# COURSE FOR EDUCATORS: DESIGNING AN INSTRUCTIONAL EVENT CENTRE FOR INNOVATIVE EDUCATIONAL AND COMMUNICATION TECHNOLOGIES (CIECT) UNIVERSITY OF THE WESTERN CAPE

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#### **Abstract**

The Centre for Innovative Educational and Communication Technologies (CIECT) at the University of the Western Cape designed and developed a blended learning course for teacher-educators, namely: Designing an Instructional Event. The course is registered with the South African Quality Authority (SAQA) at a National Qualification Framework (NQF), Level 6. Research indicates that, online courses (popularly known as eLearning) can enhance face-to-face interaction. However, there is need for the selection of the relevant eLearning Tools (eTools) and the application of sound ePedagogical Practices. This course aimed at demonstrating how to make use of various eTools to supplement the traditional face-to-face approaches. By the end of the course, the teacher-educators were expected to: (i) explain the current trends in eLearning and how they affect the teaching practice; (ii) understand the educational philosophies that could inform the online teaching/learning/instructional practices; (iii) design an online teaching/instructional event ;(iv) understand the need for good structuring of course content for blended learning; (v) select eTools for use in the instructional event according to their pedagogical values and underpinning; and (vi) understand the roles of an online facilitator and how they affect the learning process.

In addition, the 36 teacher-educators across Grades (R to 12) and various disciplines were assessed in relation to the provision of assessment criterion. The facilitators created an awareness of assessment processes and the submission of formal tasks during the face-to-face and online phases. As a follow-up, the participants were expected to plan, design and develop a small online teaching event; and actively participate in various online discussion topics. The researchers aimed to determine the effective use of the presented eTools for application by teachers in their specific disciplines – to enhance teaching-and-learning practices; as well as the effective application of eAssessment tools. This paper will highlight the main themes as derived from the responses within discussion forums; and related to the submission of the formal assessment task, namely, the creation of a prototype - an online environment for their specific discipline. Furthermore, some of the findings highlighted an increase in the innovative teaching methodologies of teachers after the completion. The principles also expressed observable augmented instructional abilities, and that the course would even be of benefit to the school leaders -the principles themselves.

Keywords: ePedagogy blended learning, eLearning, eTools, teacher-educators, instructional event.

#### 1 PROJECT BACKGROUND

Research indicates that, "technology (including e-Learning) will continue to, ...inevitably transform all forms of teaching and learning in the twenty-first century" as indicated by Brown, 2002 cited in Mlitwa (Undated:5). However, there is still a need for innovative approaches to improve the capacity building of teacher-educators. Thus, teacher-educators need to select relevant eLearning Tools (eTools) and apply sound *ePedagogical Practices*. This course aimed at demonstrating how to make use of various eTools to supplement the traditional face-to-face approaches. By the end of the course, the teacher-educators were expected to: (i) explain the current trends in eLearning and how they affect the teaching practice; (ii) understand the educational philosophies that could inform the online teaching/learning/instructional practices; (iii) design an online teaching/instructional event; (iv) understand the need for good structuring of course content for blended learning; (v) select eTools for use in the instructional event according to their pedagogical values and underpinning; and (vi) understand the roles of an online facilitator and how they affect the learning process.

Following, the Centre for Innovative Educational and Communication Technologies (CIECT) at the University of the Western Cape designed and developed a blended learning course for teacher-educators, namely: Designing an Instructional Event. The course is registered with the South African Quality Authority (SAQA) at a National Qualification Framework (NQF), Level 6. This course is currently also in the process of delivery for teacher-educators in Mthatha, Eastern Cape, as it is envisaged that teacher-educators who engage will eventually make effective use of eTools for teaching-and-learning; and moreover transfer the acquired skills to their learners in order for them to be equipped with specific eSkills and become creators of knowledge.

