

MEANINGFUL ASSESSMENT IN HEALTH TECHNOLOGY

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ABSTRACT

The implementation of the outcomes-based education and training (OBET) and learner-centred approaches specifically in the health technology programmes at the Central University of Technology, Free State (CUT) exposed facilitators to new challenges in teaching and assessment. The current assessment environment in these programmes was established, using two questionnaires aimed at facilitators and students. The results of the study showed a trend towards innovation in assessment and the establishment of an assessment culture when compared with specific characteristics in literature on meaningful and scholarly assessment practices.

Key words: Meaningful assessment, assessment innovation, assessment environment

1. INTRODUCTION

The reform in education and training from the “traditional” to outcomes-based education and training (OBET) started as an institutional drive at the Central University of Technology, Free State (CUT) in 2001. The implementation of the OBET and learner-centred approaches - specifically in the health technology programmes - exposed facilitators to new challenges in teaching and assessment. One such a challenge was for facilitators to unlearn the “traditional” educational principles and be empowered with and embrace the principles associated with the OBET and learner-centred approaches. By doing so facilitators may abandon “talk and chalk” and written assessment and replace them with interactive facilitation and an appropriate variety of assessment methods and instruments that are linked to the outcomes.

At first the responsibility to implement the changes and create an environment based on the aforementioned educational approaches apparently seemed like an overwhelming task to the facilitators. Since a changed educational environment was not viable without the underpinning knowledge of theory and practice of these approaches, facilitators in health technology participated in formal and informal learning opportunities at appropriate workshop and seminar sessions over the past six years. Guidance, direction, knowledge and skills to assist facilitators in creating a changed educational environment were facilitated at these workshop and seminar sessions. Additionally, several of the facilitators in the School of Health Technology have engaged in formal studies in the field of higher education to duly position them in the new education environment.

The need for a new educational environment, such as OBET, in which meaningful assessment of learning is practiced, is highlighted. OBET assessment is aimed at the outcome that includes evidence of knowledge, competence and attitudes - requiring innovation in assessment. Additionally the South African Qualifications Authority (SAQA) highlights the principles of good or "credible" assessment referring to fairness, validity, reliability and practicability in assessment (SAQA 2001:16,19,20). Furthermore the literature on assessment of learning use an assessment culture (Peterson & Vaughan 2002:45) or a scholarship of assessment (Angelo 2006:76; Banta 2002:ix) to describe a meaningful assessment environment. In the South African context, the term *Ubuntu* in assessment is used (Beets & Van Louw 2005:184). Such an assessment culture consists of shared assumptions, ideas, customs, values and beliefs on assessment which are transferred to others (Palomba & Banta 1999:344). Thus a change in an assessment culture will necessitate the desire of facilitators to improve on current processes. Actions such as planned conversations and discussions about assessment have to be scheduled on a regular basis to promote this kind of assessment culture.

Scholarship of Assessment, according to Banta (2002:ix) and Mentkowski and Loacker (2002:82) has spontaneously been used by practitioners and scholars involved in the outcomes assessment movement over the past three decades. This specific environment aims to improve student learning; it is not particularly associated with excellence in teaching. The Scholarship of Assessment forms the foundation for innovation in assessment, providing the potential to change the academic culture. Angelo (2006:78) recommends a number of guidelines for promoting, supporting and sustaining the Scholarship of Assessment. Some of these guidelines are to engage and sustain academic involvement in assessment; to focus on improving student learning; to scaffold ongoing support for academe; and to insist on high standards of quality measured against meaningful criteria.

Within the South African educational environment, Beets and Van Louw (2005:184) link an assessment culture with the principles of *Ubuntu*. *Ubuntu* also enjoys a presence as a value in the South African National Education environment (Broodryk 2005:21). Beets and Van Louw (2005:184) capture a perspective of assessment in the following: "*Ubuntu* as a philosophy or set of ethical principles provides an effective frame of reference in teaching, learning and assessment for both the facilitator and the student."

