

***A Comparative Study of Accelerated and Non-Accelerated Primary School
Pupils in Selected Private Schools in Sokoto Metropolis***

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Abstract

Acceleration of pupils has become a common but controversial practice with private primary schools in Nigeria and Sokoto state in particular. This research aimed at comparing the performance of primary 6 pupils who were accelerated and those who were not in selected primary schools in Sokoto metropolis, Sokoto state, Nigeria. Four leading private schools in Sokoto metropolis were purposively selected to meet the target sample. The total population of primary 6 pupils in these schools was involved in this research since primary 6 pupils are scarce in most schools while some schools do not even have them because of acceleration. A total of 235 pupils were used (FGCSS 89, FSS 23, Alheri Schools 29 and Blue Crescent Schools 94). A correlational research design was adopted. Three hypotheses were generated and the t-test statistics was used to test them. The instruments used for collecting data were; (i) a questionnaire aimed at identifying pupils who have skipped class from the time they started school and the class(s) they skipped (ii) an academic performance test in English and Mathematics for primary 6 pupils adopted from Njoku (2010), a validated instrument that has high rate of internal consistency. The results of the research showed that accelerated pupils performed better than non-accelerated pupils generally and in English language and Mathematics respectively. It was therefore recommended that acceleration of pupils should not end with making children finish school at young age rather it should aim at identifying and training these gifted children for the needed technological development in Nigeria. This can be done by expanding and enriching their curriculum.

Keywords; Comparative, Accelerated, Primary, Private and Metropolis.

Introduction

At the introduction of western education in Nigeria a lot of emphasis was laid on age and maturation as a key to academic success. This was done to the extent that pupils coming for enrollment in primary schools were asked to cross their left hand over their heads to touch their right ears before they were enrolled into schools. In effect a child who passed this test must have reached 7 years. As time rolled on the demand for western education increased, this selection test

was discarded, 6 years became the ideal age to many educationists. It is worthy of note that today in our computer and jet age many children enrolled into school at the age of 4 years or less. This era, many parents, guardians and pupils themselves want to go as fast as their brain can carry them.

Many children now finish primary school at the age of 8 or 9, some also graduate from university at the age of 19. There have been a lot of controversies with regards to acceleration of learners among parents, teachers and educationists. Some are in favour while some are against it. The question is “Is acceleration of pupils really necessary”? One way to answer this question is by comparing the academic performance of the accelerated pupils with that of their non-accelerated counterparts. This is exactly what this research is all about.

Review of Related Literature

Acceleration is a type of intervention to advance students at faster rates or at younger ages than is typical through an educational programme (Colangelo, Assouline & Gross, 2003). Van Tassel-Baska (2000) defined it as a set of administrative strategies that enable educators to cater efficiently and effectively for the diversity of cognitive development, needs and competencies of gifted and talented students. He emphasized that it allows learners to progress through an educational programme at rates faster or ages younger than normal. Schiever and Maker (2003) noted that the practice has the potential to enhance students learning, maturation, accomplishment and self-esteem.

Benbow (1998) stated that, of the many intervention strategies provided by schools, acceleration is one best supported by researchers. Sayler and Brookshire (1993) noted that despite the controversy surrounding acceleration, no studies have shown the practice of acceleration to be harmful. Commonwealth of Australia Senate Committee Report (2001) identified acceleration as being highly advantageous for students who are socially and emotionally ready for an alternative placement. Rogers (2007) synthesis of the research on educational practices for gifted and talented students points to the positive effects of subject and whole grade acceleration. Wells, Lehman and Marron (2009) in their study compared the performance of whole-grade accelerated students to older classmates of similar achievement who were not accelerated, they found that the accelerated students not only kept up with the older

students but performed better. Steenbergen-Hu and Moon (2011) in their meta-analysis confirmed the positive influence of acceleration on high ability learner.

However, skipping class is not perfect for everyone and the decision should be carefully weighed in light of the “whole” child. UNESCO also emphasized that progression in school should be based on the specific needs of each student. Policy and Implementation Strategies for the Education of the Gifted and Talented Students (2004) identified 15 types of acceleration as early entrance to school; stage advancement or grade skipping, continuous placement, self-paced instruction, subject-matter acceleration, combined classes, advanced placement, correspondence course, credit by examination, University acceleration, curriculum compacting, curriculum telescoping, mentorships, extra-curricular programmes and concurrent enrollment. Schiever and Maker (2003) emphasized the need for proper assessment before recommending any kind of acceleration programme.