The research report reflects on the experiences and feedback of 36 teacher-educators, from Christel House School in Cape Town (Western Cape). The school management required that, every educator needed to make use of Information Communication Technologies (ICTs) to enhance their face-to-face instruction; and overall professional development. The blended learning course entailed a five (5) day face-to-face, hands-on intervention; and four weeks online engagement which included the submission of a formal assessment task, namely, the creation of an interactive online environment. The educators ranged from lower and higher grades (Grades R to 12), including the technical support staff.

#### 2 RELEVANCE OF ELEARNING FOR TEACHER-EDUCATORS

It is necessary to note that "eLearning, Web-based learning, online learning, and distance learning are widely used as interchangeable terms" (Tsai & Machado, Undated). Furthermore, the nature of eLearning is dynamic. This changing nature of eLearning makes it challenging for researchers to agree on a single definition, commonly acceptable by majority of scientific community (Tsai, 2009; Sangrà., Vlachopoulos, and Cabrera, 2012:1). Regardless, some of the commonly accepted definitions of eLearning include that, it is the "use of computer and internet technologies to deliver a broad array of solutions to enable learning and improve performance", or even learning that makes use of "the internet, a computer network, CD-ROM, interactive TV, or satellite broadcast" (Food and Agriculture Organization of the United Nations, 2011; Classroad, Undated; Karrer, 2012).

When developing an eLearning course for teacher-educators certain issues need to be addressed as the process has been termed as an expensive one; and maximum attention would minimise challenges. Such issues may include a good understanding of education; multimedia content and electronic technologies; a need for a clear link between the course and real performance goals, as this avoids designing a course which is irrelevant to your target group (in this case, teacher-educators). In addition, this requires the course designers to understand educators' course expectations (Brown & Voltz, 2005; Kuhlmann, 2010). Paying attention to such relevant issues among others, leads to a successful achievement of the set objectives, as supported by Wagner, Hassanein & Head, 2008 (cited in Stoltenkamp & Kasuto, 2009:720) - who indicated that - "because eLearning has the prospects for growth, it is indeed a potential market, one that can only be realised when all the needs and concerns of stakeholders are addressed".

There is a common interest by "school pupils, university students, employees; and by the ongoing training and development of professionals like doctors, nurses and teachers" to enhance learning by use of digital tools (http://peoplelearn.homestead.com/wblmeaning.html). Hence, some of the implications of eLearning can be either positive or negative, for example: learners and educators are able to learn and teach at the desktop; teaching-and-learning can take place in self-paced (asynchronous) formats or in virtual classes through the use of asynchronous and synchronous tools (Stoltenkamp and Mapuva, 2010; Wagner, Hassanein and Head, 2008). Besides, eLearning enables flexible learning and improves the quality of education for learners or course participants. Furthermore, flexibility is a huge selling feature as students are given active learning opportunities; learners are "able to gain greater control over their own learning in eLearning compared to traditional learning"; and there is variety in course selections as one can either choose between online course or the face-toface one (Tsai, 2009: 34; Jethro., Grace & Thomas, 2012). Previous research indicates relevance of eLearning courses for educators, as it creates a "positive effect on teacher knowledge, teacher instructional practices. and most importantly. student achievement" (http://www.aptv.org/aptplus/ELearning/impact.asp; Gencturk, 2012).

On the other hand, some of the reported challenges associated with eLearning include, competition for the provision of online courses, especially as many institutions offer similar, if not the same courses. This raises issues of quality and affordability; and the demands of technology for online course participation. Furthermore eLearning can create chaos especially where there is limited infrastructure

(Remenyi, 2008:324; Tsai, 2009: 34; Jethro., Grace & Thomas, 2012). Other challenges indicated include, pressure on accreditation bodies as they have to deal with high numbers of accreditation requests as a results of growing eLearning providers, "lack of knowledge of how to alter instructional design to be effective for courses with technology and lack of confidence in using these applications to teach" (Wagner, Hassanein and Head, 2008:29). Categorically, both the benefits and challenges are determined by the set project goals, objectives and furthermore target audience and organisational infrastructure and culture (Kruse, 2007).

