

## **How External Assessment Mediates Teaching, Learning and Assessment in Junior High School in Ghana**

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**Abstract:** *External assessment is traditionally regarded as a neutral activity detached from teaching and learning. Consequently the learning-inducing effect of this type of assessment receives little attention when the tests are developed. This article reports the findings of a study of the importance attached to an external assessment by 40 teachers and 120 students in their teaching and learning activities respectively. Questionnaires and interviews were used to gather data on the perceived influence of the assessment and the real life experiences of its role in the interaction between the teachers and their students in the classroom. Statistical analyses show that the students have a significantly higher opinion of the learning-inducing effect of the external assessment than the teachers and there are differences in the structure of the factors that underlie their opinions. Analysis of the interviews confirms that both the teachers and students attach a great deal of importance to the assessment as it influences teaching and learning activities in the classroom. It was concluded that both the teachers and the students attach a great deal of importance to the external assessment, suggesting that more attention needs to be paid to its hidden effect on education when tests are developed for such assessments.*

**Keywords:** *Hidden influence of external assessment, Role of external Assessment in teaching and learning, External assessment and classroom interactions, external assessment in action, assessment and quality of education.*

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### **1. INTRODUCTION**

External assessment in education is often seen as a tool for measuring how much learners know and can demonstrate by answering the questions posed in examinations. It is meant for grading learners and thereby placing a value on them in terms of the level of knowledge they possess (Ecclestone & Pryor, 2003). The uniform conditions under which all examinees are expected to participate in external assessments is borne out of the need to provide a level playing field in order to sustain the notion of merit that is inherent in this type of assessment (Broadfoot, 1979). External assessment is thus ordinarily considered as a neutral activity that has no impact on teaching and learning but only measures and reports learners' level of knowledge. However, it is now known that external assessment, especially the high-stakes type which has consequences for learners and other stakeholders, tends to have a strong influence on what is taught and how it is taught, how students learn and what they actually learn (Popham, 1987; Resnick & Resnick, 1992). External assessment is thus not merely performing the role of a thermometer in the education system but it is at the centre of teaching and learning, and determines the type of knowledge and skills that teachers and their students pay attention to in class. Naturally, the skills and knowledge which receive greater attention are those that are more likely to be acquired by learners in school.

External assessment has become the preferred government response to the perceived low quality of education in an increasing number of countries worldwide (Phelps, 2000). Generally, the rationale for instituting external assessment programmes is to pressurise teachers to improve their practice and consequently students' learning outcomes in the form of improved test scores (Amrein & Berliner, 2002; Black & Wiliam, 1998; Broadfoot & Pollard, 2000; Gipps, 1994; Madaus, 1988). Assessment is thus being used as a tool for implementing education reforms aimed at improving quality because of its influence on teaching and learning.

The quality of education is not easy to define by reason of the complex interplay of the philosophical, contextual and personal factors that contribute to its conceptualisation.

Nevertheless, the quest for quantifiable indicators of quality has created a situation where most parents and policy makers have come to accept cognitive skills development in school, although only a partial view, as evidence of the quality of education. Consequently, assessment and quality of education have become wedged together and the discourse on quality is often within the context of assessment outcomes (Fullan, 2009; Supovitz, 2009; UNESCO, 2005.). It is for this reason that the nature of the assessment tasks in terms of how sufficiently they represent the knowledge, skills and abilities that constitute the goals of the curriculum has become an issue that deserves the attention of policy makers in education and assessment (Harlen et al., 1992; Supovitz, 2009). The quality of external assessment questions has thus become relevant in considering educational quality because educational reformers in both industrialised and developing countries often claim that “improving national (or state) testing systems is an important, perhaps a key, strategy for improving educational quality” (Chapman & Snyder, 2000, p. 457).

### **1.1. Purpose of the Study**

In Ghana, there is a lingering public perception that the quality of basic education is falling. This is in spite of reforms meant to improve quality in terms of knowledge use. The expectation is that the external assessment at the end of basic education in Ghana, i.e. the Basic Education Certificate Examination (BECE) would align with the curriculum by demanding the demonstration of the expected knowledge and skills (GNAT, 2006). Nevertheless, this has not been the case as the examination questions demand predominantly the recall of information with very little demand for reasoning and application of what has been learnt (Ghartey-Ampiah, 2006; GNAT, 2006). The persisting dominance of lower level recall-type questions in the BECE suggests that relevant stakeholders may not be aware of how influential the examination is in determining what is actually taught and learnt in junior high school (JHS) and consequently the type of knowledge and skills that the pupils acquire (Lewin, 1997). Very little is known in the literature about how influential the external examination is in the Ghanaian school system. There is, therefore, the need to determine how important it is to teachers and pupils in junior high school. This would be an important indicator of how it influences the type of knowledge and skills that teachers and pupils actually pay attention to. The study was, therefore, conducted to answer the research question: how do Ghanaian junior high school teachers and their pupils value the external examination?