With *Ubuntu* the primary values of humanness, caring, sharing and compassion are embraced (Broodryk 2005:13). To establish the *Ubuntu* values in assessment, teaching and learning the values of humanness and caring have to come to the fore (Broodryk 2002:32). Humanness includes warmth, tolerance, understanding, peace, and humanity, while caring points to empathy, sympathy, helpfulness, and friendliness (Broodryk 2002:32). These values capture the true spirit in which meaningful assessment should be conducted, connecting with OBET assessment principles.

Assessment demands discipline from the student and the facilitator and thus involves the core values of respect, dignity, obedience and order, pointing to the transparency of assessment (Beets & Van Louw 2005:187).

2. PROBLEM STATEMENT AND AIM OF THE STUDY

OBET assessment, an assessment culture, a Scholarship of Assessment or the principles of *Ubuntu* in assessment reiterates the change in the assessment environment as the new vision of assessment activities that needs to be sustained. The new vision in health technology programmes at the CUT is to practise teaching and assessment in such a way that a culture of meaningful assessment is created, embracing the principles of *Ubuntu* in assessment while enhancing a Scholarship in Assessment. An assessment model as a tool to attain our vision of a culture of meaningful assessment of learning was designed in a previous study (Friedrich-Nel, De Jager & Nel 2005:886). To prepare for the implementation of the assessment model, the question was asked if the current assessment environment in the health technology programmes at the CUT has changed to adopt the principles of OBET assessment captured in the assessment model. Thus current assessment practices were appraised against apparent meaningful assessment practices according to literature to determine the current position of the programmes in the School of Health Technology in terms of an assessment culture. The outcome is discussed in this article.

3. METHODOLOGY

The study reported on in this paper formed part of the planning phase of an action research (AR) project to establish a culture of meaningful assessment of learning in the health technology programmes. The implementing, observing and reflection phases of this AR project are not discussed in this article. As part of the planning phase, two questionnaires (one directed at facilitators and one at students) were designed to obtain quantitative information to establish the current assessment position and environment in the health technology programmes. The participants were full- and part-time facilitators (n = 55) and mostly second- and third-year students (n=245) representing the six health technology programmes, namely Biomedical Technology (BT), Clinical Technology (CT), Dental Assisting (DA), Emergency Medical Care (EMC), Radiography (R), and Somatology (S) offered in the School of Health Technology. Permission to approach facilitators and students to participate in the project was obtained from the Director of the School of Health Technology and the programme heads. Participation was, however, voluntary.

The opinions of facilitators and students on assessment of learning were captured by means of the two questionnaires, designed for facilitators and students respectively. Both closed and open questions were included. The questionnaires had three sections, namely demographics, learning facilitation, and assessment methods.

Since learning facilitation and assessment are interrelated (Kotzé 1999:31) and learning impacts on assessment as well, questions on different learning facilitation methods were included in the questionnaires on assessment. The questions directed at the facilitators were formulated to acquire information on the learning facilitation and assessment methods used in the past; methods currently most commonly used; and the methods preferred. Trends in these categories could indicate improved assessment practices. Alternatively trends could also point to factors restraining alternative assessment practices.

Students, on the other hand, had to report on the learning facilitation and assessment methods they experienced; which methods were most commonly used in class; and which methods they preferred. The learning facilitation methods covered in the questionnaires were formal lectures with and without student participation, group work, individual activities, presentations and assignments. The assessment methods that were covered included formal and practical examinations, assignments, Objective Structured Clinical Assessment (OSCA), oral presentations, reflection reports, simulations, demonstrations, as well as peer and self-assessment. In addition, the questionnaires were also designed to create awareness on learning facilitation and assessment among the facilitators and the students.

After the two questionnaires had been designed and prior to distribution, the Department of Biostatistics at the University of the Free State (UFS) performed a quality control procedure as a preliminary step with a view to data analysis. Thereafter a pilot study was performed, requesting feedback from three facilitators and five students from a non-participating programme in the faculty of Health and Environmental Sciences at the CUT.

The questionnaires were distributed via the various programme heads of the participating programmes to 55 full- and part-time facilitators and 245 second- and third-year students. The exception was participation of students from the one-year Dental Assisting (DA) Programme. The researcher had the opportunity to explain the purpose of the questionnaire to participating facilitators during a meeting, while the various programme heads explained the procedure to the students. Additionally internal validity was secured by attaching a detailed and explanatory cover letter to each questionnaire.

