



Assessment in Higher Education: Perceptions among Stakeholders from Ghana

Frank Yao Gbadago^{1*}, Alfred Morrison¹ and Francis Donkor²

¹Department of Accounting Studies Education, College of Technology Education, University of Education, Winneba, Kumasi, Ghana.

²Faculty of Vocational and Technical Technology Education, College of Technology Education, University of Education, Winneba, Kumasi, Ghana.

Authors' contributions

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ABSTRACT

Formal education is considered an important means of acquiring knowledge and skills (both attitudinal and technical) for developing human capital stocks; and it increases one's ability to understand and critique new ideas necessary for facilitating the adoption and/or modification of technology as fundamental to development, growth and poverty reduction in nations across the globe. As nations and the world at large relentlessly channel huge resources into educating their citizenry, assessment is identified as the main means of obtaining authentic feedback to improve students' learning, teaching and educational programs at all levels. Despite the good attributes and over reliance on assessment, opinions suggest that the ability to identify good assessment techniques is not intuitive supporting the fact that there is no one best approach to assessment. Reported cases of cheating and all kinds of manipulations surrounding conduct of assessments and/or examinations in higher education (HE), together with the advent of mass enrollments at almost all levels of education, the apparent lack of equal expansion in the facilities, non-provision of adequate logistics, and the inability of authorities to properly co-ordinate and/or manage

*Corresponding author: E-mail: frankggh@yahoo.com;

assessment processes as expected have largely accounted for the vociferous calls for review or search for alternative(s) to assessment in education worldwide, more importantly in Ghana. This study therefore sought to ascertain and analyse the perceptions of stakeholders on the assessment process in HE to determine the repercussions of such perceptions. The study involved a cross-sectional survey of students and other stakeholders in HE from the Kumasi Metropolis, Ghana. The results show that the stakeholders' perceptions on assessment in HE largely coincided with prior studies on assessments that have served as the basis for most pedagogical instructions and educational programs.

Keywords: Assessment in higher education; Kumasi metropolis, Ghana, perception; teaching and learning.

1. INTRODUCTION

Formal education is considered an important means of acquiring knowledge and skills (both attitudinal and technical skill sets) and for development of human capital. Consequently, education, as it is argued in literature, tends to increase one's ability to understand and critique new ideas which is expected to facilitate the adoption and/or modification of technology. Further, as opined by [1] and supported by [2] and [3] education is believed to be fundamental to development, growth and poverty reduction in both developed and less developed economies. This explains why huge resources are being channeled [4,2,3] into educating citizenry of nations.

Education, in this context, means the process of receiving or giving systematic instruction (especially at a designated place known as the educational institution, which could be a school or university) so as to facilitate learning, and to transfer knowledge, skills, values, beliefs, and habits of a group of people to other people through storytelling, discussion, teaching, training, or research. A review of the literature suggests that assessment has since been a critical aspect of education and necessary for enforcing teaching and learning [5-10]. Thus, the various stakeholders (being policy makers, administrators, trustees, regulators, parents, students, teachers, opinion leaders and society at large) in the educational community largely depend on assessment as the main means of obtaining authentic feedback for improving students' learning, teaching and the educational program(s) [11,6].

Tertiary (or higher) education is believed to be the place where higher level manpower and/or skill sets are developed and trained for manning the economy of a nation. Consequently, to ascertain whether the intended learning

outcomes are achieved by the learning and teaching facilitators, or the intended learning experiences were being obtained by the learners, the pen and paper mode of assessment has been generally accepted as the most accepted means of confirming these. Despite the good attributes of assessment and its over reliance in education, [4] opined that the ability to identify good assessment techniques is not intuitive. This supports the fact that there is no one best approach to assessment. This obviously motivated the continued search for a more authentic alternative(s) (if any) to assessment [5,11,6,8,12].

There has been continuous vociferous debate on the usefulness, as well as the nature, of the form of assessment (as to its qualities and intended outcomes) being conducted in Ghanaian educational institutions among various stakeholders within the educational community [13,5,11,12,10]. This has led to the introduction of all forms (mode) of assessment in place of the traditional assessment. Although there have been various studies on assessment [13,11,4, 14,7-9,12,10], they were not conclusive. Also, the emergence of unconfirmed reported cases of cheating and all kinds of manipulations surrounding conduct of assessments and/or examinations in various higher educational institutions could be attributed to the profound calls for alternative(s) to assessment. Further to this, with the advent of mass enrollments [15,1] in almost all educational institutions and the apparent lack of equal expansion in facilities, provision of adequate logistics, and the authorities' inability to properly co-ordinate and/or manage assessment processes as expected have largely accounted for the vociferous calls for review or search for alternative(s) [5] to assessment in education worldwide, more importantly in Ghana.

The search for credible alternatives to the pen and paper mode of assessment is more

imperative today than ever before given the changes happening in society and in the workplace. This has made the search for assessment alternatives more mesmerizing to both academics and practitioners in higher education [5,8,12]. Also, although there have been studies on assessment, most, if not all, were conducted in developed economies outside of Ghana [16-18,11,4,15,7,1,8,12]. Consequently, the difference in the research settings thus presents a problem with generalization and/or whole scale adoption of the findings to a developing country such as Ghana.

Interestingly, the apparent lack of credible alternatives coupled with the inability of graduates of higher education (HE) to meet specific job functions in the workplace after completion in Ghana [19] has brought the debate to the issue of whether higher education and assessment has failed society. While industry attempts to ascribe the blame to facilitators of higher education, the facilitators blame the government [19]. There is, therefore, the need for studies to systematically investigate the current research problem in a developing country context, in particular the Ghanaian setting. The importance of assessment in education and development of human capital, provides the justification for this present study into stakeholders' perceptions on assessment in HE in Ghana with the view to identifying the policy implications thereof. As such, this paper sought to ascertain the perceptions of the stakeholders on assessment in HE in Ghana using respondents from Kumasi Metropolis. The key research questions addressed in this study are: do key stakeholders in HE have any perceptions on the current pen/pencil and paper based assessment(s) in HE in Ghana? If they do, are there any policy implications for these perceptions for HE in Ghana?