### **1.2. Context of the Study**

Basic education in Ghana is compulsory for every child of school-going age and spans two years of pre-school, six years primary and three years junior high school. At the end of this cycle, the pupils take the BECE. The results of this examination are used to select students for senior high school where there are enough places for only about half of each cohort of junior high school students (MOE, 2009). The mainly recall-type questions in the examination implies that the children who terminate their formal education at the junior high school would essentially be equipped for life with the limited type of knowledge they have been exposed to in school. It also means that the goal of the curriculum to make the children learn how to reason and think critically would not have been achieved primarily because the nature of the BECE diverges from it and therefore diverts teaching and learning away from it.

## **2. METHODS**

### **2.1. Data Collection**

The study was done in District 10<sup>1</sup> of the Greater Accra Region of Ghana which had twelve public junior high schools. All teachers of two compulsory subjects in the BECE namely, English Language and Mathematics in the schools and selected JHS3<sup>2</sup> pupils participated in the study. Access to the teachers was negotiated through the District Director of Education while access to the pupils was negotiated through the heads of their schools who acted ‘in loco parentis’ for them.

A total of 40 teachers (21 males and 19 females) and 120 pupils (ten from each school) consisting of 60 boys and 60 girls who were selected randomly took part in the study. Two sets of questionnaires, one for teachers and the other for pupils, were used to collect data. The questionnaires included twelve common items regarding the importance attached to the BECE by

the participants. There were also one-on-one interviews with eight teachers selected from six schools and group interviews for four volunteer pupils each in two schools. The questionnaires which were intended to identify the beliefs of the participants about the importance of the BECE were administered first after which the interviews were conducted. The interviews were meant to elicit from the participants real life experiences of how the BECE intervened in their teaching and learning respectively. The quantitative and qualitative data were meant to complement each other and provide a comparison of the beliefs and the real life experiences of the participants in order to obtain a deeper understanding of the real value that was placed on the external examination.

## **2.2. Data Analyses**

The questionnaire data were analysed with SPSS 10 using a pre-coded scheme ranging from 1 to 5 to correspond with the Likert scale of “Strongly Disagree, Disagree, Undecided, Agree and Strongly Agree” which was used for the responses. In order to compare the responses of the teachers and the pupils, the parallel items in the questionnaires for both groups were extracted together with their mean scores and a comparison of means was carried out using the t-test statistic. Factor analysis was further performed on the items to examine the underlying structures of the beliefs of both groups separately (Tables 1 and 2). Principal components analysis with varimax rotation and Kaiser Normalization were used to extract statements with Eigenvalues equal to or greater than 1.00. Items that did not seem to have any conceptual link with the factors on which they had high loadings (0.4 – 0.6) were left out of the groupings. Five factors were identified for each group and they accounted for 69.77 percent of the total variance for teachers and 60.37 percent for the pupils.

The interviews which were conducted in English were recorded with a voice recorder and transcribed personally. Codes identified in each participant’s responses were compared, sorted and grouped. The groups of codes were then summarised into three general themes for the analysis.

## **3. RESULTS**

### **3.1. Statistical Analyses**

The quantitative data revealed that the mean scores<sup>3</sup> of the pupils were consistently higher than those of the teachers on 11 out of the 12 common questionnaire items with the exception of item 12 (see Table 1). The higher mean scores of the pupils in eight of the items were statistically significant but the differences in the means of three items (1, 10, and 11) were not significant. The only item in which the mean score of the teachers was higher than that of the pupils was item 12. However, the difference between the means was also not significant, implying similarity in the opinions of both the teachers and the pupils on the four items. The statistical differences in means in the larger proportion of items are explained in the factors that underlie the beliefs of the two groups about the role of the BECE in their teaching and learning activities.

