

# Scrapping High-Stakes BECE: A Leap Towards Transforming How Ghanaian Students Learn

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*“It is recognized that the type of assessment employed by the system dictates the type of pedagogy used by the teachers”- (Anamuah-Mensah committee report, 2002, p. 28)*

In recent times, the awareness, concerns and debates regarding the best way forward for the ailing Ghanaian education system have reinvigorated. This is indicative of how passionate we feel about the deteriorating standards of the quality of education in the country. It is pretty obvious that, the current weakness of our education system and its concomitant joblessness is a source of worry and concern to all.

Personally, I feel encouraged by the widest coverage accorded to my recent proposals on the need for a structural reform of the education system and the resulting discussions in the media. I have monitored closely the passion, candor and alacrity with which people have shared their thought on the need to scrap the BECE. We've got only one objective for this crusade which is to transform the way students are taught and get assessed in Ghana.

My previous article outlined various structural education reforms needed to improve our education system. For I believe these reforms, when properly executed, are crucial to our future, and to a new economy that allows Ghana to compete with the rest of the world. In that paper, I shared similar sentiments by prominent people of our society regarding the overloaded Ghanaian curriculum. This is because, not only are our students required to study broad array of subjects, but also the depth of topics in each subject area is too deep and loaded with relatively limited instructional time. I reiterate the widely held notion that “the greatest enemy of understanding is coverage. If we try to cover everything, by the end of the day people will have learned very little and will have understood nothing”.

Evidence in support of this theoretical position abounds. For instance, a recent study reports that high school students who study fewer science topics, but study them in greater depth have advantage in college science class over their peers who study more topics and spend less time on

each (Science Daily March 10, 2009). My considered opinion is that there are certain fundamental concepts that are more important or beneficial to master than others and that spending focused time, at the expense of covering many other topics, is a far more productive venture.

It is therefore heartwarming to learn that the Ministry of Education has considered the proposal to reduce the number of subjects studied at basic schools to not more than five subjects as reported by Deputy Minister Samuel Okudzeto Ablakwa. What remains outstanding is how the transition into a “depth-oriented” curriculum would be managed. This could be a subject for a later discussion. For now, however, I intend to reinvigorate the advocacy for the scrapping of the current Basic Education Certificate Examination (BECE) by providing more compelling reasons to do so.

First of all, if the Ministry of Education subscribes to the popular depth-of-study philosophy of curriculum coverage, then we've got to address the twin issue of assessment. Assessment issues are as important as all other ingredients that come with quality education. This is because it is the only medium to measure and evaluate educational experiences and outcomes. Generally speaking, assessments may be categorized as having two main purposes, which in some cases could be combined in the same assessment process: assessment to support learning (assessment for formative purposes) and assessment of learning outcomes (assessment for summative purposes). The latter is the nature of the high-stakes BECE and WASSCE which are used to established students' eligibility to progress to the next level of the educational ladder.

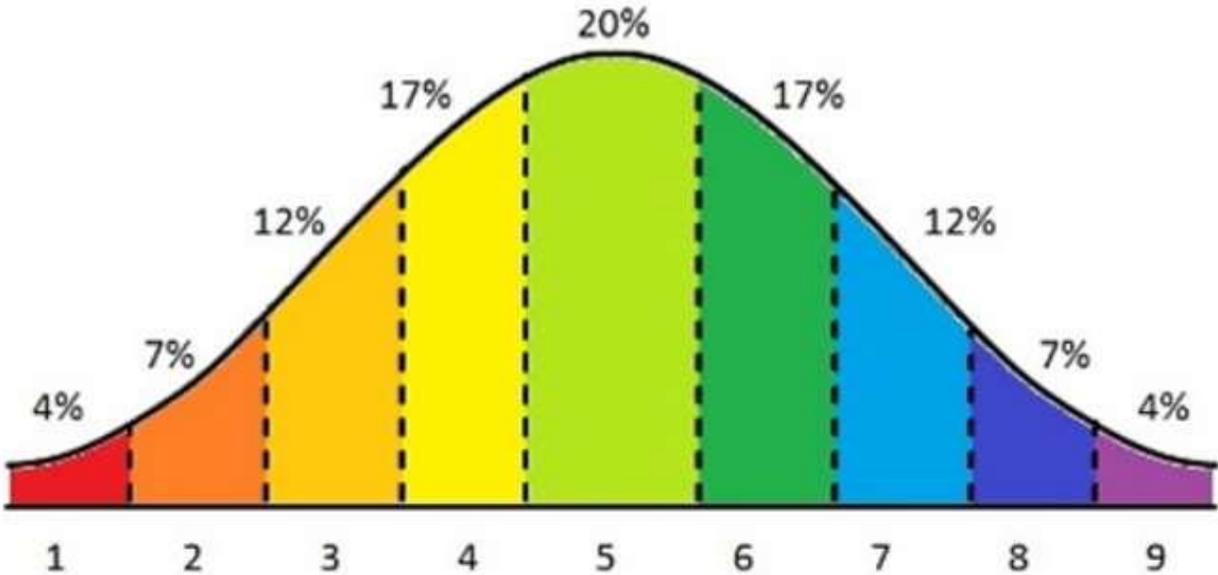
Whether an assessment is for formative or summative purpose, the result may be evaluated by measuring a candidate's performance against their peers who sat the same test (i.e. norm-referenced) or against a pre-defined criteria/standard (i.e. criterion-referenced). WASSCE is an example of a criterion-referencing as grade A1 and F9 is awarded to students who obtain 75% - 100% and 0% - 44% in a particular subject in the exams, respectively. The grade boundaries have descriptors which indicate the meaning of each grade such that 75% and above may be considered "Excellent".

