RESEARCH ARTICLE

Performance discrepancies between formative and summative assessments: focus on six different higher learning institutions from Ghana, Kenya and Rwanda

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ABSTRACT

The thrust of this study was to examine discrepancies between formative and summative assessments among selected institutions of higher learning in three African countries, namely; Ghana, Kenya and Rwanda. The study had three fold objectives: i)to examine the level of students performance in formative and summative examinations ;ii) find out factors responsible for the differences in performance, if any and; iii) suggest plausible remedial strategies to correct the observed discrepancies. A descriptive survey research employing cluster sampling techniques was used to select the study sample. Questionnaires were used to generate primary data which was analyzed using statistical package for social sciences (SPSS). The finding revealed mixed results. While on the one hand, students scores in all the three countries decreased in summative assessment when compared to the formative assessment scores, the analysis of other statistical values such as range, mean and standard deviation lead to realize the existence of differences in performance between the two types of assessments, on the other hand. Therefore, the discussion made in light of the reviewed literature and researchers’ contextual experiences led to the conclusion that such discrepancies in difference could be attributed to a number of other intertwined factors. Such factors include: weight, content covered, type of questions set, mode of delivery, terms and conditions of candidates’ eligibility, decisions taken and academic implications that are quite different between formative and summative assessments unique to the three African countries studied. The study made several recommendation, amongst them being the need to reinforce and strengthen the formative evaluation in the form of individually attempted and supervised tests so that student weaknesses can be diagnosed early during the teaching – learning and appropriately addressed in good time instead of overreliance on summative evaluation.(285 words)

INTRODUCTION

Background Information

The high premium attached to the quality of education and the methods of assessing the quality using formative and summative indicators in institutions of education in most African countries is neither achievable nor sustainable without the continuous interrogation of merits of evaluation and also on how they influence the holistic measurement of quality education by school systems in Africa (Orodho, 2014; UNESCO, 2012). Demand for educational quality is also increasing, as Ministries of education in these African countries views the satisfactory performance of their basic education systems not only instrumentally unreliable but also strategically inconsistent in relation to economic development and international competitiveness( United Nations,2013). The foregoing notwithstanding, the commencement of the old non-formal schooling systems that later were formalized to give birth to the modern ways of imparting knowledge, educators have had in their practices the mechanisms to obtain feedback for trainees also known as learners. The rationale behind such exercises was to identify in time whatever weaknesses in the learning process so that they could be fixed adequately. Indeed, it was perceived to ensure that the previous acquisitions really shaped the trainee and producing in him/her long lasting changes. It is actually these two devices that were shaped into the current big two known types of assessment namely formative and summative.

The importance of assessment has been emphasized by different authors. For instance Okonkwo (2011) argues that ‘Teaching-learning process is incomplete without effective and meaningful assessment of students learning outcomes. This applies to both conventional modes of education as well as to open and distance learning modes’. Moreover, it is emphasized that ‘assessment lies at the heart of the learning experience: how learners are assessed shapes their understanding of the curriculum and determines their ability to progress’ (JISC, 2010). This late author goes ahead to mention that assessment and feedback ended up becoming integrated parts of the educators’ prime roles and responsibilities in any educational setting or context.

Capturing the worldwide spectrum, Looney (2011) has demonstrated that students’ assessment as educational practice and obligation for educational system has progressively been taking more value and consideration even in setting up
educational policies. Indeed, as countries have progressively been striving to develop curricula that suit their local context and needs, assessment did not also sleep on the way. Rather it accompanied the whole revolution road that ended up into assessment scales and standards to monitor students, schools and educational systems ‘performance across regions and countries.

The above mentioned roadmap has much impacted on the educational developments. In this regards, Looney (2011) argues that in view of the results from assessment, educational institutions are being held accountable for helping students ‘to meet central standards, as measured by these national or regional assessments’. On the other hand, the same results are also enabling students themselves, parents, schools, governmental and non-governmental institutions to identify the gaps in students and schools achievements but also to fix the current trend of quality required in teaching and learning process.