**Table1.** Comparison of Means for Teachers and Pupils on Common Items Using T-test

S/N	Items	Mean		Standard Deviation		t
		Teachers	Pupils	Teachers	Pupils	
1.	JHS is enough for successful living	2.20	2.27	1.09	1.40	0.727
2.	BECE is best criterion for SHS selection	3.18	4.49	1.29	0.87	0.001*
3.	Will teach & will learn differently without BECE	2.66	3.61	1.32	1.32	0.001*
4.	Prefers past questions for class tests	3.10	4.04	1.30	1.14	0.001*
5.	BECE is mainly recall	2.60	3.87	1.15	1.30	0.001*
6.	Purpose of BECE is to measure knowledge acquired	4.00	4.58	1.18	0.73	0.005*
7.	Uses past questions in teaching & pupil often tries past questions	4.02	4.56	0.73	0.75	0.001*
8.	Use CA alone to grade BECE	1.90	2.39	0.98	1.35	0.015*

9.	Teacher is fountain of knowledge	3.82	4.48	1.34	0.81	0.005*
10.	Pupils are anxious & attend extra classes for BECE	4.10	4.30	0.88	0.97	0.260
11.	Teaching should not be for BECE alone	4.30	4.45	0.82	0.92	0.349
12.	Teaching & learning should focus on BECE	3.05	2.61	1.39	1.50	0.102
* Statistically significant difference $p < .05$						

### 3.1.1. Factors Underlying Teachers' Opinion about the BECE

The first factor related to the purpose of the BECE and suggests that the notion of insufficiency of JHS education was prevalent among the teachers. It is imaginable that the teachers were eager that their pupils become successful in the future. For that reason progression to SHS was paramount and motivated them to teach to the test so that their pupils would perform well in order to achieve this desire. Achieving this goal has another dimension to it, though. Majority of the teachers (97.5%) agreed that they felt happy when their pupils performed well in the BECE. There was thus a kind of scaffolding of the benefits of the pupils' performance to the teachers. If the pupils' performance is of some personal benefit to the teachers also, then it is likely that they will devote much of their instructional time and effort to preparing their pupils for the examination. However, by engaging the attention of the teachers, the BECE would indirectly exert its influence over what they did in the classroom.

The second factor suggests that the BECE had a constraining effect on the teachers. Being the criteria for selecting pupils to enter SHS, the BECE tended to place a limitation on the things that the teachers taught in class. It is likely that because continuous assessment (CA) forms part of the grading of the BECE, the test items that teachers used for their CA reflected what they expected the BECE to focus on. In this situation, the formative function of CA would be undermined as teachers may be unwilling to introduce test items or practices that reflect a much more expanded view of learning. The external examination thus placed limitations on what and how teachers taught. It is also probable that the teachers' emphasis on the BECE contributed significantly to the anxiety experienced by the pupils in relation to the examination.

The third factor reveals a relationship and suggests that the BECE casted its shadow on classroom assessment. The use of past BECE questions in class assessments implies that pupils were taught the type of knowledge and skills that the past questions demanded. Also, the BECE was seen by the teachers as the measure of what their pupils knew. The external assessment had thus developed a mutual relationship with teaching and learning: while the BECE fed into what is taught and assessed by the teachers, the past questions provided the model for the class assessments and the BECE took the form of the past questions. In effect, classroom assessment had become a rehearsal for the external assessment.

The fourth factor relates to how the external examination interferes with the content and nature of the teachers' assessment. The BECE was seen by the teachers to demand mainly recall of knowledge. That being the case, teachers are likely to take a cue from it and teach for recall to ensure that their pupils perform well in the BECE. However, it is what they teach that will be tested in their classroom assessments. This also says something about the BECE in terms of the emphasis that it might be giving to recall items. If BECE moves away from this emphasis, it is also likely that teachers will shift their emphasis, thus strengthening the argument about the impact of assessment-driven instruction. At another level the relationship between BECE and the teachers' assessments is also likely to have effect on the relationship between the teachers and their pupils. As the teachers focus on the BECE, they may like to pay attention to the high performing pupils and ignore those who are unable to cope with the pace of lessons in preparation for the examination. This can lead to the exclusion of such pupils from the learning that takes place in class towards the external examination.

