to promote problem-solving, team building, verbal and numerical skills, social skills, and self-esteem, among others (Johnson, Johnson, and Smith, 2006; Kuh, Kinzie, Buckley, Bridges, and Hayek, 2007; Kimber, 2007).

Dillenbourg, Baker, Blaye, and O'Malley (1996), as cited by McInnerney and Roberts (2004), defined collaborative learning as "mutual engagement of participants in a coordinated effort to solve the problem." McInnerney and Roberts (2004) defined online collaborative learning as a situation where "students learn primarily by communicating among themselves via the Internet", and online cooperative learning, on the other hand, is a situation where "students are allocated to, and learn in, small groups and communicate within those groups via the Internet". While there have been numerous studies on collaborative learning in management education in residential settings (Johnson, Johnson, and Smith, 2006), the empirical work on online collaborative learning in management programs has remained relatively scant. This study hopes to contribute to filling in this gap by examining the experiences of the learners in two collaborative learning activities conducted in two separate courses in the DR&DM program–R&DM220 (Organizational Structure, Relations, and Processes in R&D Systems) and R&DM251 (Technology Evaluation).

This paper aims to explore the recurring themes that constitute learners' views and experiences in the case study entitled "Alligator Story" undertaken in R&DM220 and WebQuest undertaken in R&DM251, as reported in the literature . From these themes, the study shall also derive teaching and learning implications on collaborative learning in management in the ODeL environment. By unpacking the recurrent themes on the learners' experiences, the study can provide some insights on the role of collaborative learning in management education, in general, and R&D management, in particular.

Review of Related Studies

Collaborative Learning¹

The terms "collaborative learning" and "cooperative learning" are often used interchangeably even though they pertain to different ideas. According to Bernard, Rubalcava, and St. Pierre (2000), collaborative learning differs from cooperative learning as the latter usually refers to a situation where a task is divided and distributed among group members and each member contributes to constructing one final product. On the other hand, collaborative learning refers to a situation where mutual discussion, active processing of information, analytical and critical thinking, and synthesis of the whole process is present (Bernard, Rubalcava, and St. Pierre, 2000).

Group diversity has an adverse positive effect on the learning process of the students as they are exposed to the different perspectives, knowledge, and experiences of their co-learners (Gokhale, 1995). On a similar note, Vygotsky (1978), believes that students perform exceptionally well when working in the collaborative learning medium rather than when working on their own.

Furthermore, it has been demonstrated in Gokhale's (1995) study on the relationship of collaborative learning and critical thinking that collaborative learning "provided students with opportunities to analyze, synthesize, and evaluate ideas cooperatively." Moreover, it was investigated that collaborative learning enhances critical thinking through "discussion", "clarification of ideas", and "evaluation of others' ideas".

¹Data for this study consisted of the articles written by the first two authors which appeared in the Vol. 4, No. 1 issue of the open access ASEAN Journal of Open and Distance Learning: "Collaborative Learning Activities in Online Courses: Issues and Strategies" by Primo Garcia and "Learners' Heterogeneity and Knowledge Sharing in Cooperative e-Learning" by Jaine C. Reyes

Collaborative Learning in ODeL

Previous studies have reported the effectiveness of collaborative learning activities in an online environment. According to Bates (2015), online collaborative learning enhances learners' critical thinking, analytical thinking, synthesis, and evaluation skills through knowledge construction resulting from intellectual discourse among students.

Stacey (1999) reviewed several literature focusing on online collaborative learning and found evidence that the interactive nature of collaborative learning has the ability to "change the nature of distance education from an autonomous, isolated experience to a potentially social constructivist environment". Moreover, her study highlighted the following attributes of knowledge construction through collaborative learning: clarification of ideas via group communication, obtaining feedback to a learner's ideas from other group members, sharing diverse perspectives of group members, group sharing of resources, ideas, and expert advice, seeking group solutions for problems, power of group discussion mediated by communications media, practicing the new language of the knowledge community in small groups, learning a safe setting for risk, providing socio-affective collaborative support, providing technical support collaboratively, planning to continue group beyond the course, using group responsibility as an individual motivator, changing roles with changing needs, using conferences to manage group activities, and effects on student outcomes.

A study conducted by Thompson and Ku (2006) highlighted graduate students' experiences and attitudes in online collaborative learning in an instructional design course. The research findings of the study showed the major challenges faced by the students, as well as ways on how they overcame these challenges, the relationship of the degree of collaboration and quality of their projects, and their attitudes towards collaborative learning. Thompson and Ku (2006) concluded that groups who had a positive approach in group work were more collaborative, which resulted in a better quality of their group projects.

Methods

To gain an understanding of the learners' views and experiences in the two learning activities, the study adopted a meta-interpretive approach, which focuses on the interpretive synthesis of qualitative research (Weed, 2005). As opposed to meta-analysis, which is aligned with positivist epistemology, meta-interpretation is framed within a qualitative epistemology. Meta-interpretation uses interpretations of other authors as raw data for synthesis. This approach is appropriate to this study given that it aims to synthesize the learner experiences as constructed in two research papers, both of which were largely qualitative in nature.

In analyzing the learners' views and experiences of collaborative learning, texts in the two papers were initially coded either using the same categories provided in the original paper, concepts derived from literature, or categories identified by the authors. Based on these codes, the themes pertaining to students' constructions of collaborative learning were identified. Typical of qualitative nature, the interpretive process was iterative (Taylor and Bogdan 1998).

Once the themes were derived, it appeared to the authors that they can be further categorized into thematic points. Using this as an interpretive device, the authors classified the themes into central theme and sub-themes. Implications of the themes on the use of collaborative learning in ODeL were then discussed.

Scope and Limitation

This study does not aim to compare the two collaborative learning activities which were delivered in two different courses. This study is focused on finding the recurrent themes in students' learning views and experiences in collaborative learning as reported in the two papers.

Given the limited sample size, the external generalizability of the conclusions derived from the study may be limited. As such, the authors opted for "user generalizability" (Merriam, 1998) by presenting the context of the study (i.e., nature of the collaborative learning activities, description of courses in which they took place, and the learners who performed them) so that the readers who are familiar with the same context can decide for themselves the generalizability of the study's conclusions to their own situations.

Collaborative Learning Activities in Focus

In this section, the two learning collaborative learning activities, including how they were implemented, will be described.

Learning Activity Design

1. "Alligator Story: An Exercise on Values"

One of the two collaborative learning strategies studied in this paper is the mini-case study titled "Alligator Story: An Exercise on Values" (see Appendix A) which was part of the requirements of the course R&DM220 (Organizational Structures, Relations, and Processes in R&D Systems). R&DM220 is a 6-unit course under the DR&DM post-baccalaureate program. It focuses on "human and organizational relations, processes, and behavior (including implications and applications of organization theory to the practice of research and development management), organizational designs in appropriate research environments, and institution building concepts and principles as they are applied to research organizations" ("Diploma in Research & Development Management", n.d.).

The "Alligator Story", as part of the R&DM220 module on the "Culture of Research Organizations", intends to provide students a better understanding of the interrelationship of values, subcultures, and organizational culture.

A total of 12 students enrolled in R&DM220 1st Semester A.Y. 2012-2013 served as participants of the study. Out of the total number of enrollees, seven were females and five were males. A majority were in their late 20s to late 30s and were mainly working in the field of research and development, product development, and quality systems. Furthermore, they were predominantly in the second semester of their first year in the DR&DM program.

Learning Tasks

For this activity, the class was first divided into three groups consisting of four to five members each. The students were then asked to read the "Alligator Story" individually and were tasked to rank the characters based on "how disgusting they are to them". They were also told to indicate the reasons behind their rankings. The students worked individually for the first part of the
activity. However, for the second part, they were asked to brainstorm the collective ranking of the characters and to incorporate and relate organizational culture to the fictive story. Please see Appendix A for the list of discussion questions required from the students.

The outputs from the group activity were evaluated by the faculty-in-charge (FIC), a term used for teachers in UPOU. In addition, there was also "peer assessment" where each member evaluated his/her teammates' performance and contribution to the group activity. The FIC assessed the students based on the "quality of arguments presented, depth of discussion, and clarity of presentation". On the other hand, the criteria for peer assessment are the student's "effort to connect with group mates, quality of contribution in discussions, attitude in the discussions, and contribution to overall group performance".

Strategies Implemented

Learning object. The medium used to facilitate discussion was a fictive story which was previously used by the FIC in a residential class. The students were no longer required to gather additional information to complete the learning activity.

Scaffolding. The students were given a step-by-step set of guidelines on how to accomplish the activity and when to submit the activity. To help the students in accomplishing the activity, the teacher suggested strategies on how they can organize their online meetings, what communication tools to use, what alternative ways of organizing virtual meetings to employ, and how to assign tasks to members. The students were also provided with guide questions to aid them in their group discussions (see Appendix A). Moreover, they were also informed about the benefits of collaborative learning to aid them in understanding the concept of working with peers in an online environment.

Timing. The collaborative learning activity was scheduled almost one month after the start of classes because it was assumed that around that time, the students had already adjusted to the online learning environment. It was also not advisable to hold the activity at the latter part of the semester as around that time, the students would already be preparing for their final examinations.

Time allotment. The groups were allotted two weeks to complete the learning activity.

Feedback. The FIC was available to entertain questions regarding the activity.

Assessment. The evaluation rendered for the activity was in the form of peer assessment and teacher's assessment. In terms of grading, the teacher's assessment carried more weight.

2. WebQuest in R&DM 251

The WebQuest learning activity was undertaken in the 3-unit course R&DM251 (Technology Evaluation) under the DR&DM post-baccalaureate program. R&DM251 tackles perspectives and frameworks in technology evaluation and mechanisms in institutionalizing technology evaluation systems. WebQuest is "an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the internet, optionally supplemented with videoconferencing (Dodge, 1997).

The WebQuest activity was employed in the last unit (Unit IV: Institutionalizing Technology Evaluation) of the R&DM251 course to synthesize the students' learnings from the whole course. In addition, it aimed to enhance collaborative research and learning which elicits the interdisciplinary background and expertise of the students.

The students of R&DM251, like those enrolled in R&DM220, were mostly in their late 20s to late 30s. Most of them were in their second year in the DR&DM program and are employed in technical, R&D, or business-related companies.

