# Assessment in Practice: A Case Study of the Polytechnic of Namibia and the International Institute for Geo-Information Science and Earth Observation (ITC) in the Netherlands

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## **Abstract**

This study examines the problem of splitting views on assessment methods at the Polytechnic of Namibia. This problem led to some lecturers being unaware of what assessment method is relevant to their courses. The paper evaluated the literature on major assessment categories of formative (continuous) and summative (exam-based) using a comparative case of the International Institute for Geo-Information Science and Earth Observation (ITC) in the Netherlands and the Polytechnic of Namibia. The major finding is that assessment methods stipulated in the Polytechnic Prospectus are not clear. This has resulted in a gap between the assessment methods and even questions the objectives of the courses. The project recommends that the Prospectus Regulations should be revisited to make the assessment methods strong. With a momentum towards increased strong hybrid assessment it is appropriate to assess the correlation between student performance in continuous assessment work and in more traditional end of course written examinations.

Keywords: Examination, Formative Assessment, Summative Assessment

## Introduction

Conflicting views have been noticed between the proponents of the continuous assessment and the proponents of the hybrid assessment method as stipulated in AC4.4.1.2 of the Prospectus [1] with two assessments that qualify the student for the final 2 to 3 hour examination.

The proponents of continuous assessment without examinations at the end of the semester believe in a teaching and learning approach that provides students with consistent feedback throughout the semester. The proponents of examination on the other hand, counter-argue that the level of maturity

of the Polytechnic students does not allow them to go without examination. One major problem is that not all the students write their own assignments and it is assumed that students pay other people to write assignments on their behalf. Moreover, other variables such as lack of self-discipline especially among the young students and apathy of reading, may lead to plagiarism or ignoring assignments altogether. Continuous assessment without examination at the end could degrade the standard of the institution. The institutional situation of large classes also does not allow lecturers to use continuous assessment because of time and venues. Based on this hypothesized problem this study intends to address the following question: To what extent has the Polytechnic Assessment Regulations, been clear on summative and formative assessment methods? A comparative study of the ITC and the Polytechnic assessment approaches has been conducted to throw light on the issues mentioned above.

## Formative and Summative Assessment in the Classroom

Stakes [2] compares formative and summative assessment by saying that "when the cook tastes the soup, that's formative; when the guests taste the soup, that's summative". Crooks [3] on the other hand refers to summative assessment as intended to summarise student attainment at a particular time, whereas formative assessment is intended to promote further improvement of student attainment. In other words, this could be termed, assessment of learning versus assessment for learning.

Garrison [4] states that summative assessments are given periodically to determine at a particular point in time what students know and do not know. Many people associate summative assessments only with standardised tests. Garrison refers to some examples of summative assessments such as end-of-unit or chapter tests and end-of-term or semester exams. The UK Centre for Legal Education [5] suggests that summative assessment is not traditionally regarded as having any intrinsic learning value. It is usually undertaken at the end of a period of learning in order to generate a grade that reflects the student's performance.

The UK Centre for Legal Education (200-2009) further argues that the traditional unseen end of module examination is often presented as a typical form of summative assessment. Scriven, [6] supports the use of summative assessment that, "summative evaluation provides information on the product's efficacy (it's ability to do what it was designed to do). For example, did the learners learn what they were supposed to learn after using the instructional module? Scriven, [6] further argues that "in a sense, it lets

the learner know "how they did," but more importantly, by looking at how the learners did, it helps you to know whether the product teaches what it is supposed to teach".

Two important points flow from this differentiation. Firstly, there is no reason why only summative assessment should be included in any formal grading of student performance. It is perfectly appropriate to have elements of formative assessment as part, or even all, of the final grade. The second point is that the distinction between formative and summative assessment may be a false one. Whilst some elements of assessment may generate a greater formative learning experience than others, it can be argued that all forms of assessment have some formative element. Students undertaking a degree course where assessment consists only end of module unseen examinations will over the period of the course improve their examination technique. This is a formative learning experience.