1.1 Review of Relevant Related Literature

Assessment is perceived as one of the most important tools in determining individual's progress in educational endeavour(s), typically referred to as examinations [10]. Pedagogical literature suggests that education involves giving, and/or receiving, systematic instructions so as to pass on knowledge and skills [4]. Assessment is any evaluative process or technique used to gather and discuss information obtained from various sources to develop a deep understanding of what students know, understand, and can do with the knowledge they acquired from

educational experiences as well as make judgment so as to improve subsequent learning [20,11,21,7,9,10].

Consequently, it is expected that individuals in educational institutions undertaking training at one point in time need to be evaluated and/or examined [21,9,10] so as to ascertain whether the students know, understand, and have acquired the expected knowledge and the skill sets that they were exposed to as a result of their educational experiences. Extant pedagogical literature also suggests that results (in other words the feedback) obtained from such appraisals (or assessments) may be used to improve subsequent learning [11], identify the level of achievement attained so far, and rank and award students. In some cases, feedback from students' assessment(s) may be used to judge faculty members' teaching success or otherwise [15]. According to [11] as supported by [4], assessment is reliably able to gather enough information useful in ascertaining the amount of understanding and knowledge that students got from any of their educational experience(s) and the level of any improvement expected in subsequent learning activities.

Thus, assessments ensure that: performance standards are learnt and kept (especially where performance standards are to be rewarded); improvement and needs for further training and retraining to enhance performance (especially when it is below expectation) is noted; and excellence is to be rewarded while poor performances are punished among others [21, 22,8,9,10]. In practice, beyond educational endeavours, all the preceding roles are critical even for quality assurance purposes [15,8]. Although assessment can be employed in other endeavours such as in employment, programs etc, it is imperative to note that assessment is considered most inevitable in educational setups where the core business is teaching and learning. In these settings, those engaged in teaching or training of students (learners) are usually referred to as teachers whereas those who are being taught by the teachers on the other hands are referred to as the students or learners. In educational settings, it is for both teachers and students that are to be assessed to find out how well they are doing in a particular subject or course as teachers or students respectively [10]. Teachers are mostly assessed to ascertain whether they are handling or teaching a particular subject appropriately or not.

Literature suggests that the teachers' mastery of the subject being taught as well as his general disposition may have influence on the students' performance in assessment, the learning activities as well as the overall learning outcomes [16,18,17]. The outcome of the teachers' assessment could be used for rewards or punishment, promotion, recommending for further professional training or development of the teacher.

In the same vein, students are also assessed in several ways to ascertain whether they appreciate the subject they have been taught, merit promotion to the next level of their studies (educational endeavours), should graduate and be awarded certificates, etc. In most educational institutions of higher learning, in general students' assessments are an ongoing process and may take two main forms, namely, continuous assessment and final examination. The continuous assessments (CA) are mostly left in the hands of the faculty members and are at their discretion without direct intervention from the administrators. CA in general takes the form of class exercises, class texts, projects, assignments, presentations, demonstration, practicals, etc. [23]. Irrespective of the mode, CA is appropriately included in determining student's final grade which is critical for various reasons. Final examination on the other hand, is usually conducted at the end of the course of study under close supervision of the educational authorities and the faculty members who taught the students. A review of extant literature on assessment reveals a general consensus among scholars that students' assessment in higher education is far from perfect and, in many cases, is at the heart of the challenges facing higher education across the globe and hence needs reappraisal and rethinking in both developed and less developed economies alike [5,6,8].

In Ghana, concerns about students' performance in assessments have received a lot of attention in general [5,14]. As it were, assessment has always been with us since inception of education right from the days of the colonial masters. However, the call for closer observation of the system arose again in 1987 when the new educational reforms brought about the implementation of the three years junior high school (JHS) programme during the 1987/88 academic year (The Ministry of Education Policy on Educational Reforms, 1987) calling for school based assessment (SBA); that is continuous assessment (CA) [24]. This called for further

studies, both empirical and theoretical, in search of better assessment strategies [5].

Literature has it that assessment originated from the Latin word "assidere" which means to sit by, evaluate and make judgment [25,26]. This was common during the early 15th Century when the book-keeping concept was newly developed. There is general agreement in the literature that assessment provides the means for gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences for purposes of improving subsequent learning and educational practices [20,11]. Until today, there has not been any authentic replacement for assessment despite the numerous criticisms from scholars. The criticisms mostly been due to the fact that traditional assessment has largely been pen and paper based. This thus presents doubt as to whether assessment is capable of achieving the intended goals [20,5,11,9,27,10].

Extant literature revealed various forms or types of assessments such as summative, formative, norm-referenced, criterion-referenced and ipsative referenced as means of determining the level of students' learning outcomes as explained below [28,5,4,27]. Yet still, they are equally paper based today. Summative assessment, as the name suggests, is an assessment type undertaken at the end of a students' learning activity known as term/semester with the objective of determining how much of that learning has occurred in the students and to award grades or certify the students' attainment level [28,5]. This is typical of semester or term exams or, in limited cases, end of lesson exercises (test) as well as the end of chapter quiz.

Amuah [5] Postulates that formative assessment is that type of assessment which is done from time to time during the course of the instructional activity to provide continuous feed back to students and the teacher (instructor) regarding the success of learning and teaching activities, enabling them to make the necessary improvement.

Also, norm-referenced assessment is a test given to all students in a class after a period of instruction, the scores or results gained by each student is compared and/or ranked with those gained by the others and the degree of success of each student's learning is determined on the

basis of this comparison. Further, a criterion-referenced on the other hand is a test based on the expected attainment levels (respective learning objectives) which makes it possible for the performance of each student to be compared with the expected levels, and a decision taken on the degree of success of each student's learning. Finally, ipsative referenced test is given at the end of some specific learning task and the attainment levels are identified, and then these levels are compared with attainment levels shown on similar learning tasks on subsequent occasions. On the basis of these comparisons decisions are taken on the degree of success of each student's learning as in the Trends in International Mathematics and Science Study (TIMSS) that provide data for evaluating educational achievements across countries.

