Virtual Reporting: An Online Learning Collaborative Initiative for Intercultural Environmental Practices

Joane V. Serrano
University of the Philippines Open University ◆ Philippines ◆ jserrano@upou.edu.ph

Alvie Simonette Q. Alip
University of the Philippines Open University ◆ Philippines ◆ alvie.alip@upou.edu.ph

ABSTRACT

Universities are challenged to address these issues and become venues to initiate the implementation of cultural strategies for sustainability (Higgins, 2013). Promoting intercultural environmental practices as part of environmental advocacy can be documented and widely disseminated through information and communication technologies (ICTs). Philippines, as a developing country, faces a serious challenge of access to quality education including quality instructional materials due to its high cost of production. However, in recent years, the growing popularity of some social interaction sites that utilize video sharing such as YouTube has revolutionized the development and production of instructional materials. Teachers and students alike are now able to document, produce, and share their original video works without any cost. This paper showcases intercultural practices on environmental advocacy through a collaborative activity called virtual reporting. This study aims to: (1) Discuss virtual reporting as an online learning initiative for intercultural environmental practices; and (2) Identify the challenges and possibilities of virtual reporting.

These virtual reports are products of collaborative efforts of students who are located in various parts of the country and some are even based abroad or outside of the Philippines. Sample student works that were analyzed include the following: (1) Religious Environmentalism: Towards a Greater Understanding of the Role, Belief Practices, Relevance of the Christian Filipinos and Buddhist Thais; and (2) Indigenization: Resailing with the Badjaos, Sowing with Ifugaos. Generally, the students were constrained by the longer time needed in conceptualizing and producing their virtual reports. Nevertheless, their passion for the environment and collaborative efforts were effectively translated into their final outputs. Hence, virtual reporting is an innovative learning initiative and assessment that can be an effective medium for environmental advocacy and cultural awareness.

INTRODUCTION

One of the most pressing issues faced by human society today is the aggravating environmental problems and challenges in many parts of the globe. Different sectors of society, including universities, play an important role toward sustainable environmental practices. With the growing interests of many students on environmental issues, it is imperative for universities to develop their students' awareness and understanding on these issues. It is the duty of universities as well to lead in solving environmental problems and stimulate society to the right direction (Mikulik and Babina, 2009). However, hand in hand with this duty to lead in environmental equilibrium is the responsibility to preserve and promote local and cultural environmental practices such growing trees and recycling.

Education plays a crucial role in promoting inter-cultural, inter-religious and inter-racial understanding within and between societies (ASEAN, 2006), and is likewise one of the best venue to initiate the implementation of cultural strategies for sustainability (Higgins, 2013). According to Higgins, "culture is often at the root of unsustainable outcomes and intercultural dialogue through cultural diversity and creativity which can challenge and change damaging cultural practices and results in innovative visions for the future" (2013: 10). Hence, in promoting intercultural environmental practices it is necessary to plan, reflect and evaluate the education for sustainability (EFS) practice through a cultural lens to truly exercise cultural equality, in order to achieve an intercultural dialogue for sustainability. This intercultural dialogue for sustainability which also encompasses environmental advocacy and cultural awareness can be documented and widely disseminated through information and communication technologies (ICTs).

In this information and knowledge era, there have been considerable efforts to integrate Internet and new ICT in instructional design and delivery. Universities must be able to maximize the capacities of ICT to teach and at the same time address various societal issues including environmental issues such as land erosion, oil spills, and the unlawful hunting of baboons. According to Fillion et al (2009), the past two decades showed how ICT have transformed knowledge acquisition and dissemination and new methods developed to satisfy the rapidly evolving needs of people. They emphasized that in order to survive in the current global economy, organizations including universities, must continually innovate at the human, materials, and technological level. However, some scholars (Soh, et al, 2012; Tambulasi, 2009; Tapia and Ortiz, 2008) believe that these advances and developments in ICT further widen the digital divide between the information rich and information poor within and among countries.

