Active Learning in a Virtual Environment: 
Miriam College’s Experience 
in Teaching Online Facilitation 

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Abstract - A critical literacy of faculty members in 21\textsuperscript{st} century teaching is the heutagogical competence in information and communication technology underscoring the capacity to handle classes in virtual learning environments. Miriam College, a women’s college in the Philippines, has conducted four online classes on teaching online facilitation to 87 faculty members and staff. The course aims to enable traditional classroom teachers to handle a blended or online class. The course utilized social constructivism and connectivism as its teaching and learning frameworks and active learning as a teaching approach as afforded by a virtual learning environment. A content analysis of all forms of engagement in course activities presents an informative picture of the quality of learning among the teacher learners along vital teaching and learning precepts. This paper aims to contribute to the experiences of traditional classroom teachers who are faced with the challenge of digital educational technology and the 21\textsuperscript{st} century learning styles of digital natives. 

Keywords - E-Learning, Online Facilitation, Active Learning, Heutagogy, Constructivism, Reflective Thinking, Digital Educational Technology

I. INTRODUCTION

A key concept in online education is active learning wherein students take an active role in the knowledge, attitudes, and skills acquisition process. With active learning, learners are considered equal sources of knowledge vis-à-vis the teacher who acts as a facilitator; thus, both share materials in class. Learners interpret ideas and concepts based on their prior knowledge and contribute to knowledge creation. Learners are self-directed and determine their learning styles. Because we are teaching 21\textsuperscript{st} century learners, active learning becomes more relevant in today’s learning and teaching.

Miriam College is an 88-year old Catholic women’s college in the Philippines that offers basic, tertiary, post-graduate and adult education programs. It has specialized centers engaged in curriculum development, research, community outreach and advocacy in the fields of social development, peace education, environmental studies and women’s empowerment. Together, these academic courses and special centers work in harmony to realize Miriam College’s vision as a premier educational institution in the Philippines.

Our 21\textsuperscript{st} century learners are multitaskers who tend to use sound and images to convey content whenever possible (Rodger, Runyon, Starret & Von Holzen, 2006). Technology the center of their learning and interactions with information. They look at the Internet as the universal source of information. They are digitally literate, experimental, and social. They crave for interactivity, have strong visual-spatial skills and good at visual images,
though weak at reading skills. They tend towards inductive discovery, look for fast response times which may lead to short attention spans (Oblinger, 2004).

In an increasingly complex and global world, 21st century learners have to be equipped with the traditional alphanumeric literacy, global, cultural, visual, network, computer, media, and library literacies.

Thus, teachers now need to lead students to make connections, find meanings, think through issues, and solve problems (Rodgers et al., 2006). This necessitates a shift of being the teacher as a “sage on the stage” to a facilitator or “guide at the side” with 21st facilitator literacies. These literacies are the following: Content Literacy, Written Literacy, Library Literacy, Classroom Management, Assessment Literacy, Internet and Cloud Literacy, Computer Literacy and Social Media Literacy, Instructional Literacy (Learning design, Pedagogy, Andragogy, Heutagogy, and Epistemology).

II. THE VIRTUAL LEARNING ENVIRONMENT

The 21st technology provides education with digital tools and Web 2.0 to connect with facilitators, educators, learners and collaborators within and outside the school. Thus it should be teaching with technology rather than teaching from technology.

A. Theoretical Approaches and Frameworks

The Teaching Online Facilitation (TOF) Course adopts theoretical approaches and frameworks to guide its learning-teaching processes.

Heutagogy espouses that learners are highly autonomous and self-determined.

Web 2.0 offers an environment that supports heutagogical approach, by supporting development of learner-generated content and learner self-directedness in information discovery and in defining the learning path (Blaschke, Heutagogy can be applied as a framework even for young learners because of their proficiency in digital tools and online applications).

Constructivism provides educators with sound theoretical and methodological frameworks for learning with digital tools. Learning is a social process wherein reality is constructed through human activity and in real-world situations. Learners function as a part of a community of practitioners helping to solve real-world problems. Thus the facilitator or teacher is mindful of the culture and context of the learners (Kim, 2001).

Through a constructivist framework, the TOF course utilizes search engines for learners’ independent inquiries, web conferences, and discussion forums for asking questions, clarifying concepts, and sharing experiences.

A connectivist approach is appropriate and necessary in a world of knowledge explosion. Knowledge is actuated through the process of a learner connecting to and feeding information into a learning community (Kop & Hill, 2008). Thus, knowledge is distributed across an information network and is stored in various digital formats. These are social bookmarks, news feeds, podcasts, blogs, wikis, discussion forums, social and professional networks, industry conferences, and other external events (Tracy, 2011). Learning and knowledge are said to “rest in diversity of opinions” (Siemens, 2008, as cited in Kop & Hill, 2008).

The learners connect to an information network to share and find new information, modify their beliefs on the basis of new learning, and then connect to a network of learners to share these realizations and insights, and find new information once more. Therefore, there is knowledge creation among learners of the TOF course.