Learning Tasks

The WebQuest learning activity used as part of the requirements for the R&DM251 course on Technology Evaluation was adapted from Dodge's model (Dodge, 1997). The modified WebQuest retained its structure as it was used for several semesters from 2007 until 2014.

For this learning activity, (see Appendix B) the class was encouraged to work in groups with three to seven members each. The FIC initially assigned the groupings by combining individuals with different specializations and work background in a group. The class was encouraged to send an email with the names of their preferred groupmates to the FIC. The groups were then given one discussion slot in the course site. Then, they were asked to meet with their group mates, whether physically or virtually, to assign a role to each member. The roles they may choose from are the following: technical director, scientist, engineer, and stakeholder. This "role-playing" activity allowed the students to answer the questions through different perspectives. After assigning roles, they were asked to individually accomplish the task sheet before discussing it with their group mates.

The outputs from this activity were assessed using peer evaluation and the FIC's student performance assessment.

Strategies Implemented

Learning object. The WebQuest activity undertaken in R&DM251 aimed to give the learners a greater understanding of the role of institutional, infrastructure, and policy setting in developing mechanisms to institutionalize.

Scaffolding. To accomplish the activity, the students were given a task sheet which they need to answer individually before discussing it with their group. They were also asked to compare and contrast three R&D organizations based on how they conduct R&D, and how they implement and institutionalize technology assessment/evaluation mechanisms. To aid the students in their WebQuest, a "hot list" of information sources were given to them. This "hot list" consisted of resources on conceptual tools in technology evaluation and organizations conducting technology assessment/evaluation.

Timing. The WebQuest activity was held at the latter part of the course as it served as a synthesis for Unit IV: Institutionalizing Technology Evaluation.

Time allotment. The students were given four weeks to accomplish the learning activity.

Feedback. The FIC was also available to entertain questions regarding the activity.

Assessment. The students' individual and group performances, as indicated in the task sheets, contributed to 50% of their score. In addition to the assessment done by the FIC, peer evaluation was also employed.

Results and Discussion

The analysis of the texts on the students' views and experiences of the two learning activities yielded the following themes.

1. Collaborative Learning can deepen learning

Collaborative learning can enable learners to gain a deeper understanding of the lessons being taught. Through the learning activity, learners in R&DM 251 were said to have "gained... an indepth understanding of the lessons from their interaction, sharing of experiences, and information exchange." The activity in R&DM 220 was liked because it enabled the learner not only to discuss the topic at hand but also think about it at a "deeper level", as gleaned from the statements reported:

"The story itself is a good starting point to initiate discussion on values. It makes you not only to think hard but also to feel deep at the same time."

The exercise also allowed the students to "appreciate [their] differences and discover how organizational culture is made."

"I also had the chance to re-examine my personal values and relate myself with the characters in the story."

2. Collaborative Learning can broaden perspective

Collaborative learning can also lead to the broadening of the learners' perspectives brought about by the opportunity to "learn better through interaction, information exchange, and experience sharing among group members" (R&DM 251). As one student in the said course who did the WebQuest activity said, "more inter-disciplinary, more heads are able to share their experiences and opinions with the group."

One respondent in R&DM 220 enjoyed the chance to learn from his/her classmates and in the process expand one's perspective:

"I liked how I have learned a lot from my group mates. Some of the perspectives that they have had never crossed my mind. Upon hearing their opinions did I only realise that those may be acceptable or possible as well."

The idea of assigning roles in WebQuest also ensured that different perspectives are brought into the group activity. As a student in R&DM 251 said, role playing is a "good learning method and beneficial for additional group inputs, encouraging full group discussion and participation, and broadening perspectives of group members". The fact that the group members come from different professional backgrounds mean that learners can learn from each other on how to address problems:

"... Since not everyone in the group is of the same field, it's good to know how each member of the group perceive things and what possible if not the best solution on the problem being tackled...it is also a good exercise on how members participated in group discussion for they tend to do that in their respective jobs." (R&DM 251 student).

3. Collaborative Learning is Enjoyable

The learners find satisfaction in doing collaborative activities. One student in R&DM 220 said that he/she had "so much fun with the activity that there was no part or area about it that [he/she] did not like." Learning activities have provided the students an opportunity to have personal contacts and get to know each other better, as explained by one respondent:

"I was able to get in touch with my online classmates by hearing their voices and seeing their faces during our group discussion via Skype." (R&DM 220 student).

Despite having different schedules, a student in R&DM 251 had expressed his/her appreciation for collaborative learning since it has allowed him/her to "get to know more of [his/her] classmates." This personal contact supposed brings more enjoyment to the learners by bringing into distance learning a more "at school environment," as a student in R&DM 251 noted. The fact that they recommend the inclusion of videoconferencing in the class meant that they put value on synchronous, oral, interactions.

4. Collaborative Learning is Challenging

Collaborative learning can also pose several challenges to the learners. The time and geographical difference among the learners add another layer of complexity to the work. These students in R&DM 220 and R&DM 251 shared their views on this:

"Finding a common time for all to conduct the virtual meeting [is challenging]. We are working and [have] different time of availability." (R&DM 220 student)

"The time and space difference between the learners already makes the conversational turns in online environment more challenging." (R&DM 220 student)

"The group activity also "needs more time (from members) to interact with each other." (R&DM 251 student)

"... As for us, when we do WebQuest, we require to communicate almost every day". (R&DM 251 student)

Another challenge in collaborative learning is attributed to the behavior of some co-leaners" who do not respond promptly" (R&DM 220 student), "do not seem to take deadlines seriously" (R&DM 220 student), or do "not exert effort to check email updates regularly and the late submission of her contributions." (R&DM 220 student).

Challenges also arise when some of the learners are said to be confused about their roles in the activity. As an R&DM 251 student said, "patience is also needed when some members do not understand their role well", given that "it requires research to intensively get the perspective of the position being played."

Some learners are also said to have poorly understood the guidelines on the activity. One R&DM 220 student said:

"For instance, it was said by the FIC that the final ranking should be posted in the Moodle site. The members of one particular team posted their individual rankings in the discussion forum."

5. Teacher's Absence Creating New Space for Collaborative Learning

Since the point of interaction in collaborative learning is between learners, the teacher is "relatively" absent in the learning environment, thus, opening up a new space where the learners are freer to interact among themselves. In R&DM 220, it has been reported that this "relative 'absence' of the teacher in this phase of the class enabled the students to deal with each other in a much more informal manner and allowed them to know each other on a more personal level. In the process, another space for interaction was also created -- one that extends beyond the 'formal' space of the 'classroom' that was created and managed by the teacher." In collaborative learning, the teacher becomes more of a "co-learner" (R&DM 251) as opposed to just dispenser of knowledge.

6. Teacher's Presence Facilitating Collaborative Learning

The role of the teacher as a facilitator of collaborative learning is also appreciated by learners. A student in R&DM 251 said that "... what really gave life in terms of encouraging learning in this course was the involvement and active participation of the [teacher]. A student in the same course liked when the teacher "actively participate(s) in/facilitate(s) the team's learning process, [provides] feedback in the form of stimulating inputs and challenging questions... which made me feel the personal touch of the teacher, and therefore enhanced everyone's learning...."

7. Flexibility in Collaborative Learning

Analysis of the learners' recommendations on how to improve the collaborative learning activities tend to show that the learners prefer some leeway in terms of assessment, topics to choose from, resources to use, and with whom to do the activity with, as shown by the following statements:

"Addition of open-ended questions for peer assessment." (R&DM 220 student)

"Provide more topics to choose from, if not, let the students suggest some topics that might be of interest to them." (R&DM 251 student)

"... Students should be reminded not to limit themselves with the references in the Hot List" since students "have a tendency to be dependent on them rather than use it as a guide." (R&DM 251 student)

"Students to do the same exercise with friends rather than classmates." (R&DM 220 student).

8. Structure in Collaborative Learning

Learners appreciated the guidelines and resources provided by the teacher. For example, the "Hot List of information resources in the WebQuest was considered very useful by the respondents", since they "provided up-to-date topics and examples as well as serving as a guide on tackling the subject."

The importance of explicitly stating the learning objective of the activity has also been raised in R&DM 220, given that "at times, the learner can also misunderstand the purpose of the activity."

The timing of when the collaborative learning activity is scheduled within the semester is also said to be crucial. One R&DM 251 student said that "group assignments should be done on early stages of the lessons since there will be less lessons to tackle or readings as well as no preparation for the exams."

9. Collaboration is Learning

The act of doing a collaborative activity, which involves the learners interacting with one another and "working together as a group" to "collectively accomplish a common task in an online environment", is said to be an opportunity "to learn more about the lesson" (R&DM 220 student). It is such an imperative in their learning process such that an R&DM 251 student recommended that "one compulsory assignment requiring group work should be given since this forces interaction among students even if with hectic schedule."

The previous discussion indicates that the themes derived from the texts can be categorized under the following thematic points: purpose, learner experience, teacher's role, and format. The thematic variations identified per thematic point are shown in Table 1.

Thematic Point	Thematic Variati	ons (Subthemes)	Central theme
Purpose	Collaborative Learning	Collaborative	
	can deepen learning	learning can broaden	
		perspective	
Learner experience	Collaborative Learning	Collaborative Learning	
	is enjoyable	is challenging	Collaboration is
Teacher's role	Teacher's absence	Teacher's presence	learning
	creating new space	facilitating	icarning
	for Collaborative	Collaborative Learning	
	Learning		
Format	Flexibility in	Structure in	
	Collaborative Learning	Collaborative Learning	

Table 1. Thematic points and thematic variations derived from the texts

Participants see collaboration essentially as an opportunity to learn from one's peers through the exchange of ideas. As Stacey (1999) argued, computer-mediated collaborative learning allowed for the social construction of knowledge through "sharing diverse perspectives of group members". Not only did group work give learners the opportunity to share their perspectives and ideas but also enhanced individual and group engagement, which are crucial in the learning process.