#### 3 METHODOLOGY OF THE STUDY

The study used a case study approach and entailed the participation of 36 teacher-educators. It must be noted that this was the total number of the school's teaching staff members, inclusive of a technical support staff person who manages the school computer lab. Engagement in this course would be highlighted as part of continuous professional development. The course, Design an online instructional/teaching event, was divided into two phases whereby each participant underwent a one week face-to-face training intervention; and four (4) weeks active participation within an online environment.

A qualitative research design was applied, and questionnaires were administered. In addition, observation during a face-to-face workshop was conducted; and feedback from discussion forums were analysed in form of individual tasks. Before embarking on the face-to-face training, a learner profile questionnaire was distributed to the 36 participants. It should be noted that all the participants completed the questionnaire, which as further analysed. The questionnaire focused on detailed prior knowledge of the participants, including the following areas: access to resources; resource and time management; skills/eSkills, competencies and attitudes and team work. Such information was valuable for the facilitators as they gained a better understanding of the participants' skills and course expectations.

During the face-to-face phase, the researchers compiled information through observation of the face-to-face workshop, especially related to interaction; the attainment of eSkills and application of eTools for specific disciplines. In addition, the participants were expected to present on the final day of the face-to-face week – and demonstrate the affordances, application and challenges of the use of various eTools in relation to their subject-matter. Lastly, there was an analysis of the feedback from online discussion forums. The educators were expected to submit a formal assessment task which included the planning, design and development of a small online teaching/instructional event. Below are some of the discussion topics which the participants responded to:

- Discussion Topic: Select/discuss the target audience (those who are expected to engage in the designed online course/instructional event).
- Discussion Topic: Discuss the importance of developing clear, measurable outcomes for their instructional events.
- Discussion Topic: Discuss the selection and use of eTools to support current teaching-and-learning experiences.
- Discussion Topic: Discuss the selection and use of eTools to support their current assessment practices.

#### 4 RESEARCH FINDINGS

A number of themes emerged from the teacher-educator course. However, there is need to note that the study limitations included the fact that themes tended to be confined. The participants had comparable opinions hence restricted development of themes, which may have been due to the fact that the educators had come from one institution. The researchers feel that, educators from different backgrounds (institutions) can lead to development of interesting various themes, as it would be based on different experiences. The identified themes included :(i) Course expectations; (ii) Relevance of face-to-face workshop interactions ;(iii) Application of eTools to enhance learning and teaching methodologies; (iv) Significance of interactive asynchronous engagement;(v) The need to consider learners' needs (vi) eTools enhances self-directed learning; (vii) Need for educators to plan before implementing any eTools. These themes have been linked to relevant literature as discussed below.

## 4.1 Course expectations

There is always a need for course designers and facilitators to understand participants' expectations. The researchers distributed questionnaires prior to the training workshop, inquiring about the participants' expectations; basic computer literacy skills; reading and writing abilities' as well as their attitude and commitment to the course. All 36 participants completed the questionnaire; and 70% responded positively to the above mentioned areas. Hence, this meant that most of the participants stated that they were able to independently carry out basic tasks without difficulty, such as copy and paste; internet searches and reading learning material without difficulty.

Participants expressed their course expectations, namely: they looked forward to learning new skills and knowledge, so as to improve their Information Communication Technology (ICT) competency; learn from other course participants; learn how to make effective use of new eTools within their specific teaching disciplines; and transfer skills to their students. According to the participants, the workshop had met their personal expectations and it was very relevant. It is important to acknowledge that all the participants (100 %) responded that they had benefited from the course.

# 4.2 Relevance of face-to-face workshop interactions

"ICT is often considered part of a solution addressing the changing learning needs of societies" as noted by Garrison and Anderson, 2003, cited in Mlitwa (2007:56). On the other hand, face-to-face interaction still remains relevant in workshop facilitation. It's during face-to-face facilitation that people can clarify certain issues; common understandings are achieved faster within dynamic and diverse groupings; as well as participants are prepared and trained to work optimally within an online environment (i.e. they are expected to complete and submit online discussions and assignments). In this research, participants were expected to commit to a five (5) day face-to-face interactive workshop; and a four-week online phase — in which they were expected to be self-directed learners.

