Assessment in a statistics course under the South African Qualifications Authority

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Contemporary South African society is characterised by change. Education and training have been specifically targeted for dramatic transformation since the ANC Government gained power in 1994. South Africa has now shifted to an Outcomes-Based education system with the main national outcome being the raising of national standards. The goal is to instil a culture of learning and also learner accountability through project and performance assessment. It also involves major changes for the two previously autonomous systems of *Education* and of *Training*. Previously the goal of the South African *Education* system was the transfer of *knowledge*; while the goal of the *Training* system was the transfer of *skills*. These two systems have now been integrated to give greater access to lifelong learning.

National Qualifications Framework

The South African National Qualifications Framework (NQF) with the South African Qualifications Authority (SAQA), emphasises that assessment should be: continuous; diagnostic; formative as well as summative; criterion-referenced; performance-driven; and authentic. In the South African context this entails: Collaborative learning and group assessment; a cognitive and problem-based approach to assessment; assessment activity integrated into instruction, teaching and learning.

Principles of effective assessment

By law, assessment must be underpinned by the following principles:

- The purpose of assessment should always be made explicit. The criterion-referenced approach will be used.
- Assessment must be authentic, continuous, multi-dimensional, varied and balanced.
- Assessment is an on-going integral part of the learning process.
- It must be accurate, objective, valid, fair, manageable, and time efficient. Assessment takes many forms, gathers information from several contexts, and uses a variety of methods according to what is being assesses and the needs of the learner.
- The methods and techniques used must be appropriate to the knowledge, skills, or attitudes to be assessed as well as to the age and developmental level of the learner.
- It must be bias free and sensitive to gender, race, cultural background and abilities.
- Progression should be linked to the achievement of the specific outcomes and should not be rigidly time bound.
- Evidence of progress in achieving outcomes shall be used to identify areas where learners need support and remedial intervention.

The overall outcomes

The overall outcomes for an introductory statistics course can be seen that students should be able to:

- make sense of statistical information prevalent in an information-laden society, and be sensitive
 to and comprehend instances and processes of variability and uncertainty in the world around
 them
- contribute to or take part in the production, interpretation, and communication of data and findings pertaining to data-based problems they encounter in their professional or civic life.

Paradigm Shift

Previously South Africa used *norm referenced* assessment where the learners performance is assessed by comparing it with that of other learners in a group. There has now been a paradigm shift towards *formative*, *criterion referenced* assessment where the individual learner's performance is measured against a set of predetermined criteria. Outcomes-based assessment implies assessment based on observation of authentic tasks. Authentic assessment strategies do not only assess memory, skills, attitudes, and knowledge. They also involve the direct assessment of complex performances and generally consist of performance, portfolios, and products.

Selection of appropriate assessment methods and instruments depends on the purpose of assessment: why the information is being gathered and how it is used. However it also provides lecturer and students with a means of reflecting on what is actually happening in the classroom situation.

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RESUME

L'Afrique du Sud est characterizee par la transformation. L'education et l'entrainement sont engages dans un processus d'evolution vers une approche deducation basee sur les resultats (Outcomes Based Education). Cette approche comprend plusieurs formes de controle

Formative

Diagnostic

En resume

Evaluatif

Le defi cest pour offrir uncours de statistique introductoire qui accede aux demands de l'Antovite Sudafricain de Qualification.