Statement of the Problem

Acceleration of primary schools pupils has become a very common phenomenon among private primary schools in Sokoto state and in Nigeria in general. It has become a yardstick with which many parents assess the performance of primary schools. Many primary schools use it as advantage to attract parents and their children to their schools. The 9 – 3 – 4 system of education as advocated by the National Policy on Education is no more visible with many private schools because of the various types of acceleration they practice. Most pupils are moved from nursery to primary 2 and from primary 4 to primary 6 while some schools move their pupils from primary 5 to JSS I. But we are still complaining of fall in the standard of education. Many public school teachers and administrators criticize the private schools for this since it is not common with the public schools. All these have generated a lot of confusion in the minds of many. This research aimed at comparing the performance of accelerated primary 6 pupils and their non accelerated counterparts is one of the attempts to answer the many questions that are arising.

Objectives of the Study

The objectives of this study were to find out if:

1. There is any significant difference in the performance of pupils who were accelerated and those who were not in private primary schools in Sokoto metropolis.

2. There is any significant difference in the performance of pupils who were accelerated and those who were not in English language in private primary schools in Sokoto metropolis.
3. There is any significant difference in the performance of pupils who were accelerated and those who were not in Mathematics in private primary schools in Sokoto metropolis.

Hypotheses of the Study

Three null hypotheses were generated for this study:

1. There is no significant difference in the performance of pupils who were accelerated and those who were not in private primary schools in Sokoto metropolis.
2. There is no significant difference in the performance of pupils who were accelerated and those who were not in English language in private primary schools in Sokoto metropolis.
3. There is no significant difference in the performance of pupils who were accelerated and those who were not in Mathematics in private primary schools in Sokoto metropolis.

Significance of the Study

This research is of great benefit to parents and teachers who need to be educated on whether to support acceleration of pupils or not. It will also be useful for policy makers who need to establish rules and conditions for acceleration.

Scope of the Study

This study covers all private primary schools in Sokoto metropolis. It only compared the academic performance of primary 6 pupils who were accelerated and those of their counterparts who were not in core subjects of English language and Mathematics.

Research Design

The technique adopted for this study was the correlational design. This design is best for this research because it helps to identify and determine relationships and differences between the performances of one group with that of another.

Population of the Study

This study covered all private primary schools in Sokoto metropolis during the 2011/2012 academic session.

Sample and Sampling Technique

Four (4) leading private primary schools in Sokoto metropolis were purposely selected for this study. Purposive sampling was used to select the schools in order to reach the target schools and the target pupils. These schools are Federal Government Staff School ($n = 89$), Federal Staff Primary School ($n = 23$), Alheri Primary School ($n = 29$) and Blue Crescent Primary School ($n = 94$). The whole population of primary 6 pupils in all the schools were used ($N = 235$). This method was adopted since researchers like Shaughnessy, Zechmeister and Zechmeister (2000) confirmed that the best research is the one that involved the total population, pointing out that sampling came on board because of the inability of researchers to cover the total population. It was also necessary to adopt this method since primary 6 pupils are scarcely seen in schools. Many private schools do not have primary 6 and those who have them, have limited number of pupils. Primary 6 pupils were also selected for this study since it is the certificate class for primary schools.

Instrumentation

The instruments used for the research are:

- i. A questionnaire that identified pupils who skipped class and those who did not. The questionnaire consisted of 2 sections; Section A captured the personal data of the pupils while section B contained simple questions like have you skipped any class since you started school? Which class(s) did you skipped? Who initiated the idea of your skipping the class(s)? (Yourself, School or Parents).
- ii. Academic achievement test in English language and mathematics for primary 6. The test was adopted from Njoku & Kalgo (2010). It was developed during a Ph.D research using primary 6 in Sokoto, Kebbi and Zamfara states of Nigeria. The tests have very high content validity and a reliability of 0.88 for English language and 0.86 for Mathematics. The tests have been found useful in many researches involving primary 6 pupils in Sokoto state.