Learner-centered online learning can lead into knowledge construction depending on
how well the three elements of active learning are designed into course activities, assignments, and projects. The elements of underpinning such as real world and relevant examples, exploration, higher-order thinking skills, and scaffolding are utilized in the TOF course. The elements of ownership in terms of learners’ driven goals and objectives, self-mediating and control of learning, self-reflection and self-awareness, learners’ experience, self-assessment, their own representation of ideas must be presented in the TOF course. These two elements are linked to the elements of engaging: learners’ active engagement in analysis, evaluation, and synthesis of multiple perspectives; and learners' collaborative assessment (Koohang, Paliszkiewicz, Nord, & Ramim, 2014).

Active learning is described as student-centered where the learners are treated as equal sources of knowledge and provided the opportunities for self-direction and determination of learning styles.

Local knowledge provides an important perspective to the TOF course. In an interconnected world, local knowledge, in the form of languages, oral histories and cultural traditions, is increasingly threatened by the spread of global influences (Holmes & Crossley, 2004). This may result in the homogenization of culture and national identity. We need to ensure that the diversity and richness of cultures flourish and that our students are rooted in their local culture. Thus, local knowledge is very important in this digital age.

Local knowledge is a complex set of knowledge systems rooted in the context of a community within a defined territory, collectively owned and shared by the people, and identifies with their way of life. It provides an understanding of the experiences of the people embedded from a common history that generates similar worldviews and appreciation of their immediate, extended and external environments. It is dynamic, evolving and inclusive of the adaptive capacities of people to embrace change including impacts of popular culture in post-modern society (Asian University Digital Resource Network, 2014).

The TOF course integrates local knowledge into its teaching-learning process by giving importance and emphasis to the learner’s local context and culture.

III. TEACHING ONLINE FACILITATION

An identified gap in the review of the school’s Open Distance Learning Program is the need to conduct capacity-building among faculty members on the knowledge and skills in handling blended and online courses. As a response, the ODLP designed an online course for faculty members on how to facilitate teaching and learning in a virtual classroom using the Moodle platform. After 4 batches of Miriam College faculty members, the ODLP extended its training to faculty members of partner institutions of the Asian University Digital Resource Network, an innovative consortium of colleges and universities in the Philippines that advances the integration of local knowledge in the curriculum with the use of digital educational technology. One batch of TOF for Local Knowledge has been conducted for AUDRN teachers from 14 schools nationwide.

The TOF course runs for six-weeks and covers the fundamentals of online teaching. The course is designed to cover four areas of online facilitation competencies -- theory, instruction, content, and class management. The teacher-trainees are expected to achieve Familiarity and understanding of the different underlying principles of online facilitation; be able to identify the different components and processes in facilitating online learning and explain the different phases of an online course delivery including the tasks and roles within each phase; can demonstrate the enabling attitudes to online learning and develop facilitation skills and techniques; and
learn strategies for the delivery of an online course.

For the AUDRN teacher-trainees, the diverse contexts provided by the different schools belonging to ethnocultural groups in the country highlight the richness of local knowledge content in social learning.

A. Learner Demographics

A total of 122 academic professionals enrolled in six batches of the TOF courses with 101 enrollees from Miriam College and 21 from AUDRN partner schools. Out of the 122 who enrolled and at the minimum, went through the pre-registration, orientation, and introduction activity, 87 were able to successfully finish the course after six weeks. The average passing rate of the 5 batches is a total of 71% with the first batch having the lowest passing rate of 60% and the fourth batch with the highest passing rate of 88%. The passing rate increases from the first to the fourth batches with 72% and 77% for the second and third batches, respectively. A dip in the fifth batch conducted for AUDRN partners at 67% passing rate was, however, registered due to some extraneous factors such as internet connectivity, administrative support, and faculty loading.

The Miriam College course learners were composed of 35 college faculty members, 24 basic education teachers, and 14 professional (technically skilled) employees of special centers and administrative offices. The average age of the learners is 44 years old with the oldest at 64 years old and with 44 years of teaching experience while the youngest is 22 years old with no teaching experience. Female learners of Miriam College comprised 75% of the successful graduates while 25% are males. AUDRN learners are 70% female and 30% male and all 14 graduates are faculty members of higher education.

B. Course Participation

The primary activity in the course was the discussion forum. An average of 716 total posts were made with the third batch having the highest discussion forum posts registered at 1,130 and the fifth batch with the lowest at 504 posts. The third batch had the highest number of successful graduates with 23 while the fifth batch had the lowest at 14, similar to the fourth batch but with a slightly higher total discussion forum posts at 637. The most popular forums are on the first two topics on social constructivism, web2.0 and the basics of online facilitation.

Other activities provided more opportunities for the learners to actively participate in the course. These were the wiki co-creation, glossary contributions, and knowledge checks. A popular activity among the learners is the icebreakers given once in the middle of every week.

The sharing of resources from the learners was highly observable. Aside from the reference and instructional materials provided by the course as springboards for the discussions and other activities, almost 50 videos, 38 pdf or text files, over 60 websites and roughly 20 photos and images were uploaded by learners in the online class. In addition, each of the 87 graduates created audio and video assignments.