There is a need to balance between rapid developments in ICT and the need to develop materials grounded on local cultures. With the recent interest on Open Educational Resources or OER, it is hoped to address the digital divide between the global north and the global south and to contribute to the development of less advanced countries (Mulder, 2008). Over the years, the importance of OER has been extensively documented in conferences, declarations and literatures (Downes, 2007). However, in a developing country like the Philippines, OER is a topic that has rarely been discussed. This concept is

relatively new in this country. Higher education in the Philippines is heavily commercialized, thus opening access to knowledge is an unusual idea to many Filipinos (Garcia, Alip & Serrano, 2013). This is ironic considering that free access to quality education including quality instructional materials is a serious developmental issue.

Visual media production entails high cost of production. This is especially true for materials on intercultural environmental practices due to distance and access to local cultural communities which results to difficulty in video capture. In recent years, the growing popularity of some social interaction sites that utilize video sharing such as YouTube has revolutionized the development and production of instructional materials. YouTube has been found to be an effective teaching and learning tool (Burke, Synder and Rager, 2009). It allows video capture using low-end cameras and allows sharing with minimal cost. This opens up possibilities for collaboration among scholars to record and share intercultural environmental practices. Virtual reporting is one of the course requirements in an Environmental Advocacy class of UP Open University offered in the First Semester of 2011-2012 that allowed collaboration among group of students. Virtual reporting is a term 'coined' under the said class, which refers to a video documentation of environmental advocacy strategies through YouTube.

OBJECTIVES

This study aims to examine the possibility of collaborative work and sharing of visual materials through virtual reporting. Specifically, it aims to:

(1)   Discuss virtual reporting as an online learning collaborative initiative for intercultural environmental practices; and

(2)   Identify the challenges and possibilities of virtual reporting as a collaborative work.

LITERATURE REVIEW

Course activities that allow for collaborative learning have become favorites among online teachers. According to Ke and Carr-Chellman (2006), the advances in ICT and Internet technologies as well as the expansion of social view resulted in a paradigm shift from learning independently to collaborative pedagogy. They further noted that online educators and practitioners have put considerable efforts "in grouping and pairing students in different learning activities in order to honor the need to learn in socially negotiated spaces through intellectual tools that are required during the course of interactions." (2006: 69).

Roschelle and Teasley (1995) define collaborative learning as "a coordinated synchronous activity that is the result of a continued attempt to construct and maintain a shared conception of a problem." For Dooly (2008) collaborative learning requires participants of the learning process to work together toward a common goal. She noted that collaboration entails the whole process of learning which may include students teaching each other, students teaching the teacher, and teacher teaching the students. Dooly (2008) highlighted the importance of responsibility for another's learning including their own and that accomplishing the goals means that they have helped each other to understand and learn.

Collaborative learning is both a learning strategy and learning outcome as it allows students to learn beyond what they can learn alone by actively engaging in discussion, toward working on a common task. Through collaboration, the students' interest in learning increases as they assume responsibility for their own learning and engage themselves in sharing ideas, ushering them to become critical thinkers (Dooly, 2008; Bower & Richards, 2006). As a facilitator of learning, the teachers should also introduce new learning initiatives using ICT tools as a means for students to communicate, share, edit and collaborate. Lock (2007) noted that online educators with a view to promote online community have to integrate the four cornerstones in a learning community framework: communication, collaboration, interaction and participation. He further noted that the collaborative nature of a learning community, which allows learners to communicate, collaborate, interact and participate, helps to foster the learning process.

METHODOLOGY

This paper examines two virtual reports on intercultural environmental practices as forms of environmental advocacy and communication. The reports are part of the course requirements in an Environmental Advocacy class of UP Open University offered in the first semester of the 2011-2012 academic year. The two reports were selected based on three criteria: 1) focus on intercultural environmental practices; 2) use of free visual media and video sharing; and) collaborative efforts. These virtual reports are products of collaborative efforts of students who are located in various parts of the country and some are even based abroad or outside of the Philippines. The experiences of the students in preparing and producing their virtual reports were documented, analyzed and discussed in this study.