Perhaps instead of becoming overly concerned with whether an assessment is formative or summative in nature it may be better to see various types of assessment as a continuum of the formative learning experience.

## Written Examination as summative assessment method

A person who passes an examination in academic school receives a diploma, a degree or a certification. Carrick Institute for Learning and Teaching in Higher Education [7] argues that written examinations typically involve a variety of question types. Since examinations are intended to provide students with a range of ways in which to demonstrate their knowledge, there are also some issues of concern. The need to design assessment which is effective and valid within existing resource constraints is one. Possibly, open questions and extended essays are favoured by many academic staff and students, but in practice other considerations should be made on availability of suitably-qualified assessors and the time required to mark individual papers.

# Written Examination and Bloom's Taxonomy

Before examining question types, it is useful to establish a link between assessment and the cognitive processes. In assessing specific levels of student's mastery of course content, we always need a framework for describing those levels. Bloom's taxonomy is a system created to improve testing precision by categorising cognitive functioning into distinct levels. Appropriate questions could then be developed to assess the desired level. Psychologist Benjamin Bloom developed this system at the University

of Chicago in the late 1940s (8). His goal in formulating this classification was to increase precision in the discussion of educational goals among teachers, administrators, and researchers. This can be ranked low to high level as Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation (UW-Madison Teaching Academy [8]).

According to (8), "Taxonomy" is simply a system of categorising and organising. In this case, the taxonomy is hierarchical; each level is subsumed by the higher levels. In other words, a student functioning at the "application" level has also mastered the material at the "knowledge" and "comprehension" levels. In light of this, it is now beneficial to discuss some of the most commonly used question types according to Carrick Institute for Learning and Teaching in Higher Education [9] and their potential relevance to the Taxonomy approach is as follows:

Multiple -choice questions (MCQs): MCQS are extensively used in examinations particularly at first year and large classes. At the Polytechnic of Namibia, staff with large classes such as Economics, Human Resources to mention but two, quite commonly use multiple-choice questions in examinations due to the ease of scoring such questions. This means that multiple-choice questions are often set to reduce strain on resources and it would not necessarily be good to assess appropriate skills. Hence, the MCQs are limited in their capacity to assess critical thinking and other valued skills and knowledge. Although it is acceptable that MCQs save time, it is also assumed that MCQs encourage undesirable approaches to learning because they only test students' ability to memorise detail. Carrick Institute for Learning and Teaching in Higher Education (2007) also argues that while it is true that MCQs can be used to assess the lower levels of cognitive skills described in Bloom's Taxonomy, knowledge level, and the ability to "list", "label", "name", or "recall", well designed MCQs can do much more, but they take time to prepare. This draws the conclusion that MCQs per se are not deficient but their effectiveness requires careful design and consideration. It also requires disciplinary-expertise, insight into student learning and time. Thus, MCQs in examinations are usually presented as large sets in order to reduce the chance of students scoring well by chance alone. Bloom's Levels: Knowledge, Comprehension, Application and Analysis.

**True/false questions (T/F):** The T/F questions can effectively diagnose students' level of understanding of complex concepts. However, their use in examinations is problematic because they are not reliable due to limitations to just two options, "guesswork" and "chance". Sometimes the assessor provides ambiguous and complicated statements in T/F questions that may

confuse the student. Overall, when used in examinations the T/F questions, would not be able to test critical thinking and valued skills in that particular subject, because it operates like a jackpot. If by chance a student strikes the correct knob then a lucky student can score high while knowing less. *Bloom's Levels: Knowledge and Comprehension*.

