

Closing the distance in ODL – e-Portfolio Assessment

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ABSTRACT

In outcomes-based education (OBE), outcomes, not content, must be assessed. Formative assessment takes place during the teaching and learning process, whereas summative assessment refers to assessment that is used for making a judgment about the achievement of an outcome. Authentic assessment mirrors the real world and is integrated with learning as learners are viewed as active participants in the learning process. Integrated assessment assesses a number of outcomes simultaneously, using a combination of assessment methods and instruments. One appropriate method that can be used to include summative, authentic and integrated assessment in a qualification would be the inclusion of a capstone module, to be taken in the final year of study. The purpose of such a module is to integrate the learning that has taken place throughout the programme and assess if the exit outcomes have been achieved. A well-designed portfolio will meet the teaching goals of engaging the students in the higher order cognitive of activities of reflection and creativity. Furthermore, the assessment of a portfolio opens the door for nonvenue-based assessment; a driving force in open distance learning (ODL) assessment.

KEYWORDS: Open distance learning, assessment, capstone module, e-portfolio, non-venue based assessment

INTRODUCTION

In OBE, with each module or qualification, the outcomes and associated assessment criteria are clearly stated so that students understand, in advance, what they have to do to achieve these outcomes and assessors can use the criteria to assess the outcomes with reasonable objectivity and reliability. With OBE, the outcomes, not content, must be assessed. (Unisa 2005)

Formative assessment supports teaching and learning during the teaching and learning process, whereas summative assessment refers to assessment that is used

for making a judgment about the achievement of the outcome. Summative assessment may take a form other than an examination, such as the submission of a portfolio of evidence or reports from workplace mentors (Box 2002; UNISA 2005).

Furthermore, authentic assessment mirrors the real world and is integrated with learning (Plimmer 2000). Assessment is a process whereby the learners are active participants and the criteria are open and negotiable. The goal is to engage learners in the assessment as well as the learning process. This engagement will assist the learner to develop better learning and self-evaluation skills that are vital, as there is a move to a society where life-long learning must be the norm. Portfolio assessment is one form of authentic assessment.

Integrated assessment refers *inter alia* to the assessment of a number of outcomes simultaneously, using a combination of assessment methods and instruments for outcomes.

One method that can be used to include integrated assessment in a programme would be the inclusion of a capstone module (Unisa 2005). A capstone module is a programme-specific module taken in the final year of study. The purpose of such a module is to integrate the learning that has taken place throughout the programme through the use of portfolios, which will be assessed to ascertain whether the exit outcomes have been achieved. (Bruhn & Camp 2004; Keefe & Dick 2004)

E-PORTFOLIO ASSESSMENT

A portfolio is a purposeful collection of a person's work. Portfolio assessment has traditionally been used in creative fields such as fine art and music. More recently it has become common in a much wider range of educational settings. A well-designed portfolio will meet the teaching goals of engaging the students in the higher order cognitive of activities of reflection and creativity. (Cassiday & Schwitter 2007; Klenowski, Askew & Carnell 2006). According to Plimmer (2000), portfolios can, at best, "act as a silent mentor becoming an instrument of learning as well as a repository and students become a responsible partner in documenting and evaluating their own learning".

In the Unisa *ICT Diploma in Information Technology* qualification, the necessity of a capstone module was identified and, due to the nature of the outcomes, an e-portfolio was identified as assessment method.

ICT3713 & ICT3714

Two third year modules were earmarked as capstone modules with the first, ICT3713, a pre-requisite for the second, ICT3714. To provide a newly qualified ICT professional with experience in the implementation and evaluation of an ICT project, the ICT3713 student has to analyse a problem scenario in a fictional environment, design an ICT solution underpinned by theoretical arguments, and present a

proposal for an ICT solution. In ICT3714 the student has to implement, evaluate and present the ICT project.

Both modules are assessed in two assignments and a final e-portfolio. The assessment is cumulative in that the comments on one assignment lead to changes in the next assignment. The e-portfolio would be the culmination of the work that has been done in the semester. All assignments are compulsory and, except for the e-portfolio for ICT3714, will have to be electronically submitted and will be marked onscreen with a marking schema.