Historically, formative and summative assessments have been used in various educational systems worldwide. For instance, late back in the nineteenth century, in the United States of America, early summative assessments included grade reports to parents and end-of-year recitations (Brookhart, 2011). As argued by the Cross Sectoral Assessment Working Party (2011), ‘the purpose of assessment is for students to develop and improve in their learning and for teachers to plan and teach effectively’. Hence, in the course and at the end of the learning exercise, assessment is revealed important.

In the case of higher education, it is important to mention that the creation and accreditation of higher education institutions on the entire planet has been mandatorily been accepted based also on the validity of forms of assessment namely formative and summative. It is in this respect that African higher learning institutions from Ghana, Kenya and Rwanda whose students’ scores in formative and summative assessments were analyzed do also have embraced these assessment patterns in their practices.

In fact, while formative assessments aims at discovering areas for improvement during the teaching-learning process, the summative assessment would come at the end of the process i.e.; at the end of the term, year, level or programme for purposively decision making about the ended activity or completed programme. That is how a more descriptive and explanatory of these two complementary assessment components is brought by Robert Stake who argues that “when the cook tests the soup, that’s formative; when the guests taste the soup that is summative” (Guskey, 2002). It is against this backdrop that this paper was spurred into attempting to examine the apparent discrepancies in formative and summative evaluation processes in institutions of higher learning in selected African countries.

Literature review

Understanding the Concepts of Formative and Summative Assessment

According to Mansell et al. (2009), a distinction routinely made by experts in the field of assessment is that assessment is characterized as either formative or summative. Formative is the use of day-to-day, often informal, assessments to explore pupils’ understanding so that the teacher can best decide how to help them to develop that understanding. Summative is the more formal summing-up of a pupil’s progress that can then be used for purposes ranging from providing information to parents to certification as part of a formal examination course. It should be noted that assessments can often be used for both formative and summative purposes.

Harlen & Deakin (2002) write that assessment is a term that covers any activity in which evidence of learning is collected in a planned and systematic way, and is used to make a judgment about learning. Harlen & Deakin (2002) add that if the purpose is to help in decisions about how to advance learning and the judgment is about the next steps in learning and how to take them, the assessment is formative in function. However, if the purpose is to summarise the learning that had taken place in order to grade, certificate or record progress, the assessment is summative in function (Harlen & Deakin, 2002).

“Formative” and “summative” are not labels for different types or forms of assessment but describe how assessments are used (Mansell et al., 2009). For example, a task or activity is not formative unless the information it provides is actually used to take learning forward. What a pupil does or says will be observed and interpreted by the teacher, or other learners, who build on that response to develop a dialogue aimed at helping learners to take their next steps (Mansell et al., 2009). However, summative assessment appears in three ways. There is Summative assessment by teachers to be used within their school, by which teachers routinely sum up what their pupils have learned, because an effective appraisal of the progress pupils have made in their understanding is integral to helping them move on. Yet this is not the only use to which in-class assessment can be put. Its other purposes can include:

reporting on a child’s progress to parents; helping school managers decide which class a pupil is to be placed in; helping a pupil to decide which subjects to pursue in options choices; forming all or part of an external qualification; and providing information to the outside world on the standards reached by pupils in a particular school (Mansell et al., 2009). There is also summative assessment by teachers for use externally, outside of their school. This is for example, when a pupil moves from one school to another; when the judgments made by a pupil’s own teacher contribute towards an external qualification; and when summative assessment by teachers forms part of a wider system of assessment at local, regional or national level (Mansell et al., 2009) whereas externally marked tests and examinations are especially built by awarding bodies and test development agencies or internationally.

