

# Implementing the First Cross-border Professional **Development Online Course through International** E-mentoring: Reflections and Perspectives

Buddhini Gayathri Jayatilleke 🗓, Geetha Udayanganie Kulasekara 🛡 &

Malinda Bandara Kumarasinha 🗓 The Open University of Sri Lanka (Sri Lanka) bgjay@ou.ac.lk, dgkul@ou.ac.lk & mckum@ou.ac.lk

> Charlotte Nirmalani Gunawardena <a>P</a> University of New Mexico (USA) lani@unm.edu

#### **Abstract**

This research paper discusses the accomplishments, issues, and challenges experienced by Open University of Sri Lanka (OUSL) academics when offering the first cross-border professional development online course to train online tutors and mentors. The course was delivered exclusively online and facilitated by OUSL academics and e-mentors from the USA. The course was comprised of 30 participants: 9 from Pakistan, 10 from Mauritius and 11 from Sri Lanka. This qualitative study is based on reflections of both faculty and participants. Data were collected using reflections and informal anecdotal records of the three OUSL academics and self-reflection instruments (pre, mid and final) administered to participants, and reflective journal entries made by participants. Participants' views were triangulated with the reflections of the OUSL academics to validate the results. While there were many accomplishments in the design and delivery of the course, the findings revealed that there were many challenges in implementing the course: pedagogical, organizational and technological aspects in particular. The paper provides recommendations to address such challenges when offering cross-border online courses in the future.

Keywords: Reflective practice; Professional development; Cross-border; e-mentoring, Instructional design; Online learning

#### Introduction

Rapid developments in Information and Communication Technology (ICT) provide greater access and flexibility to engage in education irrespective of physical location. Higher education institutions around the world have capitalized on this by securing eminent professionals to design and deliver online courses across countries and cultures. However, this context also creates the need for professional development of academics who develop and offer online courses locally, regionally and internationally.

The Open University of Sri Lanka (OUSL) launched its first cross-border professional development online course in 2014 for the participants of three countries: Sri Lanka, Pakistan and Mauritius. This was a novel initiative undertaken by the OUSL academics to offer a capacity building course to develop professional competency in tutoring online courses among academics across three countries. It was an innovative cross-border online course as it:

- used a creative instructional design model Wisdom Communities (WisCom) developed by Gunawardena, Ortegano-Layne, Carabajal, Frechette, Lindemann and Jennings (2006) focusing on community building, knowledge innovation, mentoring, and learner support
- offered exclusively online for a period of 6 weeks for participants across three countries

Reception date: 30 October 2016 • Acceptance date: 9 March 2017 DOI: https://doi.org/10.5944/openpraxis.9.1.461  used international e-mentors from USA to facilitate the inquiry-based collaborative learning process.

This paper reports on the experiences of both OUSL academics and participants with respect to accomplishments, issues, and challenges of delivering the first cross-border exclusively online course by the OUSL. Findings will provide insights and strategies for academics who would like to offer cross-border courses through international e-mentoring.

# **Online Design Framework**

During the last decade, many educators have attempted to build learning communities in various online contexts based on the fundamental principle that a community-based design will benefit groups of individuals coming together to develop relationships, construct knowledge and engage in meaningful practice (Stuckey & Barab, 2007) and shown the benefits to be derived from online learning communities (Roberts & Lund, 2007). Responding to the need to develop designs to foster learning in online communities, Garrison, Anderson and Archer (1999) developed the Community of Inquiry model by defining three kinds of presence in a learning environment: social, cognitive, and teaching which has been used to both design and evaluate online collaborative learning. Another approach was WisCom (Wisdom Communities) developed by Gunawardena et al. (2006) to build online wisdom communities. Based on socio-constructivist and socio-cultural learning philosophies (Vygotsky, 1978) and distance education principles, the WisCom model was designed to facilitate transformational learning by fostering the development of a wisdom community. knowledge innovation, mentoring, and learner support in an online learning environment. It also promotes a "Cycle of Inquiry" module design, based on Bransford, Vye, Bateman, Brophy and Roselli (2004), work on how people learn. Extending beyond current instructional design practice, WisCom provided both a "new model for teaching" that builds upon the inherent capacity of networked communication to support the growth and intellectual development of communities of practice (Lave, 1991; Wenger, 1998) and a "new model of learning" where learners engage in the process of scholarly inquiry that supports individual and collective learning. WisCom was revised (Frechette, Layne & Gunawardena, 2014) to accommodate cultural inclusivity in online community design. Figure 1 illustrates the WisCom model used to design the professional development learning experience in this study.