However, a review of extant literature suggests that, the results of the pen (or pencil and paper) based assessments do not give a true reflection of students' academic achievement, distance students from participating in decisions affecting their academic achievements, makes both students and teachers focus on examination by concentrating efforts and time on strategies for passing examinations. Literature argues that, for these characteristics, there has been a sustained search for better alternatives to date as suggested by [5]. This search for better alternatives to traditional assessment has become more profound than ever because of the emergence of the application of information communication technology in education and life situations, and the complexity of societies as well as systems which necessitated the need for critical thinking while not forgetting employability and industry expectations and necessary skill sets. As such, academic knowledge, which can only focus narrowly on recall instead of strategic thinking and employability skills, cannot help solve societal problems and hence cannot meet complex ever changing modern societal needs.

Consequently, [11] called for learner centered assessments that focus on what learners could do with their learning. Literature suggests assessment in general, and strategy in particular, has great influence on students' learning and learning outcomes [6]. This is because how students perceive assessment in a course of study informs their approach to learning [29,6]. That is either to use a surface or deep approach to learning. Thus, a student's perception on assessment is largely a factor of his or her prior experience of education; and how he or she

perceives the current situation and its assessment requirements [6].

Today's modern higher education students are constrained with time as HE generally drifts towards semester, modular and/or sandwich systems. Also, students now combine employment with regular study. Consequently, as they are loaded with lots of learning activities, they are tempted to adopt strategies and cue seeking approach to learning and study. This is because any student who fails to focus on assessment rather than learning may not perform well in his/her assessment [6]. Further, extant literature suggests that the amount of time spent by students on their out of classroom studies has a direct effect on achievement in assessment [6]. Alternatively stated, assessment does influence both the amount of time and the time (i.e. when) students study.

Because assessment invariably invokes the need for study, and consequently puts stress on students [21,6]), they need to understand the requirements and demands of the assessment and obtain regular feedback on the assessment [22,6]. In this vein, extant literature suggests that there needs to be a constructive alignment of assessment with both the teaching and learning objectives so as to produce positive learning outcomes which is usually evidenced by successful assessment [6,8,10]. Based on the foregoing discussions, a well designed assessment task that has a primary focus or goal of supporting student learning as well as being used for grading and/or ranking students' learning outcomes must be seen as valid and reliable [27]. That is, the said assessment must seek to provide the maximum opportunity for students to fully demonstrate the expected/agreed learning outcomes. In addition, the said assessment should be educative by supporting student learning and providing timely and appropriate feedback that allows students to progress in their subsequent learning. Further, a generally accepted assessment is the one that is explicit by defining the purpose and criterion for the assessment while ensuring that the processes involved are as transparent as possible. Such assessment should also exhibit fairness in that all students are equally able to demonstrate their learning outcome that is reflective of their different abilities and efforts. Finally, the assessment must be seen as comprehensive if it works together to provide a holistic picture of the students' understanding

and encompasses every aspect of the learning outcomes as expected.

Given the observed limitations of traditional assessment [10], there has been a general consensus among modern day higher education theorists for authentic assessment to be imposed in place of traditional assessment [6,8,10] largely due to numerous changes in society, coupled with the need for an assessment that is capable of assisting in employable skills acquisition. This proposition leads to various assessment frameworks and models among which were assessment taxonomy and assessment model. Assessment taxonomy (as popularized by [30, 31,32] even though it was initially accredited to [33]) spelt out what assessment is expected to evaluate/ appraise depending on the level of the learning activity being assessed. In other words, proponents of assessment taxonomy argue that assessment should evaluate students' various knowledge levels as shown in Table 1.

As assessment is expected to evaluate all these facets of knowledge, there is no one best type of assessment, and hence assessment must include a wide variety of strategies so as to cover

all those levels of knowledge possessed by the student as a result of his or her educational experiences [33,30,31,32].

A critical review of literature on assessment revealed various stages in the assessment process [20,11,31,34,4,8]. [11] referred to the stages involved in the assessment process as the assessment cycle. They proceeded to categorize the stages into four as shown in Fig. 1. Thus, according to [11], for an assessment to achieve its intended purpose it is critical to formulate statements of intended learning outcomes; develop or select assessment measures necessary to achieve those intended outcomes; create appropriate experiences leading to those outcomes; and discuss and use assessment results to improve learning.

In today's world of education the assessment that is seen as authentic is the one that achieves the intended agreed learning goals; promotes the required amount of students' learning experiences and activities; and adequately prepares the students for the world of work.

Table 1. Tabulation of assessment taxonomy

| S# | Types of expected knowledge | Level of education being assessed | Intended outcome | Action verb(s) or typical question word |
|-----------|------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1 | Remembering/knowledge | Basic School Level | Student's ability to recall or remember information | Define, duplicate, list, memorize, recall, repeat, reproduce state |
| 2 | Understanding/comprehension | High School Level | Student's ability to explain an idea or concept | Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase |
| 3 | Applying | Undergraduate level | Student's ability to use information in a new way | Choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write |
| 4 | Analyzing | Undergraduate level | Student's ability to break information into component parts or distinguish between the different parts | Appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test |
| 5 | Evaluating | Graduate level | Student's ability to justify, criticize a stand or decision | Appraise, argue, defend, judge, select, support, value, evaluate |
| 6 | Creating/synthesis | Graduate level | Student's ability to create a new product or point of view | Assemble, construct, create, design, develop, formulate, write |