The relevance of face-to-face interaction had been expressed by more than 70% of the participants in the prior-knowledge questionnaire, while the remaining 30% had indicated that they did not value face-to-face. However, during the face-to-face training week, it was noted that 100% of the participants actually expressed the need for face-to-face support as they delved into more advanced eSkills training, namely the creation of digital posters, stories, podcasts and narrated PowerPoint presentations. The face-to-face training week was planned around learning themes, related to the alignment of content, eTools and assessment tasks:

- DAY 1: Socialisation and Familiarisation
- DAY 2: Information Exchange
- DAY 3: Online Assessment eTools
- DAY 4: Communicating Online
- DAY 5: Evaluation Determining the adequacy of the instruction

## 4.3 Application of eTools to enhance learning and teaching methodologies

"Successful education and training in our knowledge society depends increasingly on the confident, competent and innovative use of ICT's. ICT is regarded also as a powerful support tool to foster learning and teaching" (Quintin, 2006:19). This statement was demonstrated by participants, who indicated that they hoped to acquire new ICT skills and knowledge advancement during the course. They furthermore indicated that, acquired ICT skills would be applied in their specific disciplines to enhance teaching-and-learning practices. This was in line with their prior-knowledge responses, as they had indicated and hoped to learn and gain new knowledge during the workshop.

So as to demonstrate their understanding on the course content, on the last day of the face-to-face phase, participants were expected to; share with peers and stakeholders (educators; visiting sponsors and the Principle of school) - with regards to the benefits of the eTools presented and facilitated throughout the week. In addition, participants had to share and demonstrate the effective application of eTools for their specific subject-matter. Educators were also encouraged to provide recommendations on each presented work. Through peer presentations, any pending issues were also addressed. Their ability to apply such eTools in their teaching discipline is in line with the growing demands of education which requires the society, "taking advantage of computer technology which

can enhance and improve the teaching and learning process" (Vinci and Cucchi, 2007). Some of the responses regarding the effective use of eTools within their specific disciplines, included:

Participant: "To supplement our high-touch teaching (chalk and talk and face to face in class) with a high-tech approach (eLearning tools via internet, etc.) will surely enhance teaching. Teaching should be beyond the walls of the classroom. The learners' intelligence should be measured by the skilled help of the educator. Hence to add more colour and value but not substitute my teaching all together through examples like: Audacity, PowerPoint Presentation, Google Blogger, aTubeCatcher, Picasa, Digital Photo Story and Wordle...".

Participant: "My e-tools of choice vary from the interactive whiteboard which is suitable for PowerPoint presentations, video clips via a- tube catcher and discussion forums where pupils are allowed to express themselves without face to face interaction. This is especially helpful with learners who cannot converse in an open forum. These tools will be enhanced by rubrics which give a clear indication of how a learner is assessed and MCQ'S allowing the learners to debate the alternatives given. This I see as having full functionality in my class without stretching the limits of imagination".

# 4.4 Significance of interactive asynchronous engagement

Researchers such as Robinson, 2011; Cantebury Christ University, 2009; McNamara and Burton, 2009, indicate that there are various benefits of engaging learners on an online discussion. These include:

- there is open sharing of answers among the participants;
- enables participants to contribute at their convenient time;
- time break allows reflection :
- contribution can happen at once, no need to wait for your turn;
- open sharing of questions and answers happens at the same time;
- allows for a database of contributions;
- sharing could enhance peer learning and
- learning process becomes more evident to both learners and tutors.

During the online phase of the design course, participants were expected to actively engage in activities such as discussion topics and the creation of a 'small online instructional event' – in order to receive a Certificate of Competence. A participant's commitment to the online learning interventions was crucial and this had been established through analysis of the prior-questionnaire. Despite the majority of the educators indicating that they could only commit between 3-7 hours a week for personal studies; all of them managed to commit to the online activities. The individual reports indicated an overall percentage for each participant (ranging from 55% to 85%) - related to the completion and submission of formative and summative assessment tasks.