Harlen & Deakin (2002) argue that proponents claim that tests cause students, as well as teachers and schools, to put more effort into their work on account of the rewards and penalties that can be applied on the basis of the results of tests. In opposition to these arguments is the claim that increase in scores is mainly the consequence of familiarization with the tests and of teaching directed specifically towards answering the questions, rather than developing the skills and knowledge.
intended in the curriculum. It is argued that tests motivate only some students and increase the gap between higher and lower achieving students; moreover, tests motivate even the highest achieving students towards performance goals rather than to learning goals, as required for continuing learning.

Scriven (1967) first suggested the distinction between formative and summative approaches in reference to evaluations of curriculum and teaching methods. He suggested that evaluators could gather information early in the process of implementation to identify areas for improvement and adaptation, and at successive stages of development. Soon after, Bloom (1968) and Bloom, Hasting and Madaus (1971) took up this idea, applying the concept to student assessment in their work on “mastery learning”. They initially proposed that instruction be broken down into successive phases and students be given a formative assessment at the end of each of these phases. Teachers would then use the assessment results to provide feedback to students on gaps between their performance and the “mastery” level, and to adjust their own teaching to better meet identified learning needs (Allal, 2005).

Kellaghan & Raczek (1996) argued that assessment policy is an important element to raise standards of students’ achievement. Kellaghan & Raczek (1996) identified that tests and examinations indicate standards; that high (“world class”) standards can be demanded; that they exemplify to students what they have to learn; that rewards and penalties can be applied to the results; that students will put effort into school work in order to pass tests.

Challenges to Assessment

Assessment has for some time been a challenging issue in higher education around the world (Yorke, 2010). Knight (2002) made a strongly-argued case that summative assessment was in disarray, not least because more expectations were placed on it than the assessment methodology could bear. However, summative assessment has received relatively little attention, despite its importance for students and their future. More problematic than many are prepared to acknowledge are the grading of students’ work, as discussed by Milton, Pollio et al. (1986) and Yorke (2008), which is influenced by a variety of factors including normative disciplinary practices, the way in which grades are cumulated to produce an overall index of attainment, such as the honors degree classification in the UK and the grade-point average (GPA) in the USA, or when it is used as an overall index of achievement on a programme of study (Yorke 2008); and, less visibly, the assessment regulations implemented by autonomous institutions for evidence of variation in the UK (Yorke et al., 2008); and in the USA (Brumfield, 2004).

Masters (2011) arguments that some forms of assessment promote 'performance' rather than learning cultures. For example, one-off, end-of-course examinations usually are designed to judge and compare students on the amount of course content they have learnt – often for the purposes of ranking and selecting students for the next phase of education – rather than to monitor and understand learning progress. In such assessments, Masters (2011) goes on to say, learning can be driven more by external pressure for results than by curiosity and intrinsic motivation. And this pressure often distorts teaching and learning by encouraging cramming and creating unacceptable levels of stress for students and their families. These research findings relating to emotions, attitudes and beliefs have implications for how assessments of learning are conducted and how the results of assessments are reported and used. Their learning should depend on a thorough understanding of the learning terrain through which they are progressing: typical paths of development; sequences in which understandings normally are established; and side-tracks in the form of common errors, learning difficulties and misunderstandings, which stands in stark contrast to the traditional use of assessment to determine how much of what a teacher has taught each student has successfully learnt (Masters, 2011). Traditional assessments are made not in relation to an understanding of long-term learning progress, but in relation to a specific corpus of taught content. Under traditional approaches, it is common to treat ‘curriculum, teaching and assessment’ as separate activities. The role of teachers is to teach the curriculum, the role of students is to learn, and the role of assessment is to judge how much of the taught content students have learnt (Masters, 2011).

Reasons for Academic Underachievement

Experts associate fear to fail with students’ underachievement. According to Atkinson & Feather (1966) and Hill (1972) cited in Reiss (2009) students with high fear of failure show inconsistent effort and, thus, underachieve. These students may try hard on easy tasks but not when challenged. When teachers or parents criticize them, they may not hear what the teacher or parent is saying.