C. Active Learning

An indicator of an active class is the high Participation of the learners in their number of discussion forum posts. The highest number of posts registered by a single student across the five batches is 127 in nine discussion forums belonging to the third batch. The lowest was 27 posts, the minimum number of required posts to earn the course certificate, also belonging to the same batch. For most of the 87 graduates, the median range of posts is from 40 to 50.

Time spent in the online class also indicates level of interest and commitment to the course. As an asynchronous class, full discretion on class attendance is given to the learner except for the live class or webinars where they are required to synchronously meet online. The number of hours dedicated by the learners of
the 5 batches is variable but consistent with their level of participation. The highest number of hours dedicated by a learner across the five batches ran up to 200 hours in six weeks, spending four hours a day, on the average, to the course. This includes offline readings and preparation of assignments and projects. Online time spent was registered at 7 hours a week or at least an hour a day on the average.

Active learning can be best demonstrated by the learners’ determination of how and when they want to learn and the quality of exchanges between the facilitator and learner and among the learners themselves. These were clearly expressed by reflections shared in the final exam essays. The learning becomes a meaningful activity with critical self-reflection and not merely a passive absorption of knowledge. Critical reflection is not meditation, rather it is mediation - an active, conversive, and dialectical exercise that requires as much intellectual work as does every other aspect of the learning process, from analysis to synthesis to evaluation. But in reflection, all the learned material can be gathered about, sorted and resorted, and searched through for greater understanding and inspiration (Morris, 2012).

Questioning was also exhibited in class to find answers to the challenges encountered. “Hey teacher, are you still relevant? Do we have what it takes to be 21st century teachers? Is teaching online as fulfilling as teaching in the physical classroom? What happens to the affective nature of education? and How can we facilitate and strengthen the development of values in an online setting?”.

Attempts to deconstruct and reconstruct realizations were likewise raised in discussion forum posts. Here is an example from a graduate:

“Equalizing power in education is one way that I see the internet radicalizing our times. And when power relations are transformed, there will also be new way of learning - one that generates diversities, contestations, and new forms of inter-subjective humanity. We begin from standpoints-viewpoints and end, hopefully, with more wisdom in the convergences and divergences of our multiple ideas and our sciences. Who knows, we might even end up with a new civilization?” (Francisco, TOF I final exams, 2012).

Interaction among students generated rich learning in terms of sharing viewpoints based on individual experiences as teachers. Here is a sample conversation.

“Recently, I learned about the difference between appreciative inquiry and critical thinking. As a teacher and online learner, appreciative inquiry is (also) an attitude/philosophy I’d like to cultivate in myself because I believe it leaves more room for creative thinking. Rather than being competitive with others, it nurtures a more collaborative and cooperative atmosphere since it’s respectful of divergent ideas...and with this, we appreciate each other’s gifts no matter how diverse or different we are from each other.” (Carandang, TOF1, DF4, 2012).

Clearly, the attributes of critical reflection of clarity (being clear about what is being said), inference (making deductive and inductive inferences and value judgments), basis (having a reasonable basis for those inferences), and interaction (engaging in cooperative interaction with peers) are exhibited in this conversation (Ennis, 1987, as cited in Quality Talk, 2012) concepts on the teacher’s role and the acquisition of knowledge and skills was never the sole responsibility of the course director and the team of facilitators of TOF. Building on each other’s knowledge, everybody contributed to knowledge creation by explaining, interpreting, and analyzing the theories, concepts, and ideas.

Based on the course evaluation, most of the learners found the school’s e-learning platform easy to navigate and student-friendly. However, school policy on the restricted
access to social media sites such as You Tube and Facebook during school hours was a limitation. Bandwidth problems also took more time from the learners to dedicate to the course. Nevertheless, everybody opined that the Miriam College e-learning system enabled them to experience active learning and reflective thinking.

IV. CONCLUSIONS

The TOF experience of Miriam College shows the applicability of an online course to upgrade the teaching competencies of teachers in both the basic and higher education units for effective delivery of online and blended courses. The application of constructivism, connectivism and active learning facilitated learner engagement leading to knowledge construction and ownership. The teaching strategies employed in TOF can also be applied to face-to-face sessions for younger learners.

The limited experience of Miriam College in conducting online trainings for its faculty members gave a very insightful perspective on the effectiveness and viability of a virtual learning environment in achieving learning outcomes. Clearly, the depth and breadth of acquiring knowledge and creating one’s own are present because the learning environment and the course design are anchored on the attributes of active learning. Academic rigor is not compromised and thus, ensures that despite the limited live interactions, learners are self-directed and take responsibility for their learning.

The availability of digital materials and formats also facilitated learner engagement. However, there was a paucity of local digital materials which could have contextualized the learning. The challenge is the development of materials using local knowledge to reflect local situations. This is more critical for learners who need to be grounded in their own local identity and culture, particularly young Filipinos. Local knowledge research can utilize digital formats to create these materials.

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REFERENCES

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


