

FACILITATION OF A DIVERSE HIGHER EDUCATION STUDENT COMMUNITY FROM CONVENTIONAL TO ALTERNATIVE ASSESSMENT PRACTICES

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ABSTRACT

The higher education classroom of today is filled with students of vast diversity which applies to culture, sex and nationality. This can be seen in the fact that some students only study for the sake of a higher education or the availability of a bursary. These factors influence the persuasion and commitment towards more surface learning. It is stated that the principle of assessment is not only a tool to indicate achievement or outcomes met, but a good assessment method can also shape learning. By shifting to an alternative assessment method one can shift a learner's persuasion and commitment from surface learning to deep, constructive learning.

1. INTRODUCTION

The higher education classroom of today is filled with students of vast diversity. This diversity does not only apply to culture, sex and nationality but also to the persuasion and commitment of students towards learning (Moore 2007). This can be seen in the fact that some students only study for the sake of a higher education or availability of bursaries. A student's dedication and interest is therefore broad. These students are more susceptible to a surface learning approach. In higher education are there not a good through put for surface approach learners. A shift from conventional to alternative assessment practices can be a powerful tool to motivate, inspire and facilitate an artificial shift from surface learning to deep, constructive learning.

2. BACKGROUND

2.1 Surface learning and deep, constructive learning

Students' dedication to learning can be divided into two approaches, namely: (Biggs & Tang 2007:19-25) (Rust 2002:148-151) (Santrock 2008: 100);

- Surface learning that can be identified by learners that:
 - Rely primarily on memory
 - Study at the last minute with the minimum energy spent
 - Perform at low cognitive levels
- Deep, constructive learning that can be identified by students that:
 - Accept personal responsibility for understanding course ideas

- Enjoy the experience of learning actively
- Identify where to apply learning in industry or future work place

The initial feeling would be that surface learners would not be able to shift to deep learning, but this is possible if one look at the following simple example where an uneducated or non-technical person would comprehend a complex task like sending a sms or mms on a cell phone. The motivation thus initiated a self-learning, outcomes-based, deep approach.

2.2 Conventional vs. alternative purposes of assessment

To accomplish a shift in learning one must shift the purposes of assessment (Geyser 2004:90-91) (SAQA 2005). The purpose of conventional assessment was only a summary of knowledge at end of teaching. Where the purpose of alternative assessment can be:

- Diagnostic assessment which determines skills and abilities prior to acceptance.
- Formative assessment which assist the learning process, do “error detection for error correction” and motivates.
- Summative grading which provides the opportunity to learn from assessment and learn for assessment, determines destiny and determines if a student is ready to advance to the next level.

2.3 Conventional vs. alternative forms of assessment

Diagnostic assessment thus measures prior knowledge. Formative assessment identifies the progress of students during the learning process, where as summative assessment can be seen as evaluating competence at the end of a learning unit. Authentic assessments measures skills that are in context to real-life situations.

Norm-referenced assessments measure students against their peers and criterion-referenced assessment measure students against pre-determined performance criteria. Group-based assessments are, as the name state, performed when students are required to participate in groups.

2.4 Conventional vs. alternative types of evidence of learning

Evidence of assessment can be classified as (SAQA, 2001:38-39) (Brown, 2001: 15-16) (Biggs and Tang 2007: 20):

- Direct evidence is a conventional type of evidence which include direct observation, questioning and also product and output evaluation.

- Indirect evidence is collected from tasks that was completed earlier and include feedback from team work, reviews and previous qualifications, etc.
- Historical evidence can include portfolios, photographs, completed projects as well as qualifications, etc.

2.5 Conventional vs. alternative methods of assessment

Conventionally, only summative and norm-referenced assessment methods were utilized. Following a shift to alternative methods, it is suggested to use a combination of summative and formative assessment and to also incorporate a variety of the following methods: authentic, norm-, criterion-, self- and group based assessments.

2.6 Conventional vs. alternative instruments for the assessment of student learning

It is stated that a good assessment method shape learning (Brown (2001:6-7)). Thus one needs good instruments to apply these methods. Conventionally the only instruments were tests and examinations, but alternative instruments of assessment can include the following:

- Open book exams (Race, 1995 p4)
- Structured question papers
- Multiple choice questions (SAQA 2001)
- Reports
- Portfolios (SAQA 2001)
- Presentations (Race 1995, p 10)
- Vivas (Race 1995, p 11)
- Tests and Examinations

2.7 Conventional vs. alternative tools for the marking of assessment instruments

Types of criteria used in assessment of a student's work can vary according to the subject or approach that the assessor chooses to use (Brown 2001:15-17):

- Intuitive
- Global based
- Criterion reference grading
- Broad criteria
- Specific criteria
- Marking scheme
- Basic checklists
- Detailed checklists

2.8 Conventional vs. alternative agents for student assessment.

Agents for student assessment refer to the persons who assess students' learning (Biggs 2007: 213) (Meyer 2007: 217). The agents' functions would include:

- The explanation and establishment of content to the learner
- Setup of tasks, tests and examinations
- Memorandum development
- Marking

Conventionally, all of these were performed by the educator, but alternative agents can include:

- The educator
- The parents
- External people
- The government
- The education department
- Peers, etc.

2.9 Conventional vs. alternative principles of good assessment.

It is important that the agents apply the following principles, according to SAQA of 200:

- Fairness
- Validity
- Reliability
- Practicability

It is also important to be

- Credible
- Meaningful and
- Timely return feedback for reflection (Geyser (2004:92-99) Brown (2001:6-7))

3. METHODS

To facilitate the shift from surface learning to deep, constructive learning, a facilitator should (Biggs 2007:19-25);

- Explicitly bring out the structure of the topic or subject by using a real example or application.