The researcher collected the completed questionnaires from the participating programme heads at the end of March 2006. The questionnaires were coded and quantitative responses entered into the computer using the SAS system. Open questions were summarised using a thematic approach. Themes were clustered and collapsed in identifying similar patterns in the qualitative responses.

4. RESULTS

In this section the demographic data of the participants and the teaching and assessment methods used/experienced and preferred by the facilitators and the students respectively are described and illustrated in tables or figures. In addition, significant areas in the feedback on assessment statements are provided. The respective response rates for the questionnaires were 58% (32/55) for facilitators and 80% (195/245) for students.

4.1 Demographic information

The majority of the facilitators were female, with 72% Afrikaans-speaking in the age group 31 to 50. Almost half (47%) were part-time facilitators. The majority of the students (71.8%) were female and Afrikaans-speaking (48.7%). About 52% of the students were in the second and 46% in the third academic year. Three students from the DA programme were in their first academic year. 84% of the participating students were in the 18-to-20 and 68% in the 21-to-22-year age groups. In Table 1 the sex and language distributions of the participating students (n = 195) are reflected.

Table 1 Sex and language distribution of students (n = 195)

		No	%
Sex	Male	55	28.2
	Female	140	71.8
Language	English	22	11.3
	Afrikaans	95	48.7
	Sesotho	47	24.1
	Other	31	15.9

4.2 Learning facilitation (teaching) methods: Facilitators and students

Almost all the facilitators (90.6%) used formal lectures with student participation in the past (see Table 2). It was also the method used most often (90.6%) and the preferred teaching method of 78.1%. Group activities were used in the past by 96.9% of the facilitators; used most often by 75%; and preferred by 84.4% of the facilitators. Although student presentations (78.1%) and assignments (81.3%) were used as teaching methods in the past, the results point that 37.5% and 56.3% respectively used the teaching method most often. Likewise 53.1% and 50% of the facilitators respectively regarded these as preferred teaching methods. Interesting to note is that formal lectures without students participating were most often used and preferred by 12.5% of the facilitators who participated in the study. The details are available in Table 2.

The facilitation methods encountered most often by students were formal lectures with student participation (95.4%). Formal lectures with student participation were used most often (91.3%) and was the preferred method as well (88.7%) (see Table 2). The students furthermore reported that they had been exposed to group activities (95.4%); independent individual activities (82.1%); student presentations (86.7%); and assignments (88.7%) in the teaching and learning environment. 50% of the students reported that these methods were often used and were their preferred teaching methods. It is worthy to note that the method of formal lectures without student participation was not most often used and was not a preferred teaching method. (See Table 2 for the details).

Table 2 Teaching methods: Facilitators and students

Teaching methods	Facilitators' teaching methods (n = 32)			Students' teaching methods (n = 195)		
	Used in past %	Used most often %	Preferred method %	Experienced %	Used most often %	Preferred method %
Formal lectures no student participation	65.6	12.5	12.5	39	22.1	17.4
Formal lecturers with student participation	90.6	90.6	78.1	95.4	91.3	88.7
Group activities	96.9	75	84.4	95.4	79	62.1
Independent individual activities	56.3	21.9	46.9	82.1	56.9	50.2
Student presentations	78.1	37.5	53.1	86.7	66.7	42.1
Assignments	81.3	56.3	50	88.7	69.7	55.4

4.3 Assessment methods: Facilitators and students

Table 3 shows a distribution of assessment methods previously used in the past; methods currently most often used; and the preferred methods. In the past formal tests and exams were used by 90.6% of the facilitators; most often used by 87.5%; and were the preferred method of 78.1%. In the past assignments were used by 84.4% and were the preferred assessment method of 65.6% of the facilitators. Practical exams in practice were the preferred assessment method of 62.5% of the facilitators. It is noteworthy (see Table 3) that assessment methods such as OSCA, reflection reports, simulations, demonstrations, peer and self-assessment were not used by many of the facilitators in the past. These methods were also not used most often or were neither the preferred methods of assessment of the facilitators who participated in the study.