The Virtual Report outputs examined in this study were:

Virtual Report 1 - Religious Environmentalism: Towards a Better Understanding of the Role, Belief, Practices, Relevance of the Christian Filipinos and Buddhist Thais
(URL: http://www.youtube.com/watch?v=gMibfQLgzYA&list=PLFD7B97A212480003)
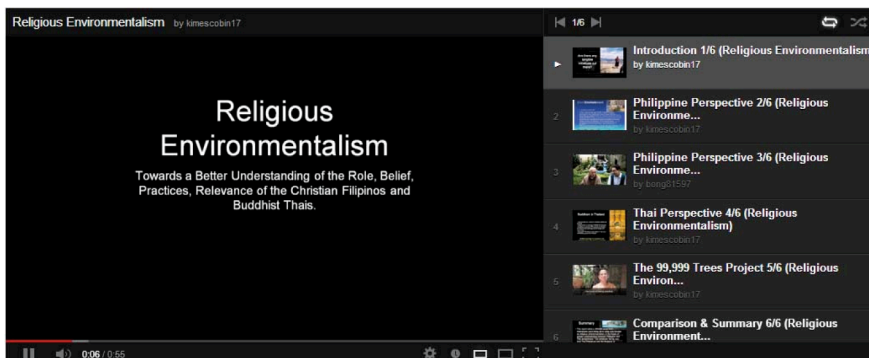
Religious Environmentalism is the deliberate application of a religious attitude toward the environment and viewed to potentially solve environmental crisis. The two cases featured in this Virtual Report exhibited the value of community and approaches developed by those with little formal education or information about environmental matters, building on a more powerful motivator – faith and worship.

CASE 1: Inter-religious dialogue and immersion with Sierra Madre Mountain dwellers, the Agtas and Dumagats. This case features a priest who fought against illegal loggers operating in the area. His mission in the areas was not to convert the natives to Christianity/Catholicism but to have Christian-native dialogue among themselves as stakeholders and stewards of God's creation.

CASE 2: The Thai Perspective. This case features a Buddhist monk bestowed by the King a royal title because of his efforts to plant 99,999 trees to counter the effects of land conversion from forest to rice paddies and monocropping. Buddhists consider the environment as a living organism and is directly connected to humans, largely spurring from the basic truth of inter-relatedness

Virtual Report 2 - Indigenization: Resailing with the Badjaos, Sowing with Ifugaos
(URL: http://www.youtube.com/watch?v=vL2xwDSPL5A)
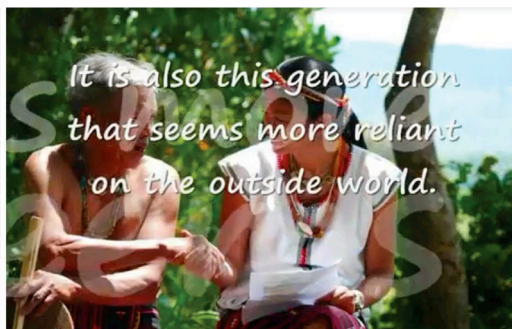
One strategy for effective environmental advocacy is through Indigenization. Battiste, M. (2005) in Kitchen, J. and Raynor, M. (2013) highlighted that "indigenous knowledge reveals the wealth and richness of indigenous languages, worldviews, teachings, and experiences, all of which have been systematically excluded from contemporary educational institutions and from Eurocentric knowledge systems." This concept is concretized in the Virtual Report on indigenization through a discussion on three subcultures, namely communities of Badjao, Ifugao and Bataan fisherfolks. Indigenization draws from the experiences and culture of the local people. The virtual report raises the issue of balancing environmental and cultural protection and conservation and the question of imposition of values versus understanding the local cultural context.

RESULTS AND DISCUSSION

Virtual reporting as an online learning initiative for intercultural environmental practices

Virtual reporting was one of the major requirements for the Environmental Advocacy class at UP Open University. For this requirement, the students were required to do a report on certain environmental and intercultural topics. In virtual reporting, the students were asked to group themselves. They video-recorded the topic they have chosen using their cell phones, digicams, webcams or videocams.

Given the technological limitation in UP Open University, faculty members need to be creative in designing course requirements and activities. In order to truly engage the students in the learning process, they should be able to communicate and collaborate online.

Virtual reporting helps promote a learning community where learners can learn from and with each other. Because of the nature of this course requirement, the students had to frequently communicate and collaborate with their group mates. This required them to be more responsible, independent and accountable even without any instructions from their Faculty-In-Charge (FIC). Harvey, et al (2007) noted that more peer interactions resulted in heightened learning as well as improved quality of group work.

