

LEADERSHIP OPINION ON EXTENDED SCHOOL DURATION AND ACADEMIC PERFORMANCE OF STUDENTS

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Abstract: This study investigated leadership opinion on extended school duration and the academic performance. The purpose of the study was to determine whether the SHS students performed better when the duration was extended to four years. The qualitative method was employed for the study. A population of 149 teachers who taught both the 3 and 4-year SHS students and 3 headmasters were drawn from three schools in Central Region via purposive and convenient sampling techniques respectively. The unstructured interview guide was used to collect the data. Nine(9) school leaders were interviewed and the interview data was analysed qualitatively. Two (2) research questions were formulated to guide the study. The major finding of the study was that the 4-year cohorts of students performed better than the 3-year cohorts. The MOE and GES, Ghana should consider extending the SHS education duration to four (4) years as a better option to improve students' academic performance.

1. INTRODUCTION

The aim of an educational system should be to develop well-rounded and engaged citizens who will build more cohesive and participatory societies (UNESCO, 2008). Education increases individual productivity, as measured by the well-documented link between educational attainment and personal earnings (Behrman, 2011). At the national level, education plays an important role in fostering economic growth. Today's rapidly growing economies depend on the creation, acquisition, distribution, and use of knowledge, and this requires an educated and skilled population (Easterly & Ross, 2002). Some evidence exists to indicate that educational performance, in the form of grades achieved or literacy indicators, have an effect on economic returns which is independent of attainment. The greatest impact of achievement lies not directly on economic returns but on access to higher levels of education.

In particular, grades achieved in secondary level of schooling are the key determinant of admission to universities and colleges where, arguably, the greatest individual economic benefits could be acquired (Behrman, 2011). Investigating the determinants of students' performance is thus key to understanding the relationship of education to human capital development. More specifically, this study focuses on human capital theory as a conventional model of educational resources as input and students' performance in WASSCE as outcome. It examines education resource allocations as inputs with educational attainment and achievement as outcomes. The applicability of the theory in the study can be seen in the fact that all the theoretical concepts inputs, process and output/outcomes, have a bearing on students' performance. Using the theory, the study seeks to investigate the duration of schooling as a factor that affect the desired academic performance in senior high schools.

The significance of educational inputs on academic outcomes is a much debated subject, because most studies such as Asare-Inkoom (2003), Pittman, Cox and Burchfiel (2010), Aquero and Beleche (2013) who have analyzed a similar topic have found very mixed results. Inputs such as class size or monetary resources provided to schools have not been found to have uniformly positive or negative effects on academic outputs, and this has led to a debate over the nature and specification of the educational production process. Education policies in developing countries have focused on attracting

children to schools (UNESCO, 2004). For example, Capitation Grants for Basic Schools and school feeding in Ghana were designed to as incentives for school enrolment. Middle-income countries are close to reaching universal primary school enrolment but still lag behind in terms of quality, as reflected by poor student performance (UNESCO-IBE, 2010). For instance, Ghana has a 98% net primary school enrolment, but more than two-thirds of its students perform at basic and below basic levels in national standardized exams. To improve student performance, developing countries such as Peru, Argentina, Colombia and the Dominican Republic are increasingly identifying the expansion of the school calendar year as an important educational policy to achieve the best results in their students in terms of academic performance (Llach, Adroque, & Gigaglia, 2009; Behrman, Parker, & Todd, 2012).

Many countries are considering ways of addressing the low performance in academic tests. According to the proponents of the extended school year such as Pischke (2003), Hansen (2008) and Pittman et al (2010), one of the benefits derived from its adoption would be increased test scores. The rationale for extending the school year appears to be rooted in a position that emphasizes the amount of time allowed for learning. Carroll described learning as being a function of the time allowed for learning that is the amount of time on task and the amount of time needed to learn (Olaleye, 2011). Longer duration of school years provide the potential for increased instruction time, review, and attention for individual students (Krashinsky, 2006). This is an issue that is explored by this research that is to evaluate the effects of school duration on the academic performance of students.

