Concepts on Assessment Practices in Institutions of Higher Education as Perceived by BA ISAGO Undergraduate Students

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Abstract

This is a quantitative study regarding the concept on assessment practices in higher institutions of learning as perceived by BA ISAGO undergraduate students. A questionnaire was developed on the concept regarding assessment practices on a four likert scale and administered to a convenience random sample of 400 undergraduate students at BA ISAGO University in Botswana. Out of which 365 undergraduate students studying varying degree programmes responded to the questionnaire and their responses were coded, analysed using exploratory factor analytic method (available on the SPSS computer package). SPSS software produced the descriptive statistics (means and standard deviations) and factor analysis. The Principal factor with iteration was employed and varimax rotation method was also used to extract the perceived constructs on the concept on assessment practices at institutions of higher education. Seven constructs with eigen values greater than one, emerged from the factor analysis. Results revealed seven (7) main concept on assessment practices were perceived by BA ISAGO University undergraduate students. The seven main constructs were to: determine students' higher level of thinking/ cognitive abilities; provide constructive feedback for effective students' learning outcomes; allow for students' self-reflection and peer assessment of learning outcomes; use of different alternative modes of assessing learning outcomes; maintain quality assurance processes in form of assessment criteria; modify learning outcomes using formal and informal assessment procedures; identify students prior knowledge before beginning instruction. The study further determined if gender and faculty of study of students have significant influence on students' perceived concept on assessment practices at higher education. It was found that gender and faculty of study had significant influence on students' perceptions with regards to some assessment practices All these perceived assessment practices by the undergraduates would inform institutions of higher education on how to appraise undergraduate students' cognitive abilities.

Keywords: assessment practices, higher institutions of learning

1. Introduction

Assessment in any educational system ascertains the extent to which educational learning outcomes are achieved and also the extent to which students have mastered the subject matter. Educators, through assessment can determine whether students are developing desired competencies and values, or whether the curriculum provides the vital knowledge and skills of the discipline, and whether students can integrate learning from individual courses into a complete educational experience that prepares them for future careers. In higher institutions of learning, assessment of student learning is a fundamental phenomenon and it is also a continuous process geared towards promoting and understanding students' learning outcomes. According to Webber and Tschepikow (2012), assessment of students' learning outcomes is a significant component of effective teaching and learning in any educational institutions. Van den Akker (2003) described assessment as essential component of the curriculum practice. According to him, assessment is a process for obtaining information about curriculum operation in order to make decisions about student learning, curriculum and programmes and on education policy matters. Knight (2006) defined assessment as the formation of judgements on the quality of students' achievement. Carless, Joughin, & Mok, (2006); Gibbs & Simpson (2004) perceived assessment as a mechanism to inform students about their learning performance and how they can improve on their learning outcomes. Boud and Falchikov (2006) also pointed out that assessment can have powerful effects on what students do and how they do it, communicates to them what they can and cannot succeed in doing and builds or undermines their confidence as learners.

1.1 Concepts on Assessment Practices at Institutions of Higher Education

Falchikov (2005) viewed assessment practices at institutions of higher education as any process that can be used to appraise undergraduate students' knowledge, abilities or skills, comprehension, understanding of the concepts learnt. Marzano (2000) also suggested that assessment practices should be vehicles for gathering information about students' achievements or behaviour about their learning outcomes. Boud (2009) explained that assessment practices in tertiary education is always implemented in a traditional way; revolving around examinations, assignments and other kinds of tests. Boud (2000) warned that some current assessment practices in tertiary education were unlikely to help prepare students for lifelong learning. Boud and Falchikov (2006) stressed that "higher education has traditionally focused on preparing students for acquisition of knowledge rather than participation in learning". Knight (2002) claimed that summative assessment in higher education was in 'disarray'. In his view, current assessment practices have negative effects on students' learning due to an overemphasis on grades and learning outcomes, and it thus did not necessarily take learning processes into account.