The participants are said to see collaborative learning as enjoyable given that it promotes social interaction and team building among co-learners by providing "a network of social interaction that underlay the mutual respect and trust needed for a successful collaborative learning process" (Stacey, 1999). Having said this, collaborative learning is also challenging. This is especially true in the case of online learners who communicate with each other at a distance. Requiring synchronous communication, collaborative learning promotes learner motivation and co-creation of knowledge among peers. However, the same collective effort which learners find enjoyable, also brings with it certain challenges, including difficulties in communicating through technology, negative attitudes of some learners on collaboration, and technology, and lack of individual accountability (Thompson and Ku, 2006; An, Kim, and Kim, 2008). Furthermore, the same collective effort which learners find engaging also impinges on the flexibility of the course -- the ability to study at one's own pace. The urgency to depend on their co-learners for grades also imposes a limitation on some learners (MacDonald, 2003).

This brings in the role of the teacher. Given the relative complexity of organizing collective work online, teachers are seen by learners as providers of structure, source of clarity, and corrector of mistakes. As other studies have shown, teachers are essential in bridging this gap by providing feedback (whether individual or by group), giving guidelines and rules in doing the activity, and by encouraging questions. While learners look for this structure, they also need enough elbow room for them to work around the required collaborative learning activity (An, Kim, and Kim, 2008). This is especially true for adult learners as in the case of the participants in this study, hence, the expressed appreciation for the teacher's relative absence in the collaborative activity. In addition, the advent of new technologies which allows for more interactive and engaging interactions among learners, have actually lessened the need for the physical presence of the teacher in collaborative learning (Greiffenhagen, 2012).

The study has shown that collaborative learning, is itself, learning, which goes to show the target learners' appreciation for its benefits. As one student indicated, the learners' participation in group discussions is reflective of what they "tend to do that in their respective jobs," which in turn, highlights the appropriateness of collaborative learning as an instructional strategy in the training of professional managers whose practice can be best described as relational. Implementing it in the ODeL environment, however, requires a delicate balancing act for the teacher between providing structure and flexibility. Based on these two cases, learners in online collaborative learning benefit from clear instructions, clarifying expectations, providing online resources to enable exploration, and using peer review as an opportunity for co-creation of knowledge but also as a mechanism for establishing accountabilities among learners in the group. Having said this, learners also appreciate if they are given flexibility in terms of what online resources to use, whom to do the collaborative learning activity with (i.e., colleagues instead of classmates), and how to assess their work.

While collaborative learning activities in a sense are essential to the learning experience of management students, it was also recognized that it can be challenging. Hence, there is a need to ensure that the amount of collaboration required does not negate the flexibility that ODeL affords to online students. One way to achieve this is to schedule the conduct of the learning activities in the early to middle part of the term when students are doing fewer course requirements. These findings can be applied not only in the two R&DM courses but also in similar courses and programs within and outside UPOU.

Conclusions

The study has shown that the DR&DM students' experiences and views in both courses seem to show that the very act of collaboration is learning. Collaborative learning is said to open up opportunities for learners to deepen their understanding of the lessons while expanding their views of R&D management concepts, issues, and situations. While the affordances provided by collaborative learning makes it enjoyable to students, the complexity of doing it online makes it more challenging as well. The study also indicates that in designing and delivering collaborative learning activities, teachers need to provide enough structure to lessen confusion about the process of collaboration but also provide enough the flexibility to allow for exploration of ideas that learners find interesting or relevant to their professional lives.

Given the limited scope of the study, a study involving collaborative learning activities in other courses or programs can be conducted in the future. A quasi-experimental (cross-sectional) study to determine other effects of online collaboration on learning can also be pursued.

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Comments You do not have permission to add comments.		This is a two-step activity. The first part will be done individually but the final output, which follows after the first stage, will require collective effort. Please see left side bar for your groupings. Below are some guidelines on how to go about this exercise. First part (Individual):	The Alligator River Story (Exercise on Values)	ut the final output, which follows after the fin asst offensive (no. 5). Briefly take note why east offensive (no. 5). Decide amon; (from the exercise as far as culture in orgat ch 2015 your rankings and explanation in th details.

Exercise on Values

The Alligator River Story (Anonymous)

As most stories begin...Once upon a time, there was a river that was practically overflowing with alligators. As many of you have guessed, it was called Alligator River. A girl named Abigail lived on the west bank of the river. Her boyfriend, Greg lived on the opposite bank. Abigail and Greg were very much in love with each other. One slight complication: no boat, and an alligator-filled river stood between them.

Abigail decided to seek help so that she could see her boyfriend, Greg. She approached Rene, who owned a boat. Not this was very fortunate for Abigail, because Rene's boat was exactly what she needed to get across the river. She explained her situation to Rene and asked if she could borrow this boat. Rene thought for a moment and then replied: "Sure, you can borrow my boat, but only under one condition: The condition is that you sleep with me tonight".

Now this startled Abigail, because she didn't want to sleep with Rene – she just wanted to borrow his boat so that she could see Greg.

After Abigail had told Rene "nothing doing," she wandered down the road until she came upon Henry. Abigail explained her plight (her desire to see Greg, Rene's response) to Henry. After hearing all this, Henry told Abigail: "Don't bother me! That's not my concern. I've got other things to do. Leave me alone!" A despondent Abigail, her options exhausted, finally decided to go back to Rene. She slept with him that night. The next morning, Rene, true to his word, loaned his boat to Abigail.

Abigail sailed across the river and saw her beloved Greg. After spending a few delightful hours together, Abigail felt compelled to tell Greg what happened. After she had related her whole story, Greg blew up completely: "You what?" I can't believe you did that. I can't believe that you slept with him! That's it – it's all over – just forget the relationship – get out of my life!"

Distraught, Abigail wandered off. She came upon Larry, who was wandering around , too. Borrowing his shoulder to cry on, Abigail poured out her story to Larry. Larry then went looking for Greg (with Abigail close behind). Larry found Greg and proceeded to beat him up, with Abigail gleefully and laughingly applauding the bloody pommeling.

That's the end of the story.

Source: Readings in Human Behavior in Organizations (1990) by Rodriguez, R.A. et. al.

University of the Philippines Open University

R&DM 251 Technology Evaluation



FMA 3 WebQuest

Submission Date: 22 February 2014

I. INTRODUCTION

This assignment will synthesize what you have learned in this course, particularly Unit IV. You will engage in an adventure in quest for treasure (which is not just knowledge but greater understanding of this knowledge).

A WebQuest, according to Prof. Bernie Dodge, (http://webquest.org/index.php) is an inquiry activity that presents student groups with challenging task, provides access to an abundance of usually online resources and scaffolds the learning process to prompt higher order thinking. For the web quest, it may interest you to visit and read the article on "Some Thoughts About Web Quests" by Prof. Bernie Dodge in: <u>http://webquest.sdsu.edu/about_webquests.html</u> (accessed Jan 7,2014).

II. THE TASK

The world wide web or internet contains rich resources where you can draw examples and illustrations on technology evaluation. This assignment is a group activity, which will give you an opportunity to work with your classmates. Just ponder that management is not what it is without people working together toward a common goal. Your specific task as a group is further explained in *"III. The Process"*, particularly in "C".

By the end of this assignment, you and your group mates will be able to understand better the role of institutional, infrastructure, and policy setting in developing mechanism to institutionalize Technology Evaluation within the R&D organization.

Specifically, in this assignment, you will assess selected R&D organizations conducting technology assessment/evaluation in terms of their mandate, programs/ projects, TA/TE tools and techniques used; and explain the:

- 1. Impediments in the institutionalization of TA/TE
- 2. Desirable features of a TA Organization
- 3. Institutional Settings (i.e., technology assessment office, university/research center, research institute)

III. THE PROCESS

A. This assignment is best done by a group of 3-7 members, I will initially assign groupings but you may send me an email of the names of your classmates you prefer to work with. You have about four (4) weeks to work on this assignment so I

Second Semester 2014-2014

Dr. Jaine Cadoc-Reyes (FIC)

University of the Philippines Open University	R&DM 251 Technology Evaluation
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advise you to contact your group mates early, and arrange the time and date of your simultaneous discussion (synchronous) in the Course Site.

A specific discussion slot in the Course Site will be allotted for your group. (If this will not be convenient to you, an e-group is an alternative but make sure you include my e-mail address so that I can keep track of your progress).

- B. Your group will meet (virtually if face to face is not feasible). You will also agree on which role each member will play [i.e., technical director, scientist (specify if chemist, biologist, geologist, agriculturist, environmentalist, etc), engineer (specify if mechanical, electrical, etc), stakeholder (i.e., ethnic leader, consumer group president, barangay captain, company owner, etc.)] so that you can enrich your discussion with varying points of view:
- C. Each member of the group should be able to answer the task individually first, before sharing his/her work with the group using the task sheet below:
 - 1. Read the articles found in the "hot list". If you have supplementary resources which you need to use, add them in the "hotlist".
 - 2. Based on your readings, as a group, formulate and agree on a set of criteria in determining the desirable features of a R&D or TA organization
 - Individually, each member searches and suggests at least one R&D or TA organization to assess.
 - As a group, discuss and agree as a group which <u>three organizations</u> you will analyze in terms of how they conduct R&D as well as implement and institutionalize technology assessment/ evaluation mechanism.
 - Individually and later as a group, compare and contrast the three organizations based on your agreed criteria in no. 2. You may rate and explain the implementation and institutionalization of TA/TE technology evaluation in these three organizations, quantitatively and/or qualitatively.

You may also use the numeric or qualitative rating like the scale below:



VE= Very Effective, E= Effective, ME= Maybe effective, NE=Not effective, EE= Extremely not effective

4. Make a conclusion by explaining your answer to this question: "Which among the organizations have the best technology evaluation/assessment mechanism?

Second Semester 2013-2014

Dr. Jaine Cadoc-Reyes (FIC)

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R&DM 251 Technology Evaluation
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- 5. Each member of the group should have finished activity nos. 3 and 4 before the group can "virtually" meet to integrate and synthesize your group output.
- 6. You may use a matrix for your individual and group outputs.
- 7. Submit both individual and group output including your additional information resources to the "hot list" of information resources should also be included in the assignment. Remember to submit your assignment on time. Upload the finished assignment in the Course Site.

IV. INFORMATION RESOURCES

To start your WebQuest here are some "hot list". You are also <u>required</u> to search for other supplementary resources and add them in this list.