- Presenting real example or application related questioning/problems that will initiate an active response from students.
- Start teaching by expanding on knowledge that students previously acquired.
- Confront and eradicate students' misconceptions.
- Assess for structure rather than for independent facts.
- Emphasize depth of learning, rather than breadth of coverage.

The facilitator also needs to facilitate the agents (parents, external people, government, peers, etc.) in order to assist with:

- Explanation and establishment of content to the learner
- Setup of tasks, tests and examinations
- Marking
- Memorandum development

The facilitator should also provide the agents with guidelines and clear outcomes that the learners have to achieve. An alternative assessment like this can incorporate the following:

TABLE I: Open book exams

Open book exams (Race 1995: 4)	
Advantages:	Less stress on memory Measure retrieval skills
Disadvantages:	Not enough books Need bigger space (desk)
Application:	Design a real world application or system
Agent:	Industry can be an agent
Helpful hints:	Decide to prescribe relevant books for answering the paper. Set more application questions, in order for students to make use of the information they have, rather than a question and direct answer from the book. Allocate marks on how students have applied the information and expect short answers.

TABLE II: Structured question papers

Structured question papers and Multiple choice questions (SAQA 2001)	
Advantages:	Most of the syllabus is covered in the question paper. Test how fast the students think. Saves time and energy. Test higher level skills of the ability to interpret information, as well as to understand and analyze it (SAQA 2001).
Disadvantages:	Guess factor. Question designing takes time. The danger of impersonators.
Application:	Incomplete statement or a question
Agent:	Peers or an educator can be an agent
Helpful hints:	Avoid overlapping of questions. Pilot question prior to use. Provide feedback to students for correct and incorrect options. Ensure that students are familiar with the necessary skills to answer multiple choice questions.

TABLE III: Reports and essays

Reports and essays	
Advantages:	Provide feedback where specific skills, relative to intended learning outcomes, are insufficient. Useful tool to provide secondary evidence that the learning process have evolved successfully.
Disadvantages:	Allows students to display what they have learned (Race 1995: 8). Difficult to trace collaboration. Writing & marking are time consuming.
Application :	Write report on lab test
Agent:	Peers or an educator can be an agent
Helpful hints:	Let students report on less work e.g. if students have done 8 tests in the lab ask the students to report on only 3 tests. Allow student collaboration and to assess previous reports in order to familiarize themselves with what is expected during report writing.

TABLE IV: Portfolios (SAQA2001)

Portfolios (SAQA 2001)	
Advantages:	Suitable for long-term activities The evidence in the portfolio must meet the requirements of sufficiency and currency
Disadvantages:	Difficult to assess Students could be distracted when someone is watching their performance
Application:	Collection of different types of evidence: photographs, completed projects, qualifications, etc.
Agent:	Peers, external people, industry or an educator can be an agent
Helpful hints:	Excellent for assessing practical work. Ask students to suggest better ways of doing practical in the future. Design the correct end product. Experiential training done in industry.

TABLE V: Presentations

Presentations (Race 1995: 10)	
Advantages:	Individual performance is assessed. Most students take it very serious. Can be done as collaborative work.
Disadvantages:	Cannot be anonymous. Difficult for a large class. Time consuming. Intimidating to some students. The evidence is transient- unless recorded.
Application:	Present a topic or learning unit, or create a workshop manual for software, a project or system.
Agent:	Peers, external people, industry or an educator can be an agent
Helpful hints:	Be clear about the purpose of presentations. Allow the students to create their own rubrics. Advise the students to practice before the actual assessment of the presentations.

TABLE VI: Vivas

Vivas (Race 1995: 11))	
Advantages:	Ownership of evidence. Fair examination.
Disadvantages:	Some students underperform due to cultural and individual differences. The agenda may leak. The agenda is narrow.
Application:	Interview or oral examination on a possible solution of an industry or actual problems
Agent:	Peers, external people, industry or an educator can be an agent
Helpful hints:	Prepare the agenda in advance. Prepare a checklist or pro-forma. Debrief each viva at least once.

4. CONCLUSION

A diverse higher education class room can be artificially shifted from surface learning to a deep, constructive learning. This can be done by the facilitator to aligning assessment to facilitate deep, constructive learning. Alternative assessment methods have the ability to motivate, create a joyful experience and create interest in learners. All of these are characteristics of deep learning. Artificially shifting learners from a surface to deep learning approach might necessitate more energy, planning and time spend by facilitators. The payoffs though are positive results in throughputs. Facilitators have to ensure that, whichever form of assessment they use, it is fair and reliable in order to make valid judgments from the evidence collected.

5. REFERENCES

Brown, G. 2001. Assessment Guide for Lecturers. UK Learning and Teaching Support Network (LTSN)

Geyser, H. 2004. Learning form assessment. In Gravett, S. & Geyser, H. (Eds). Teaching and learning in higher education.

J. Biggs and C. Tang. Teaching for Quality Learning at University. 3rd edition, 2007. Mc Graw Hill

Rust, C. 2002. The impact of assessment on student learning. *Active Learning in Higher Education* 3(2).

S. Moore, G. Walsh and A. Rísquez. *Teaching at College and University*. 1st edition, 2007. Mc Graw Hill

Santrock, J. and Halonen, J. *Your Guide to College Success: Strategies for Achieving Your Goals*, 2008. Wadsworth cengage learning

SAQA. 2001. *Criteria and Guidelines for Assessment of NQF Registered Unit Standards and Qualifications*.

SAQA. 2005. *Guidelines for Integrated Assessment*.

Race, P. 1995. *The Art of Assessing*. *New Academic* 5(3)

M. Meyer & M. Orpen, 2007 *Occupationally-directed Education, Training and Development Practices*. P.217