

African Journal of Education and Practice (AJEP)

AN ANALYSIS OF SHADOW EDUCATION ON ACADEMIC PERFORMANCE OF MAINSTREAM EDUCATION

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Abstract

Purpose: The study sought to determine the impact of shadow education on academic performance of mainstream education.

Methodology: The study used descriptive survey research design. The target population of the study was teachers, students and parents in public secondary schools in the 29 secondary schools in Athi River District. Purposive sampling was used to select respondents from the sampling frame; 29 principals, 29 teachers, 29 parents and another 29 students were selected from the twenty nine schools. This study used primary data which was collected through use of structured questionnaires. Data from the questionnaires were analyzed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results. Pilot study was conducted to measure the reliability and validity of the questionnaires. The reliability of the instrument was tested using the Cronbach Alpha method.

Results: Shadow education improves performance of students and schools in general. Participation in tuition during the morning or evening hours at school improves performance. Participation in tuition once school closes for holiday improves performance. Participation in tuition every weekend improves performance.

Unique contribution to theory, practice and policy: Parents should encourage their children to value shadow education as from the results it has been identified that through shadow education performance of students improves and that shadow education prevents idleness that is created when students are free with no engagement in school work.

Keywords: *Shadow education, performance, mainstream education.*

1.0 INTRODUCTION

1.1 Background of the Study

Education is a gateway to civilization and a source of wealth and power which are very necessary for growth and development of any country's economic and political institutions (Paviot, Heinsohn, & Korkman, 2008). According to Paviot, Heinsohn, and Korkman, (2008), education systems in most developing countries are meritocratic and this encourages tough competition among students and schools. This culminates into what is referred to as shadow education. Shadow education may be defined as a supplementary coaching that continues after school hours (Bratti & Staffolani, 2002). The metaphor shadow education originates from the works of Bray (2003). Bray (2003) notes that private supplementary tutoring only exists because the mainstream education system exists; second, as the size and shape of the mainstream system change, so do the size and shape of supplementary tutoring; third, in almost all societies much more attention focuses on the mainstream than on its shadow; and fourth, the features of the shadow system are much less distinct than those of the mainstream system.

Silova (2007) supports the idea of Bray by noting that Shadows can of course be useful. Just as the shadow cast by a sun-dial can tell the observer about the passage of time, so the shadow of an education system can tell the observer about change in societies. However, in some countries, parents, educators and politicians are highly critical of the way in which private tutoring has come to dominate the lives of families and pupils. Tutoring commonly creates and perpetuates social inequalities, and it consumes human and financial resources which perhaps could be used more appropriately in other activities. Critics add that private tutoring can distort the curriculum in the mainstream system, upsetting the sequence of learning planned by mainstream teachers and exacerbating diversity in classrooms. In this sense, unlike most shadows, private supplementary tutoring is not just a passive entity but may negatively affect even the body which it imitates (Bray, 2007).

On the other hand advocates of shadow education claim that it leads to superior results, but these has not been proven as its difficult to draw the borderline between value added by shadow education and the conventional schooling. The claim is based on the idea that time allocation determines performance as observed in a number of studies. For example, Taylor (2007) reported that some schools offer private tutoring when their performance seems dismal. This implies there is a general perception that failure of students in national examinations may be partly due to inadequate time with teachers that may lead to poor syllabus coverage. Studies, have indicated that time allocation was a key factor that determines performance. For instance, Stinebrickner & Stinebrickner (2008) investigate the causal effect of spending time for studying on academic achievement for first year students at Berea College (US). Using whether one of the randomly assigned roommates brings a video or a computer game with them as an instrument, they found evidence that an increase in study quantity by one hour increases the performance significantly. Dolton, Marcenaro, and Navarro (2003) found that time spent on classroom teaching is more productive than time spent on self-study and that time used for private tuition has a negative effect.

In a review of literature on shadow education patterns and participation Silova (2007) provided statistics for 12 Countries. The statistics indicate a massive participation in private tutoring for students at all levels of education. For instance, in China the 2004 Urban Household Education and Employment survey covering 4,773 households indicated that tutoring was received by 73.8% of primary, 65.6% of lower secondary and 53.5% of upper secondary students. In Cyprus, a 2003 study of 1,120 college students found that 86.4% had received private tutoring when in secondary school (Xue& Ding, 2009).