Source: Adapted from Anderson, 2003

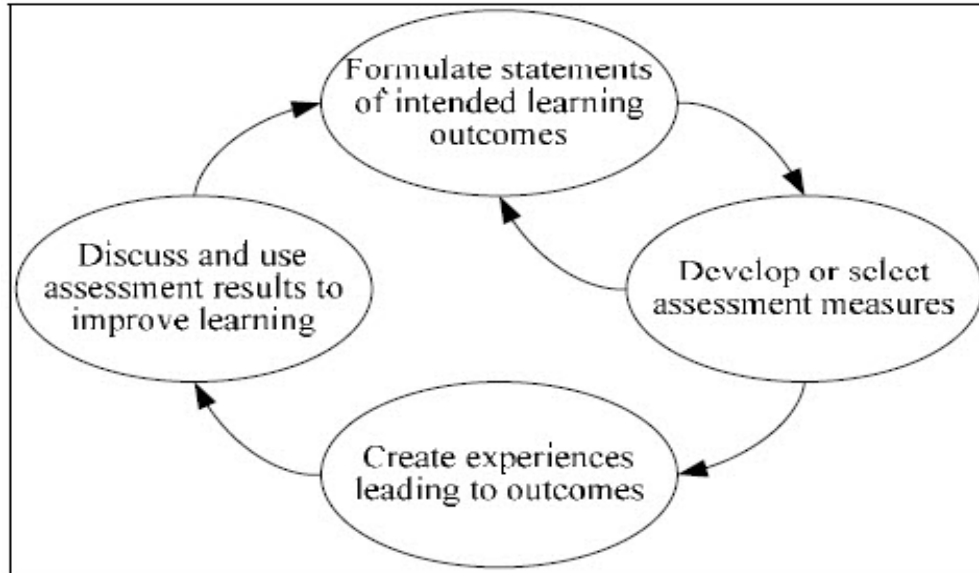


Fig. 1. Assessment cycle

Source: Adapted from Huba and Freed, 2000

However, considering the fact that education is not undertaken in a vacuum, the intended goals can only be successfully achieved if the students and other stakeholders in the teaching and learning process are not left out of the equation. In this case, the policy makers, administrators, parents, industry and the general public are wholly involved in every facet of the teaching and learning. Intuitively, where all the above mentioned stakeholders together with the students are made to understand and agree upon the intended learning outcomes through communication and dialogue, much of the task may be completed. Also, this may inform the appropriate teaching and learning strategy to adopt as well as how the assessment should be conducted and/or what to assess. This, therefore, requests for the inclusion of another component or stage of the assessment process, which was conspicuously left out in [11]'s model - the documentation and communication stage. This is critical as it is able to document and communicate the intended learning outcomes at the end of the learning experiences/ activities as well as the assessable areas to be assessed to all the stakeholders that matter. The purpose of which is to ensure that the facilitator of the learning process understands what to do in each stage so as to achieve the intended learning outcomes.

In summary, due to the current world's socio-economic and demographic transformations

leading to shifts in labour market requirements, growing youth and/or graduate unemployment, migration trends and technological advancements, transformed and intensified approaches to skills development policies for work and life, the watch word for higher education players is the need for learners to acquire diverse and relevant knowledge and skills. These knowledge and skill sets must help foster professional and personal development, counseling and facilitation of various pathways to learning [3].

Having drawn on prodigy of extant body of knowledge in the context of this current research, we therefore proceed accordingly to evaluate the perceptions of stakeholders on assessment in HE within the Kumasi Metropolis of Ghana a developing country.

2. METHODOLOGY

This study used survey research design where sets of structured questionnaire were used as the data collection instrument. The study adopted both the qualitative and quantitative research methods for data analysis and presentation. This mixed-method, according to [35] usually provides a better understanding of a research problem because of the different objectives it seeks to address. The study was conducted within Kumasi Metropolis, Ghana. Although the purposive sampling technique was used to select

the sample, the choice of the region was however guided by the large presence of higher educational institution(s) namely universities and/or polytechnics.

The population consisted of various stakeholders (such as students, parents, faculty members, administrators, policy makers) in HE. In all 350 respondents were chosen for this study. To ensure that very high quality data that reflect respondents' perceptions and improve representativeness of the sample were collected, a survey was conducted within Kumasi Metropolis, Ghana between December, 2015 and February, 2016. Out of the 350 sets of questionnaires administered, 287 usable sets were obtained representing 82% response rate. It is generally recognized under Central Limit Theorem that in a sample of 100 or more, distribution is approximately normal and the results of the statistical tests performed are meaningful and representative [36-38]. Therefore, 287 participants arrived at above is seen as reasonable and representative enough for this study.

A self-administered structured questionnaire was used because of its ability to collect data of high quality within the shortest possible time with minimal costs as well as not requiring the physical presence of the researcher [37]. The instrument items were grouped into Sections A to C. Section A gathered background information on respondents whereas Section B focused on the nature and modes of assessment in HE in Ghana. Section C tried to ascertain how the respondents perceive assessments in HE. The instruments were constructed upon completion of review of relevant related literature on the current research problem and pre-tested to improve its' clarity and potency. The instrument was administered to the respondents on pre-agreed appointed days to be completed and returned to the researchers and their assistants that same day at the respondents' usual premises or educational institution(s). This approach was adopted as a way to ensure a high response rate given the background that data collection instruments left with respondents to return generally turn out to have a low response rate of about 30% on the average depending on the context and location [37,39,40]. Section C of the instrument, which focused on the stakeholders' perception, comprised of closed-ended questions using a four point Likert scale ranging from 1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree. A Likert scale was

considered the most appropriate technique for measuring participants' views and attitudes [41].

The data obtained were analyzed using SPSS version 21. Obtained data were coded into the SPSS version 21, and frequencies and descriptive statistics were generated based on the original data from the sample. The frequency distributions were further ranked to determine the order of the stakeholders' perception on assessment in HE (refer to Table 5).

3. RESULTS AND DISCUSSION

The results of the study were discussed under three separate sections, namely, demographic profile, reliability of the items in the instrument and stakeholders' perceptions on assessment in HE.