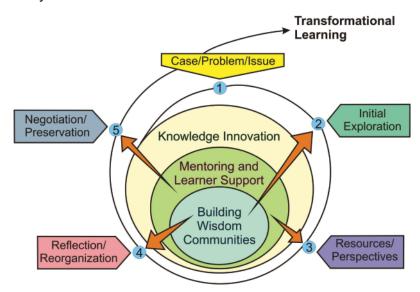


Figure 1: WisCom model with "Cycle of Inquiry" module design (Adapted with permission from Gunawardena et al., 2006)

# The Study and its Context

Having identified the importance of e-learning as a solution for limited higher education opportunities in the country, a series of professional development workshops in online tutoring and mentoring were conducted under the Distance Education Modernization Project (DEMP) of the Ministry of Higher Education in Sri Lanka. The aim of these workshops was to develop the capacity of faculty and other professionals who would be responsible for designing and delivering online courses through the National Online Distance Education Service (NODES). Initially, these workshops were conducted in a blended format with four face-to-face days. These face-to-face sessions were spread across six weeks while the predominant portion of the activities were conducted online. The purpose of having these periodic face-to-face sessions was to take the participants gradually through a teacher centred to a student centred environment enabling the participants to undergo a paradigm shift through a smooth transition from face-to-face to online.

The OUSL purchased this blended programme from the Ministry of Higher Education, updated it by the academics of the Centre for Educational Technology and Media (CETMe) of the OUSL, and offered it as an exclusively online programme to the participants in this study.

### Transformation of blended course to an exclusively online course

The original training course was designed based on the Wisdom Communities (WisCom) Instructional Design model (Gunawardena et al., 2006) and the design was retained in this exclusively online course. The learning modules were designed using the cycle of inquiry, starting with a purpose statement and goals, followed by a message from the moderators providing an advanced organizer, leading to a learning challenge for the module which directs learners to learning resources that need to be searched and reviewed before participation in collaborative learning activities (asynchronous/synchronous). The collaborative learning activities provided participants the opportunity to reflect and reorganize their thoughts by negotiating with peers and e-mentors to develop a solution to the Module's learning outcomes. Figure 2 is a screen capture of a sample module to show the WisCom instructional design.



Figure 2: Screen capture of a sample module

Since all the modules were relevant and appropriate, the contents of all the modules were kept unchanged. However, some of the web resources were replaced due to the unavailability of the original resources. Additional learning resources such as screen casts for navigation, user log-in etc., study guides and guidelines for chat sessions were prepared to replace the four face-to-face sessions in the original training course, fostering independent learning. Even though the original blended course was transformed to an exclusively online course, the duration of the training course was kept at six weeks.

This course comprised of 14 modules using MOODLE (Table 1) as the Virtual Learning Environment (VLE) and adopted the WisCom instructional design. The learning experience starts with a learning challenge after allowing the learners to go through the purpose and the message by the facilitator and lead to resources and then to learning activities. Reflective journals were included in each module and were considered as part of the evaluation. Specific guidelines were provided to write reflective journals. In addition, variety of e-activities have been incorporated in the course such as asynchronous/synchronous discussions, quizzes, peer evaluations, online simulations to expose the learners to show the availability of different strategies/techniques and how to use them appropriately and, to motivate them to engage in the course. The final evaluation was based on three tasks in each module, specific individual/group assignments; participation in e-activities; and reflective journal entries.

The course was facilitated by three academic members of the OUSL in collaboration with four e-mentors from the USA. While the OUSL academic members facilitated the overall online learning experience, each international e-mentor was assigned one small group and was expected to promote inquiry-based learning through collaboration to achieve group goals.

Table 1: Overview of the modules of the online course

Module No.	Title	e-activities	Assignment
	Pre-course activities	Forum Pre course self-reflection instrument Reflective Journal	Individual
1	Paradigm shift to online tutoring/ facilitating/moderating	Forum Reflective Journal	-
2	The role of an online tutor mentor and necessary skills and qualifications	Chat Forum Quiz Reflective Journal	-
3	Building an online learning community and creating the social environment	Reflective Journal	Individual
4	Facilitating Interaction	Reflective Journal	Individual – 3
5	Collaborative learning and team building online	Reflective Journal	Individual
6	Facilitating knowledge construction	Forum Reflective Journal	
7	e-Mentoring	Forum WIKI Pre and Post questionnaire on cross cultural e-mentoring Reflective Journal Mid course self-reflection instrument	Group
8	Providing Learner Support	Reflective Journal	Individual
9	Orienting students to online learning	Quiz Reflective Journal	

Module No.	Title	e-activities	Assignment
10	Assessing Learning & Providing Feedback	Forum Reflective Journal	individual
11	Conducting Practical Course Components at a Distance and Virtual Labs	Online simulation Forum Reflective Journal	-
12	Cultural Issues Related to Learning and Communication	Forum Quiz Reflective Journal	Individual and Group
13	Ethics of Online Learning	Forum Reflective Journal	
14	Monitoring and Evaluating Tutors/ Mentors	Forum Reflective Journal Final course self-reflection instrument	

The following research questions guided this study:

- What were the major achievements of the cross-border online course from the reflections and perspectives of participants and OUSL academics?
- What were the issues faced by participants and OUSL academics when engaging in a crossborder online course?
- What were the major challenges faced by OUSL academics when implementing the cross-border online course with international e-mentoring?