1.2 The Problem

Assessment practices in higher education have been a concern in the educational system of most countries, especially in Africa. But some researchers, who are interested in assessment, have also expressed concerns about assessment practices in higher or tertiary education of learning. In higher institutions of learning recently, it seems there are limited assessment practices to effectively assess learning outcomes of undergraduate students. Most higher institutions of learning use assessment practices based on standardised examination which comprises of essay questions or various forms of objective testing, projects and dissertations. Samuelowicz and Bain (2002) perceived that the assessment practices chosen by academics are likely to be influenced by how academics view the nature of knowledge, learning, teaching and the purposes of assessment. They further emphasised that broadly, academics who viewed teaching as exposition, and learning as reproduction, tend to believe that assessments should determine how well students can reproduce the knowledge they have been given and how well they can use that knowledge in much-practised tasks. On the other hand, those who viewed teaching as facilitating learning, and learning as constructing a personal understanding based upon established knowledge and procedure, tend to believe that assessments should require purposeful transformation of knowledge to address open ended issues or problems not previously encountered.

Hale and Astolfi (2011) suggested that the types of assessment strategies practiced by instructors and how frequently they practice them would have an impact on the quality of students' learning. According to them assessment practices in higher institutions should comprise of higher level of thinking such as analysis, synthesis and evaluation. The type of test items that match with these levels should be carefully selected and implemented.

Black and William (2004) identified three main problems in assessment practices in higher learning institutions which were, *the assessment methods that instructors use are not effective in promoting good learning*; *grading practices tend to emphasise competition rather than personal improvement* and *assessment feedback, if at all exists often has negative impact particularly on low-achieving students who are led to believe that they lack ability and so are not able to learn*. Diamond (1998) described the fundamental problem in assessment practices of higher education courses as the mismatch between the learning targets established and the methods and criteria instructors use to judge and grade the students. According to him, ' in most cases, the learning goals include higher-order reasoning abilities, but the assessment procedures most frequently used focus on simple recall and recognition of the learned content'.

According to Black and William (1998), 'Assessment practices in higher learning institutes have been criticised for putting a premium on the reproduction of knowledge and passivity of mind at the expense of critical judgement and substantive competence'. These were the views of researchers on the concept of assessment practices in institutions of higher education, it will be necessary to establish the perceptions of undergraduate graduate students at institutions of higher education, on the concept of assessment practices. This study is intended to survey BA ISAGO undergraduate students' on their perceptions of the concept on assessment practices at institutions of higher education in relation to effective learning outcomes.

1.3 The Aims of This Study Are to:

    (i)   Find out from BA ISAGO undergraduate students, their perceptions about the concept on assessment practices in higher institutions of learning.

    (ii)   Examine if there are any significant differences with respect to gender and faculty of study in relation to these undergraduate students' perceived assessment practices.

1.4 Research Questions

1). What are BA ISAGO undergraduate students' perceived concept on assessment practices in higher education in relation to learning outcomes?

2). Are there significant differences with respect to gender and faculty of study of undergraduate students' perceptions regarding concepts on assessment practices in higher education?

2. Review of Literature on Assessment Practices

The review of literature was based on perceptions and experiences of academics and undergraduate students, on the current assessment practices used in higher institutions of learning.

Maclellan (2001) conducted a survey research which focused on the differences in perceptions and practices held by lecturers and third-year students in a B.Ed (Hons) Programme on assessment practices at higher education. The instrument used for the study was a 40-item questionnaire to find lecturers' beliefs and students' experiences with the theory and practice of assessment. Eighty (80) lecturers and one hundred and thirty (130) third-year undergraduates participated in the study. According to the findings, lecturers and students had different perceptions towards assessment practices. Lecturers adopted formative assessment for developmental purposes such as motivating students, diagnosing learning and evaluating teaching and this enabled further learning. Students, however, perceived that assessment was commonly summative and that ranking and grading their achievements was the dominant focus of the university. Students considered that assessment was not authentic in practice. Maclellan (2001) then commented that "the staff view of assessment did not fully espouse the philosophy of the standards model, thereby presenting a somewhat confusing picture of assessment" (p.317). Maclellan pointed out that staff declared the use of formative purposes of assessment, but their actual practices of assessment were not consistent with a standards model. Maclellan's study used only a survey questionnaire to investigate lecturers' and students' beliefs and practices of assessment in a university.