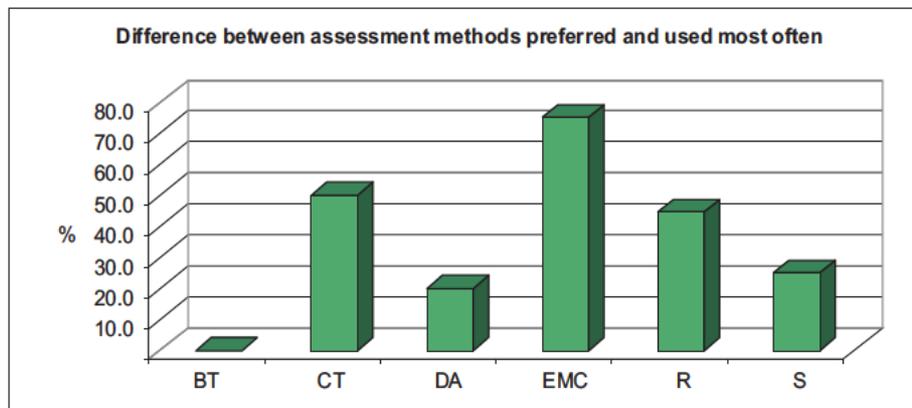
The students reported that the assessment method they experienced was formal tests and exams (97.9%). The same method was often used by facilitators (97.9%) and this was the preferred method as well (87.7%). Assignments were experienced by 84.1%; used often (80%); and was the preferred method of 54.9% of the students. The oral presentation was experienced by 74.4% and peer assessment by 75.9% of the students. Thus the latter two methods were not used often and were also not the preferred methods of the students. It is noted in Table 3 that - with the exception of peer assessment and demonstrations - assessment methods such as OSCA, reflection reports, simulations and self-assessment were not often used in the past. In Table 3 it can be seen that all these methods (except peer assessment) were not often used and the majority of the students did not prefer these methods. The details are available in Table 3.

Table 3 Assessment methods: Facilitators and students

Assessment methods	Facilitators' assessment methods (n = 32)			Students' assessment methods (n = 195)		
	Used in past %	Used most often %	Preferred method %	Experienced %	Used most often %	Preferred method %
Formal tests and exams	90.6	87.5	78.1	97.9	97.9	89.7
Practical exams in laboratory	56.3	40.6	59.4	70.8	61	55.4
Practical exams in practice	49.6	37.5	62.5	62.6	56.9	57.4
Assignments	84.4	65.1	65.6	84.1	80	54.9
Objective structured clinical assessment (OSCA)	40.6	25	25	35.4	33.3	27.2
Oral presentations	62.5	28.1	50	74.4	57.4	29.7
Reflection report	15.6	31.2	31.2	43.1	34.9	23.6
Simulations	37.5	28.1	28.1	34.4	27.7	26.2
Demonstrations	53.1	34.4	34.4	64.1	49.7	44.6
Peer assessment	53.1	34.4	34.4	75.9	58.5	43.9
Self-assessment	25	12.5	28.1	44.6	30.3	30.3

4.4 The difference between preferred assessment method and method most often used

Approximately 30% of the facilitators indicated that there was a difference between the assessment methods that they used and those that they preferred (see Figure 1). The biggest difference was experienced by the facilitators of the EMC programme, while the facilitators in the BT programme reported almost no difference. The programme members indicated a variety of reasons for not being able to use their preferred method, for example unfamiliarity with learning facilitation and assessment methods, preparedness of students for classes, large student numbers, and time constraints.



Legends: BT = Biomedical Technology; CT = Clinical Technology; DA=Dental Assisting; EMC = Emergency Medical Care; R = Radiography; S = Somatology

Figure 1 The difference between methods used and preferred for each programme

Although 84.4% of the facilitators mentioned that assessment activities were planned in their programmes, only 59.4% asked peers for feedback on assessment. Although all the facilitators claimed that students were provided with a schedule/timetable for assessment when the academic year commenced, a mere 15.6% communicated the specific assessment method to be used with the students.

While all the facilitators reported that students could use assessment as a learning experience, it was surprising that only 31.3% of the facilitators emphasised assessment as a learning opportunity.