# Methodology

### Research design and methods

We employed a qualitative research design as our primary intent was to determine participant perspectives on their engagement in this cross-border online learning experience. As researchers and designers our predominant philosophical approach was pragmatic (Creswell, 2014) as we wanted to explore the results of our online design on the learning process. As Creswell has observed, pragmatists look at applications—what works, and solutions to problems and employ many approaches for collecting and analyzing data rather than subscribing to only one way. As pragmatists, we focused on reflective practice, both "reflection-on-action" and "reflection-in-action" using reflections from participants and OUSL academics who led the learning experience. Reflective practice, reflexivity and first person inquiry are widely used in research in order to understand the process of "learning through" and "from experience" towards gaining new insights of self and/or practice (Boyd & Fales, 1983; Jarvis, 1992). The purpose is to critically examine current practice to gain new understanding to improve future practice. The concept of 'reflective practice' was driven by Dewey's ideas and was later influenced by the work of Schon's (1983) 'The reflective practitioner: how professionals think in action'. His main concern was to facilitate the development of reflective practitioners through two types of reflections: "reflection-on-action" (after-the-event thinking) and "reflection-in-action" (thinking while doing) so that professionals could become aware of their implicit knowledge, learn from their experience and implement the necessary changes into current practice.

Data were collected using three methods at different stages of the 6-week period. These methods included:

- (1) The three OUSL academics' reflections and informal anecdotal records on participants' online behaviours. They critically evaluated their own learning experiences and their own context and reflected on the challenges faced by them in administering the first cross-border course.
- (2) Reflections of participants from three different countries; Sri Lanka, Pakistan and Mauritius gathered through self-reflection instruments administered at the beginning, middle, and end of the course, and
- (3) Personal self-reflections in Reflective Journals that captured participants' experience engaging in a cross-border online course. Participants views were triangulated with the reflections of the OUSL academics to validate the results. Content analysis was used to identify categories and themes (Patton, 1990). Content analysis of the data from both OUSL academics and participants indicated the emergence of several similar categories and themes.

#### **Results and Discussion**

# **Profile of respondents**

There were 30 professionals enrolled in the cross-border online professional development course; 9 from Pakistan, 10 from Mauritius and 11 from Sri Lanka. They were mostly academics from national universities in their respective countries. In this sample 16 were females (53%). Age ranged between 25 years to 60 years, and the majority were in the 25–29 years age group (30%), followed by the 30–35 age group (22%).

15 responded to the mid course self-reflection instruments, and 13 responded to the final course self-reflection instruments. Thus, the response rate for the mid course self-reflection instrument was 50% and 43% for the final course self-reflection instrument.

Only 10 were successful in completing this course; one was certified as a master trainer and the remaining 9 were certified as online tutors. Out of these 10 successful completers, eight were females including the master trainer.

Three OUSL academics were responsible for updating the course design and delivery of the course. They also functioned as local e-mentors. Out of the three OUSL academics; two were female and one was male. Three graduate students (two female and one male) from a U.S. university functioned as e-mentors to facilitate group discussions and mentor the groups to achieve group goals. One faculty member from the U.S. who designed and developed the initial course participated as a guest to facilitate specific online discussions.

When reflections of participants and OUSL academics were analysed using an interpretive and iterative approach (Ely, Vinz, Downing & Anzul, 1997), three main categories were identified; pedagogical learning experiences in the course and associated issues, as well as organizational and technical issues when implementing the course. These are discussed under the following three sections.

# What were the major achievements of the cross-border online course from the reflections and perspectives of participants and OUSL academics?

This section reports on the reflections and perceptions of participants with respect to their learning experiences in various aspects of this course, starting with the pedagogical aspects of this online course. Their views were triangulated with the reflections of OUSL academics.