Administration and Scoring of the Instruments

The questionnaire to identify those who skipped class(s) was administered by the researchers to all the pupils first i.e. school by school. With proper instruction and guidance the pupils accurately answered the questions. The questionnaires were retrieved from the pupils and

the academic performance tests were given to them. The researchers timed the pupils appropriately. The question papers were retrieved from all the pupils. The researchers took time to mark the scripts and scored them accurately.

Presentation, Analyses and Interpretation of Results

H0₁: *There is no significant difference in the performance of pupils who were accelerated and those who were not in Sokoto metropolis.*

This hypothesis was tested by subjecting the test scores of the group of students who skipped class and those who did not to t-test analysis as shown in table 1.

Table 1: Difference in the Performance of Pupils who were Accelerated and those who were not in Sokoto Metropolis.

Variables	N	Mean	Std. Deviation	t-Cal	p-Value	Decision
Those who Skipped Class	111	47.7	12.51	6.93	.000	Rejected
Those who did no Skipped Class	124	36.5	14.12			

From table 1 above, a paired sample t-test indicated that scores were significantly higher for those who skipped class ($M = 47.7$, $SD = 12.51$) than for those who did not ($M = 36.5$, $SD = 14.12$), $t(234) = 6.93$, $p < .001$, $d = .50$. This indicates that there is difference in the performance of pupils who were accelerated and those who were not in Sokoto metropolis. Therefore, H₀₁ which state that there is no significant difference in the performance of pupils who were accelerated and those who were not in Sokoto metropolis is rejected.

H0₂: *There is no significant difference in the performance of pupils who were accelerated and those who were not in English language in Sokoto metropolis.*

This hypothesis was tested by subjecting the test scores in English language of the group of students who skipped class and those who did not to t-test analysis as shown in table 2.

Table 2: Difference in the Performance of Pupils who were Accelerated and those who were not in English Language in Sokoto Metropolis.

Variables	N	Mean	Std. Deviation	t-Cal	p-Value	Decision
Those who Skipped Class	111	29.1	6.20	7.29	.000	Rejected
Those who did not Skipped Class	124	21.2	7.97			

From table 2 above, a paired sample t-test indicated that scores were significantly higher for those who skipped class ($M = 29.1$, $SD = 6.20$) than for those who did not ($M = 21.2$, $SD = 7.97$), $t(109) = 7.29$, $p < .001$, $d = .70$. This indicates that there is difference in the performance of pupils who were accelerated and those who were not in English language in Sokoto metropolis. Therefore, H_{01} which state that there is no significant difference in the performance of pupils who were accelerated and those who were not in English language in Sokoto metropolis is rejected.

H03: *There is no significant difference in the performance of pupils who were accelerated and those who were not in Mathematics in Sokoto metropolis.*

This hypothesis was tested by subjecting the test scores in Mathematics of the group of students who skipped class and those who did not to t-test analysis as shown in table 3.

Table 3: Difference in the Performance of Pupils who were Accelerated and those who were not in Mathematics in Sokoto Metropolis.

Variables	N	Mean	Std. Deviation	t-Cal	p-Value	Decision
Those who Skipped Class	111	19.2	6.95	4.48	.000	Rejected
Those who Skipped Class	124	14.8	6.23			

From table 3 above, a paired sample t-test indicated that scores were significantly higher for those who skipped class ($M = 19.2$, $SD = 6.95$) than for those who did not ($M = 14.8$, $SD = 6.23$), $t(109) = 4.48$, $p < .001$, $d = .43$. This indicates that there is difference in the performance of pupils who were accelerated and those who were not in Mathematics in Sokoto metropolis. Therefore, H_{01} which state that there is no significant difference in the performance of pupils who were accelerated and those who were not in Mathematics in Sokoto metropolis is rejected.

Summary of Findings

- i) There is significant difference in the performance of pupils who skipped class and those who did not in favour of pupils who skipped class.
- ii) There is significant difference in English language performance between pupils who skipped class and pupils who did not in favour of pupils who skipped class.
- iii) There is significant difference in Mathematics performance between pupils who skipped class and pupils who did not in favour of pupils who skipped class.