- A. Conceptual tools in technology evaluation
 - Appraising Inventions: They Key to Technology Management (Perchorowics) www.pepvc.com/resources/Appraising_Inventions.pdf (Accessed Jan 7,2013)
 - 2. Assessing Technology Tools
 - http://www.nsba.org/sbot/toolkit/att.html#Technical (Accessed Jan 7,2014) 3. Web-enabled Innovation in New Product Development (Farris, et al)
 - http://www.highbeam.com/doc/1G1-111066404.html (Accessed Jan 7,2014) http://findarticles.com/p/articles/mi_6714/is_6_46/ai_n29046706/ (Accessed Jan 7,2014)
 - 4. Managing Technical Risk Understanding Private Sector Decision Making on Early Stage Technology-based Projects (Branscomb, et.al)
 - www.atp.nist.gov/eao/gcr_787.pdf (Accessed Jan 7,2014)
 - 5. How Are You Managing Technology Risk? (Bonnette)
 - http://www.bankersonline.com/technology/mone.html (Accessed Jan 7,2014) 6 How to sell Technology Assessment
 - http://www.5min.com/Video/How-to-Sell-Technology-Assessments-103359603 http://technologyassessmentsecrets.com/
- B. Organizations conducting technology assessment/ evaluation.
 - Technology Assessment Protocol of PCARRD http://www.pcarrd.dost.gov.ph/tgb/Component_1.htm (Accessed Jan. 6, 2012) www.stii.dost.gov.ph/sntpost/frames/jantomar03/iptm.pdf (Accessed Jan 7,2014)
 - 2. The CSIRO Assessment Frameworks http://www.csiro.au/csiro / http://www.csiro.au/org/Our-Strategy-Overview.html http://www.csiro.au/resources/SPIFtoolInfo.html (Accessed Jan 7,2014)
- 3. International Center for Technology Assessment www.icta.org (Jan. 6, 2012)
- 4. Swiss Centre for Technology Assessment www.ta-swiss.ch (Accessed Jan 7,2014)
- 5. Institute for Technology Assessment www.mgh-ita.org (Accessed Jan 7,2014)
- 6. Institute of Technology Assessment (Vienna) www.oeaw.ac.at/ita/welcome.htm (Accessed Jan 7,2014)

Second Semester 2013-2014

Dr. Jaine Cadoc-Reyes (FIC)

University of the Philippines Open University

R&DM 251 Technology Evaluation

- International Assessment of Agricultural Knowledge, Science and Technology for Development http://www.agassessment.org/ (Accessed Jan 7,2014)
- 8, World Technology Evaluation Center www.wtec.org (Accessed Jan 7,2014) 9. Technology Assessment International http://technologyassessment.com/
- (Accessed Jan 7,2014)
- 10. Institute for Advanced Studies on Science, Technology and Society http://www.ifz.tugraz.at/index_en.php/article/articleview/173/1/62 (Accessed Jan 7,2014)

V. EVALUATION

Your Course Guide contains how this assignment will be graded. Your individual and group performance as indicated in the Task Sheets, will each contribute 50% of your score. Hence, you have to do well in these two tasks.

VI. CONCLUSION

Having completed the WebQuest, you should have gained analytical ability to develop a suitable TA/TE mechanism for the R&D organization as well as understand what TA/TE tools and techniques are being used in the field. Aside from these you became familiar with the availability of resources at your fingertips, which you can tap for your technology evaluation in the future. Moreover, you got acquainted with your classmates and I hope this fostered camaraderie among you. Your group will share with your other classmates your learning experience in doing this assignment in our last discussion forum.

Date of Submission: 1 March 2014

Dr. Jaine Cadoc-Reyes (FIC)

Assessing the Practices for the Conduct of Graduate Students' Thesis at the Faculty of Management and Development Studies, UP Open University

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Abstract

Graduate student thesis practices are procedures and policies that are followed by graduate students, faculty members, and staff of higher education institutions. Since UP Open University (UPOU) is an Open and Distance e-Learning (ODeL) institution, the thesis practices that are implemented by its Faculty Offices must adhere to the principles of distance education. Appropriate implementation of graduate thesis production at UPOU requires closer coordination because of the time and space difference between and among advisers, students, staff, panel members, and program chair. The practices comprising graduate student thesis writing in the UPOU Faculty of Management and Development Studies (FMDS) Programs are here explored. The study examines the administrative practices followed by the programs of FMDS in the conduct of graduate thesis among its learners. Practices that contribute to quality thesis administration are suggested here. These suggestions follow those available in the literature and those uncovered from thesis students' experiences. Finally, this inquiry presents recommendations that will promote good practices in administering the programs' thesis courses in the distance mode.

Keywords: best practices, thesis administration, thesis course, graduate students, distance education

Introduction

The University of the Philippines Open University (UPOU), which is one of the constituent universities of the UP System, aims to provide opportunities for alternative access to quality higher education by offering baccalaureate and post-baccalaureate degree programs and non-formal courses by distance education.

The Faculty of Management and Development Studies, one of three academic degree-granting Faculties in UPOU, currently offers eight (8) Diploma/Graduate Certificate programs and seven (7) Master's degree programs, some of which are ladderized. Out of the seven (7) Master's degree programs, four (4) are thesis programs. These programs are the Master of ASEAN Studies (MAS), Master of Arts in Nursing (MAN), Master of International Health (MIH), and Master of Land Valuation and Management (MLVM).

Given that the thesis courses offered by the four programs are mostly delivered via distance mode, Nasiri and Mafakheri's (2015) argued that there are various challenges (cultural, intellectual, professional, and personal) that affect the administration of thesis work among distance education students due to the spatial and temporal gaps between learners and their teachers. Since the students are geographically dispersed around the country and all over the world, the programs' practices should enable the students to undertake their thesis writing course even if they are separated from their thesis advisers by time and space. Although each program in FMDS already has an established set of administrative practices for the implementation of their respective thesis courses, it is yet to be determined which among these practices promote quality thesis writing among the learners in the context of ODeL. Nasiri and Mafakheri (2015) added that there has been little research on the challenges and complexities of distance postgraduate research degree programs.

As the study only focused on the administrative practices implemented at the program level, the course guides and thesis manuals of the thesis courses offered at FMDS were reviewed. Interviews with the Program Chairs and staff who have been involved in administering the thesis process were conducted. It is understood that there are, in addition, specific practices implemented by individual advisers in supervising their advisees. Moreover, since the examination of the thesis practices was limited to the selected programs of FMDS, the authors recognize that the recommendations derived from the interviews and the study of course guides and manuals are bound to their context.

Results of the study will promote good practices in administering FMDS Program's thesis courses in the context of ODeL. These suggestions can serve as basis for the development of general guidelines and policies for the conduct and administration of graduate thesis in FMDS. These guidelines will enhance the practices of the Program Chairs, staff, students, panel members as well as the individual practices of thesis advisers. While the findings of the study cannot be generalized to the entire population, these can provide insights to similarly situated educational institutions.

Objectives of the Study

General Objective:

The aim of the study is to examine the thesis administration practices of the four programs in the Faculty of Management and Development Studies (FMDS) at UP Open University (UPOU) in the context of open and distance e-learning.

Specific Objectives:

Specifically, the study aims to

- 1. Compare the practices followed by UPOU FMDS Programs in administering graduate thesis courses with the practices contributing to quality thesis administration conducted in the distance education mode as gathered from the literature as well as with the students' thesis writing experiences; and
- 2. Derive recommendations to further promote good practices in administering FMDS Programs' thesis courses.

Review of Related Studies

Graduate student thesis practices are procedures and policies implemented by higher education institutions in administering their thesis courses. Quality thesis administration is one of the main concerns among institutions today especially those involved in open and distance eLearning (Chrispen, Chabaya, Paul, and Owence, 2012). Since the students are geographically dispersed around the country and all over the world, open and distance e-learning (ODeL) institutions' thesis practices should enable the students to conduct and write their theses even if they are separated from their thesis advisers, panel members, program chairs and staff by time and space. As Calma (2008) stated, the primary goal of thesis administration is the achievement of quality and completion. It plays a crucial role in maintaining the quality of knowledge generation which is a mandate of universities (Chrispen et al., 2012). Thus, ODeL institutions should implement quality thesis writing practices in the context of ODeL to achieve the goal of enabling thesis students to complete quality research (Chrispen et al., 2012).

In the literature, there are two quality frameworks for the thesis administration and supervisory practices in the context of open and distance education -- the Triad of Quality Supervisory Practices by Chrispen and colleagues (2012) and the Dynamic Facilitation by Quan-Baffour and Vambe (2008), both of which guided the conduct of the study.

Triad of Quality Supervisory Practices

The Triad of Quality Supervisory Practices (Chrispen et al., 2012) states that the achievement of quality thesis administration is dependent on three factors: the supervisors, the thesis/research students, and the conditions that nurture quality supervisory practices. Figure 1 below summarizes the ideal characteristics of each of the factors.

 Factors in Students Innovation oriented candidates Appreciation of scholarly tradition Community of learners Student Sherpas (Coaches) Autonomous but responsible students 	 Factors in Supervisors Honoring obligations Constructive, consistent and prompt feedback Results and quality oriented supervisors Members of an active research committee who get along with each other 	Conditions Fostering Quality Supervisory Practices Self sufficient library Ancillary services availability Conducive supervision meeting place Ample time to work on a quality product Qualified researchers and a quality product Monitoring and supervision task force Coordinator reacting to student challenges on time Orientation to research Fostering knowledge sharing and utilization Adhering to ethics Re-skilling workshops Availability of e-learning resources
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Figure 1. Triad of Quality Supervisory Practices by Chrispen et al. (2012)

Dynamic Facilitation

Quan-Baffour and Vambe (2008) proposed the framework of Dynamic Facilitation as the best practice to use when supervising distance education postgraduate students. The authors argue that this framework "promises to be the best practice of scaffolding and leveraging student research work at the post graduate level because this type of supervision allows the student to relate research questions to social contexts and problems that they encounter in real life."

According to this framework (Figure 2), the three main aspects that form the foundation of dynamic thesis administration in the context of ODeL are (1) introducing learner-centered approaches to postgraduate dissertation supervision; (2) dealing with post-graduate student researchers as critical thinkers on their own right; and (3) putting in place leveraging systems of student support to help students physically, and theoretically bridge the 'distance-ness' in distance education.