The fifth factor deals with how BECE influences teaching as an activity. Generally, the teachers believed that teaching was guided by the BECE, but also thought it was not desirable because it deprived them of exercising their professional expertise. The effect is that the teachers are likely

## How External Assessment Mediates Teaching, Learning and Assessment in Junior High School in Ghana

to feel less in charge of how they teach and what they wish to cover. The fact that the external assessment guides teaching raises an issue about improving the level of thinking required by the BECE so that if teachers use the items to direct their instructional practice, this will, at least, contribute towards improving their teaching.

**Table2.** Results of Factor Analysis of Teachers' Responses (Factor loadings are shown in brackets)

<b>Factor 1 Purpose of BECE</b>	<b>Factor 2 Constraining effect of BECE</b>	<b>Factor 3 BECE and classroom assessment</b>	<b>Factor 4 BECE and the content of teacher assessment</b>	<b>Factor 5 BECE and relationship with teaching</b>
JHS is enough for successful living (0.784)	Will teach differently without BECE (0.848)	Purpose of BECE is to measure knowledge acquired (0.619)	Uses past questions in teaching (0.795)	Teaching & Learning should focus on BECE (-0.636)
BECE is best criterion for selection to SHS (0.534)	Pupils are anxious (about BECE) (0.417)	I prefer past questions for all class tests (0.853)	BECE is mainly recall (-0.674)	Teaching should not be for BECE alone (0.844)
	Use CA marks alone to grade BECE (0.770)			

### 3.1.2. Factors Underlying Pupils' Opinion about the BECE

The first factor that underpinned the pupils' opinion about BECE was the view that teachers constituted the source of the knowledge they needed at JHS. In the same vein, they saw BECE as requiring the knowledge that they acquired from their teachers. This situation paints a picture of complete dependence of pupils on their teachers to supply them with information solely for the purpose of passing BECE. With an attitude of dependency, the pupils are not likely to be interested in learning activities that will provide them with the opportunity to develop their ability to think independently and creatively. This implies that even if a teacher wanted to introduce the pupils to such learning activities, the pupils were not likely to embrace it, as some teachers revealed during the interviews. The experience of such teachers was that their attempts to take their pupils' minds to the usefulness of the lessons beyond the classroom met with cat calls of "non-sylla" (i.e. not in exam syllabus) from the pupils because they saw such digression as a waste of time.

The second factor reveals that the pupils understood that they had to prepare towards the examination in order to improve their chances of performing well. Supplementary tuition made available in extra classes which were organised by their schools was one important way in which the pupils prepared for the BECE. They also practised by answering past questions because they believed that similar questions would be found in the examination. It was thus not surprising that they preferred past questions to their teachers' questions as class tests.

The third factor indicates that the pupils were aware that their chances of entering SHS depended on the grades they would obtain in the BECE. The desire to qualify for SHS was likely to make the pupils interested in the nature of the examination so that they could adopt learning strategies that would enable them to earn good grades. It appears that the acquisition of grades was what the pupils considered as the ultimate aim of their JHS education. Holding such a view of education can lead to a mindset of learning for grades and render what is learnt a secondary issue. Grade-focused learning may be shallow and require memorisation of facts. This type of learning can result in pupils obtaining good grades without acquiring the knowledge and skills that are the goals of the curriculum. The quest for grades can thus distort the outcome of the education that the pupils receive.

The pupils were also aware that CA was a component of the BECE grades, but expressed strong negative views about it because of the subjectivity they saw in it. The pupils' preference for the external assessment indirectly strengthens its influence over their learning.

The fourth factor shows that the pupils believed that the BECE constrained what they learned and compelled them to learn in a particular way. The requirements of the examination were such that the pupils did not have the time to explore and find out things for themselves. Although the pupils wanted to know more things than they were being taught, the high-stakes nature of the BECE did not allow them to spend time on those things that were not directly relevant to the examination. The unsatisfied desire of the pupils to learn other things means that they were being guided to acquire a certain type of knowledge only which is not likely to satisfy the inclinations of all the pupils; this could stifle creativity. This kind of education is likely to produce pupils who will do things that they are not interested in but have to do them because that is what they have been exposed to.

The fifth factor relates to what the pupils considered to be the purpose of their JHS education. They generally agreed that they needed to go beyond JHS in order to become successful in life and thought that JHS education was meant to prepare them for the next higher level. This brought into focus the type of learning that would enable them achieve this aim. The pupils might be thinking that if they were to get ready for SHS, then what they learned needed to be relevant to the BECE, which is the testimony that the purpose of their being in JHS has been achieved.