Another study regarding the concept on assessment practices was conducted by Gossmann (2008), a case study approach was used to investigate the perceptions of academic staff and students about the purposes of assessment and actual assessment practices. This study was undertaken in the Baccalaureus Education (BEd), Early Childhood Development, Foundation Phase Programme in the Faculty of Education, University of Pretoria, South Africa. This study employed a survey questionnaire and follow-up interviews. Thirty (30) academic staff and 114 third-year students completed the questionnaire, and three academic staff and three students participated in the interviews. The key findings revealed that academic staff and students perceived the main purpose of assessment as 'developmental or formative'. According to the study, however, it was confirmed that the purpose of formative assessment was not evident in the practice of academic staff. According to the academic staff, class size was a major factor in implementing effective assessment practices. Students, on the other hand, reported that the main issues were the reliability of assessment. The results of this study were similar to Maclellan's (2001) study. While academic staff declared their focus on formative assessment, their practices of assessment did not follow the standards model. Gossmann (2008) concluded that the standards model is needed in tertiary education because it can be used to reflect what has been learnt in criterion-referenced assessment.

Fletcher, Meyer, Anderson, Johnston, & Rees (2012) investigated faculty and students' attitudes with regards to aspects of assessment was conducted at four tertiary institutions in New Zealand. The study employed parallel surveys of conceptions of assessment in which a six-point Likert scale, ranging from strongly disagree to strongly agree was used to investigate the differences between faculties' and students' conceptions of assessment practices. Faculties teaching undergraduate programme and first year undergraduate students at four New Zealand tertiary institutes participated in this study. The tertiary institutions consisted of two universities, one polytechnic institute, and a wananga (a **wānanga** is a publicly owned tertiary institution that provides education in a Māori cultural context in New Zealand). This study used a convenience sample, so participation was voluntary and confidential. There were 877 faculty teaching staff (males=441; females=436) and 1,224 first year undergraduates (males=379; females=845) completed questionnaires. The findings of this study revealed that teaching staff perceived assessment practices as a tool to improve student learning and reflect on their teaching practices, whereas students perceived assessment as irrelevant and unfair in the teaching and learning process.

Wren et al. (2009) stressed that negative perceptions and beliefs about assessment practices in university contexts held by many students may reflect problems of effective implementation in good practice and also reflect differences in thinking regarding the nature and purpose of assessment. Differing perceptions have been found between academics and students with regards to the importance of feedback in relation to student enhancement.

According to studies by Asghar (2012), academics acknowledged the value of feedback that supports student learning as major component of assessment practices. On the other hand, according to Wren et al. (2009), students reported that feedback given was too brief and unlikely to help them improve in the learning outcomes.

Ferguson (2011) investigated perceptions of students about effective, quality feedback from their extensive experiences in higher education and was undertaken by in a major Australian university. This study used a questionnaire with a mixture of open and closed questions. Participants in this study were from three different pre-service education programmes within the university, a four-year undergraduate programme (BEd), a one year-graduate programme (DipEd), and a two-year graduate programme (BTch). Four hundred and sixty-five (80%) graduate students and 101 (72%) undergraduate students out of a total sample of 750 completed the questionnaire voluntarily. This study found that a large number of students needed feedback containing constructive comments to give them confidence and motivation. It is argued that "the most important factor in 'good' feedback was a clear link between assessment tasks and guidelines, assessment frameworks and criteria and feedback offered" (Ferguson, 2011, p. 60). However, most students reported that unclear or brief feedback could de- motivate their future learning. This finding was consistent with a study by Wren et al. (2009) showing that it was unhelpful of lecturers to give feedback through brief comments.

Fook and Sidhu (2011) conducted a study to explore the perspectives of undergraduates, postgraduates and lecturers with regard to assessment preferences and practices. This study employed both quantitative and qualitative research methods. Two sets of questionnaires were used for faculty lecturers, and undergraduate and postgraduate students. Follow-up interviews were also used to investigate assessment preferences and practices by lecturers, undergraduates, and postgraduates. Thirty (30) lecturers, 27 postgraduates, and 42 undergraduates were selected to participate in this study. Three lecturers, three postgraduates and three undergraduates were drawn from the sample group participated in interviews. The aim of the interviews was to gain more insight into the assessment practices in higher education.