Figure 2. Dynamic Facilitation by Quan-Baffour and Vambe (2008)

Framework of the Study

In order to accomplish the study's objectives, the characteristics and principles of the Triad of Quality Supervisory Practices and Dynamic Facilitation, which are illustrated in Figures 1 and 2 respectively, were examined and compared. The overlapping characteristics and principles of the two frameworks were then grouped to formulate a comprehensive set of criteria that would help determine the current and ideal practices of FMDS Programs in administering thesis courses. The similar characteristics and principles of the two frameworks are presented columns 1 and 2 of Table 2 below. The derived criteria that would be used as a basis for determining current and quality thesis administration practices of FMDS is listed down in the third column of the same table.

The characteristics and principles of the two frameworks and the derived criteria presented in Table 1 were incorporated in the study's framework shown in Figure 3 below. As can be seen in the framework, using the derived criteria, the current practices of FMDS programs in administering thesis courses would be determined and compared with the practices promoting quality thesis administration in ODeL context as well as with the students' thesis experiences. Based on the comparison, recommendations will be presented to help improve the thesis administration practices being conducted in FMDS programs.

Practices Promoting Qu in ODe	Derived Criteria for Determining Current and Ideal Practices of		
Triad of Quality Supervisory Practices	Dynamic Facilitation	FMDS Programs in Administering Thesis Courses	
 Innovation oriented candidates (students) Appreciation of scholarly tradition (students) 	 Innovative (students) Active and interactive in learning (students) 	 Prerequisites for graduate thesis 	
Ample time to work on quality product		 Recommended period of completion 	
Orientation to research Community of learners Student Sherpas	Tour in the library Introduce librarian to students	 Orientation to thesis course 	
 Results and quality oriented supervisors (effective, skilled, and experienced supervisors) Members of an active research committee who get along with each other (expertise and rapport) 	 Technically skilled (advisers) Skilled in writing (advisers) Knowledgeable of access to various sources and resources (advisers) Attended seminars/ conferences (advisers) Has publications (advisers) 	 Criteria for selection of adviser and panel members 	

Table 1: Criteria for Examining Current and Ideal Practices in Administering FMDS Programs' Thesis Courses Derived from Combining the Quality Thesis Administration Practices from the Two Frameworks

 Re-skilling workshops Results and quality oriented supervisors (supportive, enthusiastic, available) Honouring obligations (availability of supervisors) Constructive, consistent and prompt feedback (efficient and committed supervisors) 	 Learner-centered approaches to postgraduate dissertation 'supervision' (advisers) Dealing with post-graduate student researchers as critical thinkers (advisers) Assisting students in technical aspects of work (advisers) 	 Re-skilling workshops for students on the research process and advisers on mentoring roles
 Honouring obligations (availability of supervisors) Results and quality oriented supervisors (availability) Autonomous but responsible students 	 Responsible and committed advisers and students 	Consultation schedules
 Constructive, consistent and prompt feedback (supervisors) Results and quality oriented supervisors (supportive, available) Autonomous but responsible students 	 Established research proposal framework/ thesis process algorithm Constant support and guidance of advisers to students Creation of working 'contract' between advisers and students to set the deadlines/ timeframe 	 Progress monitoring mechanisms
 Honouring obligations (availability of supervisors) Results and quality oriented supervisors (supportive, available) Autonomous but responsible students 	 Specified channels of communication between the researcher and adviser Regular modes of students' access to their advisers 	 Medium of communication for students and advisers
 Self-sufficient library Ancillary services availability Availability of e-learning resources Monitoring and supervision task force (coordinator) Reacting to student challenges on time (coordinator) Conducive meeting places for face-to-face consultation sessions and other course activities 	• Access to libraries	 Student support systems/services

Community of learnersStudent sherpas	• Conduct of research seminars for the students	 Interaction among students
 Adhering to ethics Qualified researchers and a quality product 	 Providing students an instrument with set standards Submission of students' self- assessment documents (e.g. journals/portfolios) 	 Criteria for passing the proposal or manuscript submitted
 Fostering knowledge sharing and utilization 	 Attend and present papers in conferences (students) Publish their papers in peer reviewed journals (students) 	 Fostering knowledge sharing and utilization



Figure 3. Conceptual framework of the study

Methodology

To collect data on the thesis practices being implemented in FMDS Programs, the Program Chairs and staff were interviewed and copies of relevant documents such as course guides, program guides, and thesis style guides (if any) were also gathered. In addition, an online survey for continuing and previous thesis students was also conducted to identify the problems that they encountered in the process of their thesis conduct. Data from the survey were used to supplement the findings of the study.

The practices of the programs were examined using the framework developed for this study. Using content analysis (Mayring, 2000), the practices were coded and compared with the factors identified in the study's framework. In addition, student's experiences as revealed in the survey were also categorized and matched against the said practices.

Results and Discussion

FMDS Practices in Comparison with Quality Thesis Practices & Students' Experiences

Prerequisites for Graduate Thesis

The Triad of Quality Supervisory Practices (Chrispen et al., 2012) and Dynamic Facilitation (Quan-Baffour and Vambe, 2008) both point out that postgraduate distance education thesis students should be innovative, appreciative of scholarly tradition and active and interactive in learning. To cultivate these characteristics, prerequisites for graduate thesis must be met as this will help them gain knowledge on the theories, principles, models, and frameworks, which are crucial to the conduct of research in their respective disciplines. At FMDS, this is achieved either by terminal requirements such as obtaining a passing grade in the comprehensive exam (implemented by MAS and MAN), obtaining a passing grade in all the prerequisite courses including research courses (implemented by MAS, MAN, and MIH), and obtaining a degree in the equivalent Diploma Program (implemented by MLVM and MIH). Table 2 shows the requirements for enrollment to the various FMDS thesis courses.

	Prer	Prerequisites for Graduate Thesis			
Program	Passing Grade in Comprehensive Exam	Passing Grade in Prerequisite Course/s including research courses	Completed a Specific Degree Program		
MAS	\checkmark	\checkmark			
MAN	\checkmark	\checkmark			
MIH		\checkmark	\checkmark		
MLVM			\checkmark		

Table 2: Requirements for Enrolment to FMDS Thesis Courses

Recommended Period of Completion of Thesis Courses

The Triad of Quality Supervisory Practices of Chrispen and colleagues (2012) emphasized time as an important issue of quality. Just like thesis students who are studying in traditional institutions, distance education students should be given ample time to work on their research so that they would be able to produce quality output.

According to the course policies of the MAS, MAN, and MLVM programs, thesis students are given a prescribed time frame of two semesters (1 Academic Year) to complete their thesis course. Most universities offering graduate programs expect students to complete and defend their graduate thesis or master's project within one year after completing the required coursework for the degree (Oaks, 2017; University of Arizona, 2018; Bailey &Scarrow, 2010). As for the case of the MIH program, thesis students are only given a short period of one semester to finish their research. In relation to this, MIH Thesis students have revealed that they were not able to finish their research within the recommended period of completion due to their work and the scope of their study (e.g., sample size, ethical issues). Students from other Programs also expressed that they experienced the same problems encountered by MIH students, and in addition, they also cited personal concerns (e.g., pregnancy) to be among the hindrances for the completion of their research. This finding is in line with Olakulehin and Ojo's (2008) study, which reported that it is common for postgraduate students who are taking up research courses in distance education to encounter such difficulties in the development of their research work.

MAS, MAN, and MLVM thesis students should apply for residency in the succeeding semesters if they fail to complete their thesis work within the prescribed time period. MIH thesis students, on the other hand, are advised to formally request for extension. Table 3 shows the recommended period of completion for each of the thesis courses offered by FMDS.

	Prer	equisites for Graduate Th	esis
Program	Passing Grade in Comprehensive Exam	Passing Grade in Prerequisite Course/s including research courses	Completed a Specific Degree Program
MAS	\checkmark	\checkmark	
MAN	\checkmark	\checkmark	
MIH		\checkmark	\checkmark
MLVM			\checkmark

Table 3: Recommended Period of Completion for FMDS Thesis Courses

Orientation to Thesis Course

Orientation is crucial especially for thesis students who are doing their research work at a distance as it is instrumental in guiding them about the thesis process. Moreover, it also serves as a venue to welcome them and to introduce them to other researchers and also to the resources and individuals that they can tap should they meet challenges as they progress in their thesis work (Chrispen et al., 2012). Since it would be difficult to convene thesis students for face-to-face orientation sessions because they are geographically dispersed, the MAN and MIH programs make use of technologies such as video conferencing platforms such as Skype and Google Hangouts and web streaming platforms such as Facebook Live for their orientation sessions. e-Copies of orientation reading materials are also uploaded in thesis course sites.

Program	Means o	f Orientation	- Technology Used	
	Provision of Reading Materials	Conduct of Orientation Sessions		
MAS	\checkmark		The Guidelines on the Thesis Process is embedded in the ASEAN 300 Course Site	
MAN	\checkmark	\checkmark	 The N 300 Course Guide is uploaded in the course site Orientation Sessions are held through Google Hangouts 	
МІН	✓	✓	 The IH 300 Algorithm is uploaded in the IH 300 course site Orientation Sessions are webstreamed through Facebook Live (Previously done through Google Hangouts/Skype) 	
MLVM	\checkmark		The LVM 300 Course Guide is embedded in the LVM 300 Course Site	

Table 4: Means of Orientation to FMDS Thesis Courses

The LVM 300 Course Guide is embedded in the LVM 300 Course Site

Criteria for Selection of Adviser and Panel Members

Advisers play a key role in helping distance education thesis students produce quality outputs. As such, administrators must ensure that they are effective, skilled, experienced, well-published, and are actively attending research seminars/conferences (Chrispen et al., 2012; Quan-Baffour and Vambe, 2018). A research committee with good rapport must also be formed to help the student and the adviser in areas where they are challenged based on the Triad of Quality Supervisory Practices (Chrispen et al., 2012). The MAS, MAN, MIH and MLVM programs take into account the expertise of advisers and panel members to match the various research interests of students. In addition, MAS, MAN and MIH programs also look into the highest attained degree of advisers as this reflects their research experience and technical and writing skills. Table 5 presents the qualifications that the four programs use in to gauge whether or not one would qualify as a thesis adviser for the thesis course.