An excess of 90% (93.8%) of the facilitators assessed their students more than once per term in each module/subject. The majority of the facilitators (96.9%) timeously explained the purpose of the assessment to the students and 87.5% explained what they expected from students in assessment (the criteria) before assessment. More than 80% (81.3%) accommodated higher order thinking when the assessment was designed.

Feedback on assessment was provided by 90.6% of the facilitators and all reported that the feedback was provided within a reasonable time after assessment, with a reasonable time being as negotiated with the students. The majority said that the students could use the feedback to improve their academic performance (87.5%). Almost 47% preferred written assessment.

95% of the students reported that they had been assessed more than once per term in each of their modules/subjects. More than 90% of the students took assessment seriously; used assessment as a learning experience; and used the feedback to improve their academic performance. 90% of the students reported that they received a schedule/timetable for assessment at the beginning of the year.

In excess of 80% of the students reported that the facilitator explained the requirements of the assessment; that they learned to pass test/exams; and that they preferred assessment by written test/examinations. Almost 80% of the students knew which assessment methods were used and 75% of the students said the lecturer explained the purpose of assessment. About 70% of the students received feedback on assessment within a reasonable time. 51% mentioned that they wanted to be assessed with more than one type of assessment method. 55% of the students indicated that they had prepared for their respective contact sessions. The results obtained by means of the two questionnaires on assessment directed at facilitators and students respectively from six programmes in Health Technology were described in this section. In the next section the results will be discussed and compared to the literature.

5. DISCUSSION

The aim of the research reported on in this article was to establish the current assessment environment in the health technology programmes at the CUT and to appraise the findings against the literature on meaningful assessment. This information will be helpful to design specific assessment actions and interventions, as well as to prepare and/or plan for the implementation of an assessment model designed in a previous study.

The demographic data of the participants reflected the composition of the School of Health Technology at the time of the study, namely that the majority were female facilitators. In the same way the student population between Afrikaans (49%) and English, Sesotho and other languages (collectively 51%) imitated the student population in the health technology programmes.

The researcher's opinion was that previous exposure to experiences in learning facilitation and assessment of second- and third-year students facilitated appropriate completion of the questionnaire. In this way feedback from students was used to determine the position of the health technology programmes in terms of assessment.

The results showed evidence of a change towards more innovative teaching methods in the health technology programmes. Specific examples of methods scoring high among both groups of participants were formal lectures with student participation such as structured interactive sessions and group activities. Structured interactive sessions have the potential to facilitate engagement of students with their learning material and to assist students to internalise the learning material which stimulates higher order thinking (Steinert & Snell 1999:37).

These authors emphasise that constructive learning styles - such as group work - develop and promote interactions between students, communication skills, cultural sensitivity, and teach the students skills to manage themselves in a group. Additionally, Wigen, Holen and Ellingsen (2003:37) show in a study involving medical students that activities such as group work correlate positively with academic success.

The results of the present study confirmed that formal tests and exams are still used most and are the preferred assessment method used in the health technology programmes. The perceived importance of formal tests and exams was a reflection of the overall assessment strategy at the University, which did not promote the principles of assessment in the OBET approach (Kotzé 1999:36; Friedman Ben-David 2000:472). Havnes (2004:107) claims that, if the examination is the final objective of a student's studies, it is a meaningless exercise.

Cunnington (2002:255) agrees that the "traditional" assessment system does not promote assessment in the OBET approach. Thus if the CUT supports assessment in the OBET approach, the "traditional" assessment system will not suffice. In the same way and supported by the results in the study, it is evident that a number of innovative assessment methods and instruments are not yet used by facilitators. Examples of these are reflection reports, simulations, demonstrations, peer and self-assessment. Likewise, the majority of the students mentioned that they were not familiar with these assessment methods. The information obtained from the students showed that there is still a lack of innovative assessment methods used. The need was therefore identified for using more innovative interventions in teaching and assessment to appropriately prepare students as health professionals. Atkins, Beattie and Dockrell (1993:63) caution about the possible weakness of traditional assessment practices, namely encouraging surface learning. Crossley, Humphris and Jolly (2002:801) emphasise assessing the performance of students in addition to knowledge. These authors (Crossley *et al.* 2002:801-803) confirm that using multiple assessment methods and tools is particularly relevant to assess the knowledge and skills of health professionals.