Senior high school (SHS) education in Ghana is available to JHS graduates who obtain good results in the final national standard examination for junior high school pupils called Basic Education Certificate Examination (BECE). Based on the WAEC grading system, only high performers who obtain BECE Aggregate 36 or better are eligible for consideration for admission to SHS and placement in programmes like elective Business, General Arts, Science, Visual Arts and allied programmes of study. Like JHS education which culminates in BECE, achievement in SHS is measured by the WASSCE results, which qualifies them for higher education and the world of work (Hayford, 2007; Asihene, 2009; Dorleku, 2014). Currently the SHS education last for three years. Students are admitted in September/October of the starting year and end in May/June of the third year.

Pischke (2003) has looked at the short school years mandated in Germany to unify their schooling system. He concludes that shorter school years increase grade repetition rather than improving performance. The positions whether “extended or reduced duration has positive or negative effects on students’ academic performance” is highly contested by some other studies. International cross-section studies by Jong-Wha and Barro (2001) and Wobmann (2003) concluded that school year duration has no impact on academic performance. Other investigations also do not support the notion that higher levels of achievement can be expected from increasing the length of the school year. According to Bahling (1981) and McMahon (1983) cited in Pittman et al. (2010), increasing the length of school year might enhance retention of skills more than improve performance on standardize tests. Skirbekk (2006) also assessed how the duration of primary and secondary schooling affects student achievement in the final year of secondary school in Switzerland and concluded there was no significant impact of the school duration on student performance in mathematics and science tests scores. Similar conclusions were reached by Farbman & Kaplan (2005).

Pittman et al. (2010) also studied the changes in achievement that can be expected from extending the school year. They analysed the achievement scores from two school systems and the results of the various comparison indicated that simply increasing the length of school year would not likely produce marked changes in test score performance. In each of these referenced works, the finding was that extending the school year did not result in a proportionate increase in academic performance. The resolution of this debate constitutes a gap in the literature that this research seeks to occupy.

Statement of the Problem

Education reforms in Ghana are benefit of well-planned and pragmatic attempt to resolve the challenges facing the education system. These reforms have largely not been able to achieve their goals, and this is precisely a major reason why there are persistent calls for reforming the education system in Ghana by government after government (Tonah, 2006). One of such reforms is changing the 3 year SHS education to 4 year SHS and reverting it to 3 years again.

According to the New Statesman (2011, September, 11), some educationist and politicians the four year SHS group produced results that were unprecedented since the inception of the Senior Secondary (now Senior High) School system. However, the proponents of the three-year SHS, the Evans-Anfom Committee (1987) did not see any need in increasing

the duration of the SHS by one additional year, as doing so would rather lost sight of the real cause of the problem and delay a solution.

The study therefore intends to investigate whether SHS students performed better academically, when the duration was extended to 4 years.

Purpose of the Study

The purpose of the study is to determine whether the increase in the duration of the Senior High School year from three years to four years improved the academic performance of the SHS students.

Objectives of the Study

This study is set out to achieve the following objectives. To

1. Explore factors that affect students academic performance in the three selected schools.
2. Examine which of the 3 and 4 year students performed better academically.

Research Questions

1. What factors affect students' academic performance of in the three selected SHS?
2. Which of the 3 and 4 year students performed better academically?

2. METHODOLOGY

This study adopted the qualitative research design. The research was conducted in three public schools in the Central Region of Ghana, namely, Winneba Senior High School and Potsin Senior High School as well as Apam Senior High School. The target population was teachers who have taught both groups (i.e. from 2007 to 2015) in the three selected schools and are holding leadership positions. The total population was 43 school leaders (18 from Winneba SHS, 14 from Apam SHS, and 11 from Potsin T.I. Ahmadiyya SHS).

One (1) headmaster/headmistress, one (1) assistant headmaster and one (1) senior hall master from each school were selected from the sample with convenience and purposive sampling methods respectively. In all nine (9) respondents were selected for the interview. The procedure requires that the researcher identifies the characteristic and then find sites or individuals that display different dimensions of the characteristics (Creswell, 2008). This sampling size was selected for this study because while Creswell (2008) recommends 5 to 25 as appropriate for qualitative analyses, Morse (1994) suggests at least 6. Also, according to Hardon (2001), there are no specific rules when determining an appropriate sample size in qualitative research. Hardon (2001), says it depends on what one wants to know, the purpose of the study and practical factors.

Again, this sample size was selected for the study because it was manageable considering the short time frame. It is often time consuming to go to and trace the people than to actually do the interview. Also, the resources are not only needed to collect the information, but more so to analyse it. Since the variables included in this research makes it exploratory type of study, the sample size was relatively small to avoid problems during analysis (Varkevisser, Pathmanathan & Brownlee (2003).