	Criteria Used f	or Selection of Adviser and	election of Adviser and Panel Members		
Program	Type of Expertise	Has Experience in Research	Has an MS or PhD Degree		
MAS	\checkmark	\checkmark	\checkmark		
MAN	\checkmark	\checkmark	\checkmark		
МІН	\checkmark	\checkmark	\checkmark		
MLVM	\checkmark	\checkmark			

Table 5: Criteria for Selection of Adviser and Panel Members in FMDS Thesis Courses

Re-skilling Workshops for Students on the Research Process and Advisers on Mentoring Roles

Chrispen and colleagues (2012) stated that re-skilling workshops are essential for both students and advisers. They added that re-skilling workshops for students aim to expose them to the research process while the counterpart re-skilling workshops for advisers aim to equip them with the competencies needed for mentoring advisees and to brief them about their responsibilities in the research process. Table 6 shows the re-skilling initiatives implemented in FMDS.

Re-skilling Workshops for Students

In lieu of formal re-skilling workshops for its thesis students, the four Programs provide reference materials to help refresh students' knowledge on the fundamentals of research. In addition, MAS, MAN, and MIH thesis students are required to pass prerequisite research courses before they can enrol in their respective thesis courses. The advantage of having prerequisite research courses for MAS, MAN and MIH thesis students is that they can eventually develop their thesis from their approved research course outputs. In the absence of prerequisite research courses in the MLVM program, thesis students are given a set of assignments which are designed to pace them in the development of their thesis. The practices which are conducted in lieu of formal re-skilling workshops for students are summarized in Table 6.

Despite having passed the prerequisite research courses and having access to refresher reference materials on conducting research, there are MAS, MAN, and MIH thesis students who have difficulty in going about the research process, such as topic selection and finding appropriate literature for their study. Thesis students of the MLVM Program that does not have prerequisite courses on research methods encountered this same problem, and in addition, they are also faced with challenges in the organization of research flow, finding appropriate research setting, statistical interpretations, and sampling.

	Practices Implemented in in Lieu of Re-Skilling Workshops				
Program	For Students				
	Pass Prerequisite Research Course	Provision of Reading Materials	Accomplish Assignments		
MAS	\checkmark	\checkmark			
MAN	\checkmark	\checkmark			
МІН	\checkmark	\checkmark			
MLVM		\checkmark	\checkmark		

Table 6: Practices Implemented in FMDS Thesis Courses in Lieu of Re-skilling Workshops

Despite having passed the prerequisite research courses and having access to refresher reference materials on conducting research, there are MAS, MAN, and MIH thesis students who have difficulty in going about the research process, such as topic selection and finding appropriate literature for their study. Thesis students of the MLVM Program that does not have prerequisite courses on research methods encountered this same problem, and in addition, they are also faced with challenges in the organization of research flow, finding appropriate research setting, statistical interpretations, and sampling.

Re-skilling Workshops for Advisers

There are no re-skilling workshops held for thesis advisers as the usual practice of the four programs is to tap experts who have ample experience in research, teaching and mentoring research students. Most of them also have experience in teaching ODeL courses. Despite possessing the mentioned qualifications, it seems that not all thesis advisers are able to properly fulfil their roles as mentors as there are thesis students from the four programs who have mentioned that they received little to no guidance from their advisers. Moreover, some students also stated that their research were directed or dominated by the research interests of their advisers and panel members.

Progress Monitoring Mechanisms

The Dynamic Facilitation highlighted that constant self-evaluation during thesis development is a must for students who take thesis courses in distance mode. It is recommended that they use the institution's "review instrument" to gauge their performance.

The "review instruments" for FMDS thesis students are presented in Table 7. All four programs provide their students with guidelines about the thesis process. In addition to this, MLVM and MAS thesis students are also given a timeline to help pace their thesis writing progress. The timeline provided for MLVM thesis students, however, is only until the development of the thesis

proposal. In the case of the MAS Program, the steps in the thesis writing process that must be accomplished at the end of each semester are indicated in the course site. Despite the availability of a timeline, there are MAN and MLVM thesis students who have expressed difficulty in keeping up with the schedules. In addition, some of the MAS students conveyed that the provided steps of the thesis process course site were too general.

In the case of the MAN and MIH programs, thesis students are encouraged but are not required to devise their own timelines. The absence of a formal timeline is perceived as a problem by some of the MIH students as it entails difficulties in setting up schedules. For instance, it is difficult to find a common time where all panel members are available. Aside from also having difficulties in scheduling, there are also MAN students who have expressed that there are instances where announcement of important dates were delayed.

Program		Functions Related to Tracking of Thesis Progress		
	for Students	To Provide Guidelines on the Thesis Process	To Provide a Timeline for Activities and Deadlines	
MAS	ASEAN 300 course site	\checkmark	\checkmark	
MAN	N 300 Thesis Guide	\checkmark		
МІН	IH 300 algorithm	\checkmark		
	MIH style guide	\checkmark		
MLVM	LVM 300 course guide	\checkmark	\checkmark	

Table 7: Progress Monitoring Mechanisms for Students

The progress monitoring mechanisms that the four programs use to track the progress of their thesis students are presented in Table 8. The course sites for the thesis courses of the four programs are designed to serve as a venue for communication and output submissions. Despite this, there are many instances where advisers and advisees still use email as a means for communication. The MAN and MIH programs, on the other hand, are required to provide updates about their progress in the thesis writing process. N 300 students are required to submit a monthly progress report while IH 300 students must accomplish the continuous monitoring form.

	Progress Monitoring Mechanism	Functions				
Program		Track communication b/w students & advisers	Track student progress	Track student submissions		
MAS	Course Site	\checkmark		\checkmark		
MAN	Course Site	\checkmark		\checkmark		
	Monthly Progress Report		√			
	Course Site	\checkmark		✓		
мін	Continuous Monitoring Form		✓			
	Study Closure/Final		\checkmark			
	Report Form					
MLVM	Course Site	\checkmark		\checkmark		

Table 8: Progress Monitoring Mechanisms Implemented at the Program Level

Consultation Schedules

Thesis students and their advisers individually decide on and arrange for consultation meetings depending on their most convenient time as the four programs do not impose a policy on how often and when thesis students and their advisers should meet. Both the Triad of Quality Supervisory Practices (Chrispen et al., 2012) and the Dynamic Facilitation (Quan-Baffour and Vambe, 2018) suggested that it is critical for both parties to uphold their responsibility of maintaining contact with each other during the course of the thesis.

As in the case of arranging orientation sessions, setting up consultation meetings can be quite challenging because of the spatial and temporal distance between the thesis students and advisers (Nasiri and Mafakheri, 2015). Moreover, the students also have to consider the availability of their advisers due to extensive commitments (Chrispen et al., 2012). The results of the survey tend to show that thesis students from the four programs had difficulty in setting up consultation meetings because they had to take into account their advisers' hectic schedule. Those who were able to set an appointment with their advisers conveyed that there was not enough time available for the meeting.

Medium of Communication Between Students and Advisers

Taking into account the "distance-ness" between the adviser and the student, the medium to be used for communication must be specified for students' regular modes of access to their advisers (Quan-Baffour and Vambe, 2018).

The thesis advisees and advisers of the four programs communicate with each other through various means as it has been the practice of the four programs to let the advisers and advisees decide on which medium of communication would be the best and most convenient for them to use. For immediate feedback, all programs usually allow face-to-face consultations and real-time communication methods such as phone calls. Advisers and advisees also utilize computer mediated communication which, according to Forrester, Motteram, Parkinson, and Slaouti (2004), comes in many forms and may be asynchronous in nature, thus enabling collaboration and interaction despite the existence of temporal and spatial distance. Thesis students view their ability to interact and collaborate with their advisers through online platforms such as Skype, Facebook, Viber, Google Hangouts as advantageous.

It is also common for thesis students and their supervisors to communicate via email which, according Gaines (2014), still remains to be the most prevalent means for communication for thesis advising. In addition, the thesis course sites have discussion forums where students can discuss their inquiries with their advisers and thesis coordinators.

	Medium of communication between students and advisers				
Programs	Face-to-Face Meetings	Phonecall	Email	Discussion Forums	Video Call/Chat
MAS	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MAN	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
МІН	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MLVM	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 9: Medium of Communication for Students and Advisers

Access to Student Support Systems/Services

Suciati (2011) mentioned that the thesis writing journey for distance education students can be a hard, winding, and lonely road, especially since their face-to-face meetings with their advisers is less frequent than meetings available to those who study in conventional universities. That is why the two guiding frameworks emphasized the importance of support systems and services as these play a crucial role in aiding students in the completion of their thesis. Examples of these services include self-sufficient libraries and e-learning resources, ancillary services, monitoring and a supervision task force that will promptly react to students' challenges, and adequate meeting places for face-to-face consultations and other course activities.

All of the mentioned services can be accessed by FMDS thesis students. For instance, students can freely access available references and services and online research databases at the University Library. Facilities and equipment at the UPOU Headquarters are available for use during face-to-face meetings such as orientations, proposal defence and final presentations. The chair and research assistant of the programs serve members of the monitoring and supervision task force as they administer thesis course related concerns. They also facilitate the preparation of students and needed equipment, documents and venue for the students' thesis proposal/final defence. For face-to-face meetings, students and advisers can freely utilize the current facilities available at the UPOU Main Headquarters and at the Learning Center located at NCC, UP Diliman.