**Short-answer questions:** This type of question also appears in examinations at the Polytechnic of Namibia especially for the first year students in various departments. Atherton [10] argues that slightly less structured than multiple-choice questions, short answer questions are often used in examinations to award a few marks as a "starter", followed by a question which requires more writing. Atherton [10] further provides the following examples of short-answer questions as follows:

They may simply ask the student to write in a missing word or phrase: "The Spanish Armada was sent during the reign of ......... in England, and ..... in Spain (2 marks)"; or they may call for brief listings: "List three of Schneider's first-rank symptoms of schizophrenia (1 mark each)" or for a one-sentence answer: "What is the basic principle of utilitarianism? (2 marks)"

Such questions may require an explanation or description, and often allow for the use of diagrams in addition to text. Still, the emphasis in this examination is predominantly upon demonstrating understanding, rather than writing skills - 'note-style' writing is often accepted, and errors in grammar and spelling tolerated. As the examples above indicate, such questions tend to test the lower levels of the cognitive domain. The problem with these questions is that if students get used to being asked them, they will revise just to produce the "right" answers, and thus follow superficial learning. Short-answer items are only suitable for questions that can be answered with short responses (UW-Madison Teaching Academy n.d). Additionally, because students are free to answer any way they choose, short-answer questions can lead to difficulties in scoring if the question is not worded carefully. It's important when writing short-answer questions that the desired student response is clear. Bloom's Levels: Knowledge, Comprehension and Application.

**Extended answers or essays**: Extended written responses are also a feature of examinations at the Polytechnic, particularly in the departments of Public Management and Human Resources. However, when the class sizes tend to be bigger the extended answers in an essay type are effective. In timed examinations, it is usual to indicate the amount of detail required by indicating the amount of time recommended for a particular question. UW-Madison Teaching Academy (n.d) argues that some essay-style questions

are multi-part, providing students with a structure and focus. Essay questions are the only question type that can effectively assess all six levels of Bloom's Taxonomy. Moreover, they also motivate students to express their thoughts and opinions in writing, granting a clearer picture of the level of student understanding. But there are problems of time requirements and grading consistency. Bloom's Levels: Knowledge, Comprehension, Application, Analysis and Synthesis Evaluation.

# Advantages and disadvantages of written examinations

The main disadvantage of these examinations is the extent to which they encourage students to memorise information for examinations rather than attempting to understand it as a component of their overall course. This implies that students are prepared to study with the purpose of passing final examinations without necessarily acquiring skills and knowledge for the future. Eventually, the institution is producing unskilled graduates. This argument tallies with Paulo Freire's radical views on education systems (De Beer and Swanepoel [11]. Freire is particularly critical of the existing education system, which he says is equal to "banking education in which students receive, file and store deposits ... Banking education domesticates students for it emphasizes the transfer of existing knowledge to passive objects who must memorise and repeat this knowledge". These types of syllabuses discourage students from applying their knowledge in practice, whereby they would have been able to improve their living conditions. According to Race (1998) in The Higher Education Academy [12] the most important thing lecturers do for their students is assess their work. There are many different forms of assessment used in higher education, and below are listed the advantages and disadvantages of the examinations which may be relevant to the assessment situation at the Polytechnic of Namibia:

# **Advantages**

- Time-efficient
- Cost-effective
- Relatively easy to achieve equality of opportunity
- Less plagiarism
- · Staff are familiar with exams
- Encourages students to learn certain subject matter

# Disadvantages

Does not increase students' desire to learn

- Students play the game of guessing the agenda, so that learning can be unfocused
- For social work students in particular, experience of learning in situations is limited
- Traditionally feedback is low
- Does not help the theory/practice gap
- Scripts are usually marked in a rush
- Handwriting, neatness and presentation are also assessed and there is emphasis on exam technique rather than content
- · Staff marking the scripts become bored!
- Difficult to be reliable when marked by different staff members
- Encourages surface learning if exams questions are badly written
- Does not measure teamwork, leadership, creativity and even lateral thinking

Evaluation of secondary data on summative assessment ends here and the focus is now on formative assessment.