Fook and Sidhu's study (2011) found that respondents preferred alternative assessment to traditional summative assessments. The findings highlighted the need for alternative assessment and practices of formative assessment which were deemed to transform knowledge among the students in higher education. This finding has also been confirmed by other studies carried out in the context of higher education (Wren et al., 2009; Asghar, 2012). With the empirical evidence from this study, Fook and Sidhu (2011, p. 70) highlighted that "institutions of higher learning need to revisit their assessment procedures to include more formative assessment procedures that would encourage more student participation". The study also suggested that issues of validity and reliability in formative assessment should be extensively considered because these two are the most important characteristics of good assessment criteria. The study concluded that the assessment tasks should range from comprehension to problem solving, explaining, drawing conclusions and critical thinking (Fook & Sidhu, 2011). In conclusion, the emerging themes of studies about students' perceptions regarding assessment were, fairness of assessment, summative purposes, and the importance of feedback that supports students learning.

The current study on assessment practices in institutions of higher education was motivated by the above literature reviewed that there are problems associated in assessing undergraduate students' learning outcomes and achievements in most countries of the world. It will be very necessary to also identify such problems within the context of higher education in Botswana by exploring the perceptions of undergraduate students at BA ISAGO University on assessment practices at higher institutions of learning. Assessment practices at institutions of higher education should not be used only for grading students achievements, but should also be used for improving students learning through feedback processes.

3. Methodology

3.1 Sampling Procedure

The sampling procedure was based on convenience sampling procedure of four hundred (400) undergraduate students, participation was voluntary and confidential. In all, out of the four hundred (400) undergraduate students from different faculties at BA ISAGO University, only three hundred and sixty four (364) undergraduate students responded to the administered questionnaire on perception of assessment practices at higher education. The students who responded to the questionnaire were from four (4) faculties; faculty of Commerce(204); faculty of Education (41); faculty of Built, Arts, Environment and Sciences (90); faculty of Law (29), out of which were (134) male and females (230) students who participated by completing the questionnaire.

3.2 Instrument

This study used a questionnaire adapted from Maclellan (2001). Questionnaire items reflected the range of assessment practices that were documented in the literature (Maclellan, 2001). The questionnaire consisted of two sections A and B. In Section A students were asked about their background information. And Section B consisted of thirty (35) closed ended questions in statements form on assessment practices on a four likert rating scale, Strongly disagree(SD) Disagree (D) Agree(A) Strongly agree (SA) on assessment practices at higher education of learning.

3.3 Data Analysis

The responses of these undergraduate students were analysed statistically using Statistical Package for Social Science (SPSS software), the mean and standard deviations of students' responses to each item were calculated and tabulated, exploratory factor analysis was used to find the perceived assessment practices by the undergraduate students, independent t-test at 0.05 alpha level was used to find out if there were any gender significant difference on the students' perceptions on assessment practices in higher institutions of learning and Analysis of Variance (ANOVA) at 0.05 alpha level was used to find if there were significant differences in relation to faculty of students.

4. Presentation and Discussion of Results

What are undergraduate perceived concept on assessment practices in higher education in relation to learning outcomes?

Table 1. Descriptive statistics of students' responses to the questionnaire

	N	Min	Max	M	SD
Q1.Assessment is used to motivate student learning.	364	1	4	3.12	.976
Q2.Assessment is used to rank student achievement.	364	1	4	2.88	1.044
Q3.Assessment is used to identify students' strengths and weaknesses.	364	1	4	3.05	.986
Q4.Assessment is used to reflect lecturers' teaching performance.	364	1	4	2.73	1.072
Q5.Assessment is designed to assess students' ability to develop new knowledge.	364	1	4	2.95	.934
Q6.Assessment is designed to assess students' ability to apply knowledge into the real life situation.	364	1	4	2.69	1.023
Q7.Assessment is designed to assess students' ability to present information.	364	1	4	2.87	.941
Q8.Assessment is designed to assess students' ability to analyse information.	364	1	4	2.87	.922
Q9.Assessment is designed to assess students' ability to synthesize information.	364	1	4	2.79	.935
Q10.Assessment is designed to assess students' ability to evaluate information.	364	1	4	2.87	.897
Q11.Assessment is conducted at the start of the course	364	1	4	2.38	1.145
Q12. Assessment is conducted during the course	364	1	4	2.95	.965
Q13.Assessment is conducted at the end of the course	364	1	4	2.30	1.167
Q14.Assessment is conducted through written assignments	364	1	4	2.97	.976
Q15.Assessment is conducted through group presentations	364	1	4	2.73	1.007
Q16.Assessment is conducted through reflective journal writing (portfolio)	363	1	4	2.13	1.011
Q17.Assessment is conducted through a final examination	364	1	4	2.54	1.179