**Table3.** Results of Factor Analysis of Pupils' Responses (Factor loadings are shown in brackets)

Factor 1 Source of knowledge acquisition	Factor 2 Preparation for BECE	Factor 3 Grading of BECE	Factor 4 Constraint to learning	Factor 5 Purpose of JHS education
Teacher is fountain of knowledge(0.674)	Pupil attends extra classes (0.778)	BECE is mainly recall (0.697)	Will learn differently without BECE (0.740)	JHS is enough for successful living (0.517)
Teaching should not be for BECE alone(0.742)	Pupil tries past questions (0.547)	Use CA marks alone to grade BECE (0.715)		Teaching & Learning should focus on BECE (0.839)
Purpose of BECE is to measure knowledge acquired(0.629)	I prefer past questions for all class tests (0.581)			

### 3.2. Participants' Experiences of the Influence of the BECE

The common theme discernible from the interviews with the teachers and pupils<sup>4</sup> was the dominance of the external examination as it permeated virtually all aspects of classroom activities and also creates tensions and dilemmas as far as teaching, learning and classroom assessment were concerned.

#### 3.2.1. The Dilemma of Teachers

The external examination had created a dilemma for some teachers as to what and how to teach. Those teachers who believed that the purpose of education was to equip pupils to become functional in society for life (i.e. the generalists) felt torn between the kind of pedagogy that would deliver this outcome and the pedagogy that would satisfy the demands of the BECE. For example, Musavi, a male teacher, commented

*We don't really relate whatever we do to our immediate environment and it is limiting us, the teachers, as well as the ideas of the kids because basically it is about exams; exams require this or that so I have to complete my syllabus and that kind of thing. So you're more or less tied up.*

Twima, a female teacher, revealed the source of the dilemma

*Had it not been for the exams I would have taught them how to be able to react to certain situations; I would have taught certain things much better.*

In the view of these teachers, what JHS education should give to pupils was not being achieved mainly because the external examination held sway over what they taught. Nevertheless, those teachers who believed that JHS was preparation for SHS did not experience this dilemma. Their

focus was to teach what would enable pupils to perform well in the BECE and move on to the next level. For such teachers preparing pupils to pass the BECE was the basic duty of the teacher. Jerry, a male teacher, shared this view and explained that that is what ultimately counted as successful education. Only three teachers alluded to the dilemma in the interviews but the quantitative data suggested that the teachers were equally divided in their opinions about it. About half of them (52.5%) agreed that their teaching was focussed on meeting the requirements of the BECE, implying that nearly half of the teachers felt less inclined to make the BECE the goal of their instructional practice. It is thus probable that many of the teachers experienced the dilemma over the kind of education to give to the pupils in the face of the BECE.

### 3.2.2. *Preponderance of Past Questions*

The interaction between teachers and their pupils, especially in the examination class, was mediated by past questions. On the part of teachers, it was found that the effect of past questions permeated their core functions of instruction and assessment. In the domain of instruction, some of the teachers saw the content of past questions as the standard in terms of what to teach and how to teach it, especially when they carried out activities that were specifically designed to prepare the pupils towards the examination. Alima provided an example of how these questions defined for her the standard of the BECE and its influence on her classroom practice.

*I do go beyond that standard because if I don't, my children will not be ready for the exam but when I go beyond it, then I am sure that even when the standard is raised the children will be able to answer the questions well.*

In addition to serving as a pointer to the standard, past questions serve as guide for some teachers on what content to emphasise. Mirabel underscored the usefulness of past questions in this regard.

*They are very useful because they help you to know the format [content] of the exams, and then also you can use some of them to teach your pupils so they'll get to know the standard of questions that are set. When I teach anything and there is something related to a past question I bring it up so we can solve it.*

Past questions again determine for the teachers what content is relevant and also set the boundaries of what to emphasise or leave out.

*Sometimes when you take the textbooks you see certain things you may assume that they are irrelevant for you to teach the children. But when you take a past question and see something like that, then you are compelled to teach it. (Vinor, a female teacher)*

Clearly, for her, deciding what was 'relevant' in the textbook was through the lens of past examination questions.

Moreover, the teachers thought that past questions were useful for checking the effectiveness of teaching because they served as indicators of pupils' understanding of the material taught. Musavi's narration summed up this view.