## Formative assessment

According to Boston [13] while many educators are highly focused on state tests, it is important to consider that over the course of a semester or a year, teachers and lecturers can build in many opportunities to assess how students are learning and then may use this information to make beneficial changes in instruction. This means that through continuous assessment not only the students who learn but the lecturer's instruction capacity also improves. This is confirmed by Wiliam, et al [14] who state that formative assessment involves a combination of activities aimed at targeting teacher and student actions increasingly precisely upon the next steps in learning for individuals. It involves dialogue that provides information about students' understandings that helps teachers and students interpret the effectiveness of the activity and tailor subsequent activities using that knowledge.

Moreover, Black and Wiliam (1998b) as quoted by Boston [13] define assessment broadly to include all activities that teachers and students undertake to get information that can be used diagnostically to alter teaching and learning. They also explained that under this definition, assessment encompasses teacher observation, classroom discussion, and analysis of student work, including homework and tests. Eventually, assessments would only become formative when the information is used to adapt teaching and learning to meet student needs. In other words, FairTest [15] further says that "formative assessment occurs when teachers feed information back to

students in ways that enable the student to learn better, or when students can engage in a similar, self-reflective process". For the formative method we should focus more on continuous assessment.

## Continuous Assessment

Scanlan [16] argues that continuous assessment occurs throughout a learning experience (intermittent is probably a more realistic term). Continuous assessment is most appropriate when student and/or lecturer knowledge of progress or achievement is needed to determine the subsequent progression or sequence of activities. Obviously, continuous assessment involves increased effort for both teacher and student. Continuous assessment is more likely to be formative, process-oriented, informal, internal, learnerinvolved, and/or self-referenced in nature. It can take the form of daily work (e.g. essays, guizzes, presentation and participation in class), projects/ term papers and practical work (e.g. laboratory work, fieldwork, clinical procedures, drawing practice) (National University of Singapore NUS [17]). Students are given the examination paper or assignment and 1 - 2 weeks to submit their responses. It assesses their ability to research, redraft, and use resources, and places less emphasis on speed and memory than conventional exams. This means that in order for the institution to achieve this goal through assessment, it should either do away with examinations or reduce it to 1 to 2 hours duration and increase the self-study and research duration including writing assignments. However, the following are possible advantages and disadvantages of continuous assessment:

# The advantages include:

- Elimination of memorising and question spotting.
- A reduction in pre-examination anxiety.
- Higher quality answers.
- Testing of something more worthwhile.
- Encouragement to students to keep good notes.

# In this regard the following disadvantage can defeat its purpose:

- High and sustained level of anxiety during the take home period.
- Student competition for library books.
- Increased likelihood of students getting "expert" help.

## **Discussion of Results**

ITC refers to the International Institute for Geo-Information Science and Earth Observation. The institute was established in 1950 (45 year older than the Polytechnic of Namibia), and is usually referred to as ITC because of its original name: International Training Centre for Aerial Survey. It is the largest institute for international higher education in the Netherlands (ITC Study Guide [18]). ITC is an autonomous organisation operating under the aegis of the University of Twente, and is funded by the Ministry of Education, Cultural Affairs and Science of the Netherlands. ITC is subject to the national quality assurance procedure for universities in the Netherlands and it is based in Enschede (ITC Study Guide 2008/2009/2010).

## **Effective Assessment Methods**

This section of data analysis and discussion helps this study to describe facts, detect patterns, develop explanations and provide answers to the research question in the problem statement section above. In nutshell, the section starts with the comparisons of the Polytechnic results on effectiveness of the assessment methods. On the question: which assessment method should be regarded as most effective in teaching and learning? The respondents' indicate as shown the Figure/Table 1 below.

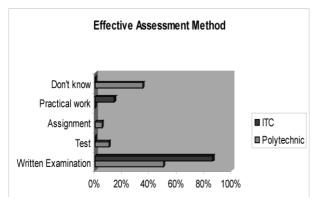


Figure 1. Effective assessment method

At most 50% of respondents from the Polytechnic of Namibia and 86% respondents from ITC indicated support of written examination as the most effective method. In addition 35% of the Polytechnic respondents have no idea which methods listed above are more effective in teaching and learning.