Incuriosity is another factor associated with students’ low achievement and is seen in two forms (Reiss, 2008). Intellectual curiosity also called need for cognition; (Cacioppo et al., 1996) motivates thinking and valuation of ideas. Exploratory curiosity motivates interest in novel stimuli and is inhibited by fear of the unknown. Incurious students may be at their best when teachers break down the material into small bites. They may respond to opportunities for frequent rests from learning experiences. They may respond to practical learning experiences: teachers should minimize emphasis on ideas and instead make salient the practical relevance of the curriculum. Curiosity scale is significantly correlated with intrinsic motivation, r = .54 (Olson and Chapin, 2007).

Another factor is lack of ambition (Reiss, 2009) and many experts suggested that competence motivation is associated with achievement (White, 1959). Students with lack of ambition set modest goals and avoid challenging courses because they do not want to work hard. Non-ambitious students who are smart still may earn average or even above average grades, but only when they can do so without working hard. The students value good grades but devalue persistent effort. These students may be willing to work at a moderate pace but no harder. When pushed to work hard, they may quit. These students may want to avoid the most challenging courses, but they may do well in moderately challenging courses. It goes without saying that ‘‘challenging’’ or ‘‘moderately challenging,’’ depends on the student’s potential.

Another factor is not working hard after graduation, these individuals may continue to avoid hard work and, thus, underachieve in their career (Reiss, 2009).

Students who value spontaneity tend to be disorganized and unprepared. They tend to have too many balls in the air, starting a new activity before they finish the current activity.
Some teachers mark down disorganized students for carelessness, inattentiveness to detail, and sloppiness (Reiss, 2009). Such students need, Reiss (2009) goes on to say, to learn to stay focused on a single course of action, completing one task before moving on to the next. Some spontaneous students think they are impressing teachers by working on multiple projects, when in reality the teachers are thinking they are too scattered to do any one job well. These students are at their best on unstructured tasks and in loosely organized environments (Reiss, 2009).

Reiss (2009) argues underachievement is also linked with lack of responsibility. Students with character problems underachieve when they are caught cheating, shirk their duties (e.g., do not do homework), or when teachers mark them down for character shortcomings. High standard scores suggest the traits of a responsible student, whereas low standard scores suggest the traits of an opportunist (Reiss, 2009).

Mandel (1997) cited in Reiss (2009) contends that another factor linked to underachievement is competitiveness. Combative behavior is an important cause of underachievement throughout life. Individuals with combative behavior make enemies of potential friends. Combative school children get into fights on the playground, school cafeteria, school hallways, or even in the classroom itself (Mandel, 1997) quoted in Reiss (2009). These students may be at their best in competitive situations. Careers that reward competitiveness include sports, military life, and business. When a student is inappropriately combative, parents and counselors should teach the difference between socially appropriate competition and inappropriate or excessive confrontation or aggression (Reiss, 2009).

**Statement of the problem**

A study conducted at College of Education, University of Rwanda by Nayituriki, Niyoyita, and Nshimiyimana (2012) has shown that the pass rate which was 86% in formative assessment of mathematical subject coded MAT 201 went down to 63% while in Physics coded PHYS 201, the performance rate which was 90.3% declined substantially to 63.5%.

The above evidence pushed the authors of this study to reflect back on their past experiences as university lecturers. A quick view in the sampled subjects taught in the past -capturing various higher learning institutions in their countries namely Ghana, Kenya and Rwanda- lead to realize really that students used to perform quite differently in formative and summative assessments. Indeed, such realities seem to replicate year after year and yet the same lecturer (s) who taught and administered the formative assessments (also much known as continuous assessment tests or Formative assessments) remain the same for summative assessments. Hence, a study on this issue would enlighten more in the phenomenon.

**Purpose and objectives of the study**

In line with the above statement of the problem, this cross-countries’ study capturing Ghana, Kenya and Rwanda aimed to investigate into the underpinning factors to university students’ discrepancies in performance between formative and summative assessments.