The unstructured interview guide was used to collect data for the study. The schools of the respondents were given the following code as SA, for school A, SB, representing school B, and SC representing school C. The three respondents from each school were also coded as L1 to represent leader '1', L2 to represent leader '2' and L3 to represent Leader '3'. The headmasters were coded L1 for easy interpretation of the data. Therefore, L1SA, L2SA and L3SA represent leader 1, 2, and 3, of school A respectively. Following the same procedure L1SB, L2SB and L3SB; and L1SC, L2SC and L3SC represent the individual respondent from school B and C respectively. All these were done to ensure that the confidentiality and anonymity promised the respondents are adhered to.

All data collected through the interview guide were analysed manually through the constant comparative thematic approach (Creswell, 2009). The data was first organized by the researcher, immersed herself in and transcribed the data, generated themes, coded the data, and described them in line with the sub-themes to correspond with the research questions posed for the study (Gay et al., 2009).

According to Creswell (2009) transcription is the process of converting audiotape recordings into text data. Here the researcher listened to each tape repeatedly to familiarise herself with the conversation and carefully wrote them down in the words of each interviewee. The researcher read through all the data to be familiar with the text and reflected on the overall meaning in order to reduce the voluminous data for analysis and clarity. Themes were then generated before the detailed analysis with the coding process. The researcher identified a set of themes from the literature reviewed and looked for data that matched the predetermined themes.

The data was then coded to generate description categories for analysis. Coding according to Creswell (2009) is the process of organizing the materials into segments or text before bringing meaning into information. It involved segmenting sentences into categories and labelling them to form description in the actual language of the participants. The qualitative data from the interview was analysed using the four levels of qualitative coding which are: initial or open coding, focused coding/category development, axial/thematic coding and development of theoretical concept.

3. FINDINGS FROM THE STUDY

Several themes emerged from the responses of all the 9 respondents (holding senior holding leadership positions) in the selected schools for the interview. These themes were generally linked to the research questions. From the responses, three main issues: factors that affect students academic performance, how duration affects the academic performance of students came out strongly from the analysis and are discussed in the subsequent sections.

Factors that affect students' academic performance

Evidence from the study indicated that many factors influence the academic performance of students. Availability of adequate and appropriate teaching and learning materials, students class attendance and participation, availability of quality textbooks, the qualification of the teachers, nature of the classroom, teacher motivation, type of leadership, style of teaching, learning preference, libraries, time management, laboratories, student motivation and standard of assessment were the factors that came out strongly.

Seeing to a better performance of student is one of the primary concerns of parents, families, teachers, and governments. As a result, most families involve themselves in the decision of the children that concerns the choice of school, especially families in Africa. They look out for schools that can provide their ward with the necessary conditions to pass well in their final examinations. Educators also need better facilities and educational resources found in a serene school environment as well as conditions of service in order to provide the needed support for students to pass. The following responses from the interview respondents attest to this truth.

The factors which affect academic performance of students are well motivated student, well motivated teachers, good academic facilities, enough contact hours between teachers and students, adequate parental support and atmosphere of discipline. L3SA

L3SC also commented, "I think factors such as inadequate textbooks, large class size, poor teaching method, truancy and teachers motivation." Again, L1SC remarked "academic performance of students can be affected by inadequate teaching and learning materials and inadequate classrooms." Adding his view L3SB said, "how students perform depends on qualified and competent teachers teaching them, available facilities and teaching and learning materials, and the good school or academic environment."

A proper and adequate school environment with competent teachers, adequate learning resources is very much necessary for a fruitful learning of the child. The favourable school environment provides the necessary stimulus for learning experiences. This is supported by Barry (2005) who holds the view that, student educational outcome and academic success is greatly influenced by the type of school they attend. The children spend most of their time in school, and this school environment is exerting influence on performance through infrastructure, teaching technique and relationship (Arul, 2012). Again, Adeogun, (2001) and Orodho, (2014), point out that the poor academic results in education are related to the teaching and learning resources allocated to it. This indicates that the extent to which students perform academically is directly proportional to the teaching and learning resources available in the school.