Discussion of the Findings

This research recorded a significant difference in performance of primary 6 pupils who skipped class and pupils who did not in private primary schools in Sokoto metropolis. Pupils who skipped class performed better than those who did not. This is in line with the findings of Well, Lehman and Marron (2009) who compared the performance of whole-grade accelerated pupils and their non accelerated counterparts in two U.S. databases. It also agreed with the assertion of Rogers (2007) who emphasized that grade skipping is not just a process that speeds pupils progress; rather it is an acknowledgement that the student has already achieved at the requisite level to qualify for a higher grade placement and that further instruction in what has already been mastered is not beneficial. The findings of this research contrast the opinion that whole-grade acceleration is detrimental to educational practice. The accelerated pupils performed better than their non-accelerated counterparts in English language and Mathematics respectively. This implies that pupils who are qualified for acceleration or skipping of class must be highly capable and ready in the major school subjects. Many researchers like Benbow (1998), Van Tassel-Baska (2000) and Colangelo, Assouline and Cross (2004) have supported acceleration particularly grade skipping but, proper assessment of pupils should be made as warned by Schiever and Maker (2003) before effecting such decisions. Parents, pupils, Psychologists and Counsellors should be involved to make sure that pupils benefit from such acceleration.

Conclusion

Acceleration is an intervention strategy used to advance highly capable pupils at a faster rate or at younger ages. It has become an acceptable practice to many educationists as such it is used in many schools. This research proved that pupils who were accelerated in primary school did better than those who were not. This attests to their high intellectual ability and readiness to study. However, proprietors and managers of such schools should follow due procedure of assessment of pupils, good consultations etc. before accelerating pupils.

Recommendations

Acceleration of pupils should not end with making pupils to finish school earlier than others rather such gifted pupils should be exposed to more intellectual activities above scheme of

work and syllabus. We should aim at identifying pupils who will be trained to achieve the technological breakthrough we long for in this nation.

School managers should follow due procedure in assessing and placing these pupils.

Reference

- Benbow, C. P. (1998). *Meeting the needs of gifted students through use of acceleration. Handbook of Special Education; Research and Practice*. Oxford: Pergamon Press.
- Colangelo, N., Assouline, S. & Cross, J. (2003). *Relevant educational and psychological research. Acceleration Scale, 2nd Edition Manual*, 107 – 123. Great Britain: potential Press
- Commonwealth of Australia Senate Committee Report (2001). *Senate Employment, Work place Relations, Small Business and Education Reference Committee. The Education of Gifted Children*. Canberra – Australia: Government Publishing Service.
- Njoku, J. N. & Kalgo, F. A. (2010). Relationship between ADHD and Academic Performance in English Language and Mathematics among primary6 pupils in Sokoto, Kebbi and Zamfara states of Nigeria. *Journal of National Association for Science, Humanities and Education Research (NASHER)*, 8 (1), 1 – 6.
- Policy and Implementation Strategies for the Education of Gifted and Talented Students (2004). Retrieved from www.det.nsw.edu.au/policies/
- Rogers, K. B. (2007). Lessons learnt about educating the gifted and talented. A synthesis of the research on educational practice. *Gifted Child Quarterly*, 51 (4), 382 – 396.
- Sayler, M. F. & Brookshire, W. K. (1993). Social, Emotional and Behavioural adjustment of Accelerated, Students in Gifted Classes and Regular Students in Eighth Grade. *Gifted Child Quarterly*, 37 (4), 150 – 154.
- Schiever, S. W. & Maker, C. J. (2003). *New directions in enrichment and acceleration. Handbook of Gifted Education*. Boston: Allyn and Bacon.
- Shaughnessy, J. J. Zechmeister, E. B. & Zechmeister, J. C. (2000). *Research Methods in Psychology*. U. S. A.: McGraw-Hill Companies.
- Steenbergen-Hu, S. & Moon, S. M. (2011). The effects of acceleration on high-ability learners; A meta-analysis. *Gifted Child Quarterly*, 55 (1), 39 – 53.
- Van Tassel-Baska, J. (2000). *Theory and research on curriculum development for the gifted. International handbook of Giftedness and Talent 2*. Amsterdam: Elsevier.
- Wells, R., Lehman, D. & Marron, M. (2009). What factors are associated with grade acceleration? An analysis and comparison of two U.S. databases. *Journal of Advanced Academics*, 20 (2), 248 – 273.