They simply use any method prescribed in the Prospectus. However, those who oppose written examinations, especially at the ITC, argue that the written examination usually focuses on reproduction of class notes and it lacks creativity and renovation. The examination is prepared and influenced by lecturers, hence they can make it very complicated or simple. The student in the examination has no chance to ask about the ambiguity of the question and consequently the student can fail the subject that he or she may know better.

# **Factors influencing assessments**

Inquiries were also made to find out about those factors that the respondents encounter as negative to the successful assessment of the students. Figure/ Table 2 below provides the outcomes as follows.

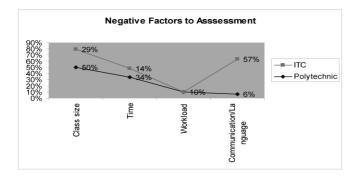


Figure 2. Negative factors to Assessment

Almost all respondents mentioned large classes as the first problem that affects assessments. For example, in the context of the Polytechnic of Namibia, a lecturer teaching a class size of more than 200 students cannot effectively assess students with more than three tests or assessments per semester. Even in marking examination scripts the fatigue of the lecturer may also affect the assessment. In the ITC for example, they have people from all over the world, who cannot speak English which is the medium of instruction. It is very difficult to assess students such as the Chinese with the same assessment instrument that is used for the student from South Africa. At the Polytechnic of Namibia, issues such as language problem among students and lack of assessment skills among assessors were also highlighted. Not all lecturers or other assessors at the Polytechnic of Namibia have been trained in assessment methods. Another problem is time,

overloading of students and lack of equipment for practical work such as in the department of Land Management. The serious challenge is on individual or written assignments at the Polytechnic. It transpires that students are not usually the authors of the assignments they submit. Therefore, most of them qualify with high semester marks and obtain less in the examination.

## End-examination vs. continuous assessment

The question was asked whether it is appropriate for the students to sit for the final examination at the end of the semester or module or it is enough to only write assignments and obtain the final mark without sitting for a final assessment. Figure/Table 3 below provides the results.

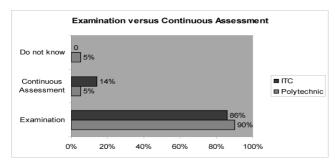


Figure 3. Examination versus Continuous assessment

At most 90% of the respondents at the Polytechnic and 86% at ITC support that students should write examination at the end of the module or semester. The examination assesses the knowledge and skills of the However, although most ITC respondents support the use of examination, they argue that examination is only effective if it is supported by other assessments during the period of the study. For example, the students can be given projects to work on as professionals by producing something that an outside expert or a planner/decision-maker can support. Students can work as a team and generate something tangible such as a plan, product, strategy etc. as if they were to present it on completion to, for instance, Municipal experts. In that regard, not only the academic and technical quality of the project results would be assessed but also the manner in which a project outcome is presented in an understandable and useful manner to a potential user. There are many advantages in making use of assignments or continuous assessment methods, among them plenty of room for interaction and adjustment. The only way to make the assignment

or continuous assessment strong is a proper objectification of it. These assessments present a true picture of whether the student can do things according to the learning material. This means that the students can do exactly and practically as the teaching and learning material has shown them and not just explain what the material entails.