All participants who responded to the final course self-reflection instrument indicated that they achieved the learning outcomes of this training course (46% strongly agreed). Further analysis revealed that the course syllabus was very clear to get the overall picture of the course (100%), sufficient examples were integrated into the course to illustrate concepts or issues (100%), learning experiences were presented in a well structured format (100%), learning activities were useful in comprehending the course content (100%) and instructions were very clear in all assignments (100%). Almost all the participants referred to the relevant learning resources and discussed them in the forum posts (92%) implying that the learning resources were appropriate and useful for knowledge building. All participants were very satisfied with the instructional design of the course.

Regarding collaborative learning activities in the course, all participants expressed satisfaction with the knowledge construction process through collaborative learning and felt that the local e-mentor (OUSL academic) encouraged groups to work collaboratively to achieve the group goal (100%). Participants acknowledged their own contributions to the group task (100%), noted their ability to manage discussions among a group of diverse learners (100%), encouraged the group to value other points of view (100%) and learned how to conduct an interactive learning experience online (100%). However, some participants commented that they would have liked to receive more timely support from international e-mentors. This may have been due to the delayed response they received due to the time difference, or a lack of response.

**Table 2: Course Achievements and Pedagogical Aspects** 

Theme	Supportive quotations
Overall satisfaction (100%)	I would say all. The content helped me to expand my knowledge of what online learning entails, the role of mentors and what we need to support learners in an online environment. The challenges and obstacles faced, helped me to understand things from the student's perspective, as well as gain insight and understanding on how to handle issues and problems as a tutor in the online environment (Mid course self-reflection, Sri Lankan Female 1).
	This is probably the last week of the course and time to say goodbye to each other. I am not writing "Goodbye" in its true sense, this is just coming out of scheduled online activities, otherwise it is actually start of friendship of a new inter country Community. We will cherish the memories of this period for long time and will remain in touch with each other In other words it is beginning of the new "Online" Culture (Last week entries of the Reflective Journal – Pakistani Female 1).
Instructional design of the course (100%)	I like the use of three orientation modes of each module i.e. Purpose of the course, tutor's message and the learning challenge. Instead of mixing up all three in one document it is a nice way of explaining expected outcomes and experiences designed in each module (Mid course self-reflection – Pakistani Female 2).

All participants felt that the online comments received by peers helped them to learn (100%) and said they experienced a sense of togetherness with them (92%). These results indicate that the instructional design based on the WisCom model, along with the mentoring and facilitation by OUSL academics and e-mentors created a learning community among a diverse group of participants. These participants were also satisfied with their learning experience in this cross-border course. Table 2 shows reflective comments that support this view.

# What were the issues faced by participants and OUSL academics when engaging in a cross-border online course?

Table 3 provides insight into the issues faced by participants and OUSL academics which are discussed below.

One of the major issues mentioned by participants was lack of participation and peer support during group tasks which made it difficult to achieve group goals. Reflections of the OUSL academics also revealed that they felt the difficulty participants had in engaging in e-activities as most of them were not meeting the deadlines as planned. Since this was one of the first online collaborative learning experiences for participants, many had difficulty understanding the requirements of group collaboration which should be addressed in an orientation session prior to the course in future offerings. Perhaps the international e-mentors should also be aware of this difficulty and pay special attention to facilitating group collaboration.

Another associated issue was workload. Only 54% stated that they kept up with the workload and most of the reflections clearly showed the difficulty that the participants faced during this course with respect to the workload (Table 3). Hence, in most occasions the academics had to rearrange some of the original modules; moving modules with demanding tasks with the modules with less demanding tasks to balance the workload while delivering the course. However, still most of the participants did not participate in a timely manner and they had to reschedule activities regularly. Rearranging modules affected both the academics and the participants especially the active participants who had already completed their activities and were eagerly waiting to start the next module. Therefore, the actual time period to complete the course was seven weeks even though the expected time period was six weeks. Fleck (2012) reported that, in many instances, the workload dimension and its distribution over the various activities is often neglected by the designers/ developers.

Though the workload was an issue most of the participants found the course interesting. One participant suggested ways of improving the course.

I feel that the workload per week could be decreased, since most of the participants are engaged fultime in other academic activities. The content of the course is great, since all of the information presented is very pertinent to the training of mentors and facilitators. So rather than deleting any modules, I suggest that the number of modules given per week should be reduced to about 2 per week. This will give opportunity for participants to engage sufficiently with all the readings and the assignments for each module. Even though this would mean that the number of weeks for the course will be extended, I think this would produce better quality work (Final course self-reflection – Sri Lankan Female 1).

Findings also revealed that many participants were not comfortable in engaging multiple tasks at one time and preferred a linear structure. Research also showed that eastern learners find it difficult to engage in non-linear online courses (Ku & Lohr, 2003) and may experience "temporal culture shock" when they encounter online learning for the first time (Leeds, 2014) and prefer "monochromic" approach (doing one thing at a time) than "polychromic" approach (doing more than one thing at a time or in parallel).