The specific objectives were as following:

- Analyze the level of performance in formative and summative assessments;
- Find out factors behind differences in performances between formative and summative assessments if any;
- Propose remedial strategies in view of the highlighted academic factors leading to differences in performance between formative and summative assessment.

**Hypothesis**

For the sake of objective analysis and scientifically proven inference, this study tested the following null hypothesis. 

\[ H_0 : \text{There is no statistically significant difference in mean performance between students’ formative and summative assessments scores (at } \alpha = .05 \text{ level of confidence).} \]

**Theoretical underpinnings**

This study was guided by the constructivism theory that was originated from Jean Piaget. In fact, as theory of learning, constructivism assumes that knowledge is built and not merely transmitted. Taber (2011) demonstrate how powerful and educationally inspiring this theory is by showing that construction focuses on many aspects around teaching and learning scenarios such as how human beings learn, factors that channel learning, curriculum design and instruction and lastly teacher effectiveness.

Moreover, Applefield, Huber and Moollem (2001) argue that such a theory implies that the focal point of teaching is put on the learner who is expected to make personal efforts to understand. This statement clearly challenges the belief of the learners as passive recipients of the cooked information by teachers. The implication is that from the presented materials, learners are tasked to make own mental interpretation of the scenario which provides them a more meaningful and long lasting experience. In other words, constructivism attempts to demonstrate that learning do not mean rote memorization. Rather, a personal initiated process of learning which shall empower students with potentials and abilities to think critically and solve problems; the only way that brings about real learning and change in the learner. The implication here is that instructors have to make sure that students get correct information.

In line with this study, this theory was chosen to be best fit based on the fact that it emphasizes that meaningful learning occurs through a combination of activities, tasks, tests and evaluations through which the learners go through all along the learning process (Cooperstein and Weidinger, 2004). Briefly because ‘constructivism emphasizes problem solving and understanding, uses authentic tasks, experiences, settings and assessments’ (Christie, 2005).

**RESEARCH METHODOLOGY**

In order to investigate into the issue of discrepancy between formative and summative assessments, this study adopted descriptive survey and used the cluster sampling. Hence, the entire list of scores obtained constituted objects of observation (Brooks, 2013) put, for a given level of study in a particular academic year; obtained scores were used as intact group. The details are presented in Table1.
This implies that the study used secondary data which were in MS Excel spreadsheets. The data analysis used mainly SPSS which generated statistical values that enabled the discussions in light of the reviewed literature enhanced by the researchers’ experiences as lecturers of the sampled subjects in the named universities.

FINDINGS AND DISCUSSIONS

The level of performance in formative and summative assessments

The first objective was to find out the level of students' performance in formative and summative evaluation in the selected institutions of higher learning from the three African countries. The results carried in Table 2 provides a detailed view on students performed in formative and summative assessments.

From the information contained in Table 2, it is clear that across investigated countries and higher learning institutions the students' performance is good in formative assessments than in summative. Indeed, students’ scores seem to be homogenous and closer in formative assessments while a big dispersion of scores is observed in summative assessments.

Despite the observed differences in scores between formative and summative assessment, these differences were revealed not statistically significant. In fact, in all cases, at an alpha level of .05, the calculated T for the Paired-Samples T-test between formative and summative assessments were greater than the critical value which inferred the failure to reject the null hypothesis. In view of this seemingly challenging scenario, more explanations had to be discussed because “formative and summative assessments are an integral part of learning” (Chikumba, 2012).

Factors underpinning the differences in performance between formative and summative assessments

A deep reflection on the practices led the researchers from Rwanda to realize for instance that the reason for a small range and standard deviation in formative assessment scores at INES is due to the fact that this form of assessment is much done as group assignment. This implies that students in same groups do earn same scores and indeed the inter-group difference in scores is mostly very low; which produces the homogeneity of scores. The scenarios changes deeply when it come to summative assessment whereby this now calls for individual efforts and demonstration. That is why Kellaghan and Raczek (1996) confirmed that assessment types affect learning strategies, students’ involvement in learning tasks and students attitudes to learning.