This was also supported by some respondents from the Polytechnic, that examination does not provide any feedback to the students and the examiner may be biased or examinations can leak to friends of those people involved in handling the examination paper. The continuous assessment also has its advantages, of which, among them, is that learning to the student is effective because they continuously get feedback and they improve in the process. The following are the views of the Polytechnic respondents on continuous assessment:

- It is good for practical courses only
- It should be matched with a specific course content
- · It is good in providing prompt feedback to the student
- It is very effective way of learning since students learn more through conducting research, presentations and group or individual projects
- It is not good for Accounting courses because the department links with international professional bodies that require examination as an assessment standard
- It is not universally used in many universities and institutions of high learning
- It is impractical in large classes
- It requires much and constant supervision

#### **Examination duration**

Duration of examinations varies considerably from course to course. This implies that the examiner has to decide on the duration of examination required for the type of questions comprised in that examination. The more complex the questions, the longer duration required for that examination. Based on this assumption this paper also asked the respondents which duration is most favourable to their courses and modules. Figure/Table 4 below summarises the responses.

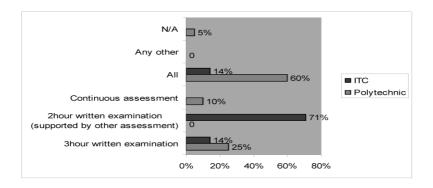


Figure 4. Examination duration

It was found that 60% of the respondents at the Polytechnic of Namibia indicated that their departments use 3 hours, 2 hours, 1 hour as well as continuous assessment. However, this depends on the level of study, for example, 1st year students may be required to sit for a one hour examination in some departments. In addition, a department, such as, Land Management may also use continuous assessment in practical courses. At the ITC, the large number of respondents does not prefer a 3 hour examination and they throw their weight of support on a 2 hour examination along with a range of other assessment methods. They argue that it is too much for the student to sit for the whole period of 3 hours. For example, examination time should be a component of assessment itself. The speed is important to teach the student to think very fast. This means that the student should not be given such a long time to solve issues, they should be given a limited time to think and solve problems in the examination to activate their quick critical thinking. A 3 hour examination, which is commonly practised at the Polytechnic is not worthwhile, was also criticized by respondents. The continuous assessment with a minor sort of examination could be an effective way of assessment and this can be projected as follows:

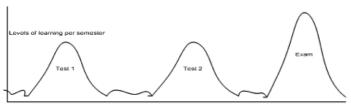
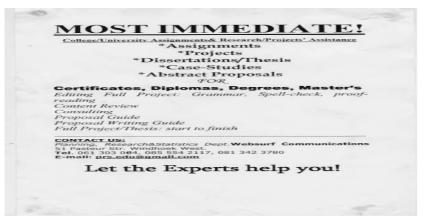


Figure 5. Learning fluctuation

Figure 1 above entails that when examination and test based assessment are used the students would only have high tendency of learning during the time of the test and they go down when the assessment is a bit far. For example, in the diagram above the learning level of students was high when they were preparing to write test 1, test 2 and even higher at examinations. This implies that the student is not studying to know the subject or to acquire skills and competencies as stipulated in the objectives of the course but only to pass the test or exams with good marks. For the continuous assessment the level of learning remains extremely even throughout the semester. Assessment is built in the broader context of teaching and learning and it motivates the student to strive for marketable skills and competencies.

In that regard, examination based assessment motivates a student to acquire temporary knowledge and to some extent reproduces the class notes just for the sake of passing the test or exams. From practical experience, the students' behaviour at the Polytechnic of Namibia may justify the basis of this reality. For example, students tend to coerce lecturers into giving them the copy of the test or the examination or demand the summary of course material because they intend to memorise and regenerate them to pass examination or test. Therefore, the proponent of formative assessment regarding written exams may weaken the learning process of the student.

Transparent evidence shows that assessments at the Polytechnic are determined on the basis of other circumstances, for example, the number and weight of assignments could have been reduced due to fear of "outsourcing" of assignment by students or the situation of large classes. The attribution behind this is that, since the lecturer does have direct control of the student when compiling the assignment, the assignment is allocated a lower score than the test which the lecturer is confident is the true work of the student. This suspicion was strengthened when a number of spontaneous announcements from people in the city, were found placed on notice boards around the city and even on campus offering to help students with their assignment work (see the example below), "I can help you with your assignment or research project". See the copy of the one notice below.