Some participants noted the need for a higher sense of social presence (Gunawardena, Flor, Gomez & Sanchez, 2016) or connection to other participants and the OUSL academics by the exchange of photographs. One of the design techniques adopted was to share only images that represented the participants rather than photographs as in certain cultures, people do not like to share photographs with people they do not know as an image represents their identity. Also, sharing photographs may indicate social status differences, which might be a challenge for equalizing the online learning environment in high power distance cultures where power is unequally distributed.

Directions for participant introductions requested that participants share an image that represented them and say why it represented them rather than post a photograph. Participant requests for photographs indicate that for some participants photographs can create a closer sense of the other and should be considered as an option in future online learning designs (see Table 3).

One other major concern noted by OUSL academics and some of the participants was that certain participants were not very concerned about plagiarism and copyright laws and were directly copying the content from the Internet as seen in the quote in Table 3. This may be because participants did not know copyright regulations or were unaware of the gravity of the issue, or, did not have adequate time to rephrase the content.

Many of the issues discussed above point to the need for a well designed orientation to the course prior to offering the online course. The orientation needs to focus on how online learning happens, how social presence and community can be created, the dynamics of online collaboration and teamwork, how to manage information and workload, how to navigate the course, and how to abide by copyright laws. This orientation would be in addition to the current pre-course activities that help participants to navigate the course.

Table 3: Issues Faced by Participants and OUSL Academics

Theme	Supportive quotations
Lack of Peer support for group tasks	It is not easy to produce a group work in online as some students pay less attention to the target and do what they want even under good online background. Some are not collaborative and aim mostly their individual targets. Some are difficult to negotiate (Final course self-reflection – Sri Lankan Female 2).
	A bit frustrated again since the only group member who is at least a little responsive, just directly wrote to the moderator and then only just responded to what was said by the moderator, ignoring that this is a group activity and we all need to be involved (Journal Reflections week 3 – Sri Lankan female 1)
	Our e-mentoring sessions were not very useful in getting a true sense of online collaboration – (Final course self-reflection – Sri Lankan Male 1).
Workload	I think the workload is high. It was difficult to manage 3 modules in one week with other commitments in work place and home (Final course self-reflection – Sri Lankan Female 2).
	Online learning means a lot of commitment and planning. I didn't realize how time consuming it can be (Mid course self-reflection – Mauritius Female 1).
Difficulty in navigating multi structures	Many activities going simultaneously made me feel uneasy (Mid course self-reflection, Pakistani Female 2)
Social Presence	I would like to see photographs of OUSLEL team especially X who was constantly with us throughout the course. Seeing and believing is different than just believing without seeing (Final course self-reflection – Pakistani Female 1).
Less sensitive to Plagiarism and copyright laws	Only a handful of group members brought original thinking to the activities. Most were content with copying something directly from the web. Rather than collaborating, it was a task of gluing together individual write-ups (or content pilfered from the web) – (Final course self-reflection – Sri Lankan Male 1).

# What were the major challenges faced by OUSL academics when implementing the cross-border online course with international e-mentoring?

The main challenges faced by the OUSL academics were related to organisational and technical issues. The next section will first discuss the organisational issues followed by technical issues.

Administration and logistic issues related to prior registration—Since this course was an online course all the promotional activities were carried out using the web and email. The interested applicants had to register online using a form and payments using the online payment gate way, This facility was available only to the local applicants. However, the online payment gate way was not functioning as expected and it was brought to our notice by a potential participant. Alternative arrangements had to be taken immediately by the lead OUSL academic with constantly liaising with relevant divisions and personnel. As this was the first time that the OUSL embarked on offering cross-border online courses, the mechanisms for online registration, payments and support mechanisms presented challenges. These procedures need to be established, streamlined and automated.

Constant communication had to be made with potential participants especially with country coordinators of international participants, clarifying their queries regarding course enrollment. All these administrative functions were carried out by the lead OUSL academic as there were no established mechanisms to liaise with international participants including their registration and payments, unlike in standard degree programmes at the OUSL. Therefore, the lead OUSL academic had to carry out all these administrative functions in addition to modifying the existing course, and other regular job duties. Lessons learned will provide a foundation for streamlining the process when cross-border programs are offered in the future.

Administration and logistic issues during the course—Although nominations were received on time and participants were given clear instructions to register before the said date, some international participants registered at different time intervals during the first week. Therefore, the deadlines had to be extended in order to accommodate late registrants to engage in pre-course activities and become familiar with the online course. Extending deadlines affected the smooth flow of the course as the course was structured to be offered on a weekly basis. Several local participants were frustrated by this as they had already completed their week's activities. This was reflected in their final course self reflection and also in their reflective journal quoted below.