The data also captures respondents' views on the factors that were responsible for the variation in the 3-year and 4-year SHS students' results. The responses were so surprising. For instance, the following comment came from L3SA

In fact the duration or number of years spent in school caused the variation in their result and this is clear from the result and the discussions so far. Both cohort accessed the same learning environment, taught by the same teachers and had similar characteristics so then you would agree with me that, it is the duration, which gave teachers and students' ample time to prepare well for the examination. You should not expect a student who has been in school for 3 years to have the same or similar results with the one who has had the an extra year to be taught and study if all other factors are held constant.

Similarly L3SC commented

The student who completed in 4 years did very well because they acquired more knowledge and mastery over the various subject before they sat for the final WASSCE examination. We all know that you get familiar with things when you interact more with them. And learning is just like that, if you get enough time to learn, something or a concept, you get more understanding in that aspect. When you are asked for any information you do not suffer to produce good or better response.

Thinking in a similar vein L1SA recounted

Hmm, from my observation, all the students came from different background having all the range of student among each year group, their characteristics was the same. Also the same teachers taught both year groups, they also attended the same school meaning they got the same environmental opportunities. This shows that it is only the duration which differs and that was what affected their performance.

Not deviating from the others L2SB also said

I think it is the duration of schooling which gave the 4 year group the advantage over the 3 year group, because same teachers taught both groups, both attended the same school, with the same learning facilities and resource so the only factor which differs here is the duration of schooling-3 years and 4 years. This is because teachers had enough time to prepare the 4 year groups before their final examination.

Deviating from the above, L2SA retorted "to me the duration has little influence on the performance since some of these students sit for the 'Nov/Dec' and have good results even in form two, what about that?"

Allocation of adequate hours to teaching is an imperative tool for attaining quality education. This is because teachers need ample time period to teach and complete certain topics, attend to the individual needs of students that contribute to their successes in academic work. Not only that but also, students require ample time to revise their lessons, visit libraries to research and do their assignment as well. This finding supports that of Hansen (2008) who investigated the impact of instructional days on student performance and concluded that more instructional time prior to test administration increases student performance. This indicates that the more the number of years the better the students' performance.

Three and four year SHS duration and Students' academic performance

Two relevant themes relating to how duration and academic performance emerged from the data: how duration affects students academic performance, how the two cohorts performed in their respective WASSCE were issues that came out strongly as crucial in the duration and academic performance.

Some period of time is needed in executing any task. The data shows that the longer the duration of schooling the better the performance of students. This was evident in the sample of responses from the respondents.

The longer the duration, the better the quality of students that can be produced. The longer duration give teachers ample time to cover the curriculum and shorter duration restrict both the teacher and students. Teachers have short time and therefore run students through the subject or topics in shorter duration which makes a lot of students fail. L1SA

A longer duration improves academic performance. For example, the 3 year, 4year SHS duration of schooling in Ghana, when you take into consideration somebody who has done 4 years, it is not a matter of comparing results but the duration, somebody who has done 4 years has more body of knowledge than somebody who has done 3 years. Just answering the questions and passing doesn't mean he has more knowledge and experience. The body of knowledge acquisition is very important aspects to be considered in academic planning. L3SC

Similarly, L2SA recounted

Duration is very important in terms of academic performance. Student need time to complete an academic curriculum. Whether it is shorter or longer duration will affect academic performance either positively or negative. Sometimes the schools term is pregnant with activities like sporting activities and other unforeseeable contingencies like rainfall, mid terms, sickness, absenteeism, so when you look at the 3 years, teachers use less than three years for the academic work. So if the years are long like say 4 years, at least students and teachers will get ample time for academic work which will improve students' performance in the final examination.

Confirming the issue of how the duration affects students' academic performance. L2SB added

Duration of schooling affects students academic performance in the sense that, if the duration is too short to complete more task, teachers and students rush in completing the task and all may not even complete all task assigned to them. However, if the duration is well designed and long or extended enough teachers and students get enough time to go through the aspect of the task assigned and able to complete all. In that case if the students are assessed in any aspect of the task, students are able to perform well.

However L2SC commented in the opposite position saying

The duration of school does not have much effect on academic performance provided all resource that improve learning such as teaching learning materials, good class rooms, availability of libraries stocked with quality books, teachers teach well and students study hard. The 'extra classes' will also help to make up for the so called short 3-year period.