Shadow education has also been reported as a common practice in African Countries. For example, in Egypt, a 2004 study estimated that households devoted 61.0% of education expenditures to private tutoring. A 1997 study estimated that household expenditures on tutoring in all levels of schooling accounted for 1.6% of gross domestic product. A 1994 survey of 4,729 households found that in urban areas 64.0% of primary children with 52.0% in rural areas had received supplementary tutoring (World Bank, 2004).

Africa, the coverage and growth of the provision of extra lessons in school subjects outside school hours for the six African countries that participated in SACMEO's two major cross national studies of the quality of education during 1995 and 2000. The paper illustrated that the percentage of grade six countries expanded from an initially high figure of around 50 percent in 1995 to nearly 70 percent in 2000. In Egypt, 1994 survey of 4729 households found that 64.0 percent of urban primary children and 52.0 percent rural ones had received supplementary tutoring (World Bank, 2004).

Table 1: Percentage of Pupils receiving Shadow Education in Six Countries

Country	Percentage of Pupils Receiving Extra Tuition		Percentage of Pupils Paying For Extra Tuition
	SACMEQ 1	SACMEQ 2	SACMEQ 2
Kenya	68.6 %	87.7 %	57.9 %
Malawi	22.2 %	79.7 %	8.9 %
Mauritius	77.5 %	86.6 %	90.5 %
Namibia	34.7 %	55.9 %	17 %
Zambia	44.8 %	55.1 %	50.9 %
Zanzibar	46.1 %	55.9 %	37.9 %
Average	49.0 %	68.3 %	43.9 %

Source: Byamugisha & Ssenabulya (2005)

The private supplementary tutoring has been kept hidden from public awareness, and for this reason it is presented as “shadow education system (Bray, 2006) or as an activity in the shadow (Costa, Ventura & Neto-Mendes, 2003) or a hidden market. This tutoring is referred as shadow because for instance it only exists because the mainstream system exists. It also imitates the mainstream. When the main stream changes in size and orientation so does the shadow. In many societies more public attention is focussed on the mainstream than on its shadow, which is hidden.

1.2 Problem Statement

Shadow education is a global phenomenon that has shown increasing trends with more and more students participating in paid private tutoring either in school or outside school. In Kenya shadow education has been informally practiced both at primary and secondary school levels mostly during holidays, weekends, evening and morning extra classes in which learners pay extra funds for the tutoring in addition to school fees (Muindi, 2012). This has elicited mixed reactions from different stakeholders with some maintaining that it was good while others felt that it is a money minting venture by the teachers from the parents.

In Athi River District for instance the challenge that is facing the education system is the ban of shadow education. Few parents in that region supported the ban while others did not. The few who were not supporting the idea of having the shadow education banned believe that through the tuition, their children perform even better and are usually engaged in school which is important. The other few who do not support the ban, indicated that some schools in the District the shadow education does not impact the performance of their children and claim the same as a strategy used by the schools to generate more income. Following the ban some parents in the district allocate their children private tuitioning, at an agreeable location among them and the teachers.

A study by Lugano (2008) on shadow education system analyzed the factors that influence demand and practice of private supplementary tuition in public secondary schools in Municipality Division, Kakamega South District. Lugano’s findings were that there is high demand and practice of private supplementary tuition in Municipality Division of Kakamega South District. The study also revealed that there was significant relationship between household factors, school-based factors, private rates of returns to education, students' attributes, teachers' job satisfaction and economic factors and demand for private supplementary tuition in the area.

Shadow education in Kenya was banned in year 2011, for all secondary and primary schools in Kenya. The main argument behind this ban was that shadow education was a major cause of indiscipline in secondary school that led to school unrests. The teachers of majority of the primary and secondary schools in Kenya were said to be exploiting poor parents through shadow education a move that was opposed by the Kenya Union of Teachers (KNUT). Proponents of shadow education argue that it improves syllabus coverage and therefore performance (Muindi, 2012). This conflict shows that the deliberation of shadow education in Kenya’s secondary and primary school has not yet been vindicated. This dearth conclusions on the effects of shadow education on performance students, creates a gap that needs to be addressed. It is as a result, that

this study sought to determine the impact of shadow education on academic performance of mainstream education.