The running of the course was chaotic. This was due to the reason that new entrants were admitted to the course even after its commencement. This lead to the dissimilar deadlines and confused some participants (Final course self-reflection – Sri Lankan Male 1).

In addition, participants had to be regularly reminded to participate in online activities as most of the activities were collaborative in nature.

I had to take immediate measures to make the participants engage in online activities and to encourage them to come online. I used announcements, messaging facility in the moodle, email (personal, official and especially created email for this course), individual and group mails and most of the time I was not successful. So I didn't have any other alternative than extending the deadlines (OUSL academic 1).

Liaising with cross cultural e-mentors was carried out through email messages indicating when to participate in the discussions. They were involved only in the e-mentoring module to demonstrate e-mentoring which was scheduled for weeks 3,4 and 5. Owing to the time difference between Sri Lanka and USA, communication was a challenge; and sometimes responses from the e-mentors were delayed. Thus, the OUSL academics had to step in and send emails to e-mentors requesting them to participate in the forum discussions. The same procedure was used with the international participants from Pakistan and Mauritius.

The OUSL academics had to make timely decisions with regard to technical, administrative and organizational issues while carrying out academic work related to this course. It was a very demanding

and challenging exercise for them. Since this was the first cross-border course offered by the OUSL, many initiatives had to be taken by the organization with respect to operational requirements; technology infrastructure in particular. Some of the issues pertaining to the organization were brought to the notice of the relevant authorities, without much success and academics felt they should have received more support and encouragement from the institution. As stated by Fleck (2012, p. 406) "Technology mediated systems are more "brittle" than human-mediated systems" and requires a range of protocols and processes. Ettinger, Holton and Blass, (2005), reported organizational support as one of the critical factors in the success of e-learning. Taylor (1998), pointed out that the 'lone rangers' of many universities who are individual practitioners developing innovative online teaching and learning products remain at the level of specific course offerings, due to a lack of institutional support and a failure to institutionalise inventive practice. Even Hough, McNaught and Schaik (1998) stressed that people within these organizational structures systematically resist attempts to alter their routines and their control over specific tasks.

Technical issues encountered at the development phase: Reflections by the OUSL academics—the transformation of the original blended course from a 'course backup' file to an exclusively online course was a daunting task. It had to be reloaded to the NODES server; re-linking and re-checking the links, creating new resources for the unavailability of the original resources, creating new e-activities for replacing face-to-face activities while adapting the course to an exclusively online version. The extreme slowness in accessing the course via a server housed in a national site with limited controls for the OUSL web administrator caused many challenges and frustrations for the OUSL academics. Hence, the time taken to transfer and modify the content took more time than anticipated.

The situation was exacerbated with the breakdown of the NODES server just one day prior to the commencement of this online course. Fortunately, one of the OUSL academic members had the access rights to the original course when it was originally offered by NODES. Hence, a prompt decision was taken after consulting the university authorities to offer this course using the OUSL server which was dedicated only to online course development and in-house training. However, direct reloading of the course backup from the NODES server to the OUSL server was not technically feasible due to the incompatibility of the two installed versions of the Learning Management System (LMS). Therefore, OUSL academics had to copy the entire content of all the modules and readjust all the links to the OUSL server while undergoing several interruptions. Copying of the entire course was made possible at the last minute as the sole responsibility of administering the local server was managed by the one of the OUSL academics in the CETMe. Hence the course team; three academics and one technical assistant were given the course creation rights immediately. Confronting all these technical challenges, OUSL team managed to complete the 'Pre course activities' and the first module of the course which were assigned for the first week, and launched the course on time. One of the factors that contributed for the launching of the course on time was that the three academic staff members were very conversant with the LMS and they had the necessary technical skills so that they managed to find alternative methods and strategies to overcome technical issues. Many studies have reported that the successful offering of online courses depend on the technical role of the online teachers (Anderson, Rourke, Garrison & Archer, 2001; Aydin 2005; Berge, 1995; Varvel, 2007). This study also showed the importance of the technical role of online teachers.

One of the OUSL academics members related her experience as follows:

Accessing the local server was more flexible than NODES as lesser number of users were accessing the site. User profiles for students were created and the login credentials were emailed on time. Team spirit was at a maximum in getting back the course. Everybody was supportive, flexible and enthusiastic in offering the first international online course, while reminding of the famous English expression 'when the going gets tough, the tough get going'- OUSL academic 2.