*I taught something in class; we have done all that we needed to do. Then, assume I have not set the question but somebody else has set it for you. How best can you use the idea that you have gained in class to answer it? So after the child has done a series of them they give me, the teacher, the impression that this child might possibly not have understood the way I taught this topic. So past questions guide me as to whether my children have really absorbed what I did and if there's need for any reorganisation I do it quickly.*

Some teachers indicated that they used past questions to predict future questions in the BECE and focussed particularly on them in their teaching in terms of coverage and content. Fafia, a male teacher's, use of past questions was representative of this tendency:

*I follow the trend of examination questions. So you look at the trend of the exam questions then you teach accordingly. But what I normally tell my children is that it will be very difficult to predict and teach the exam questions. We teach you the skills to be able to answer what you are going to meet.*

Similar to the teachers, the pupils believed that past questions were potential BECE questions and for that reason they paid particular attention to them and used them as the main material in their private efforts to prepare for the BECE. The pupils believed that they would be better prepared for the BECE if they practised more with past questions as SBG1, a female pupil, revealed:

*Some of the things that might appear in the BECE may be in the past questions. So we learn the past questions to be prepared, so that when the same questions appear you don't become scared.*

This notion of a relation between past and future questions agrees with the survey data as seen in the relatively high mean scores of pupils (4.04) on the item that dealt with their preference of past questions for all school tests.

The teachers' second core activity of class assessments also relied on past questions. Some teachers followed the pattern of past questions to frame their own questions and thus gained some insight into how to set questions. This was revealed by Twima:

*For terminal exams, for instance, I look at the content of the past questions and I set mine along the same lines. At times I pick from the past questions and at times I change the figures and at times the stories.*

To other teachers, they provide a model for assessment that they used in classes other than the examination class as Vinor indicated:

*I have never used past questions in JHS1, and in JHS2; I don't. But what I do is that I make sure that their exam questions are based on the features of the external one.*

However, the stories told by the teachers about how they understood and used past questions revealed that they relied more on past questions for their own tests than they admitted in the questionnaire. While 77.5 percent of the teachers disagreed in the questionnaire that they preferred past questions for all school examinations, it came out in the interviews that their assessments were akin to the past questions as can be gleaned from Owulah, a male teacher's reason for using past questions:

*Writing a test question is a serious [difficult] task. And to be very honest we just flip textbooks and pick questions. Those of us who probably want to restructure certain questions know that questions are readily available, so to sit down to reframe the questions now is becoming difficult for the teacher. Why should I frame questions when there are [past] questions for me to choose from?*

It is apparent that the availability of past questions makes them the first choice for school examinations for many of the teachers. The incongruence between the teachers' preference for past questions and their reported use appears to arise from their declared professional knowledge of assessment in the questionnaire. Almost all the teachers (97.5%) agreed that they were skilled in setting their own questions. The divergence between their reported knowledge and practice appears to be an image problem. The teachers may not want to belittle their professional knowledge in assessment when in reality they opt for the easier alternative of using past questions for their class tests.

What is striking about the teachers' narratives is how those teachers who said they taught to provide general education in spite of the BECE appeared not to be able to withstand the pressure of the examination, apparently because no teacher can afford to ignore the preparation of his or her pupils for the examination. Mirabel is typical of this category. She said that she taught such that pupils could use the knowledge in different real life situations but added a compelling distraction.

*...but still because there's going to be an exam you also have to take into consideration the format that the examination takes.*

This strengthens the suggestion that students' performance in the external examination is of such importance to the participants that even teachers who do not believe that the BECE should be the focus of teaching end up being persuaded to teach for the examination.

### *3.2.3. A Preference for the External Examination*

Both the teachers and pupils expressed strong sentiments about the level of trust that they had in the components of the BECE grades. All the teachers said that the external examination was more reliable than the CA. Similarly, the pupils also said that they preferred the external examination to CA, citing lack of trust and objectivity in arriving at the CA marks. Furthermore, the pupils did not think CA marks were a true reflection of what they knew. A male pupil, SBB2, summed up this view.

*It [BECE] should be combined with the class test. Even sometimes some teachers may like some student so they will add marks to that student's marks. But for the BECE they [examiners] don't know the students so they will just mark and give the correct mark.*

The pupils' suspicion of their teachers' marks casts doubts on the professionalism of the teachers as far as assessment is concerned. It is clear that the pupils relied on the teachers to teach them but preferred outsiders to assess them.