3.1 Demographic Profile of the Studied Stakeholders

The studied stakeholders' demographic characteristics in terms of gender; current educational level; age; previous working experience in industry (or practice); stakeholder categorization; programme of study; specialization; number of years spent attending school so far; and form and nature of assessment experienced so far in HE are depicted in Table 2. Out of the total sampled 350 participants, 287 completed and returned the data collection instruments giving a response rate of 82%. Of this number, 210 were males and 77 females indicating a male dominance in the chosen sample. It was further revealed that the respondents consisted of students (87.80%), parents (7%), administrators (2.10%), policy makers (1.7%) and faculty members (1.40%). The respondents' current educational level attained is made up of 2nd Degree (1.4%), diploma (12.5%), SSCE (18.5%), and 1st degree (67.6%). The respondents' ages range between 20 years to above 31 years with ages between 20-25 years (57.10%) being the majority, followed by 26-30 years (32.10%), 31 years and above with 6.30% and those who did not indicate their ages constituting 4.50% in that order. Impliedly, the sample used for the study was made up largely of youthful age group (as shown in Table 2). This accounts for the dominance of respondents with a 1st degree educational level. In terms of working experience, quite a sizable number (about 58%) have had previous working experience in industry and/or practice. Considering the fact that the majority of them are

accounting students (as shown in Table 2) who are to go into industry, this is considered as highly remarkable since this is expected to afford them the opportunity to know what industry expects of them after pursuing of their HE.

The study further revealed that the respondents have spent a number of years attending school up to their current levels as follows: 16 to 20 years (48.80%), 11 to 15 years (27.50%), 1 to 10 years (18.80%), 21 to 25 years (4.90%) in that order as shown in the Table 2.

3.2 Reliability Test

To ensure reliability of the items in the instrument for measuring the intended elements (that is the participants' perceptions on assessment in HE), we proceeded to test for the construct's reliability

using Cronbach's alpha. Although numerous reliability test models around the Cronbach's alpha has assumed more popularity among researchers. In accepting reliability of instrument, literature posits that Cronbach's alpha of 0.70 is a proxy of a high level of reliability [42, 43, 44]. The derived Cronbach's alpha value for the study's instrument was 0.684 (as shown in Table 3) that is close to the recommended 0.70 value. This indicated that the items in the instrument as measures are highly reliable for measuring our intended elements (constructs).

3.3 The Observed Stakeholders' Perceptions on Assessment in HE

The results of the investigation into the perceptions of the stakeholders on assessment in HE are presented in Table 4 and Table 5.

Table 2. Demographic characteristics of the respondents

| Variables | Categorization | Frequency | Percent (%) | Valid percent (%) | Cumulative percent (%) |
|-----------------------------------------------------------------------|-----------------|-----------|-------------|-------------------|------------------------|
| Gender | Male | 210 | 73.2 | 73.2 | 73.2 |
| | Female | 77 | 26.8 | 26.8 | 100.0 |
| Current educational level | SSSCE | 53 | 18.5 | 18.5 | 18.5 |
| | Diploma | 36 | 12.5 | 12.5 | 31.0 |
| | 1st Degree | 194 | 67.6 | 67.6 | 98.6 |
| | 2nd Degree | 4 | 1.4 | 1.4 | 100.0 |
| Age | 20-25 | 164 | 57.1 | 57.1 | 57.1 |
| | 26-30 | 92 | 32.1 | 32.1 | 89.2 |
| | 31-35 | 18 | 6.3 | 6.3 | 95.5 |
| | Others | 13 | 4.5 | 4.5 | 100.0 |
| Previous working experience in industry/practice | Yes | 166 | 57.8 | 57.8 | 57.8 |
| | No | 112 | 39.0 | 39.0 | 96.9 |
| | Not Sure | 9 | 3.1 | 3.1 | 100.0 |
| Stakeholders' categorization | Students | 252 | 87.8 | 87.8 | 87.8 |
| | Parents | 20 | 7.0 | 7.0 | 94.8 |
| | Policy Makers | 5 | 1.7 | 1.7 | 96.5 |
| | Faculty | 4 | 1.4 | 1.4 | 97.9 |
| | Administration | 6 | 2.1 | 2.1 | 100.0 |
| Programme of study being pursued in HE | Diploma | 15 | 5.2 | 5.2 | 5.2 |
| | 1st Degree | 262 | 91.3 | 91.3 | 96.5 |
| | 2nd Degree | 3 | 1.0 | 1.0 | 97.6 |
| | Terminal Degree | 2 | .7 | .7 | 98.3 |
| | Professional | 1 | .3 | .3 | 98.6 |
| Study specialization | Others | 4 | 1.4 | 1.4 | 100.0 |
| | Accounting | 265 | 92.3 | 92.3 | 92.3 |
| | Management | 9 | 3.1 | 3.1 | 95.5 |
| | Others | 13 | 4.6 | 4.6 | 100.0 |
| The number of years spent in attending school up to the current level | 1-10 | 54 | 18.8 | 18.8 | 18.8 |
| | 11-15 | 79 | 27.5 | 27.5 | 46.3 |
| | 16-20 | 140 | 48.8 | 48.8 | 95.1 |
| | 21-25 | 14 | 4.9 | 4.9 | 100.0 |

Source: Field Survey, December, 2015 to February, 2016

The results of the study as revealed by the descriptive statistics of the variables were ranked per the distribution of the stakeholders responses are as presented in the Table 5. Accordingly, the studied stakeholders' six (6) most highly ranked perceptions on assessment in HE are: education is considered an important means of acquiring knowledge and skills for developing human capital (ranked at 0.8955; see Item #1, Table 5); assessment is an essential aspect of teaching and learning in higher education (ranked at 0.8711; see Item #2, Table 5); assessment helps to reinforce students' learning in higher education (ranked at 0.8423; see Item #3, Table 5); assessment provides relevant and authentic

feedback for improving students' learning in higher education (ranked at 0.8258; see Item #4, Table 5); a teacher's mastery of his/her subject and his/her general disposition have an influence on students' interest in learning activities, assessment and learning outcomes (ranked at 0.8101; see Item #5, Table 5); and there has been over reliance on assessment/ examination as the means of appraising the level of learning and teaching outcomes (ranked at 0.8066; see Item #6, Table 5) in that order. A careful review of these observed perceptions revealed a kind of consistency with the normal context of classroom assessment discourse in both literature and the public domain [13,5,11,4,14,7,8,9,12,10].