Discussion topics were also set-up to enable the participants to communicate within an online community of practice; and prepare for their submission of a formal, summative assessment task. These topics were also aligned to previous face-to-face training interventions:

- Discussion topic 1: Identify the target audience and state how it would influence the development of your online course. The target audience is "individuals or groups of community members that your program needs to influence" (European in the Mediterranean, 2012).
- Discussion topic 2: Develop measurable outcomes aligned to assessment tasks and content; and present it in your instructional strategy. The development of measurable outcomes is a challenging process, yet very important towards ensuring meeting set goals (Bresciani, Undated).
- Discussion topic 3: Discuss the selection of communication eTools for your course and relate it to social constructivism theory.
- Discussion topic 4: Discuss the selection of online assessment eTools to enhance your traditional teaching methodologies, and

■ Discussion topic 5: Design an online teaching event. Submit a planning document (approximately 4 pages) - which indicates purpose, outcomes, structure, selection of eTools, content and related digital media components.

Following are examples of discussion postings related to the topics above:

Participant: "As a teacher, I have to create a context for learning in which students can become engaged in interesting activities that encourages and facilitates learning. Therefore, I do not simply stand by and watch children explore and discover. Instead, I may often guide students as they approach problems, may encourage them to work in groups to think about issues and questions. I intend using Wikispaces as an e-tool to create a collaborative collection of short stories that we can share within a group throughout the term, and to create online e-portfolios of student writing. I can then comment on the associated discussion page together with the students in a particular collaborative group. Students learn more about reflective writing by studying entries by other students as opposed to being continuously corrected by the teacher".

Participant: "Learners' learning can be enhanced by using technology in the classroom but also allowing learners to use technology for better understanding. By integrating computer lab time with classroom practice, learners will be more involved in the learning process and less prone to become bored with the teacher. As many learning resources are available online, the learner can focus on his/her own learning experience / knowledge acquisition by, for example, attempting online assessments and interact with each other".

#### 4.5 The need to consider learners' needs

Every learner has different learning capabilities. Research indicates that "every child is special, with unique combinations of abilities and needs that affect learning" (UNICEF, 2001). Therefore, educators are required to understand each learner's needs, so that they may be aware of what to expect from them. This may be ensured through the use of student evaluations. Besides through understanding a learners needs creates an understanding of the support they require, to achieving individual success (Sockalingam, 2012).

An educator's level of understanding of the pedagogical value of the eTools is also crucial, as this among other issues determines the ability to select and apply the eTools. The workshop designer and facilitators considered such issues as per responses in the prior-knowledge questionnaire. Information considered also included the availability of key resources, such as the availability of internet connectivity at home; and the availability of technological resources and personal study times. Besides, "teacher quality has been found to be strongly correlated with students' academic achievement" (O'Dwyer., Masters., Dash., De Kramer., Humez. & Russell, 2010:6). The need to understand and treat each learner differently emerged as a key issue as per responses below:

Participant: "It is impossible for a teacher to reach every student on the same level during 1 lesson. But by implementing a variety of learning styles throughout the course of the lesson allows all students to have a chance to learn in at least one way that will match their learning style...To enhance my classroom interaction and to keep my learners stimulated my selection of etools will include digital photo stories, You tube videos, powerpoint presentations, as well as picassa and even blogging...Picassa and digital photo stories provide a launching pad for essay writing, debates, diary entries etc. Powerpoint presentations and You tube videos can consolidate concepts as well as enhance oral presentations which will in turn build self confidence in my learners. Creating the platform for blogging will allow them to become critical thinkers, able to form opinions and express themselves. These eTools will encourage communication between my students as well as between myself and my students. Meaningful learning occurs when individuals are engaged in social activities through reflection, presentation and sharing of ideas".

Participant: "..so we can say that for the learner to engage with the learning process we need to create an environment that is safe to explore without prejudice; provide appropriate tasks; use multiple strategies; ensure peer interaction. An etool that encompasses the above with limits is the audacity software programme: the learner explores his level of reading in a safe environment at his level of reading; he engages only with the facilitator; he can also do this with a partner or the recording is for his pleasure and he can self-check".