The common mistrust of CA marks by teachers and pupils means that the external examination is more valuable to them. For the BECE to be so valuable implies that its mainly recall-type knowledge is what pervades the classroom and thus becomes accepted as the type of knowledge the pupils should acquire.

## **4. DISCUSSION**

### **4.1. Prevalence of the External Examination**

Both the quantitative and qualitative data revealed that the external examination was at the centre of the interaction between the teachers and pupils and provided direction for all teaching and learning activities including the teachers' own assessments. In a situation where the external examination dominates assessment in the classroom, the teachers' expertise in assessment is likely to become redundant although that is what can make a difference in what pupils learn (Black & Wiliam, 1998). The dominance of the BECE in classroom assessments can be reversed if the teachers would use their expertise to teach and assess the types of content that may be more aligned with the curriculum goals. If the teachers assess higher levels of thinking and problem-solving in their tests, it is likely that the pupils will learn such skills in addition to the mainly recall demanded by the BECE. It is clear that the teachers have abandoned the use of their professional skills under the influence of the BECE.

The external examination thus has the power to alter teachers' practices irrespective of their professional training. What this shows is that the examination is capable of influencing the implementation of educational policy at the classroom level, to the extent that it can limit the effectiveness of policy. By reason of the selection function of the eternal examination, the quest for grades has become a potent force that any assessment scheme that is intended to bring about changes in learning will have to grapple with. It is apparent that any change in assessment aimed at changing learning that is not linked to the acquisition of grades is not likely to achieve the desired result.

Another aspect of the influence concerns the style of teaching adopted by the teachers in response to the BECE. The two data sets revealed that the teachers took centre stage in the classroom and imparted knowledge that was appropriate for the examination. The pupils' role was to receive and memorise the knowledge for recall in the examination. The transmission style of teaching that is said to be common in African classrooms (Akyeampong et al, 2006; Pryor & Lubisi, 2002) can be identified in this study. This raises questions about the level of attention given to the influence of external assessment in pre-service teacher training. Perhaps, more attention needs to be paid by teacher training institutions to this influence on teachers in real life situations and strategies developed to counter it so that pupils can learn more of the content and knowledge in the curriculum rather than those required by the BECE.

### **4.2. Similarity of Opinions about the BECE**

The analyses of the quantitative data showed how differently the BECE was seen by the teachers and pupils as influencing them. The pupils perceived the BECE as having more influence on their

learning than the teachers believed it did their teaching. This might be the case because the performance in the examination means more for the pupils than the teachers. Indeed it is the future of the pupils that is at stake in the examination more than any incidental benefits that their good performance would bring to the teachers. Both the questionnaire and interview data also revealed that classroom assessment has become a rehearsal for the external assessment as a result of the importance the participants attached to the BECE. The desire to perform well in the examination overshadowed the benefits of the pupils' acquisition of the knowledge and skills specified in the curriculum.

The results further show that the whole enterprise of education at the JHS is seen and understood by the teachers and pupils as preparation for the BECE. This is because performance in the examination has implications for both groups. As a result of the attention paid to the BECE in learning activities, an attitude of learning for examinations may be developed by the pupils. This can hinder the development of interest and ingenuity in what they do with the knowledge acquired. This means that emphasis on the external examination may have unexpected effects and, therefore, care should be taken in using it as a reform tool. Finding ways to make teachers' assessments play a more prominent role in the classroom may help reduce the influence of the external assessment on the pupils' education.

## 5. CONCLUSION

One issue that stood out in this study is the participants' belief that teaching and learning in JHS were intended primarily to meet the requirements of the BECE. The desire of both groups for the pupils to move on to senior high school underpinned their efforts and directed them towards achieving that goal. The teachers' philosophy of the type of education to give to the children and their professionalism could not withstand the pressure of the external assessment as it dictated the content of what they taught, the teaching method they adopted and how they carried out classroom assessments. Although the pupils wished to acquire broader knowledge, they were compelled to follow the trail of the BECE because of its effect on their future life trajectories.

Both the teachers and the pupils were aware of how the external examination directed their teaching and learning but appeared helpless in confronting its negative effect on them. Indeed the performance of the pupils in the BECE was of such importance to both groups that it tended to constitute the main source of pressure on them. However, the pupils appeared to feel more pressured to pass the BECE than the teachers felt compelled to teach towards it, probably because it was the future of the pupils that was at stake in the examination.