	Available student support systems/services				
Programs	Library Services	Conducive Meeting Places for Face-to-Face Meetings	Monitoring & Supervision Task Force	Ancillary Services	
MAS	\checkmark	\checkmark	\checkmark	\checkmark	
MAN	\checkmark	\checkmark	\checkmark	\checkmark	
МІН	\checkmark	\checkmark	\checkmark	\checkmark	
MLVM	\checkmark	\checkmark	\checkmark	\checkmark	

Table 10: Available Student Support Systems/Services for FMDS Thesis Students

Interaction among Students

Being isolated makes it difficult for distance education students to interact with and gain useful insights for research writing from their peers (Olakulehin and Ojo, 2008). Nonetheless, interaction among students must still be encouraged as it provides a venue for sharing of experiences, enables students to show support to one another in their research efforts, and also fosters the production of a quality product (Chrispen et al., 2012). In the case of the thesis courses under the FMDS programs, interaction between thesis students is either initiated by the students themselves or by University as a part of the course activities. The venues for interaction between thesis students are listed down in Table 11.
Program	Venues for Interaction for Students	Student Initiated	University Initiated	Mode of Interaction/ Technology Used
MAS	Discussion Forums		\checkmark	MyPortal platform
	Proposal Presentations		\checkmark	Face-to-face meetings
MAN	Discussion Forums		\checkmark	MyPortal platform
	Class chatgroup	\checkmark		Social media platforms (Facebook)
МІН	Discussion Forums		\checkmark	MyPortal platform
	Orientation sessions		\checkmark	Face-to-face meetings
	Online orientation sessions	\checkmark		Facebook Live
MLVM	Discussion Forums		\checkmark	MyPortal platform

Table 11: Venues for Interaction for FMDS Thesis Students

Thesis students from the four programs are given the chance to interact with each other through the discussion forums which are provided in the course sites. In addition, MAS, MIH, and MLVM students can meet their classmates during scheduled face-to-face meetings, as in the case of the proposal presentations in MAS, MIH, and MLVM students. In the future, ASEAN 300 students will also be given a chance to interact with their fellow ASEAN 300 students through the colloquium. MIH students meet each other through orientation sessions. The MIH and MAN Programs also provide a chance for students to interact via social media. The MIH Program holds Facebook Live Orientation sessions for IH 300 students where students, mostly offshore based, could interact with one another through the comments section. Meanwhile, there is also a batch of IH 300 students who created a Facebook group chat to serve as their means of communication as they go through the research process.

Criteria for passing the proposal or manuscript submitted

The two frameworks emphasize that students should be able to produce outputs that are of good quality (i.e., original and flawless) and have passed ethical standards (Chrispen et al., 2012 and Quan-Baffour and Vambe, 2018).

In evaluating submitted proposals and manuscripts for the thesis courses of the MAS, MAN, and MLVM programs, evaluators see to it that the students should have followed the standard research process and satisfied the requirements needed for a good research paper.

In the case of the MIH program, thesis students' outputs are evaluated using the criteria which is enumerated in the MIH thesis guide. According to the criteria, the students must produce their own original work. The level of inquiry should at least be descriptive-exploratory and critical assessment of relevant literature must be evident. Moreover, it should have a distinct contribution to the knowledge of the field of study and it should have also passed ethical reviews. Thesis proposals are also subjected to internal and external reviews. Internal reviews are conducted while the university research committee while external reviews are done by the local community or hospital. External reviewers usually take into account the feasibility of the study, time requirement, and nature of research. They also require proposals to be written in English. Focusing on learner-centered approaches, the Dynamic Facilitation also recommends the submission of students' self-assessment documents (e.g. journals/portfolios) along with their manuscripts. However the programs only require the submission of copies of manuscript and ERB Documents.

Fostering knowledge sharing and utilization

In order to foster knowledge sharing and utilization, knowledge management activities such as creation and maintenance of knowledge repositories must be conducted (Chrispen et al., 2012). As a practice, programs in the MIH and MAN that have already produced thesis manuscripts require students to submit three hard bound copies of their approved thesis. These are distributed to the adviser, the faculty secretary, and the university library so other students can also access them. The student keeps a personal hard bound copy of his or her thesis.

Moreover, involvement in journal publication and conferences are advantageous as these boost thesis students' motivation to finish their research work on time (Quan-Baffour & Vambe, 2008). The MAS Program upholds this practice by requiring students to present at a colloquium once they have finished their thesis work as a requirement for ASEAN 299 (ASEAN Colloquium). MAN and MIH thesis students, on the other hand, are not required but are encouraged to publish their thesis work in journals or present them in conferences. In most cases, graduates of the MAN and MIH Program who work in the academe are the ones who are able to share their works through publications and presentations in conferences as these activities are usually encouraged in their profession.

There are LVM 300 students who have yet to finish their thesis as most of them are currently in the middle of the thesis writing stage. Once there are students who would be able to come up with a finished thesis output, they would also be encouraged to share the findings of their study through publication in journals or presentation in conferences.

Programs	Practices That Foster Knowledge Sharing And Utilization				
	Participation in Conferences, Colloquium, etc.	Publication of Research Work in Journals	Submission of thesis work for storage/repository		
MAS	\checkmark	\checkmark	not at this stage yet		
MAN	\checkmark	\checkmark	\checkmark		
МІН	\checkmark	\checkmark	\checkmark		
MLVM	\checkmark	\checkmark	not at this stage yet		

Table 12: FMDS Thesis Course Practices that Foster Knowledge Sharing and Utilization

The two frameworks employed in the study have been appropriate lens to document the various aspects in administering the conduct of students' theses in an ODeL institution. Most of the ideal practices that are indicated in the two frameworks are being implemented by the four programs in the administration of thesis practices. Currently, the four programs have a set of prerequisites for enrolment to the graduate thesis course, a prescribed period for thesis completion, various means for orientation to the thesis course, criteria for adviser selection and evaluation of thesis course related outputs, progress monitoring mechanisms, various modes for adviser and advisee communication, available student support services, activities and venues for student interaction, and means to encourage knowledge sharing and utilization. The MAS, MAN, MIH, and MLVM programs can continue implementing these practices as these are comparable to the quality thesis administration practices which are indicated in the frameworks which guided the study.

In this study, the practices as reported by the programs were also ascertained against the perceptions of the students who participated in the online interviews. As previously mentioned, these students reported experiencing certain challenges in the conduct of their thesis — insufficient advice from teachers, unclear expectation on what constitutes a quality master's thesis, inability to keep up with the timelines, and difficulties in setting up meeting with members of the advising committee. It must be noted though that the problems cited by students, while illuminating, are also not unique to the ODeL setting. Previous studies have shown (Paltridge, 1997; Bitchener, and Basturkmen, 2006; Can et al., 2006) that thesis administration in conventional universities have also been constrained by the students' lack of preparedness to do academic research and mismatched expectations between the adviser and the student in terms of what support each party is expected to extend or receive (Paltridge, 1997; Bitchener, and Basturkmen, 2006; Can et al., 2006; Gardner, 2009). In the context of ODeL, however, the same problems can be magnified because distance learners are more diverse and there is time and geographical difference between students and their advisers. Due to these differences, distance learners writing their thesis tend to experience more stress (Silinda and Brubacher, 2016). This points to the serious need for an enhanced learner support for the thesis students at FMDS.

In terms of clarifying to students the concept of what constitutes a quality thesis, the other three programs can look at the MIH program, which has defined the characteristics of a good thesis in their discipline and have even used national health research plan to guide the research topics of students. Some cases (i.e., occasional delays in the posting of announcements to thesis students) will simply require better implementation of existing systems. The other concerns though can be traced back to the interactions between the adviser and the student. While all the programs have set policies for selection of research advisers, students said that they needed to consider the availability of their advisers most of whom typically have extensive commitments (Chrispen et al., 2012). This brings to the fore the importance of equipping the advisers on how to tap technology not only to reach their students but to maximize the limited contact time they have with their students, almost all of whom are also combining their studies with full-time work. Part of their preparation as advisers may include learning how to impart complex research ideas online and inculcating in them the need for regular feedback to students. Promoting learner-learner interaction among the thesis students in the course site can help students learn from each other through the exchange of ideas and experiences in research and thesis writing.

While students have been prepared in several ways for thesis writing by their respective programs, for example, through passing of comprehensive examination or research courses, students can be better equipped through the provision of additional learning resources. Given the diverse profile of learners in a distance learning institution, the university or the FMDS can provide open online courses on basic research skills (i.e., statistical methods, technical writing, etc.) which any thesis student can choose to take depending on his/her need. Such short courses can also help lighten the load from the thesis advisers.

Monitoring of students' work progress indeed requires more effort in the distance mode. The university or FMDS may thus very well invest in developing an automated system for monitoring research work progress that will enable both teachers and learners to be notified of their deliverables and deadlines. Such learning environment can also have the following features: repository for submissions of manuscripts, videoconferencing, chats, calendar, etc. The other programs can also follow the example of the MIH and the MAN programs in using forms and in requiring thesis students to regularly submit progress reports.

Conclusions and Recommendations

The four programs are currently implementing most of the thesis administration practices that the Triad of Quality Supervisory Practices (Chrispen et al., 2012) and the Dynamic Facilitation (Quan-Baffour and Vambe, 2008) consider as ideal. While the programs have put such systems in place, the students' experiences also indicated that the implementation of the said systems can be further enhanced. It is suggested that these programs focus on clarifying what constitutes quality thesis in their respective disciplines, equipping thesis advisers on how to maximize online technologies in communicating complex ideas to students, scheduling their deliverables, and promoting learner-learner interactions. Students can also be better prepared for thesis writing through the provision of open online courses on research skills to those who may not be competent in some areas. Lastly, a learning management system suited for thesis advising in the online mode must be developed not only to improve the monitoring of students' progress but also to better facilitate the interactions between students and their advisers.

In the future, similar studies can be conducted in other programs in other faculties of the university as well as other similarly situated institutions to further improve their thesis practices in the context of ODeL. Aside from interviewing the Program Chairs and staff who were involved in administering the thesis process, they can also explore the practices implemented by individual advisers in supervising their advisees.

Acknowledgment

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While the issue of impact of ICTs in international development seems well explored, it is, at some point, poorly understood. Impact means different things to different people. This book interrogates the impacts of ICTs in international development by exploring the intersections between research, practice, and policy. The book revolves around two important questions: (1) "How is the research on ICTs in the Global South playing a role in achieving an information society, through implementation in practice, influence on policy formulation, and media coverage for shaping public opinion?" and (2) "What is the evidence of the impact of ICTs on society (i.e. the end objectives of socio-economic development)?" (Chib, 2015, p. 4).

The book is divided into two parts: the first is composed of theoretical discussions on how to gauge ICT impacts and literature reviews on how ICT research can impact policies towards creating information societies. The second reports different cases of ICT applications and initiatives in different sectors such as in agriculture and in education.