## 4.6 eTools enhances self-directed learning

Research argues that self-directed learning is "learning how to learn", and is demonstrated by characteristics which may include; "self-discipline, self-monitoring, self-initiative, and self-management" (Dabbagh, 2007:220). Moreover, learners are expected to demonstrate understanding of their subject of study independently. This implies a learner being able to read, write and defend their subject of study. eTools can be used by educators to foster self-directed learning. In efforts to determine the participants' commitment to self-directed learning, the prior-knowledge questionnaire indicated that they preferred reading and working independently. It should be noted that all the participants managed to successfully complete their required tasks. Following are some responses indicative of the efforts by educators to foster self-directed learning in order for learners to complete assessment tasks on their own, making use of eTools:

Participant: MCQ's could prove useful to those learners. To test their understanding, I would assess this by linking my lesson to a multiple choice questionnaire. This is a very good way to assess what learners have grasped or are struggling with. Learners do not feel threatened or under pressure when answering these because they are sitting entirely on their own and are not pressurised by time or anyone else for that matter, nor can they check what others are doing at the same time; it is their own work entirely. A novel way of using PhotoStory I thought, would be to write fractions on cards as well as their simplified equivalents; one fraction per card. I would then take a photograph of each card, and place them into the programme for learners to view. To assess the learners, they would match the fractions by writing the answers down while watching the slideshow. They would then offer their answers after an allotted time has elapsed. Pupils discuss and share their answers afterwards".

Participant: The most essential eTool to be used to assess the paragraph is a rubric. The rubric will entail a set of criteria and scoring guides which will describe what will be assessed, the standards to be met and the levels of performance. With this information, learners will be guided in knowing exactly what is expected of them, how they will be able to achieve their best mark and where they are in relation to where they need to be. A checklist will help to eliminate common errors made with language structures and conventions. It will reduce the possibility of mistakes which are often due to a lack of attention. Learners will be able to go back, proofread and edit their own work".

# 4.7 Need for educators to plan before implementing any eTools

There is need for every educator to plan effectively for an online environment, and this may require the educator to "design activities that address their modes of learning in order to provide significant experiences for each class participant" (University of Illinois, Undated). This is especially when preparing material to be used in application of the eTools of their choice. Planning is generally one of the most important parts of teaching as Kelly (Undated) describes in her blog; "the best teachers are those who think carefully about what they are going to do in their classes and who plan how they are going to organise the teaching and learning", as cited by Harmer,(1991) in Robertson and Acklam (2000). The researchers feel that, in the process of planning, the educators are able to make decisions in relation to learning material aligned to resources; selection of eTools; objectives and assessment tasks. In this research, participants were expected to demonstrate their good planning skills by submitting a formal assessment task, namely - the development of a prototype (a small online instructional/teaching event). Therefore the final submission consisted of an instructional strategy and an online course. The participants were provided with a rubric in order for them to ascertain what is expected of them in completing such exercise. The developed prototypes reflected the various disciplines across Grades R to 12: and especially how the participants would make use of eTools to enhance their traditional instruction.

# 5 CONTINUOUS MONITORING AND EVALUATION OF EDUCATORS

Participants were continuously monitored as they actively engaged in the face-to-face and hands-on activities. Monitoring denotes observations that are guided by agreed objectives "to detect departures from a set standard" as indicated by Hellawell, 1991 in Bennun (2002:8). During monitoring, information is collected systematically and analysed so as to identify project progress (Civicus, Undated: 5). Evaluation may mean different things to different people, but its commonly understood as, simply aiming at checking if the set objectives and goals were met, how it worked and if there are lessons learned and overall quality of the project, among other reason (Civicus, Undated: 7).

Monitoring in this research was conducted during the implementation of the two phases. The facilitators expected participants to present their portfolio of evidence at the end of the final day of the face-to-face workshop: Development of Instructional Strategy; Familiarisation and creation of online environment; Shared documents via Google Drive; Setup of Blogger site; Narrated PowerPoint Presentation; Creation of a Podcast; and the Creation of a Digital Photostory. Through the final presentations, the facilitators attained information regarding the participants' understanding of the pedagogical value of specific eTools. Moreover, during on-line phase, participants were monitored and evaluated through their interactive online discussions and the design and development of an online course within a specific time-frame.