Literature has it that students' academic performance is related directly to the duration of schooling, the longer the duration the more time teachers and students get to complete the syllabus and prepare well without pressure for the final examinations. Students learn in a relax mode and are able to revise before examinations. Thus acquiring better grade because the more students interact with materials the more they are able to remember when asked about that material. Asare-Inkoom (2001) quoting Sawada, Greer and Mulhern, maintained that the Japanese lowered the pace of their curriculum in order to improve the grasp of concept. Thus, pupils need more learning time for better grasp of concepts. Also, teachers according to Farbman and Kaplan could have difficulty in completing what is expected to complete at the end of each academic year in such instance where the time is short. Asare-Inkoom (2001) asserted that trying to achieve too much in a short time could have the opposite results, where students' performance will be affected negatively.

On how respondents accessed the performance of the 3 year and 4 year groups, the analysis saw LISC saying "the 4 year groups who wrote their exams in 2011, 2012 and 2013 performed better than the 3 year group; that is those who wrote the exam before 2011, in 2013 and even after 2013. This is evident in the WASSCE results."

L3SC also said that

According to their great WASSCE results, the 4 year group did very well than the 3 year group. Even as at now we have not gotten better result than in 2011, and 2012. Even the 2013 that both groups sat together to write the WASSCE, those who completed in 4 years did better than those who completed in 3 years. However, in the individual results, some in the 3 years group performed better than some student in the 4 year group. This is because student abilities to learning differ.

Adding to this, L2SA commented that "the 4 years performance was better because, the number of 'A's that we had in my subject in particular was more than what we had in the 3 year group." and L2SB also reiterated that "the 4 year group did far better than the 3 year group. The performance in their WASSCE results indicates. For example 2013 where the two groups wrote the WASSCE together testified that the 4 year group did better than those who completed in 3 years."

However, L3SB gave a divergent opinion on the issue. He said, "in the individual results, some in the 3 years group performed better than some student in the 4 year group. This is because exceptional students would perform better irrespective of the duration."

Krashinsky (2006) confirmed this when he studied the elimination of the fifth year of high school in Ontario, Canada. He indicated that cohorts with four years of high school had substantially lower grade point averages in college than those who attended high school for five years. The results of Krashinsky (2006)'s study revealed students who completed school in a longer duration perform better than those who complete school in a shorter duration.

The above findings and discussions seem to suggest that a longer duration of schooling gives teachers and students ample time to cover the curriculum/syllabus and short duration restricts both the teacher and the students. Therefore the longer the duration of school the better the academic performance of students.

In addition, it is the wish of every teacher to teach students to pass and pass well in examinations. In the Ghanaian context, if student pass well in examination, parents say the students have done well however, if the students fail, it is the teachers who did not teach well. Teachers therefore need adequate time to assist students enough to pass well. A research by Peterson (2010) affirmed that student's level of attainment was directly related to length of time actively spent in learning. A similar study by Pitman, Cox, & Burchfiel, 2010 also revealed that the extended duration of schooling increases test scores and therefore recommended long duration of schooling for SHS education. Policy makers and educators should come together to increase the duration of time for teaching and learning in the SHS syllabus so that more students will pass well.

4. CONCLUSIONS

It can be concluded from the analyses so far that;

1. The curriculum, standard of assessment, institutional learning environment, teacher and students own characteristics had no significant effect on the student academic performance of the 3 year and 4 year SHS students if the duration of schooling is not adequate for student and their teacher to interact with the factors which affect academic performance adequately.
2. The four (4) year duration of schooling improved the academic performance of the student who had their SHS education in 4 years.
3. The 4 year duration is the better suited for SHS education in the three selected schools in the Central Region of Ghana.

5. RECOMMENDATIONS

Following the research findings and conclusions, the following recommendations have been made.

1. The MOE and stakeholders in education should do all they could to improve on the existing facilities so that students and teachers get conducive learning and teaching environment to improve the performance of the students.
2. The MOE and GES should improve the condition of service of teachers to serve as motivation for them to give out their best to help students to academically perform well.
3. Parents should provide all the necessary school needs for students to assist them study and pass well.
4. Students should attend classes, manage their time and apply good study techniques in order to pass well in their examinations.
5. The Ministry of Education and Ghana Education Service should consider the extending the 3 year SHS education duration to 4 year as a better option to improve students' academic performance.

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