Q18.Students are encouraged to assess their own work (self-assessment)	364	1	4	2.43	1.117
Q19.Students are encouraged to assess other students' work (peer-assessment)	364	1	4	2.00	1.048
Q20.Assessment is through group presentations with proper feedback from lecturers or peers.	364	1	4	2.60	.978
Q21.Assessment is conducted using multiple choice questions	364	1	4	1.93	1.081
Q22.Assessment is conducted using short answer questions	364	1	4	2.57	1.057
Q23.Assessment is conducted using essay type questions	363	1	4	2.77	1.006
Q24.Adequate feedback is given to students after assessment	364	1	4	2.70	1.048
Q25.Feedback help students to improve their learning	364	1	4	3.11	.998
Q26.Feedback prompts discussion between students and lecturers	364	1	4	2.90	1.010
Q27.Feedback allow students to prepare for future assessment	364	1	4	3.04	.991
Q28.Feedback on assessment is given within a reasonable time to facilitate learning.	364	1	4	2.53	1.092
Q29.Detailed written feedback is necessary to encourage deep learning.	364	1	4	2.99	1.001
Q30.Feedback prompts discussion between students in classroom	364	1	4	2.75	.999
Q31.Lecturers use detailed marking criteria for all assignments	364	1	4	2.45	1.047
Q32.Marking is based on implicit criteria	364	1	4	2.45	1.039
Q33.Marking is based on explicit criteria	364	1	4	2.48	1.059
Q34.Detailed marking criteria are provided for all assignments/tests/examinations	364	1	4	2.55	1.044
Q35.Assessment criteria are clearly stated in module profiles/ course outlines	364	1	4	2.92	1.078

*M = mean; SD = Standard Deviation

From Table 1 above, the descriptive statistics of the responses in form of means and standard deviations of the responses are shown. The respondents *strongly agree* with the following assessment practices at higher education of learning should:

- **(Q1)** Motivate students learning (Mean 3.12, SD .976)

- **(Q25)** Provide feedback which help students to improve their learning outcomes (Mean 3.11, SD.998)

- **(Q3)** Identify students' strengths and weaknesses (Mean 3.05, SD .986), that is diagnostic assessment practices.

The undergraduate students strongly perceived that assessment practices in any higher education of learning should motivate student learning; provide feedback to help students to improve on their learning; and also to identify students' strengths and weaknesses. All the other items were rated as *agree,* the means ranged from 2.13 with SD 1.011 to 2.99 with SD 1.001. Only the item 21 had below average mean of 1.93, which showed that the respondents were opposed to the use of multiple choice questions at the level of higher institutions. That assessment practices at higher education should not involve use of multiple choice questions.

- Item **Q21**. Assessment is conducted using multiple choice questions with mean of 1.93 and standard deviation of 1.081.

The responses of the undergraduate students from the four faculties at BA ISAGO University to the thirty five (35) items in the administered questionnaire were subjected to factor analysis. Table 2 below, indicated that seven constructs derived from the thirty five (35) items, with eigen values greater than 1, accounting for

55.210% of the total variance of undergraduate students' perceptions about the concept on assessment practices at higher institutions of learning.

Table 2. Eigen values of the seven factors after varimax rotation

Variables	Eigen value	% of variance
1.	9.869	28.198
2.	2.584	7.383
3.	1.901	5.432
4.	1.488	4.250
5.	1.262	3.607
6.	1.121	3.202
7.	1.098	3.138

The Scree Plot below showed the eigenvalues associated with a component or factor in descending order versus the number of the component or factor. The scree plot is an analysis that shows you how many factors or components have been retain as factors or principal components analysis.