Virtual reporting also allows for sharing of knowledge about Philippine environmental and cultural practices. The students were able to showcase their chosen intercultural environmental practices.

Challenges of Virtual Reporting

The virtual reports produced by the students demonstrate that "technology is really a medium for creating productive environments" (Schrage, 1990). If technologies are designed to empower the students' engagement with the learning process and collaboration, they can be an effective learning activity and assessment tool. However, there are challenges that students need to overcome while participating in a collaborative, technology-supported learning activities like virtual reporting.

The following are the major challenges that emerged based on the reflections of the students from their initial preparation until the final presentation of their virtual reports:

(1) **Time and Space Matter**
Time constraints and geographical distance are among the major challenges faced by the students. Since the students within a group were located in different places, with some based abroad, finding time to have an initial discussion and sustaining the communication until the final output proved to be challenging. Longer time was definitely needed in conceptualizing and producing the virtual reports as shared by one student:

> "Doing it was fun, especially when you are experimenting on a new and quite complicated program, Vegas Pro."

(2) **Communication and Technical Difficulties**
The students made use of Yahoo messenger and emails in communicating with one another. With most of them having full time jobs, setting a common time through synchronous discussion was quite a challenge as well.

They also had difficulty in sharing with one another their virtual reports as they had to upload a large chunk of videos in YouTube. One student sent this email to his groupmates:

> "Classmates Kim and Remy, I continue to upload 17-minute interview w/ (the expert), [it was] 50% (5hours) already but [**suddenly the connection hanged**], that's why I have to repeat it using the 'advance Uploading of Video [in] YouTube'. "

(3) **Personal Differences and Inadequacies**
The group work was quite a challenge not just because of the time and distance but also because of personal differences. Finding the "right" group mates from 25 classmates from different places with similar interests and yet with intrinsic preferences had become a real challenge. It was within the dynamics of the group that the students felt the most challenged. Students in virtual learning communities are more pressured to collaborate and be part of the team (Kantor, 1998 cited in Greenberg, 1998). Any lack of interaction can cause problems when there is a dissenting opinion that cannot be picked up on with non-verbal cues, and is misperceived as a verbal attack. This type of miscommunication can be grounds for community problems as the class progresses. The students also experienced such predicaments within their groups. Adding to this is the changing of group composition, with some students dropping out and some changing interest. It was already almost half of the semester when they were able to finalize their group members.

Aside from personal differences, some students also perceived themselves to be inadequate in knowledge, creativity, and technology skills on how to come up with a virtual report. One student emailed her group mates this message:

> "Hi Iso. I viewed just now your intro and your entire report. Gosh, it's amazing! I feel so lucky to be part of this group. [You are all] high tech, I feel like a primitive ape. Hehe. Frankly, I feel honored to know you Iso. And Zoe, too!

Possibilities of Virtual Reporting

The experiences in virtual reporting drew out from the students the following realizations:

(1) **Learners as active participants of a learning community.**
According to Mason and Rennie (2010), "communication through the learning environment is a key feature of constructivist design, especially where the students are geographically isolated". Students are able to develop as members of their learning community, and create shared understandings through commenting on blogs, dialogue in discussion forums, and collaboration activities such as virtual reporting.

Time and geographical distance made communication in an online environment more challenging, but the students made it a point to actively exchange ideas and prepare for their group's virtual report. As one student puts it,

> "I appreciated our group's shared sense of pro-activeness. We always came prepared for our online group meetings. It was a seldom occasion that any of us would be late. This shared disciplined allowed us to make decisions faster and progress easier."

(2)   **Cultivating and sustaining connections needed to facilitate collaborative learning.**
In a sociocultural process, learners are regarded as distributed and multidimensional participants. This concept views that learning is effective when the learners are connected with communities and in a pattern of participating in communities (Mason and Rennie, 2010).

Despite the drawbacks of ICT, active learners find ways to communicate, experiment, and innovate to meet the learning outputs expected of them.