In ICT3713, Assignment 01 consists of the preparation of a project brief. The outcome of Assignment 02 is a draft project proposal. This assignment is an opportunity for the student to refine the project proposal and to provide detailed planning of the system that is being developed. Assignment 03, the final project proposal, is a repeat of Assignment 02, but the student has to incorporate all the feedback given in Assignment 02.

The outcome of Assignment 01 in module ICT3714 is a detailed project plan that will show how the student intends to complete the implementation of the proposed solution. The outcome of Assignment 02 is a set of analysis and design documentation. In Assignment 03, an e-portfolio, the students have to implement the proposed solution. Students can utilise any development environment with a production quality deliverable to provide a concrete, real-world experience. This will be assessed and presented during an interview.

ICT3714 E-PORTFOLIO ASSESSMENT

The next step is the final evaluation of the project. The student is responsible for arranging an interview to demonstrate the project implementation through the “sign-up” tool on myUnisa, a portal that allows for the creation and posting of meetings. myUnisa is the course management system of the Unisa. Students are also required to download the documentation of the project in the “drop box” tool available on myUnisa the day before the demonstration. This will allow the assessors to be prepared. A rubric (marking scheme) is used during the summative evaluation. The rubric refers to the outcomes of the module. Each outcome is broken down into smaller parts and a rating scale of 0 to 5 is used.

Due to the existing internet infrastructure in South Africa (e.g. the lack of affordable bandwidth) as well as the economic realities, there are four options available for the live demonstration.

Non-venue based assessment via myUnisa. The myUnisa site incorporates an open source web conferencing system developed primarily for distance education. It supports multiple audio and video sharing, presentations with extended whiteboard capabilities – such as a pointer, zooming and drawing – public and private chat, desktop sharing, and integrated VoIP. Moreover, users may enter the conference in

one of two roles: viewer or moderator. As a viewer, a user may join the voice conference, share their webcam, raise their hand, and chat with others. As a moderator, a user may mute/unmute others, eject any user from the session, and make any user the current presenter. The presenter may upload slides and control the presentation. Once a meeting is in progress, the student is assigned the role of moderator and demonstrates the project via desktop sharing. Even though this is the preferred option it is not always viable, due to a lack of bandwidth.

As the majority of students reside near the physical location of the department, an **interview** is scheduled and the demonstration is done in an office setting. One hour slots are allocated to each student.

Students residing near a Unisa regional office will be assessed on their work via the **video conferencing (VC) facility** within the university. The student is made the presenter, which makes screen, desktop and/or application sharing possible, thus allowing the student to demonstrate a project. As this is an established VC facility within the university, no technical problems are experienced.

The last option, but least desirable, is to submit the e-portfolio via an **external storage device** (e.g. CD or flash drive) or e-mail (if size permits). The assessor then conducts the demonstration with the help of the documentation. This option is only allowed if the other options are not executable due to infrastructure.

EXPERIENCE OF STUDENT AND STAFF

Though this research is work in progress, we found that it is feasible to have the capstone project within the *ICT Diploma in Information Technology* and are encouraged by early results and student perceptions. Based on informal feedback, the students' reaction to the e-portfolio were positive, with the better students making the best use of the feedback they were given on the earlier submissions to improve their e-portfolio. By creating the capstone module, the students experienced that they gained professional skills that used cutting edge technologies to provide real-world understanding whereas the department gained insight into teaching strategies that will provide students with the skills that industry need. The assessment procedure facilitated face-to-face engagement between student and lecturer in the ODL environment. This was observed as a positive experience by both students and lecturers. From the assessor's point of view, onscreen marking improved the turnaround time to less than a week and provided for comments on how the students might improve their work. The server also allowed comparisons to the student's previous submissions. By designing the appropriate assessment, it contributed to the process of teaching and helped students to develop lifelong learning skills as well.

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