In the questionnaire a large number of students requested an explanation of the “OSCA”. This feedback points to the reality that the students have either not been exposed to this specific assessment, or they are not familiar with the term. Friedman Ben-David (2000:472) claims that the OSCA is the ideal assessment method to assess the knowledge, skills and attitudes of a health professional to be. More so is an assessment method not mentioned at all in the “other” categories of the questionnaire, namely the portfolio. The portfolio, designed in the correct manner, is a meaningful assessment method to assess a variety of knowledge and skills outcomes as well as meta-cognition and attitudes, specifically aimed at assessing the health professional (Friedman Ben-David 2000:472).

The question on the differences in teaching and assessment methods used and preferred was specifically aimed to determine the intentions of facilitators to become more innovative in teaching and assessment practices. Facilitators mentioned valid reasons for not being able to use the interactive methods that they actually preferred. Some of the obstacles mentioned were time limitations, students were not always well prepared for contact sessions, while facilitators and students were not familiar with the particular methods and instruments. Steinert and Snell (1999:38) confirm that factors such as fear for the unknown as well as time constraints prevent interactive learning. However, if the facilitators are serious about change and innovation in teaching and assessment, workable solutions need to be implemented to overcome the obstacles identified in the study. For the successful implementation of new trends in teaching and assessment, Gray (2002:58) points to the necessity for academics to buy into a new educational approach and accomplish ownership. Facilitators should do all they can to create a challenging, co-operative, collaborative and supportive learning environment for students (Barr & Tagg 1995:11). In this kind of environment academics should display the desire to learn more about assessment and constantly improve on what is done for their students regarding the learning outcomes (Borland 2002:103).

The statements summarising feedback on a variety of assessment aspects confirmed that transparency and communication in assessment were already addressed in the health technology programmes at the CUT. This was verified by the fact that both groups (facilitators and students) reported on the assessment schedules provided and received; that students knew the purpose of, as well as expectations in assessment; and that feedback was provided for students' to improve their learning (Angelo 2006:75). While Ewell (2006:149) questions if assessment actually promotes better learning, Kuh (2006:226) underlines the role of competent and caring academics who share a vision and passion for the academic success of their students. The aforementioned corresponds with the principles of meaningful and scholarly assessment as supported by Mentkowski and Loacker (2002:83).

However, a possible area to address in the assessment of the health technology programmes was that only a small number of facilitators asked their peers for feedback on assessment. Crossley *et al.* (2002:803) mention "pilot testing" the assessment among peers as an ideal method to eliminate unnecessary errors, or to address and secure quality in assessment.

An area of concern identified in the study was the lack of facilitators to emphasise assessment as a learning opportunity. Havnes (2004:159) highlights that, for student learning to improve, the assessment system has to improve. According to Gray (2002:58) careful planning should assist academics to move from assessment awareness to the integration of the methods in their daily teaching and assessment practices. Thus facilitators can play an active role in improving student learning through assessment (Angelo 2006:78) and enhance the quality of the experiences of undergraduate students (Kuh 2006:225).

Facilitators can also expose the students to a larger variety of assessment methods and instruments to scaffold an innovative attitude in assessment and engage students in deep learning (Biggs 2001:65; Entwistle 2001:17). One of the key values shared in a culture of assessment according to Peterson and Vaughan (2002:45) has to be the commitment to learning and student success (Kuh 2006:225). So students have to start looking at assessment as an opportunity to enhance their skills and knowledge (Sutherland & Peckham 1998:100) and to promote deep learning (Entwistle 2001:17).

So it is assumed that after six years of implementing changes in teaching and assessment in the health technology programmes, substantial progress has been made towards innovation in assessment, apparent from the results. But not only is the process of creating a culture of assessment, a scholarship of assessment or *Ubuntu* in assessment difficult to comprehend by all involved, it is also complex to measure (Peterson and Vaughan 2002:45). The aforementioned authors (2002:45) provide the required characteristics to be used as holistic benchmarks for a changing assessment environment in the study. Some of these characteristics include a well-formulated approach to assessment and that all involved in assessment clearly understand the purposes for student assessment (Peterson & Vaughan 2002:46).