Table 3. Reliability statistics

| | | | N | % |
|---------------------------------------------------------------|-------------------------|-----------------------|------------|--------------|
| Case processing summary | Cases | Valid | 287 | 100.0 |
| | | Excluded ^a | 0 | 0.0 |
| | | Total | 287 | 100.0 |
| a. Listwise deletion based on all variables in the procedure. | | | | |
| Reliability statistics | Cronbach's alpha | No. of Items | | |
| | .684 | 19 | | |

Source: Analysis of data from Authors' Field Survey
December, 2015 to February, 2016

Table 4. Frequency table

| S# | Questionnaire items | Responses | Frequency | Percent (%) | Valid percent (%) | Cumulative percent (%) |
|-----------|-----------------------------------------------------------------------------------------------------------|-------------------|------------------|--------------------|--------------------------|-------------------------------|
| 1. | Education is considered an important means of acquiring knowledge and skills for developing human capital | Strongly Agreed | 183 | 63.8 | 63.8 | 63.8 |
| | | Agree | 92 | 32.1 | 32.1 | 95.8 |
| | | Strongly Disagree | 8 | 2.8 | 2.8 | 98.6 |
| | | Disagree | 4 | 1.4 | 1.4 | 100.0 |
| 2. | Assessment is an essential aspect of teaching of teaching and learning in higher education | Strongly Agreed | 152 | 53.0 | 53.0 | 53.0 |
| | | Agree | 125 | 43.6 | 43.6 | 96.5 |
| | | Strongly Disagree | 7 | 2.4 | 2.4 | 99.0 |
| | | Disagree | 3 | 1.0 | 1.0 | 100.0 |
| 3. | Assessment helps to reinforce students learning in higher education | Strongly Agreed | 129 | 44.9 | 44.9 | 44.9 |
| | | Agree | 142 | 49.5 | 49.5 | 94.4 |
| | | Strongly Disagree | 9 | 3.1 | 3.1 | 97.6 |
| | | Disagree | 7 | 2.4 | 2.4 | 100.0 |
| 4. | Assessment provides relevant and authentic feedback for improving students learning in higher education | Strongly Agreed | 129 | 44.9 | 44.9 | 44.9 |
| | | Agree | 127 | 44.3 | 44.3 | 89.2 |
| | | Strongly Disagree | 20 | 7.0 | 7.0 | 96.2 |
| | | Disagree | 11 | 3.8 | 3.8 | 100.0 |

| S# | Questionnaire items | Responses | Frequency | Percent (%) | Valid percent (%) | Cumulative percent (%) |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|-------------|-------------------|------------------------|
| 5. | Assessment provides relevant and authentic feedback for improving students educational programmes in higher education | Strongly Agreed | 105 | 36.6 | 36.6 | 36.6 |
| | | Agree | 152 | 53.0 | 53.0 | 89.5 |
| | | Strongly Disagree | 12 | 4.2 | 4.2 | 93.7 |
| | | Disagree | 18 | 6.3 | 6.3 | 100.0 |
| 6. | There has been over reliance on assessment/ examination as the means of appraising the level of learning and teaching outcomes | Strongly Agreed | 117 | 40.8 | 40.8 | 40.8 |
| | | Agree | 136 | 47.4 | 47.4 | 88.2 |
| | | Strongly Disagree | 17 | 5.9 | 5.9 | 94.1 |
| | | Disagree | 16 | 5.9 | 5.9 | 100.0 |
| 7. | Assessment/ examination does not correctly measure the level of knowledge obtained as a results of teaching and learning experience | Strongly Agreed | 75 | 26.1 | 26.1 | 26.1 |
| | | Agree | 133 | 46.3 | 46.3 | 72.5 |
| | | Strongly Disagree | 49 | 17.1 | 17.1 | 89.5 |
| | | Disagree | 30 | 10.5 | 10.5 | 100.0 |
| 8. | Despite advancement in technology and changes in society, assessment is the only means of appraising learning outcomes | Strongly Agreed | 63 | 22.0 | 22.0 | 22.0 |
| | | Agree | 100 | 34.8 | 34.8 | 56.8 |
| | | Strongly Disagree | 80 | 27.9 | 27.9 | 84.7 |
| | | Disagree | 44 | 15.3 | 15.3 | 100.0 |
| 9. | Current modes of assessment in our higher educational institutions are not able to reliably measure the level of understanding and knowledge that students get from their educational experiences | Strongly Agreed | 86 | 30.0 | 30.0 | 30.0 |
| | | Agree | 122 | 42.5 | 42.5 | 72.5 |
| | | Strongly Disagree | 51 | 17.8 | 17.8 | 90.2 |
| | | Disagree | 28 | 9.8 | 9.8 | 100.0 |
| 10. | Currents modes of assessment in our higher educational institutions are not able to reliably estimate the amount of improvement required in students subsequent learning activities | Strongly Agreed | 71 | 24.7 | 24.7 | 24.7 |
| | | Agree | 149 | 51.9 | 51.9 | 76.7 |
| | | Strongly Disagree | 38 | 13.2 | 13.2 | 89.9 |
| | | Disagree | 29 | 10.1 | 10.1 | 100.0 |
| 11. | A teacher's mastery of his/her subject and his/her general disposition have an influence on students interest in learning activities and assessment(learning outcomes) | Strongly Agreed | 125 | 43.6 | 43.6 | 43.6 |
| | | Agree | 121 | 42.2 | 42.2 | 85.7 |
| | | Strongly Disagree | 26 | 9.1 | 9.1 | 94.8 |
| | | Disagree | 15 | 5.2 | 5.2 | 100.0 |
| 12. | Student's knowledge or view on the usage of assessment, results have an influence on | Strongly Agreed | 98 | 34.1 | 34.1 | 34.1 |
| | | Agree | 150 | 52.3 | 52.3 | 86.4 |
| | | Strongly Disagree | 28 | 9.8 | 9.8 | 96.2 |