#### 6 REPORTED EXPERIENCES BY EDUCATORS

Participants were requested to share experienced from the beginning of the course; and some of the reported experiences included, access; internet connectivity; and the limited application of eTools for specific disciplines.

Particicpant: There were times during the online phase of the course, where educators indicated that they were not able to access the institutional eLearning platform. For example participants wrote: "Hi Tasneem, I am also unable to access the e-Learning link on the UWC website. I get the following error message: The site could be temporarily unavailable or too busy..". Another one indicated, "Have been trying to log on since after the meeting at school this afternoon. Thought I'd try at home.

Participant: "Assessment in the foundation phase using eTools is limited because learners work at the concrete phase in this level and there are practical implications. If I were to use the example of numeracy at this elementary level which is applicable for my classroom then the following obstacles exist: it could not be used for counting objects; counting all/ counting on; counting is a prerequisite to numerosity and therefore it would only be used later on in FP If i were to show a screencast of a picture of objects to count as an assessment i would have to wait for slow learners to count and others would have to wait and this creates a problem. For the Intermediate and Senior phase of maths the options are many for assessment but again because you are assessing individuals you could encounter problems. Maths tests could be screened on the board but this is not ideal for intermediate phase unless you are assessing multiplication tables and a short answer is required. Also you would have to screen the all the questions at once to accommodate different levels of learners, meaning those who are slow and those who work ahead of their peers.

Participant: Assessment for seniors is ideal provided you have the technology and if you used MCQ or Google docs. You need each learner to have their own monitor and keyboard. We only have one classroom equipped to accommodate 650 learners so again the cost effectiveness of this ideal classroom is an obstacle. Schools where each learner has access to his own laptop/p.c do exist but this is rare and it's the ideal setting".

### 7 RECOMMENDATIONS AND CONCLUSION

The researchers found that the participants were motivated to complete the course, as it was certified and registered on NQF Level by the South African Quality Authority (SAQA). Participants were also issued with progress reports providing details with to active participation and individual responsibility in the face-to-face workshop; constructive engagement in discussion topics; and the submission of the formal assessment task. Moreover, the submission of a clear and well-structured instructional strategy and planning document aligned to the developed prototype. Furthermore the report made reference to the structure of the completed prototype – structure; main chapter; use of various eTools (personal learning environment and within the Learning Management System). In addition to the use of eAssessment tools; and course content. The teacher-educators indicated that they would recommend this design course to other educators, across the province, and in other parts of South Africa: Some of the responses provided were:

"We had an outstanding teaching year in 2012. This was the result of many innovative teaching practices I've observed in the school of which 90% included full-on technology lessons. The difference between 2011 and 2012 was so obviously – technology! I must confess that the innovation and level of excitement for teaching was ignited by the e-learning course they've attended with you. I hear of so many schools with technology in the classrooms, however very few of these implements are with efficiency and with the excitement as I've observed over the last year. Please except my gratitude and

absolute admiration of a job – well done!" (Principle: High School, Christel House Private School, 4 March 2013).

"The course was of great benefit and value to all. It challenged all their abilities and strengths. It could also be adapted to their basic abilities. I wish I had done the course" (Principle: Christel House Private School – Junior School, 11 February 2013).

The researchers recommend that the CIECT team at UWC carefully reflect and review the feedback from educators in order to improve the course. In addition, the team should reflect and discuss issues related to facilitation; co-facilitation; monitoring and tracking; and assessment tasks. Moreover, the facilitators should reflect on the participants' expectations of the course and review accordingly. Furthermore, the CIECT Director has continued to engage in discussions with other Principles and partners. Recently, the training has been conducted for teacher-educators in Mthatha, a rural area in the Eastern Cape, South Africa. The researchers will conduct a comparison study of the two training interventions; as teacher-educators in Mthatha had limited resources compared to teachers in the Western Cape.

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