Source: Researcher (2009)

# Policy and Administering Assessments at the Polytechnic

At the Polytechnic the assessment policy is in the academic regulations prescribed in the annual prospectus. According to the Polytechnic Prospectus (2009:15) (AC4.1) "evaluation of a student's performance in a certificate/diploma/degree programme shall be based on continuous assessment and/or examinations." Furthermore, the Prospectus (2009:17) (AC4.4.1.2) indicates that "for all residential courses, the semester mark will be determined by way of appropriate assessments during the semester. A minimum of two assessments must be set per semester, although variations may occur per course and/or programme as approved by Senate. The Prospectus stipulates the "minimum" and no "maximum" is indicated. This implies that there is room for the departments to assess otherwise. The Prospectus also provides for "two assessments" but it does not specify whether these would be tests or assignments.

Furthermore, the Polytechnic Prospectus (2009) (AC4.4.1.1) stipulates that "the scope and regulation of the examinations for the different qualifications shall be determined by the Senate, and be conducted under the supervision of Senate at such venues, dates and times as Senate may determine". The Prospectus further stipulates that, "on completion of a prescribed syllabus (unless determined otherwise) examinations shall be conducted in all courses". This implies that the Prospectus serves as the Polytechnic's institutional assessment policy that, in this respect, stipulates examinations as compulsory assessment at the Polytechnic. Although some respondents perceive the Prospectus general rules as good assessment standards, some have the opinion that the Prospectus has left a little space for departments

and schools' flexibility to determine their assessment methods. Even a small item requires the approval of the highest institutional body, such as, the Senate.

Hence, most of the respondents at the Polytechnic perceive these rules as rigid and they support the approach where the departments and schools should be given freedom to make their own assessment methods. It was also revealed that the rules in the Polytechnic Prospectus have remained the same for many years and thus they need to be revised on a regular basis to meet the requirements of current circumstances. However, the regulations in the prospectus are required to make lecturers and students meet due dates in terms of examinations and assignments.

Another point of contention is the AC4.4.2.1 of the Prospectus (2009) "examination opportunities". This rule regulates that,

"Examination opportunities will be offered once in all courses at the end of each semester i.e. in June and November each year. Students are encouraged to utilise the first opportunity offered immediately following the semester in which the course is taught, but may also choose to utilise the second opportunity at the end of the following semester".

In light of this, respondents argue that assessment conducted after six months should not be expected to be as effective as possible. In terms of Cohen as quoted by McGonigal (2006), "lecturing may feel good, but studies tell us students remember less than 20 percent of what you've taught just two weeks after the class is over". Therefore, the respondents also feel that this does not augur well with the Polytechnic's current approach of Second Opportunity examination written six months after the class is over.

## **Conclusions and Recommendations**

This study draws a conclusion that both formative and summative assessment approaches have their advantages and disadvantages. Continuous assessment is a major component of formative assessment and is a purposeful approach to listening and observing students and using that information to understand a student's thinking and skills. Examination, on the other hand, is the major component of summative assessment that may test the student's practical skills and understanding, if the questions are properly set, especially in line with Bloom's Taxonomy. It is not clear whether the lecturers at the Polytechnic match their course objectives with assessment

## methods and questions.

The objectives determine the assessment criteria and even the weight of the test and the assignment. All interviewed respondents ITC/Polytechnic indicate that it does not mean that examination is always bad. When you are working with a big group it is not easy to reach your objectives when other assessment methods are used. Almost all respondents refer to the same administrative and technical issues of negative impact on the effectives of tests at the Polytechnic of Namibia:

- Students to bring their own answer papers to the test room.
- Time and venues.
- Relationship between test and assessment of lecturer by students.