On the other hand, there is still much to learn and to improve on for the transformation to a culture of learning and meaningful assessment to be fully accomplished in the health technology programmes at the CUT. This situation may also be linked to facilitators who have different ideas about what assessment really is and how it should be conducted (Shavelson & Huang 2003:11). Gray (2002:58) adds: "People may be at different levels/stages in relation to different elements of innovation."

Additionally, people may have different assumptions about assessment (Gray 2002:58). However the information from the questionnaires concurs with the views of Cunnington (2002:256) that a “hybrid assessment system” is currently in use in the health technology programmes at the CUT.

All the same, Palomba and Banta (1999:345) argue that an assessment model provides the required energy for a changing assessment environment and culture. Thus it is also the intention in the School of Health Technology to use an assessment model which was designed in a previous study (Friedrich-Nel *et al.* 2005:886) to assist and empower academics and students to facilitate the change to assessment in the new educational paradigm. By using this model, the use of innovative assessment methods and strategies applicable to health professionals are encouraged for the benefit of all role-players involved in assessment. Such assessment methods and strategies are, for example, portfolios, reflection reports, presentations, self- and peer assessment, assessment in the authentic environment, as well as written assessment.

The assessment model should be seen as a guide contributing to the establishment of the desired assessment culture of meaningful assessment in the true spirit of *Ubuntu*.

In this assessment environment the key values of respect and learning, sharing and compassion are ideal characteristics of a person in the African context. Beets and Van Louw (2005:188) request that facilitators reflect the mentioned values to ensure that quality teaching and learning through *Ubuntu* assessment lingers.

6. CONCLUSION

The results of the study showed a trend to innovation in assessment and the establishment of *Ubuntu* in assessment and an assessment culture in the health technology programmes at the CUT, measured against specific assessment characteristics in literature. The next step will be to use the findings of the study as a backdrop for the implementation of an assessment model that should provide the energy for a changing assessment environment. By doing so, both the academics and the students will be guided to another level in the growing assessment culture of the health technology programmes at the CUT.

NOTES

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APPENDIX I
Facilitator feedback on assessment statements

Statement	Agree	
	n	%
I use more than one type of assessment method to assess my students	30	93.8
I prefer to assess my students by written tests/examinations	15	46.9
I accommodate higher order thinking when I design the assessment	26	81.3
I ask my peers for feedback on my assessment	19	59.4
Assessment activities are planned in the programme	27	84.4
I provide students with a schedule/timetable for assessment	27	84.4
I communicate the assessment method to be used with my students	5	15.6
I explain the purpose of the assessment	31	96.9
I explain what I expect from the assessment (the criteria)	28	87.5
I assess my students more than once per term in each subject/module	30	93.8
I give feedback on assessment	29	90.6
I give the feedback on assessment within a reasonable time	32	100
The students can use the feedback to improve their academic performance	28	87.5
Students can use assessment events as a learning experience	32	100
I assess once a term in each subject/ module	32	100
I inform students about the assessment shortly before the assessment	8	25
I emphasise the assessment is an opportunity for learning	10	31.3

APPENDIX II
Students' feedback on assessment statements (n = 195)

Statement	Agree	
	n	%
I want to be assessed with more than 1 type of assessment method	100	51.3
I prefer assessment by written tests/examinations	162	83.1
I learn to pass my test/exams	158	81
I prepare for lectures	109	55.9
I take assessment serious	178	91.3
I receive a schedule/timetable for assessment at the beginning of the year	177	90.8
I know which assessment method will be used to assess me	155	79.5
The lecturer explains the purpose of the assessment	146	74.9
The lecturer explains the requirements of the assessment	164	84.1
I am assessed more than once per term in each subject/module	186	95.4
I receive feedback from my facilitator after my assessment	168	86.2
I receive the feedback on my assessment within a reasonable time	142	72.8
I can use the feedback to improve my academic performance	181	92.8
I can use assessment as a learning experience	180	92.3
I have one assessment per term in each subject/module	83	42.6