Technical issues encountered at the delivery phase: Reflections both by the OUSL academics and participants—Connectivity was a source of concern for both the participants and the academics.

oh dear! just completed an assignment and saved it and lost it – travails of online work. Can be extremely frustrating; and I can imagine how students may feel . . . discouraged.

I think online learning is actually very challenging especially if you are not technically savvy. I think the transition from traditional forms of learning to online learning will take time. . .(Reflective Journal Week 4 – Sri Lankan Female 4)

Andersson (2008) also found connectivity or the access issue a major challenge for e-learning in Sri Lanka, in a case study carried out on the eBIT course in Sri Lanka. Online access seemed to be a major challenge for both international and local participants. This issue surfaced during a chat session when participants from Pakistan and Mauritius reported frequent interruptions due to power failure, poor band width and/or internet connections. The following quotation from a participant in Pakistan clearly illustrates this difficulty.

The only thing which frustrated me was discontinuation of power supply when I was at the verge of submitted anything created with so much effort. This probably is our national problem and nothing to do with this course. It can be a food for thought for the facilitators to develop some strategy for such issues in online teaching. (Mid course self-reflection – Pakistani Female 1).

Gulati (2008) also reported similar challenges faced by developing countries when attempting to make learning more accessible to a learner through using Internet technologies. Expanding online education in developing countries still is a source of concern and not fully successful, possibly due to the governments' and institutions' failure to recognize and address the access issues pertaining to online learning. However, it has a tremendous potential to meet the educational needs of the masses.

## **Conclusion and implications**

Reflections of both the participants and the academics showed the challenges faced by both parties when engaging in a cross-border course delivery and how it affected participant satisfaction. The main challenges were technical issues related to access to technology, connectivity and regular power failure which are common issues experienced across these three developing countries. Limited peer engagement, delayed responses from the international e-mentors, plagiarism and workload were the main pedagogical issues observed in this online course. Lack of support structures for online learning in the institution were the main hindrances faced by the OUSL academics in delivering this course. Therefore, establishing policies, formulating procedures and guidelines, providing adequate support structures to 'lone learners' and freeing them from administrative and technical tasks are essential in order to deliver cross-border courses successfully, and to sustain engagement in innovative teaching practices by the faculty.

We offer the following recommendations based on our findings implementing cross-border online courses.

- plan activities well ahead of time and see whether you have adequate organisational support (human resources, both administration and technical professionals, technological infrastructure and facilities etc., established mechanisms) from the management to implement cross-border online courses
- plan alternative strategies as safety measures as cost, dependability and speed of access to the Internet, and even access to electricity is less than desirable in many countries
- the course based on the WisCom design model was fully accepted across three cultures implying that learners enjoyed interacting with each other and learning from each other as part of a learning community. All learners in this study prefer to have a structured format,

clear instructions on navigation and e-activities, problems posed as a learning challenge, and fora for knowledge construction through negotiations with peers and tutors so that they build learning communities and gradually develop their own wisdom and potential. However, workload was an issue and needs to be addressed.

- provide a linear structure with one activity (monochromic) at a time than a multi structure with multiple tasks (polychromic)
- conduct a pilot run with a group of learners before launching the course to determine the workload
- allow adequate time to complete activities and a grace period before starting a new module to allow all the participants to complete the entire module
- engage in briefing sessions with international e-mentors to identify gaps so that they can "build bridges" (Rogers et al, 2007) to facilitate cultural differences
- provide guidelines on plagiarism and copyright
- conduct a comprehensive orientation program prior to the course to orient participants to online learning

In summary, the recommendations raised in this study provide valuable insights that can be used to assist distance educators and policy makers when delivering similar cross-border online courses in the future. This study was based on a small sample of participants from three Asian countries. Therefore results maybe trustworthy only in similar contexts.

# **Acknowledgements**

We are grateful to the local and international participants, international e-mentors and Mr M B Vaidyashekhare for designing graphics.