| S# | Questionnaire items | Responses | Frequency | Percent (%) | Valid percent (%) | Cumulative percent (%) |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|--------------|-------------------|------------------------|
| | their effort(s) and time used in all learning activities | Disagree | | | | |
| | | Disagree | 11 | 3.8 | 3.8 | 100.0 |
| 13. | The result(s) of assessment or examinations do not give a true reflection of student's academic performance and achievements | Strongly Agreed | 90 | 31.4 | 31.4 | 31.4 |
| | | Agree | 120 | 41.8 | 41.8 | 73.2 |
| | | Strongly Disagree | 44 | 15.3 | 15.3 | 88.5 |
| | | Disagree | 33 | 11.5 | 11.5 | 100.0 |
| 14. | Both student and teacher focus on examinations by concentrating efforts and time on strategies for passing examinations instead of actual learning activities | Strongly Agreed | 116 | 40.4 | 40.4 | 40.4 |
| | | Agree | 105 | 36.6 | 36.6 | 77.0 |
| | | Strongly Disagree | 34 | 11.8 | 11.8 | 88.9 |
| | | Disagree | 37 | 11.1 | 11.1 | 100.0 |
| 15. | There is no better alternative to assessment | Strongly Agreed | 44 | 15.3 | 15.3 | 15.3 |
| | | Agree | 89 | 31.0 | 31.0 | 46.3 |
| | | Strongly Disagree | 95 | 33.1 | 33.1 | 79.4 |
| | | Disagree | 59 | 20.6 | 20.6 | 100.0 |
| 16. | Assessment is unable to evaluate critical thinking and employability skills and knowledge of students | Strongly Agreed | 78 | 27.2 | 27.2 | 27.2 |
| | | Agree | 104 | 36.2 | 36.2 | 63.4 |
| | | Strongly Disagree | 65 | 22.6 | 22.6 | 86.1 |
| | | Disagree | 40 | 13.9 | 13.9 | 100.0 |
| 17. | Students' perception of assessment is largely a factor of his/her prior experience of education and how he/she perceives the current situation and its assessments | Strongly Agreed | 57 | 19.9 | 19.9 | 19.9 |
| | | Agree | 167 | 58.2 | 58.2 | 78.0 |
| | | Strongly Disagree | 41 | 14.3 | 14.3 | 92.3 |
| | | Disagree | 22 | 7.7 | 7.7 | 100.0 |
| 18. | Students' perception of assessment does not affect his/her performance in assessment | Strongly Agreed | 52 | 18.1 | 18.1 | 18.1 |
| | | Agree | 98 | 34.1 | 34.1 | 52.3 |
| | | Strongly Disagree | 71 | 24.7 | 24.7 | 77.0 |
| | | Disagree | 66 | 23.0 | 23.0 | 100.0 |
| 19. | Current mode of assessment in higher education is well accepted and should remain so without any change or revision | Strongly Agreed | 47 | 16.4 | 16.4 | 16.4 |
| | | Agree | 94 | 32.8 | 32.8 | 49.1 |
| | | Strongly Disagree | 98 | 34.1 | 34.1 | 83.3 |
| | | Disagree | 48 | 16.7 | 16.7 | 100.0 |
| | | Total | 287 | 100.0 | 100.0 | |

Source: Analysis of data from Authors' Field Survey, December, 2015 to February, 2016

Thus, stakeholders perceive that education is an important means of acquiring knowledge and skills necessary for developing human capital may end up influencing their attitudes and/or reactions towards it, and probably in all their educational endeavours. This may signify that,

as this perception ranks relatively higher than the others among the stakeholders, they may do everything possible to acquire education. This may suggest why both individual and nations commit scarce resources to education. This finding supports the views of [4,1,2,3].

Having considered education as important, the studied stakeholders highly ranked assessment (87.11 on a scale of 100; see Item #2, Table 5) as an essential aspect of teaching and learning in HE. That is, the respondents highly perceive assessment as an essential and integral component of HE as it reinforces teaching and learning (ranked at 84.23 on a scale of 100; see Item #3, Table 5), as well as providing authentic feedback for improving students' learning and programmes of study (82.58 on a scale of 100; see Item #4, Table 5). This confirms earlier studies [5,11,6,7,8,9,10]. This thus re-echoes the widely held view of the importance of feedback on results of assessment(s) in teaching and learning (especially in HE) by earlier scholars (notably [11,6,15,7,8]).

Interestingly, the stakeholders studied perceived that mastery of the subject and the general disposition of the teacher have influence(s) on the students' interest in the learning activities, the assessment and, definitely, the learning outcomes (as evidenced by a ranking of 81.01 on a scale of 100; see Item #5, Table 5). Again, this is consistent with literature and has been the basis of most, if not all, teacher training programs and/or pedagogical instructions [16,17,18].

Further, the stakeholders studied have a perception that there has been over reliance on assessment/examination as the means of appraising the level of learning and teaching outcomes generally in HE in Ghana. This confirms the fact that, irrespective of changes in society, advancement in technology and/or the need for learners to acquire diverse, relevant knowledge and skills that foster professional, personal development, counseling and the skills requirement for the world of work [3], Ghanaian HE still largely depends on pen and paper modes of assessment.

Table 5. Descriptive statistics and order of ranking of the respondents' perceptions on assessment in HE

| S# | Variables | N | Ranking | Order of ranking | Minimum | Maximum | Mean | Std. deviation |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------|------------------|---------|---------|--------|----------------|
| 1. | Education is considered an important means of acquiring knowledge and skills for developing human capital | 287 | 0.8955 | 1 | 1 | 4 | 1.4181 | 0.61968 |
| 2. | Assessment is an essential aspect of teaching and learning in higher education | 287 | 0.8711 | 2 | 1 | 4 | 1.5157 | 0.60209 |
| 3. | Assessment helps to reinforce students' learning in higher education | 287 | 0.8423 | 3 | 1 | 4 | 1.6307 | 0.66598 |
| 4. | Assessment provides relevant and authentic feedback for improving students' learning in higher education | 287 | 0.8258 | 4 | 1 | 4 | 1.6969 | 0.76329 |
| 5. | A teacher's mastery of his/her subject and his/her general disposition have an influence on students' interest in learning activities, assessment & learning outcomes | 287 | 0.8101 | 5 | 1 | 4 | 1.7596 | 0.82448 |