In places where the formative assessment combines both individual and group assignments for instance at CE-UR and PIAS the standard deviation of scores is moderate while in contexts like the one of UCC where the formative assessment takes the form of individual written and supervised quizzes the standard deviation is a bit higher which implies that such modes of assessment really discriminate students from higher, moderate and under achievers.

Coming to the summative assessment, the scores from RU in Kenya earned a higher standard deviation. The explanation to this phenomenon is that formative assessment material are broken down into smaller units of assessment compared to the summative that covers material learnt during the entire semester. Indeed, learners are less anxious when preparing for formative assessment whose grading is relatively subjective compared to summative that go through the moderation process both internal and external. Hence, mechanisms to adjust the imbalance are required because “failures in examination lead to frustration” (Aggarwal, 1997).

The second ranked higher in standard deviation of summative assessment scores was INES. In this institution the guessed reason was that while the formative was in terms of group assignments, this time every individual student has to strive on his own. In such cases, those who had really not participated in classroom activities, in group works or did not reflect much on the taught content tend to perform very poorly.

In the case of UCC in Ghana, it was depicted that in cases whereby one subject is being taught by different lecturers for different groups of students in the same level, the poor performance in summative assessments may be associated with the fact that some lecturers teaching X, Y or Z group fail to cover the syllabus due to further engagements and yet the set questions by the team of lecturers do cover everything. This shows really how assessment is a hectic exercise that needs maximum attention. The reason behind is defended by Moss (1998) who argues that ‘assessment is unquestionably one of the teacher’s most complex and important tasks. What teachers assess and how and why they assess it sends a clear message to students about what is worth learning, how it should be learned, and how well they are expected to learn it’.

CONCLUSION AND RECOMMENDATIONS

The overall findings in this study have revealed that students scores decreases in summative assessment when compared to the formative assessment scores. The big difference in mean scores was observed particularly in cases where the formative assessment was administered in form of group assignment which would imply that students were ill prepared to face the summative assessments.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Names of the Higher Learning Institution</th>
<th>Cluster sample scores size %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>University of Cape Coast (UCC)</td>
<td>163 32.53</td>
</tr>
<tr>
<td>Kenya</td>
<td>Riara University (RU)</td>
<td>32  6.39</td>
</tr>
<tr>
<td>Rwanda</td>
<td>College of Education under University of Rwanda (CE-UR)</td>
<td>59 11.78</td>
</tr>
<tr>
<td></td>
<td>Institut d’Enseignement Superieur de Ruhengeri (INES)</td>
<td>40  7.98</td>
</tr>
<tr>
<td></td>
<td>Catholic University of Rwanda (CUR), Alexis Kagame Campus of Save</td>
<td>181 36.13</td>
</tr>
<tr>
<td></td>
<td>Protestant Institute of Arts and Social Sciences (PIASS)</td>
<td>26  5.19</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>501 100.00</td>
</tr>
</tbody>
</table>

Table 1 Investigated countries, higher learning institutions, scores size and percentages.
In view of this, there is need to implement and reinforce the formative assessments in form of individually attempted and supervised test so that students’ weaknesses are detected and addressed in good time. Indeed, this will enlighten them about the type of questions they will be subjected to during summative assessments. However, as collaboration which instills co-construction of knowledge is to be instilled as an academic culture against pure competition, further opportunities for evaluated group works are to be valued and implemented.