Table 3 below is the Principal Axis Factor with varimax rotation of the 35 items on a likert scale which yielded seven (7) factors. An examination of the Kaiser-Meyer Olkin measure of sampling adequacy suggested that the sample was factorable (KMO=.913).
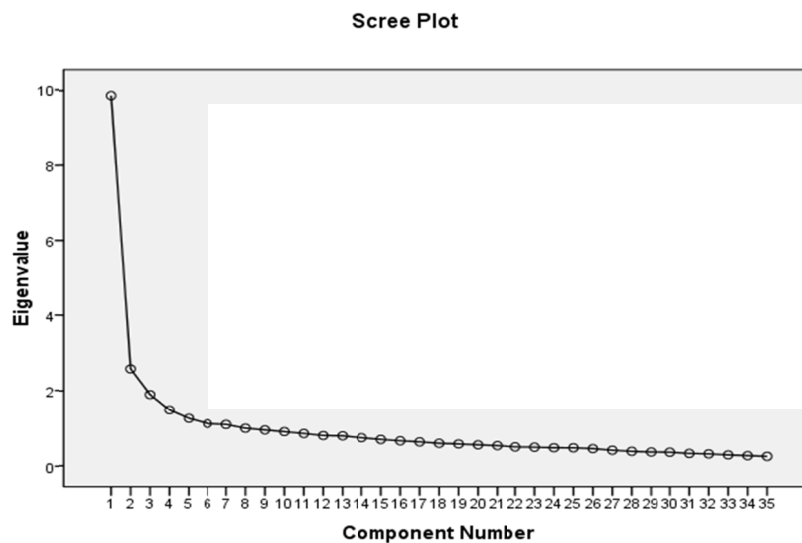

Scree Plot

Table 3. Varimax rotated component factor matrix of the 35 items on assessment practices

No	1	2	3	4	5	6	7
Q8	.725						
Q7	.718						
Q9	.689						
Q3	.682						
Q5	.660						
Q1	.646						
Q10	.639						

Q6	.623					
Q2	.614					
Q26		.726				
Q25		.678				
Q27		.671				
Q29		.650				
Q24		.644				
Q30		.603				
Q28		.538				
Q16			.711			
Q19			.669			
Q18			.635			
Q15				.659		
Q22				.588		
Q23				.516		
Q34					.670	
Q35					.664	
Q33					.513	
Q12						.673
Q11						.607

Table 3 above is the varimax rotation which signified the rotated component factor matrix of the 35 items on the assessment practices questionnaire, and results revealed seven (7) main perceived assessment practices as specified in Table 4 below.

Table 4. New emerged factors on assessment practices perceived by the undergraduate students

Items	Factor loadings	Concept on Assessment practices at institutions of higher education should be to:
Q8. Assessment is designed to assess students' ability to analyse information.	.725	***Determine Students' higher level of thinking/ cognitive abilities***.
Q7. Assessment is designed to assess students' ability to present information.	.718	
Q9. Assessment is designed to assess students' ability to synthesize information.	.689	
Q3.Assessment is used to identify students' strengths and weaknesses.	.682	
Q5. Assessment is designed to assess students' ability to develop new knowledge.	.660	
Q1. Assessment is used to motivate student learning.		
Q10. Assessment is designed to assess students' ability to evaluate information.	.646	
Q6. Assessment is designed to assess students' ability to apply knowledge into the real life situation.	.639	
Q2. Assessment is used to rank student achievement.	.623	
	.614	
Q26. Feedback prompts discussion between students and lecturers	.726	***Provide constructive feedback for effective***
Q25.Feedback help students to improve their learning	.678	

Q27. Feedback allow students to prepare for future assessment	.671	***students' learning outcomes.***
Q29.Detailed written feedback is necessary to encourage deep learning.	.650	
	.644	
Q24. Adequate feedback is given to students after assessment	.603	
Q30. Feedback prompts discussion between students in classroom	.538	
Q28. Feedback on assessment is given within a reasonable time to facilitate learning.		
Q16. Assessment is conducted through reflective journal writing (portfolio)	.711	***Allow Students' self-reflection and peer assessment of learning outcomes.***
Q19. Students are encouraged to assess other students' work (peer-assessment)	.669	
Q18. Students are encouraged to assess their own work (self-assessment)	.635	
Q15. Assessment is conducted through group presentations	.659	***Use different alternative modes of assessing learning outcomes.***
Q22. Assessment is conducted using short answer questions	.588	
Q23. Assessment is conducted using essay type questions	.516	
Q34. Detailed marking criteria are provided for all assignments/tests/examinations	.670	***Maintain quality assurance processes in form of assessment criteria.***
Q35. Assessment criteria are clearly stated in module profiles/ course outlines	.664	
	.513	
Q33. Marking is based on explicit criteria		
Q12. Assessment is conducted during the course	.673	***Modify learning outcomes using Formal and informal assessment procedures.***
Q11. Assessment is conducted at the start of the course	.607	***Identify students' prior knowledge before beginning instruction.***

From Table 4 above, seven (7) factors were extracted that signified the usefulness of assessment practices at higher learning of education as follows:

- Nine (9) items loaded onto Factor 1. It is clear from Table 4 that these nine items all relate to assessment practices that deals with *a procedure to determine students' higher level of thinking abilities*.