There are several benefits from reading this book. First, ICTD scholars from the Global South will find this book refreshing as the chapters are authored by scholars from the region featuring thinkers from Africa, Latin America, and Asia. Surely, any ICTD scholar will not miss the works of commonly cited scholars such as Heeks, Unwin, and Mansel. This book is refreshing in the sense that it gives Global South scholars the chance to significantly contribute to the ICTD discourse. The scholarship from the Global South presented in this book makes scrutiny of cases from the region to be more contextual and—rightly so—homegrown. In saying this, it does not mean that the insights do not have applications outside the region. The quality of the scholarly work presented can surely inform policies and practices relating to ICTs in development.

The book also opens doors towards uncharted research territories on the impacts of ICTs in development (see Ordoñez, 2015). The book offers directions for inquiry particularly among novice researchers in the area. In the second part of the book, the reader is presented with several cases showing varying impacts of ICT initiatives. These cases bring to light several researchable areas. A case in point is the m (mobile)-health application in India (Chandwani & De, 2015). While it is innovative and well-intentioned, the authors argue that it is fraught with ethical issues such as disclosing medical history to people (e.g., technicians who assist during the consultation) other than the physician.

For theory-savvy readers, this book offers quite a number of theoretical lenses (e.g. Flor's and Dodel's chapters) in measuring ICTs' impact on development—away from the commonly used theories such as Amartya Sen's Capability Approach. The theoretical discussions are highly engaging; some discussions focus on how to establish causation i.e., trying to attribute development or at least a part of it to ICT interventions.

Readers who are into exploring the research-policy jungle will also find this book useful. Harris (2015) offers several practical insights on how ICT studies can inform policies. It problematizes what constrains ICTD researchers from making solid impact in the policy arena. Among the factors cited is that it is not the cup of tea of most researchers to go out of their way to promote their work or to communicate in a language other than that used in the academia.

Methodologically, all throughout the book, there is a recognition of the relevance of participatory methods and approaches to research on ICTD (e.g., May & Diga, 2015; Olivera, Ale, & Chib, 2015). The authors put premium on strong contextual reference and the value of giving voice to the primary stakeholders of ICTs that will be developed. This, to me, is a very important point in highlighting the user perspective in ICTs.

This book could have enhanced its readability if more photos were added particularly in its second part where several ICTD cases are presented. The photos could have established the context of the case studies, which could have helped the reader to better imagine the scenarios being described. The tables and graphs could have been presented in a more engaging and visually appealing manner. Infographics could have done the trick in this case in making the book easy to read, which is an important point given that the contents are quite difficult to digest. This, however, is a minor point—only to help the authors to more strongly convey their points. In part 2, while it is supposed to focus on actual cases, a few were based on literature reviews. Hence, it would have been better if more cases were added given that the first part is already heavy in theories and literature reviews. Adding more cases could have further reinforced the uniqueness of ICTD cases in the Global South

Overall, this is an excellent book for ICTD researchers—budding and established professionals alike. The book has sparked conversations on how to explore impacts of ICTs in development. It provides good reflections on how to bring ICT research and relevance beyond the confines of academia.

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For both the articles and proposed articles, follow the templates for articles.

Template for Quantitatively-Oriented Articles

Title of Article

Author 1¹ and Author 2²

¹Position, Institutional Affiliation, Country, Email address

Abstract

Abstract in 150-250 words.

Keywords: No more than five (5) keywords.

Introduction (Center Heading 1)

This section contains a clear historical background of the study, showing why the research had to be undertaken. In this section, the author(s) shall have the opportunity to expound on what the research says about the research problem, and show clear support for the need to undertake the research, through appropriate research gap analysis.

Objectives (Center Heading 2)

This section provides a clear statement of the goals and objectives of the research.

Conceptual/Theoretical Framework (Center Heading 3)

The conceptual or theoretical framework would be expected for research studies that dealt with empirical procedures and methodologies. A framework of this nature would provide for clear interrelationships and direction of interactions of variables which the researcher expects to show by his/her data and data interpretations. It should be noted that variable interactions may be easier to understand if they were to be presented in illustrated model formats.

Methodology (Center Heading 4)

This section includes brief discussions of data collection procedures and analyses. Data must be presented in appropriate tables.

Results and Discussions (Center Heading 5)

Analytical discussions must present possible relationships of the results of the study and the findings from other studies specifically reviewed for this purpose. Post analysis data may be presented in both statistical tables and appropriate models and figures.

Include subheadings as are necessary.

Conclusions and Recommendations (Center Heading 6)

Conclusions must be according to the objectives of the study.

Recommendations must reflect the objectives and conclusions of the study.

References

General format must follow the suggestions for authors, but generally must follow the APA Style for publications.

Template for Qualitatively-Oriented Articles

Title of Article

Author 1¹ and Author 2²

¹Position, Institutional Affiliation, Country, Email address

Abstract

Abstract in 150-250 words.

Keywords: no more than five (5) keywords

Introduction (Center Heading 1)

This section contains the historical background of the study, including specific reports and studies that provided direct support to the research problem. Some relevant part of the literature shall be included in the discussion of the research problem to establish more strongly the need to undertake the study.

Objectives of the Study (Center Heading 2)

This section contains both the research over-all goal and the specific objectives to be attained.

Relevant Studies or Review of Related Studies (Center Heading 3)

Review of studies that are highly related to the current study. After the relevant studies have been presented, a synthesis of these may be presented and the relationship of such synthesis must be related to the study under consideration.

Subheading may be determined as necessary. In these subheadings, specific observations may be noted and statistical tables presented as well as figures and models.

Discussions (Center Heading 4)

In this section shall be inserted full discussion of results and finding, discussed more deeply in relation to the related studies already reviewed. Subheads may be determined and included in the discussions.

Conclusions (Center Heading 5)

The conclusions of the study must reflect the objectives of the research.

Recommendations (Center Heading 6)

All recommendations must appropriately correspond to the conclusions, and therefore the objectives of the study.

References (Center Heading 7)

Follow the APA Style Guide.

Style Guide for Full Paper Submission

The paper should be 15-25 pages long (including tables, figures, and references) and prepared preferably in Microsoft Word format. The author(s) should provide a title, the name(s) of the author(s), position(s), institutional affiliation(s), institutional address(es), email address(es) and key words (no more than five). You may make use of the template for preparing your paper: Journal Article Template (Qualitatively-Oriented); Journal Article Template (Quantitatively-Oriented); Detailed guidelines are as follows:

1. Font type

The whole text should be in Arial.

2. Margins

The paper should be A4 size (21 x 29.7 cm). All margins (top, bottom, left, and right) should be 1 inch.

3. Line Spacing

The whole text should be single-spaced.

4. Title

The title of the paper should be 14-point, bold, in capital and lower case letters, and centered.

5. Author Information

Use 12-point and centered for the author name(s). The Western naming convention, with given names preceding surnames, should be used.

The author name(s) should appear below the title, with one blank line after the title.

Use 10-point for author(s)' position(s), institutional affiliation(s), country, and email address(es).

The author(s)' position(s), institutional affiliation(s), institutional address(es), and email address(es) should appear below the author name(s), with one blank line after the name(s).

6. Headings

- Heading font (with the exception of the paper title and the abstract) should be 14-point Arial and in bold.
- Headings should be centered and in capital and lower case letters [i.e. nouns, verbs, and all other words (except articles, prepositions, and conjunctions) should be set with an initial capital].
- There should be two blank lines before each heading and one blank line after it.

7. Subthemes

- Subtheme(s) should be 14-point Arial, in bold capital and lower case letters, and flushed left.
- There should be one blank line before and after each subtheme.

8. Abstract

- The abstract heading should be 14-point Arial, bold, centered.
- The abstract should be in 150-250 words.
- The main text of the abstract should be 12-point Arial, italicized.
- Alignment of the main text of the abstract should be justified, no indent.

9. Key Words

- Include at most five keywords.
- Use 12-point Arial. The keywords should appear below the abstract, with one blank line after the abstract.

10. Main Text

- In general, paragraphs should be separated by a single space.
- All paragraphs must be in block format.
- Text font should be 14-point Arial, single-spacing. Italic type may be used to emphasize words in running text. Bold type and underlining should be avoided.
- The first line of each paragraph should not be indented.

11. Tables and Figures

- Tables and figures should be numbered and have captions which appear above them.
- Graphics and pictures should not exceed the given page margins.
- Captions should be 14-point centered.
- The tables and figures of the paper should follow the APA citation style.
- There should be no space between the caption and the table/figure.

12. Footnotes

- Footnotes may be used only sparingly. A superscript numeral to refer to a footnote should be used in the text either directly after the word to be discussed or in relation to a phrase or a sentence following the punctuation mark (comma, semicolon, or period)
- Footnotes should appear at the bottom of the page within the normal text area, with a line about 5 cm long immediately above them.
- Footnotes should be 10-point and aligned left.

13. References

- The author-date method in-text citation should be used. Following the APA format, the author's last name and the year of publication for the source should appear in the text.
- All references that are cited in the text must be given in the reference list. The references must be in APA format and arranged alphabetically at the end of the paper.

Sample:

Surname, A. A. (year). Article title. *Title of Journal, volume number*(issue number), inclusive page numbers.

Surname, A. A. (year). *Title of book*. Publisher location: Publisher Name.

- Surname, A. A., Surname, B. B., & Surname, C. C. (2000). Title of article. *Title of periodical, volume number*(issue number). Retrieved from URL/web address.
- Surname, A.A. (Year, Month). *Title of paper*. Paper presented at name of conference, city, country.

14. Length

The paper should be 3,000-7,000 words including tables, figures, and references.

Author Guide

The International Journal on Open and Distance e-Learning (IJODeL) welcomes original research articles, book reviews, theories, and best practices pertaining to ODeL worldwide. Articles should be 3,000-7,000 words including tables, figures, and references.

A publishable quantitatively-oriented paper should contain the following:

- 1. Abstract
- 2. Objectives
- 3. Conceptual/Theoretical Framework
- 4. Methodology
- 5. Results and Discussions
- 6. Conclusions and Recommendations
- 7. References

Go to: Quantitatively-Oriented Journal Article Template (page 62)

A publishable qualitatively-oriented paper should contain the following:

- 1. Abstract
- 2. Objectives of the Study
- 3. Relevant Studies or Review of Related Studies
- 4. Discussions
- 5. Conclusions
- 6. Recommendations
- 7. References

Go to: Qualitatively-Oriented Journal Article Template (page 64)

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