Evidently, by reason of the importance attached to the external assessment, the direction of the BECE in terms of reasoning and application of knowledge would be simulated in the classroom. It is therefore important for educational and assessment policy makers to recognise and use the external assessment to direct the achievement of the curriculum goal of inducing the desired level of critical thinking, reasoning and problem solving in the pupils as they prepare to perform well in the BECE.

## REFERENCES

- Akyeampong, K., Pryor, J., Ampiah, J. G., A vision of successful schooling: Ghanaian teachers' understandings of learning, teaching and assessment, *Comparative Education*, 42(2), 155 (2006).
- Amrein, A. L., Berliner, D.C., High-stakes testing, uncertainty, and student learning, *Education Policy Analysis Archives*, 10 (18), 1 (2002).
- Black, P., Wiliam, D., *Inside the Black Box: Raising Standards Through Classroom Assessment*, Phi Delta Kappan, 80, 139 (1998).
- Broadfoot, P., *Assessment, schools and society*, 1st ed. London: Methuen & Co, (1979).
- Broadfoot, P., Pollard, A., *The Changing Discourse of Assessment Policy: The Case of English Primary Education*, in: A. Filer (Ed.) *Assessment: Social Practice and Social Product*, London, Routledge Falmer, (2000).
- Chapman, S. W., Snyder, C.W., Can high stakes national testing improve instruction: reexamining conventional wisdom, *International Journal of Educational Development*, 20, 457 (2000).
- Ecclestone, K., Pryor, J., 'Learning Careers' or 'Assessment Careers'? The Impact of Assessment Systems on Learning', *British Educational Research Journal*, 29 (4), 471 (2003).

- Fullan, M., Large-scale reform comes of age, *Journal of Educational Change*, 10, 101 (2009).
- Ghana National Association of Teachers (GNAT), CCTA FORUM: Time with WAEC to Assess Public School Examination System, (2006).
- Ghartey-Ampiah, J., Towards Scientific Literacy for Basic School Pupils: Which Profile Dimensions are Emphasised in the Ghanaian Basic Science Curricula?, *African Journal of Educational Studies in Mathematics and Sciences*, 4, 1(2006).
- Gipps, C. V., *Beyond Testing: Towards a Theory of Educational Assessment*, 1st ed. London: The Falmer Press, (1994).
- Harlen, W., Gipps, C., Broadfoot, P., Nuttall, D., Assessment and the improvement of education, *Curriculum Journal*, 3 (3), 215 (1992).
- Lewin, K., Test Development – Designing Tests and Presenting Results. IN U. Bude, Lewin, K. (Ed.) *Improving Test Design*. Bonn, German Foundation for International Development, Education, Science and Documentation Centre, (1997).
- Madaus, G., The Distortion of Teaching and Testing: High-Stakes Testing and Instruction, *Peabody Journal of Education*, 65 (3), 29 (1988).
- Ministry of Education (MOE), Education Strategic Plan 2010 to 2020, Volume 1, Policies, Strategy, Delivery & Finance, (November 2009).
- Popham, W. J., The Merits of Measurement-Driven Instruction, *Phi Delta Kappan*, 68 (9), 679 (1987).
- Pryor, J., Lubisi, C., Reconceptualising educational assessment in South Africa - testing times for teachers, *International Journal of Educational Development*, 22, 673 (2002).
- Phelps, R. P., Trends in Large-Scale Testing Outside the United States, *Educational Measurement: Issues and Practice*, 19 (1), 11 (2000).
- Resnick, L. B., Resnick, D.P., Assessing the Thinking Curriculum: New Tools for Educational Reform, in: B. R. G. M. C. O'Connor (Ed.) *Changing Assessments: Alternative Views of Aptitude, Achievement and Instruction*, Boston, Kluwer Academic Publishers, (1992).
- Supovitz, J., Can high stakes testing leverage educational improvement? Prospects from the last decade of testing and accountability reform, *Journal of Curriculum Change*, 10, 211 (2009).
- UNESCO, EFA Global Monitoring Report, Education for All: The Quality Imperative, UNESCO Publishing (2005).

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#### **Notes**

1. District 10 is the pseudonym adopted for the district for the sake of anonymity.
2. JHS3 is the terminal class of basic education in Ghana and pupils in this class take the BECE.
3. The distributions of the responses of both the teachers and the pupils on the common items were similar. The mean scores were thus considered an appropriate measure of the differences between the two groups.
4. The names used to identify both the teachers and the pupils are pseudonyms.

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