Therefore, it is theoretically possible for all students within a particular cohort to receive A1 (or F9) grades depending solely on the levels of individuals' performances against these established criteria. In particular, criterion-referencing is transparent for students, and the grades derived are defensible in reasonably objective terms. By this system, a student must make a specified

score to earn the appropriate grade. This system of grading challenges students to study harder to earn better grades. Our tertiary institutions largely use this grading system to calculate our GPAs/CGPAs. Criterion referencing is also the current policy direction of the Ghanaian education system from primary 1 to SHS3. When you find your child, brother, sister or any relative with say grade B in their examination results, it's an example of a criterion referencing.

In contrast, BECE is of norm-reference nature and is designed to compare and rank students in relation to one another. What BECE does is to report whether our students performed better or worse than a hypothetical average student using a Stanine grading system. The word "Stanine" is short for "standard nine" and it represents standardized grading system that transforms raw scores into single digit scores ranging from 1 to 9 with a mean of 5 and a standard deviation of 2. This is how it works. When our ninth grade (JHS3) students write BECE, we define a priori how many should pass or fail as well as set the number of students who should be described as average or above students. The objective is to model-fit the raw data to achieve a normal distribution of the results as shown in the figure below. In simple terms, what WAEC does is to arrange all the raw scores of the students who sat an examination, say mathematics, from the highest to the lowest.

The number of students who obtained each score (i.e. frequency) are used to rank these raw scores from 1 to 9 (see figure below). The upper 4 percent receive a score of 1, the next 7 percent get a 2, the next 12 percent get a 3, the next 17 percent get a 4, and the next 20 percent get a 5. Then, follow the ratios downward as you move downward from 5: the next 17 percent get a 6, the next 12 percent get a 7, the next 7 percent get an 8, and the bottom 4 percent receive a 9. In other words, the Highest (4%) = Stanine1; Above average (19%) = Stanine 2 (7%) and 3 (12%); Average (54%) = Stanine 4(17%), 5(20%) and 6(17%); Below average (19%) = Stanine 7 (12%) and 8 (7%); Lowest (4%) = Stanine.



**Figure 1 Distribution Scores Which Fall Into Each Of The Stanine**

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Consequently, irrespective of how all students perform at BECE, 4% of them would obtain 9 (complete fail) with certainty. In another way, no matter how poor students perform at BECE, 4% of them would still get aggregate 1 (Excellent pass). Theoretically, a student may score 40% in BECE mathematics and obtain grade 1 because such score may be among the best when compared to that of the student's peers in that exams. It is equally possible for a student who scored 55% at BECE mathematics to obtain grade 9 (fail) because that year they had high scores.

From the diagram above; we note that only 60% of the candidates can obtain Grades 1 - 5 in every subject which is usually the minimum competency. This is fixed and unchangeable! Thus, irrespective of the highest mark or lowest mark in a subject, this percentage pass would be obtained yearly which affects the set qualification for placement in senior high schools. No doubt that over 40% of students fail to enter senior high school, not because of lack of vacancies. More worrying is the fact that, these students have limited alternative avenues for further development and progression, particularly into technical and vocational education training.

Obviously the current BECE does not properly reflect students' actual achievements and have seemingly failed to provide opportunities for students to develop their interest, aptitude and potentials. This is especially because relying on relative performance results is inaccurate, unhelpful, and unfair, especially when making important educational decisions for students such as their senior secondary education. In a previously published article, Professor Kofi Mereku who was part of the 6-member BECE Grading System Committee vehemently challenged the validity of the BECE Stanine system and recommended both criterion-referenced testing and grading system instead.

Professor Anamuah-Mensah's committee report also observed that “the Stanine system of grading in BECE currently being used is plagued with technical and operational difficulties, which render it ineffective as a measure of students' ability level and as a means of monitoring progress”. Several other notable persons have expressed similar concerns. Besides, since the policy direction is to use the BECE to test minimum competencies of the JHS leaver; it cannot at the same time be potent in determining students' next level of academic pursuits. At best, it can help differentiate students and identify those who may have specific educational needs or deficits that require specialized attention, especially in the classroom settings. These reasons, in my candid opinion, are compelling enough to cancel BECE.

Significantly, the BECE has not seen any comprehensive evaluation since its inception some 24 year ago. In a recent interview on Citi FM Breakfast Show, the Acting Director of the GES, Charles Aheto Tsegah, revealed that “the Ghana Education Service has rather looked at the performance of candidates and the outcome of the examination.” I suggest to the GES that the evaluation cannot be done compressively if we are unable to compare results of this year's cohorts of JHS students to that of last year.

For these reasons, various stakeholders including the Ghana National Education Campaign Coalition have also called on government to put up a committee to review the BECE education system. Regrettably, the BECE certificate has been rendered useless over time as it cannot be used for anything aside placement into second cycle schools. Indeed, the JHS system including the BECE certificates issued thereof are not serving its original purpose.

My position is simple and practical. We must completely scrap the BECE system in favour of a continuous secondary education where after primary 6, students sit for an entrance examination

for admission into a 6- year secondary education. Such a system would redefine our current conceptualization of basic education in Ghana and provide a strong platform to leapfrog the chasm that the current system has created. We don't need rocket scientists to help us on how the numerous secondary schools in Ghana, both JHS and SHS, could be structured to accommodate students from Secondary 1 to 6. But I do acknowledge that, change is difficult to be effected by those who are unwilling to embrace it!

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