Collaboration among group members was done through constant e-mails, Yahoo messenger, and mobile phones which were all recorded and documented. They also encountered technological challenges but that did not prevent them to continue on with their work and complete their virtual reports. One student described this situation as follows:

> "…As I had the Introduction **I went beyond the YouTube time limit**… I just published a new movie to my MobileMe Gallery that I'd like to share with you… "

Overcoming the challenges allowed the students to think outside the box and become even more creative.

(3)   **Learning and co-creation of knowledge rest in diversity of opinions.**
Students learning together in a learning community provides them opportunities to extend and deepen their learning experience, share ideas and receive critical and constructive feedback (Paloff and Pratt, 2005). Through collaborative learning, the learning objectives and learning outcomes of virtual reporting were achieved. One student summed up her experience with this statement:

> "What occurred in the entire duration of our virtual reporting is really a different experience and learning for me. I never thought that it is possible for three individuals who are far from each other, seldom or no face to face meeting at all, have different religious beliefs and have other differences can produce a final report like what we finished."

YouTube as an Open Educational Resource (OER)

YouTube is one of the most popular social media sites visited by many people across the globe. Based on the data by Alexa (ALEXA.COM), a provider of free, global web metrics, YouTube is the top three site most visited globally and top two in the Philippines. More than 100 hours of video have been uploaded to YouTube every minute and around 70% of the YouTube traffic come from outside of the USA (YouTube, 2013).

YouTube has revolutionized the development and production of instructional materials. Teachers and students alike are now able to document, produce, and share their original video works at minimum cost. Online teachers and scholars are now taking advantage of video sharing sites as online repository of quality open educational resources.

According to Bird (2010), YouTube has many advantages as a repository of OER, namely: it's free; there is an abundance of film clips with good educational content. Video clips can be 'technologically' reused and the YouTube.edu has the potential to offer quality materials. All these contribute to the great potential of YouTube to be a repository of OER. However, Bird also cited the disadvantages of YouTube: video clips may not be of quality; and YouTube videos may have copyright infringements. For a long time YouTube does not offer licensing options for its users. All videos uploaded in YouTube are under the license agreement of the company. Although, many videos have been actually used and re-used, copyright issues were not really addressed.

As a response to this concern, YouTube launched its Creative Commons video library in 2011. Harmon (2012) reported that there are now four million Creative Commons-licensed videos on YouTube which can be imported into YouTube's online video editor and allow people to remix and adapt videos without complicated editing software. This makes it easier for anyone to build on the work of others. Cathy Casserly, CEO of Creative Commons (CC), noted that users can now borrow footages from other people's videos and insert the clips into their own videos since the license grants the user specific permissions to do so provided that credit is given to the original creator.

CONCLUSION

The Environmental Advocacy students who collaborated in the virtual reports experienced three major challenges: (1) time constraints and geographical distance; (2) communication and technical difficulties; and (3) personal differences and inadequacies. These challenges experienced by the students likewise ushered them into the realizations of three possibilities: (1) learners should be active participants of a learning community; (2) cultivating and sustaining connections is needed to facilitate collaborative learning; and (3) learning and co-creation of knowledge rest in diversity of opinions.

In distance learning, it is important for the teachers to design course activities that integrate communication, collaboration, interaction and participation (Lock 2007). According to Brindley and Walti (2009), literature shows a significant relationship between participation in collaborative experiences and deeper learning as well as the development of learning and teamwork skills. Virtual reporting as a course requirement allowed the active participation of students, which is essential for them to have a meaningful learning experience. Through the use of ICTs, they were able to communicate, exchange ideas, and apply their creativity to co-create a virtual report as their learning output. Moreover, the students' learning space was opened up to a wider spectrum of knowledge sharing, allowing them to engage and take control of their learning, which transcends geographical distance and goes beyond the virtual classroom.

The collaborative nature of the virtual reporting through the use of YouTube allowed the students to work as a team despite their geographical distance and provided them with the appropriate venue to showcase their creativity and love for nature. The move by the

students to publish their video outputs publicly in YouTube shows great prospects for this tool to become an OER repository. This study has shown that virtual reporting is an innovative learning initiative as well as a form of assessment that shows positive prospects as a medium for environmental advocacy and cultural awareness. The virtual reporting was designed to bring out not just the students' collaborative nature but their creativity as well.

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