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Theory of Human Capital

With the realization that the economic prosperity of a nation relies on its physical and human capital stock, the importance of education has been well stressed. The human capital theory is based on the assumption that in order to improve the production capacity of the population, formal education plays a vital role (Psacharopoulos & Woodhall, 1997).

It goes without saying that the human capital theorists argue that the more a population is educated the more it is productive. In this accord, the provision of formal education is regarded as a productive investment in human capital. Psacharopoulos & Woodhall (1997) stipulated that human capital theory explains the large public expenditure on education globally. On this accord, it has been assumed that investment in education results to economic return both at the macro and micro levels. As a result, promotion of investment in human capital has been thought to result in rapid economic growth at the community level. For many families, such investment has been deemed to yield returns of individual economic achievement. Such crave for human capital underlines the huge investment in mainstream and shadow education. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement.

2.1.2 Institutional Theory

This theory emphasizes the influence of global civil society on the state-level conceptualizations of policy goals and means such as, government policies on shadow education. It considers the processes by which structures, including schemas; rules, norms, and routines, become established as authoritative guidelines for social behavior. It inquiries into how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse. Although the ostensible subject is stability and order in social life, students of institutions must perforce attend not just to consensus and conformity but to conflict and change in social structures.

The basic concepts and premises of the institutional theory approach provide useful guidelines for analyzing organization-environment relationships with an emphasis on the social rules, expectations, norms, and values as the sources of pressure on organizations. This theory is built on the concept of legitimacy rather than efficiency or effectiveness as the primary organizational goal (McAdam & Scott, 2004). The environment is conceptualized as the organizational field, represented by institutions that may include regulatory structures, governmental agencies, courts, professionals, professional norms, interest groups, public opinion, laws, rules, and social values. Institutional theory assumes that an organization conforms to its environment. This theory is

relevant to the study as it explains how institutional environment can affect the shadow education in Kenya.

2.1.3 Theory of Intellectual Development

This theory provides the groundwork for constructivism which is applied to education today. The common belief that knowledge is constructed within a social context is the foundation for this group of learning theories. Theory of intellectual development provide a third research tradition contributing to the notion of cognitive construction (e.g. Piaget, 1952, 1969, 1971) Developmentalists believe that learning results from adaptations to the environment which are characterized by increasingly sophisticated methods of representing and organizing information. Developmental scientists also forward the notion that children progress through different levels or stages differently. A fourth line of research depicts learning as a socially mediated experience where individuals construct knowledge based on interactions with their social and cultural environment. Like Piaget & Bruner, Vygotsky (1962, 1978) believed that the formation of intellect could be understood by studying the developmental process. However, like Bruner, Vygotsky felt that intellectual development could only be fully understood within the socio-cultural context in which the development was occurring. This theory further explains how the mind acquires knowledge and the same can be made through by continuous tutoring of students or children to fasten their knowledge development.

2.0 LITERATURE REVIEW

Supplementary tutoring differs from most other shadows in the way in which it affects the body which it imitates. It is difficult to establish how shadow education affects students' academic performance since there are many other factors involved. In this respect, one of the major challenges that researchers have encountered is that students who do or do not receive supplementary tutoring are not easily comparable since they are, in most cases, not uniform in characteristics (Bray, 2006). Gitachu (2010) further sought to establish the relationship between remedial teaching and performance of students. The results indicated that remedial teaching had strong positive correlations with all the three strategies of remedial teaching.

In Hong Kong, it was established that student took supplementary tuition for various reasons. Lee found out that the majority (71 percent) of students took to it, if their academic performance was not too good. The rest did so if they did not understand what the teachers taught in class (14 percent), others did so to prepare for public examinations (8 percent). (Bray, 2003). The minorities were forced to take to private tuition as a result of their parents requirement or if their classmates were doing so.

Bratti & Staffolani (2002) investigated the effects of students' different time use using data on first-year economic students at the University of Ancona (Italy). They found that the relative importance of attendance and self-study varies across exams. Attendance seems to improve performance especially in quantitative disciplines such as Mathematics and Economics, whereas self-study seems to be more important for non-quantitative disciplines such as Law and Economic History.