- Six (6) items loaded onto the second factor 2 on assessment practices relating to providing adequate feedback to students and labelled; ***Provide constructive feedback for effective students' learning outcomes.***

- Three (3) items loaded on Factor 3 relating to students participation in self- evaluation of their work. This factor was labelled; ***Allow for Students' self-reflection and peer assessment***.

- Three (4) items loaded on Factor 4 relating to different alternative modes for assessment practices labelled ;***use of different alternative modes of assessing learning outcomes.***

- Three (5) items loaded on Factor 5 relating to marking criteria for quality assurance purposes, which was labelled; ***maintain quality assurance processes in form of assessment criteria.***

- One (1) item loaded on Factor 6 relating to the use of different assessment tools, which was labelled; ***Modify learning outcomes using Formal and informal assessment procedures.***

- One (1) item loaded on Factor 7 relating to when to conduct assessment revealed that assessment can be conduct any time and labelled ***Identify of students' prior knowledge before beginning instruction.***

Are there significant differences with respect to gender and Faculty of study of undergraduate students' with the perceived levels of concepts on assessment practices in higher education?

Table 5. Independent T-test for gender significance difference results

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | | | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
assessment is conducted using multiple choice questions	1.208	.272	2.104	362	.036	.246	.117	.016	.476
			2.063	261.633	.040	.246	.119	.011	.481
detailed marking criteria are provided for all assignments/tests/examinations	7.975	.005	2.197	362	.029	.248	.113	.026	.470
			2.271	306.811	.024	.248	.109	.033	.463

P<0.05 for significance.

The following two items showed gender significant difference as follows:

- **Assessment is conducted using multiple choice questions** (.036***) equal variances was assumed, but there was a significant difference between the male and the female undergraduate students' responses in favour of males (mean=2.09 SD=1.127) compared to the females (mean=1.84 SD=1.046). There was also significant difference between the male and female students at t(2.104), p= 0.36, and degrees of freedom is 362.

- **Detailed marking criteria are provided for all assignments/tests/examinations** (.024***) equal variances cannot be assumed, because the Levene's Test for Equality of Variances was .005, but there was a significant difference between the male and the female undergraduate students' responses in favour of males (mean=2.71 SD=.956) compared to the females (mean 2.46 SD=1.084). There was a significant difference between the male and female students at t(7.975), p= 0.24, and degrees of freedom is 362.

Table 6. Analysis of Variance (ANOVA) to determine the significant difference with respect to faculties

		Sum of Squares	df	Mean Square	F	Sig.
Assessment are designed to assess students' ability to apply knowledge into the real life situation	Between Groups	10.506	3	3.502	3.416	.018
	Within Groups	369.032	360	1.025		
	Total	379.538	363			
Assessment is conducted at the start of the course	Between Groups	10.729	3	3.576	2.769	.042
	Within Groups	464.952	360	1.292		
	Total	475.681	363			
Assessment is conducted through reflective journal writing (portfolio)	Between Groups	15.380	3	5.127	5.195	.002
	Within Groups	354.273	359	.987		
	Total	369.653	362			

Students are encouraged to assess other students' work (peer-assessment)	Between Groups	11.017	3	3.672	3.408	.018
	Within Groups	387.980	360	1.078		
	Total	398.997	363			

There were faculty significant differences with respect to the following assessment practices as perceived by BA ISAGO University students as follows in Table 6:

- **(Q6)** *Assessment designed to assess students' ability to apply knowledge into the real life situation* **(p=.018).** There was a statistically significant difference between faculty of Commerce and faculty of Built and Environment by one-way ANOVA (F(3,363)= 3.416, p=0.018).

- **(Q 11)** *Assessment conducted at the start of the course.* **(p=.042)** .There was a statistically significant difference between faculty of Commerce and faculty of Built and Environment by one-way ANOVA (F(3,363)= 2.769, p=0.042).