| S# | Variables | N | Ranking | Order of ranking | Minimum | Maximum | Mean | Std. deviation |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------|-------------------------|----------------|----------------|-------------|-----------------------|
| 6. | There has been over reliance on assessment/ examination as the means of appraising the level of learning and teaching outcomes | 287 | 0.8066 | 6 | 1 | 4 | 1.7979 | 1.00049 |
| 7. | Assessment provides relevant and authentic feedback for improving students' educational programmes in higher education | 287 | 0.7997 | 7 | 1 | 4 | 1.9024 | 1.99936 |
| 8. | Student's knowledge or view on the usage of assessment, results have an influence on their effort(s) and time used in all learning activities | 287 | 0.7918 | 8 | 1 | 4 | 1.8328 | 0.75255 |
| 9. | Both students and teachers focus on examinations and/ or assessments by concentrating efforts and time on strategies for passing examinations instead of actual learning activities | 287 | 0.7700 | 9 | 1 | 4 | 2.0627 | 1.93321 |
| 10 | The result(s) of assessment or examinations do not give a true reflection of student's academic performance and achievements | 287 | 0.7326 | 10 | 1 | 4 | 2.0697 | 0.96187 |
| 11. | Current modes of assessment in our higher educational institutions are not able to reliably measure the level of understanding and knowledge that students get from their educational experiences | 287 | 0.7317 | 11 | 1 | 4 | 2.0732 | 0.93019 |
| 12. | Currents modes of assessment in our higher educational institutions are not able to reliably estimate the amount of improvement required in students subsequent learning activities | 287 | 0.7282 | 12 | 1 | 4 | 2.0871 | 0.88267 |
| 13. | Students' perception of assessment is largely a factor of his/her prior experience of education | 287 | 0.7256 | 13 | 1 | 4 | 2.0976 | 0.80050 |

| S# | Variables | N | Ranking | Order of ranking | Minimum | Maximum | Mean | Std. deviation |
|-----|--------------------------------------------------------------------------------------------------------------------------------------|-----|---------|------------------|---------|---------|--------|----------------|
| | and how he/she perceives the current situation and its assessments | | | | | | | |
| 14. | Assessment/ examination does not correctly measure the level of knowledge obtained as a results of teaching and learning experiences | 287 | 0.7204 | 14 | 1 | 4 | 2.1185 | 0.91600 |
| 15. | Assessment is unable to evaluate critical thinking and employability skills and knowledge of students | 287 | 0.6916 | 15 | 1 | 4 | 2.2334 | 1.00237 |
| 16. | Despite advancement in technology and changes in society assessment is the only means of appraising learning outcomes | 287 | 0.6585 | 16 | 1 | 4 | 2.3659 | 0.99049 |
| 17. | Current mode of assessment in higher education is well accepted and should remain so without any change or revision | 287 | 0.6220 | 17 | 1 | 4 | 2.5122 | 0.95659 |
| 18. | Students' perception of assessment does not affect his/her performance in assessment | 287 | 0.6185 | 18 | 1 | 4 | 2.5261 | 1.03700 |
| 19. | There is no better alternative to assessment | 287 | 0.6028 | 19 | 1 | 4 | 2.6132 | 1.09683 |
| | Valid N (Listwise) | 287 | | | | | | |

Source: Analysis of data from authors' field survey
December, 2015 to February, 2016

3.4 The Originality and Contribution of this Study

Although the validity of the results of this study for international comparison may be limited by the quantitative analysis and the coverage the stakeholders and the socio-cultural characteristics of the Ghanaian educational environment, it should be acknowledged as one of the few that has added to empirical literature on assessment and has empirically ascertained stakeholders' perception on assessments in HE in Ghana. It thus adds to the body of knowledge and calls for the reconsideration of assessment in HE that meets societal needs and requirements.

4. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

In spite of the significant contribution of this study, it has some limitations that provide avenues for further studies. First, this study did not examine the determinants of the perceptions of the stakeholders: further research should comprehensively consider this. In addition, the results of this study were based on sample of only stakeholders from Kumasi Metropolis. This is likely to limit the generalizability of the findings to Ghanaians within the Kumasi Metropolis context. Future research should extend the research context to cover other parts of the country. Furthermore, in this study, we did not

examine the consequence of the stakeholders' perceptions on learning activities, expected teaching and learning outcomes (ETLO), and performance in assessment. It is recommended that future research explores these areas to advance our knowledge of the consequence of stakeholders' perceptions on assessment in higher education in general, and in developing countries in particular.

5. CONCLUSION AND RECOMMENDATIONS

In this paper the over-riding purpose was to assess the perceptions of stakeholders on assessment in HE within the Kumasi Metropolis, Ghana: Ghana being a developing country. We set the research context for this current study drawing on extant body of knowledge in this area. Using data from a survey of 287 stakeholders consisting of students, parents, faculty members, administrators and policy makers of HE, the results (in consonance with many prior studies) show that the studied stakeholders highly perceive that: education is an important means of acquiring knowledge and skills for developing human capital; assessment is an essential and integral part of teaching and learning in higher education; assessment helps to reinforce students' learning in higher education; assessment provides relevant and authentic feedback for improving students' learning in higher education; a teacher's mastery of the subject matter or knowledge and the general disposition have much influence on the students' interest in learning activities, the assessment and the learning outcomes; and finally, there has been over reliance on assessment/ examination as the means of appraising the level of learning and teaching outcomes. These results have important implications for theory and practice in delivering education in general and HE in particular. Based on the foregoing and the results of the study, we therefore propose the following recommendations:

First, there is the need for stakeholders responsible for policy and administration of teaching and learning to once again go back to the drawing board to identify and agree on ETLO for HE considering the numerous changes in society and the workplace. This may help in documenting and communicating the agreed ETLO to students and other stakeholders as well as ensuring that students are aware of expected areas of assessment.

In addition, there is the need for the faculty members to reconsider development of new pedagogical instructions necessary for achievement of the agreed ETLO in HE taking into account the requirements of society and the workplace.

Finally, there is the need for greater collaboration between all the stakeholders in HE such as students, faculty, parents, policy makers, administration, industry/employers and the larger society.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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