## References

- Andersson, A. (2008). Seven major challenges for e-learning in developing countries: Case study eBIT, Sri Lanka. *International Journal of Education and Development using ICT (IJEDICT), 4*(3), 45–62. Retrieved from http://ijedict.dec.uwi.edu/viewarticle.php?id=472&layout=html
- Anderson, T., Rourke, L., Garrison, D. & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, *5*(2), 1–7.
- Aydin, C. H. (2005). Turkish mentors' perception of roles, competencies and resources for online learning. *Turkish Online Journal of Distance Education—TOJDE*, *6*(3), 58–80. Retrieved from <a href="http://tojde.anadolu.edu.tr/tojde19/index.htm">http://tojde.anadolu.edu.tr/tojde19/index.htm</a>
- Berge, Z. (1995). The role of the instructor /facilitator. Educational Technology, 35(1), 22–30.
- Boyd, D. & Fales, A. (1983). Reflective learning: key to learning from experience. *Journal of Humanistic Psychology*, *23*(2), 99–117.
- Branford, J., Vye, N., Bateman, H., Brophy, S. & Roselli, B. (2004). Vanderbilt's AMIGO project: Knowledge of how people learn enters cyberspace. In T. M. Duffy & J. R. Kirkley (Eds.). *Learner-centered theory and practice in distance education: Cases from higher education* (pp. 209–234). Mahwah, NJ: Lawrence Erlbaum Associates.
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). Los Angeles: Sage.
- Ely, M., Vinz, R., Downing, M. & Anzul, M. (1997). *On writing Qualitative Research: Living by words.*London: Falmer Press.
- Ettinger, A., Holton, V. & Blass, E. (2005). E-learner experiences: learning from the pioneers. *Industrial and Commercial Training*, 37(6), 286–290. https://doi.org/10.1108/00197850510617550

- Fleck, J. (2012). Blended learning and learning communities: opportunities and challenges. *Journal of Management Development*, *31*(4), 398–411. http://dx.doi.org/10.1108/02621711211219059
- Frechette, C., Layne, L. C. & Gunawardena, C. N. (2014). Accounting for culture in Instructional Design. In I. Jung & C. N. Gunawardena C. N. (Eds.). *Culture and Online Learning: Global Perspectives and Research* (pp. 54–66). Sterling, VA: Stylus.
- Garrison, D. R., Anderson, T. & Archer, W. (1999). Critical inquiry in a text-based environment: computer conferencing in higher education. *The Internet and Higher Education*, 2(2–3), 87–105. http://dx.doi.org/10.1016/S1096-7516(00)00016-6
- Gulati, S. (2008). Technology-Enhanced Learning in Developing Nations: A review. *The International Review of Research in Open and Distributed Learning (IRRODL)*, 9(1). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/477/1012
- Gunawardena, C. N., Flor, N. V., Gomez, D., & Sanchez, D. (2016). Analyzing social construction of knowledge Online by Employing Interaction Analysis, Learning Analytics, and Social Network Analysis. *The Quarterly Review of Distance Education*, *17*(3), 35–60.
- Gunawardena, C. N., Ortegano-Layne, L., Carabajal, K., Frechette, C., Lindemann, K. & Jennings, B. (2006). New Model, New Strategies: Instructional design for building online wisdom communities. *Distance Education*, *27*(2), 217–232.
- Hough, G., McNaught, C. & Van Schaik, L. (1998). Developing a faculty plan for flexible delivery for the next five years and how to get there. In Corderoy, R. M. (ed). *FlexibilITy: The Next Wave? Proceedings of ASCILITE'98*, University of Wollongong (pp. 339–346).
- Jarvis, P. (1992). Reflective practice and nursing. Nurse Education Today, 12(3), 174-181.
- Ku, H. & Lohr, L. L. (2003). A case study of Chinese students' attitude toward their first online learning experience. *Education Technology Research and Development*, *51*(3), 94–102.
- Lave, J. (1991). Situating learning in communities of practice. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.). *Perspectives on socially shared cognition* (pp. 63–82). Washington, D.C.: American Psychological Association.
- Leeds, B. (2014). Temporal experiences of e-learning by distance learners. Education+Training, 56(2/3), 179–189. http://dx.doi.org/10.1108/ET-11-2012-0114
- Patton, Q. M., (1990). *Qualitative Evaluation and Research Methods* (2<sup>nd</sup> Ed.). Newsbury Park, London: Sage Publications Inc.
- Roberts, E., & Lund, J. (2007). Exploring eLearning community in a global postgraduate programme. In R. Andrews, & C. Haythornwaite (eds). *The Sage Handbook of eLearning Research* (pp. 487–503). London: Sage.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Stuckey, B. & Barab, S. (2007). New conceptions for community design. In R. Andrews & H. Caroline (Eds.). *The SAGE handbook of e-learning research* (pp. 439–465). London: Sage Publications Ltd.
- Taylor, P. (1998). Institutional change in uncertain times: lone ranging is not enough. *Studies in Higher Education*, 23(3), 269–278.
- Varvel, V. E. (2007, Spring). Master online teacher competencies. *Online Journal of Distance Learning Administration*, *10*(1). Retrieved from http://www.westga.edu/~distance/ojdla/spring101/varvel 101.htm
- Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes.* In M. Cole, V. John-Shteiner, S. Scribner & Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* New York: Cambridge University Press.

Papers are licensed under a Creative Commons Attribution 4.0 International License