- **(Q16)** *Assessment conducted through reflective journal writing (portfolio)* **(p=.002).** There was a statistically significant difference between faculty of Commerce and faculty of Law by one-way ANOVA (F(3,363)= 5.127, p=0.002).

- **(Q 19)** *Students are encouraged to assess other students' work (peer-assessment)* **(p=.018).** There was a statistically significant difference between faculty of Commerce and faculty of Law by one-way ANOVA (F(3,363)= 3.408, p=0.018).

5. Conclusions

Assessment has long been recognized as maintaining a central position in students' learning (Craddock and Mathias, 2009). Mode of assessment can also have a powerful influence on the learning behaviour of students (Biggs and Tang, 2007) and assessing the performance of students is one of the most important activities of instructors (Trotter, 2006). Offering a variety of assessment methods is often recommended as good practice in response to numerous critiques of the over-reliance on traditional tests. Different researchers like Furniss, (2003), suggested the need to use different strategies which more appropriately assess different kinds of learning processes, the need to cater for differences in students' learning preferences and styles and the need to enhance learners' psychological approaches to learning. According to (UNECO, 2006), the main purpose of learning assessment at classroom level is to ensure that students know what and how well they are learning. One of the reasons for students' assessment of learning outcomes is to provide feedback for students and teachers about learners' progress in order for both be able to improve the efficacy of their work and also to provide feedback to educators, parents, policy makers, and the public about the effectiveness of educational services (Stephens and Moskowitz, 2004). Practices of assessment strategies influence the quality of teaching and learning. The types of strategies practiced by instructors and how frequently they practice them have an impact on the quality of students learning (Hale &Astolfi, 2011). Studies also show that the type of test items practiced by instructors should match with the learning outcomes. Teaching in the graduate programs demands by its nature higher level of thinking such as analysis, synthesis and evaluation. The learning outcomes should be stated at these higher levels of thinking. The type of test items that match with these levels should be carefully selected and implemented.

Fisseha (2010) stressed the need to use assessment strategies such as performance assessment, portfolios, authentic assessment and student self- and peer assessment together with feedback and comments, which are based on constructivist theories of learning and teaching. He further suggested that teachers should be responsible for providing feedback that students need in order to re-learn and refine learning goals. Daniel (2004) further noted that the primary purpose of assessment of students' learning outcomes is to improve student learning. In practice, however, assessments in many programs of higher education institutions are poor in terms of giving feedback and in motivating further learning.

It can be concluded from the analysis that undergraduate students perceived that the concept on assessment practices in any higher institution of learning should be able to: motivate student learning; provide constructive feedback to help students improve on their learning and also to identify students' strengths and weaknesses. Students should also be allowed to self- assess or evaluate their work. To the undergraduate students, quality assurance processes or measures should also be part of assessment practices in any institutions of higher

learning. Assessment practices should also include formal and informal assessment procedures to modify/ monitor learning outcomes/ processes. Also identification of students' prior knowledge before beginning of instruction should be part of assessment practices in any higher institution of learning.

The findings of this study on the concept of assessment practices to provide constructive feedback for effective students' learning outcomes was consistent with Ferguson's (2011) view that feedback was needed to motivate student learning. According to Newble and Jaeger (2009), the nature of assessment practices have a vital impact on student's behaviour as well as learning approaches. Adequate assessment practices serve and maintain quality assurance of academic standards in higher education institutions, which can also be used to monitor instruction for improvement and determine student learning outcomes against academic standards.

6. Recommendations

1). Assessment practices at institutions of higher education should not be used only for grading students, but should also be used for improving students learning.

2). The approach for assessment of learning outcomes should be criterion referenced approach where students' knowledge, skill and attitudes are judged with reference to standard of success.

3). Emphasis should be given for the projects and portfolios in any assessment practices of higher education learning outcomes.

4). Students' self and peer assessment practices should be established or encouraged in institutions of higher education.

5). Educators should devise adequate assessment practices to measure the attainment of the stipulated learning outcomes of students, and there is the need to gather variety of information and determine the degree to which students have attained the learning targets intended in the curriculum.

6). All these perceived assessment practices by the undergraduates should inform institutions of higher education in Botswana on how to appraise undergraduate students' cognitive abilities.

7). Training of university staff members on assessments practices that will benefit undergraduate students learning outcomes.

8). Assessment of learning must be very relevant and carefully planned because it will be used as the basis for making decisions about student learning.

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