For betterment of both evaluation patterns, researchers propose the following recommendations that would be interpreted and implemented as per realities and regulations in each of the studied cases:

- Moderating formative assessments as it is the case for summative ones
- Formalize more the formative assessments and alleviate any opportunities that may give room to subjectivity and bias.
- Enforcing study skills and educate students on effective study habits.
- Balancing the weight of summative assessment against that of formative assessment in order to reduce stress.
- Communicate a fair examination timetable in good time. Empower lecturers with pedagogical skills and in particular educational taxonomies (measurement and evaluation).
- Make classroom attendance very strict and ensure that class attendance counts effectively in determining which students will be allowed to write summative assessment exams.
- Reducing the student-lecturer ratio to the lowest minimum.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Name of the Higher Learning Institution</th>
<th>Sampled subject name/Code</th>
<th>Ac Year</th>
<th>Sampled score (n)</th>
<th>Formative Analysis Mean</th>
<th>Formative Analysis S D</th>
<th>Summative Analysis Mean</th>
<th>Summative Analysis S D</th>
<th>Paired T-test</th>
<th>Alpha level (α)</th>
<th>Degree of Freedom (df)</th>
<th>Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>University of Cape Coast (UCC)</td>
<td>Company Law 001/REMA111</td>
<td>2011/2012</td>
<td>163</td>
<td>25.2</td>
<td>5.48</td>
<td>26.0</td>
<td>7.31</td>
<td>-14.41</td>
<td>0.05</td>
<td>162</td>
<td>1960</td>
</tr>
<tr>
<td>Kenya</td>
<td>Riara University (RU)</td>
<td>RPMMA Curriculum 102/REMMA</td>
<td>2012/2013</td>
<td>32</td>
<td>35.0</td>
<td>8.16</td>
<td>44.81</td>
<td>3.56</td>
<td>-11.53</td>
<td>0.05</td>
<td>31</td>
<td>2021</td>
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<tr>
<td>Rwanda</td>
<td>College of Education (CEUR)</td>
<td>Comparative Education</td>
<td>2012</td>
<td>59</td>
<td>17.0</td>
<td>3.68</td>
<td>36.33</td>
<td>5.6</td>
<td>-13.59</td>
<td>0.05</td>
<td>28</td>
<td>2000</td>
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<tr>
<td>Rwanda</td>
<td>Institute d’Enseignement (INES)</td>
<td>Comparative Education</td>
<td>2012</td>
<td>40</td>
<td>4.0</td>
<td>29.42</td>
<td>38.33</td>
<td>14.32</td>
<td>-3.66</td>
<td>0.05</td>
<td>39</td>
<td>2021</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Catholic University of Rwanda (CUR)</td>
<td>Study Skills</td>
<td>2012/2013</td>
<td>181</td>
<td>23.0</td>
<td>12.94</td>
<td>36.4</td>
<td>7.05</td>
<td>-24.43</td>
<td>0.05</td>
<td>25</td>
<td>1180</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Protestant Institute of Arts and Social Sciences (PIASS)</td>
<td>Educational Technology</td>
<td>2012/2013</td>
<td>26</td>
<td>23.1</td>
<td>25.15</td>
<td>32.71</td>
<td>5.5</td>
<td>-26.43</td>
<td>0.05</td>
<td>25</td>
<td>1180</td>
</tr>
<tr>
<td>Overall</td>
<td>N=501</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 2 Analysis of the performance between formative and summative assessments and calculations of the Paired-Samples T-test

In view of this, there is need to implement and reinforce the formative assessments in form of individually attempted and supervised test so that students’ weaknesses are detected and addressed in good time. Indeed, this will enlighten them about the type of questions they will be subjected to during summative assessments. However, as collaboration which instills co-construction of knowledge is to be instilled as an academic culture against pure competition, further opportunities for evaluated group works are to be valued and implemented.

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- Enforcing study skills and educate students on effective study habits.
- Balancing the weight of summative assessment against that of formative assessment in order to reduce stress.
- Communicate a fair examination timetable in good time. Empower lecturers with pedagogical skills and in particular educational taxonomies (measurement and evaluation).
- Make classroom attendance very strict and ensure that class attendance counts effectively in determining which students will be allowed to write summative assessment exams.
- Reducing the student-lecturer ratio to the lowest minimum.
• Enhance active, research based and participatory learning
• Monitoring whether lecturers do teach as per module description content, modes of content delivery and assessment patterns

References


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