However, those who oppose written examinations, especially at the ITC, argue that the written examination usually focuses on reproduction of class notes and lacks creativity and renovation. When examination and test based teaching and learning is used the students would only have high tendency of learning during the time of the test and they go down when the assessment is far ahead. This implies that the student is not studying to know the subject or to acquire skills and competencies as stipulated in the objectives of the course but to pass the test or exam with good marks. It was noticed that there are good aspects that the Polytechnic could draw as a lesson from the ITC assessment approaches and regulations. This paper therefore recommends that the hybrid type of assessment should be emphasised to avoid examination and test based assessment only so that tools such as report writing should also be extensively used. NQA Framework should be on the table of the examiner when setting examination or test paper and even assignments to ensure that the assessment is in line with level of that particular course

# References

- [1] Polytechnic of Namibia. (2009). Prospectus Undergraduate Studies 2009. Windhoek: Polytechnic Print.
- [2] Stakes, R. (n.d). Formative v.s. Summative Evaluation. In http://jan.ucc. nau.edu/edtech/etc667/proposal/evaluation/summative\_vs.\_formative. htm. 27 January 2009.
- [3] Crooks, T. (2001). The Validity of Formative Assessments. http://www.leeds.ac.uk/educol/documents/00001862.htm. 27 January 2009.
- [4] Garrison, C. & E, M. (1999-2009). Formative and Summative Assessments in the Classroom. http://www.nmsa.org/Publications/WebExclusive/Assessment/tabid/ 1120/Default.aspx. 27 January 2009.

- [5] The UK Centre for Legal Education as a subject centre. (2000-2009). Formative vs summative assessment. http://www.ukcle.ac.uk/resources/assessment/formative.html. 27 January 2009.
- [6] Scriven, (n.i). (1996). Formative v.s. Summative Evaluation. In http://jan.ucc.nau.edu/edtech/etc667/proposal/evaluation/summative\_vs\_formative.htm. 27 January 2009.
- [7] Carrick Institute for Learning and Teaching in Higher Education. (2007). Principles of Assessment. http://www.bioassess.edu.au/bioassess/go/home. 27 January 2009.
- [8] UW-Madison Teaching Academy (n.d). http://teachingacademy.wisc.edu/. 9 April 2009.
- [9] Carrick Institute for Learning and Teaching in Higher Education. (2007). Enhancing Assessment in the Biological Science. http://www.bioassess.edu.au/bioassess/go/home. 25 January 2009.
- [10]Atherton, j. (2005). Forms of Assessment. http://www.learningandteaching.info/ teaching/assess\_form.htm. 20 April 2009.
- [11] De Beer, F. & Swanepoel, H. (2000). Introduction to Development Studies. 2nd edition. Cape Town: Oxford University Press Southern Africa.
- [12] The Higher Education Academy. (n.d). Different Forms of Assessment. http://www.swap.ac.uk/docs/Differentformsassessment.pdf. 31 January 2009.
- [13]Boston, C. (2002). The concept of formative assessment. Practical Assessment, Research & Evaluation. http://pareonline.net/getvn.asp?v=8&n=9. 10 April 2009.
- [14]Wiliam, D., Lee, C., Harrison, C. and Black, P. (2004). Teachers developing assessment for learning: impact on student achievement. http://www.informaworld.com/ smpp/content~content=a713612049~db= all. 10 April 2009.
- [15]FairTest. (n.d). The Value of Formative Assessment. http://www.fairtest.org/value-formative-assessment-pdf. 10 April 2009.
- [16]Scanlan. (n.d). Assessment, Evaluation, Testing and Grading. http://wwwfp.mccneb.edu/edutut/Online%20Pets%20Course/Assessment\_evaluation\_grading.htm. 10 April 2009.
- [17]McGonigal, K. (2006). Getting More "Teaching" out of "Testing" and "Grading". http://ctl.stanford.edu/Tomprof/postings/738.html. 29 January 2009.
- [18] [ITC] International Institute for Geo-Information Science and Earth Observation. ITC Study Guide 2008/2009/2010. Enschede: ITC.