The turn of the century has marked a proliferation of studies on private supplementary tutoring in different parts of the world (Silova, 2009). While initial research gave prominence to Asian societies, more recent studies reveal that private tutoring is growing elsewhere, including in Africa (Paviot, Heinsohn & Korkman, 2008; Sambo, 2001), the United States of America (Davies, 2004; Gordon, Bridglall and Meroe, 2005), western Europe (Glasman, 2004; Ireson, 2004; Mischo & Haag, 2002), and south-eastern/central Europe and the former Soviet Union (Silova et al., 2006b). In countries as diverse as Japan, Egypt, India, Malta and Poland, more than one third of students regularly receive supplementary private tutoring; in some societies this proportion is considerably higher (Bray, 2003; 2006). As Baker & LeTendre (2005) state, the use of private after-school activities has become “a world megatrend” among families with children in state education. Shadow education is a common venture in education systems in both developed and developing Countries. For countries like Japan and South Korea in East Asia, tutoring has a long history. It grew in magnitude during the 1980’s and 1990’s (Seth, 2002). A 2007 survey found that tutorial schools known as juku served 15.9% of Primary 1 children, that this proportion rose steadily in later grades, and that it reached 65.2% in Junior Secondary 3. In addition, 6.8% of Junior Secondary 3 pupils received tutoring at home, and 15.0% followed correspondence courses (Suzuki, 2009).

3.0 RESEARCH METHODOLOGY

The study used descriptive survey research design. The target population of the study were teachers, students and parents in public secondary schools in the 29 secondary schools in Athi River District. Purposive sampling was used to select respondents from the sampling frame; 29 principals, 29 teachers, 29 parents and another 29 students were selected from the twenty nine schools. This study used primary data which was collected through use of structured questionnaires. Data from the questionnaires were analysed using Statistical Packages for Social Sciences (SPSS) to derive descriptive results. Pilot study was conducted to measure the reliability and validity of the questionnaires. The reliability of the instrument was tested using the Cronbach Alpha method

4.0 RESULTS

4.1 Response Rate

A successful response rate 100 % was obtained. This high response rate was able to be achieved as a result of the availability of students, parents and teachers in the schools identified in Athi River District. The study response rate was very good. Results are presented in Table 2

Table 2: Response Rate

Questionnaires Received	Response Rate
116	100%

4.2 Demographic Characteristics

4.2.1 Position of Respondents

The respondents were asked to give their position and results in Figure 1 indicate the majority respondents to be students who totalled to 47% of the sample. Teachers constituted of 30% of the sample while parents totalled to 23%. The availability and ease to access students and teachers in the schools explain their high percentage than parents.

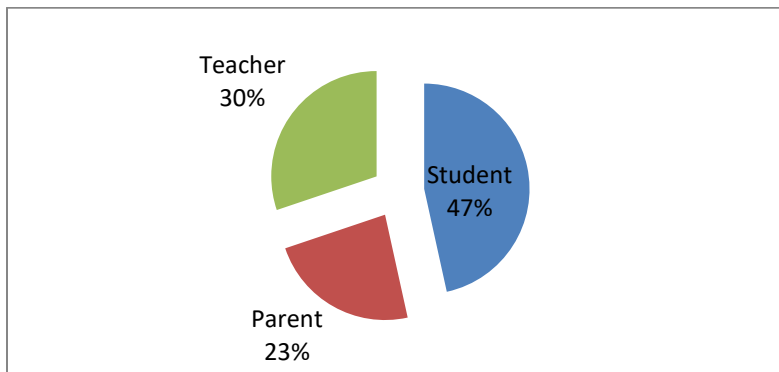


Figure 1: Position of Respondents

4.2.2 Gender of Respondents

The results shows that majority of the respondents were males as they comprised of 75% of the sample while female respondents totalled to 25%.

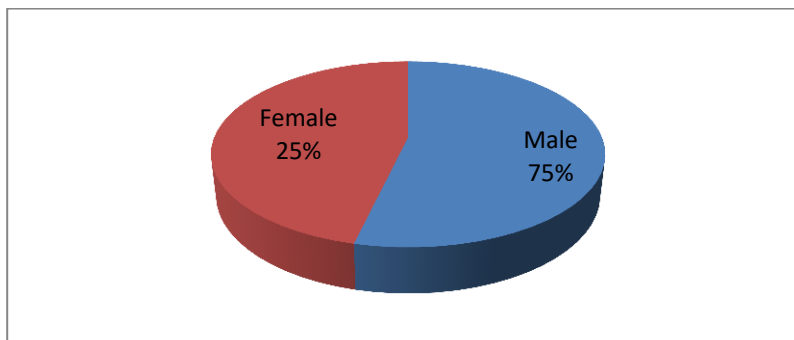


Figure 2: Gender of Respondents

4.1 Descriptive Statistics

4.1.1 Shadow Education and Performance

The objective of the study was to establish the effects of shadow education on performance of students in mainstream education. The result in Table 3 presents the views of respondents on the stated objective. Seventy six percent (76%) represent that participation in tuition during the

morning or evening hours at school improves performance. Eighty six percent (86%) responses represents that participation in tuition once school closes for holiday improves performance. Participation in tuition every weekend improves performance as indicated by 73% response level. Further results show that 72% agree that there is a high attendance of learners (over 50% attendance) receiving shadow education whose performance improve. Ninety three percent (93%) believe that the government perception on shadow education is that it improves performance. On a five point scale the mean of the responses indicated from the results was 3.91 which show that the respondents were agreeing on most of the statements while the standard deviation was 0.95 which indicates that the answers received were not dispersed far from the mean.

Results indicate that the percentage of students who participate in shadow education are over 50% in Athi Rive District. This results support those of Nath (2011b) who after analyzing data from household surveys in Bangladesh found that 37.9% of primary students and 68.4% of secondary students were receiving tutoring. This further confers with those of Dawson (2011) whose survey of eight primary schools in three locations, found that about half of the students had received tutoring. Further results further indicated that shadow education tends to improve performance of students. These results support those carried out by Lee in Hong Kong who found out that student took supplementary tuition for various reasons. Lee found out that the majority (71%) of students took to it, if their academic performance was not too good (Bray, 2003).

Table 3: Effects of Shadow Education on Performance

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Participation in tuition during the morning or evening hours at school improves performance	6.00%	6.00%	12.10%	59.50%	16.40%	4.19	0.884
Participation in tuition once school closes for holiday improves performance	2.60%	3.40%	7.80%	72.40%	13.80%	3.74	1.005
Participation in tuition every weekend improves performance	2.60%	2.60%	21.60%	44.00%	29.30%	3.91	0.764
Participation in extra coaching in school or outside school improves performance	4.30%	3.40%	10.30%	57.80%	24.10%	3.95	0.922

There is a high attendance of learners(over 50% attendance) receiving shadow education whose performance improve overtime	8.60%	8.60%	10.30%	45.70%	26.70%	3.94	0.935
The government perception on shadow education is that it improves performance	0.00%	0.00%	5.20%	56.90%	37.90%	3.73	1.197
Averages	0.04	0.04	0.11	0.56	0.25	3.91	0.95

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMENDATION

5.1 Summary of Findings

The study findings indicated that shadow education improved performance of students and schools in general. This was demonstrated by descriptive statistics that showed that majority of the respondents agreed that participation in tuition during the morning or evening hours at school improves performance, participation in tuition once school closes for holiday improves performance, participation in tuition every weekend improves performance, there is a high attendance of learners(over 50% attendance) receiving shadow education whose performance improve and that the government perception on shadow education is that it improves performance.

5.2 Conclusion

The study provided that shadow education improves the performance of students in Athi River District schools. It is evident to conclude that shadow education is viewed by students, teachers and parents to improve grades and revision skills among other learning strategies. Not all students and families felt that the shadow education systems improve the performance of students. However irrespective of that many students and families fear becoming losers, since they know the competition is high in the education sector these days as a result they have to explore means to produce winners. Thus they invest in private tutoring as a form of protection against losing.

5.3 Recommendations of the Study

The study recommended that parents should encourage their children to value shadow education as from the results it has been identified that through shadow education performance of students improves and that shadow education prevents idleness that is created when students are free with no engagement in school work.

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