

# Influence of Learner Reflection on Academic Performance of Kenyan Secondary School Students

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**Abstract** Academic performance of students at various levels of learning is a concern and many nations and scholars are looking for ways of alleviating the problem of poor academic performance. Academic performance among students may be a function of many factors such as their abilities, socio-economic background and pedagogical beliefs. This study investigated the influence of learners' reflection on academic performance of secondary school students. The study was guided by Locke and Lotham's achievement theory. Sequential explanatory design was adopted in the study. The target population of students was 2500. Stratified sampling was used to select 12 secondary schools while simple random sampling was used in this study to select 387 students and 12 form four class teachers. The researcher administered questionnaires and interview schedules to collect data. Content validity of the research instrument was enhanced through a pilot study using students not under the study. Reliability was determined by internal consistency method in which coefficient alpha of = 0.83 was obtained. Qualitative data was analysed using thematic analysis while descriptive and inferential statistics such as Pearson product moment correlation were used to analyse quantitative data. A statistical significant relationship  $r = .17, p \leq .05$  was established between learner reflection and academic performance. The study recommended that school counselors should impress on parents and teachers the need to positively reinforce their students. In addition, teachers and school counsellors should equip students with social and self-awareness skills to help students adjust to learning environment.

**Keywords** Learner reflection, Academic performance, Counselling, Secondary schools, Students

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## 1. Introduction

Academic work may be affected by feelings of students because identification with academic work is domain recognition and therefore students may define themselves through academic performance (Bell, 2011). Allan (2014) noted that while academic goals are important to students' success in academic achievement, goal commitment is vulnerable to moderating factors such as hope, particularly agency hope and confidence in one's abilities. Archambault, Fallu & Pagani (2009) argued that transition to secondary schools can play important role in understanding changes in academic achievement because students face different challenges, socialize with new peers and are educated by different teachers. According to the study, transition is associated with a number of negative outcomes such as decline in motivation, self-esteem, self-concept and academic achievement. Archambault et al (2009) concluded that secondary schools do not provide environment that fit psychological needs of students. Chirkov (2003) claimed

Students may experience additional anxiety when they maneuver the world of their parents and their teachers as well as peers. Some students may take the role of the parent when the parent is dead or does not care what future holds for the child which may require a lot of autonomy on the part of the student (Chirkov, 2003).

Lyanda, Jephchirchir, Ong'unyaand Odhiambo (2012) claimed that individual who are aware of their capabilities and responsibility will answer questions related to learning process such what goals do they have and the strategies they use to achieve the goals. Since positive self-perception is associated with scholastic achievement, one may expect troubled students to earn lower grades than their comrades however, some students may still perform well despite high levels of stress (Wango & Mungai, 2007). Iraki (2009) argued that continued exposure of students to poorly arranged learning environment and materials reduce learning rate and create avoidance behaviour. In Bondo Sub-County, there is still low academic achievement among secondary school students as the mean grade is below the expected C+ grade entry point of Universities in Kenya.

This study was based on Edwin Locke & Gary Lotham's (1990) goal setting theory which states that the process of setting goals and targets allow an individual to be focused to provide a sense of direction and enables one to achieve aims

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without distraction. Edens (2006) established that learner reflection enables the learner to establish personal agenda for learning by setting up direction in planning, monitoring and evaluating learning process without social pressure. In addition, the study noted that learner reflection makes learning more purposeful which results in good academic performance. In another study conducted in U.S.A, Celio, Durlak & Dymnrcki (2011) found that reflection provides transformative link between action of serving and idea of learning. Finally, the study established that reflection increased confidence and engagement in school, created civic knowledge and social responsibility. Kang (2010) established that reflection is central in learning experience because it enables students act in a deliberate and intentional way.

On a similar vein, Woodgate (2005) established that participants higher on future consequences had greater self-regulatory efficacy and exercise attendance than those with moderate consideration for future consequences. In another study conducted in United States of America, Principe (2005) established that students perceived that internal classroom factors positively influenced students' academic performance in accounting courses. However, combined external and internal factors were not significantly related to academic performance. Kahraman (2011) established that students with higher levels of task value, perceived parents mastery goals and perceived teachers mastery goals were positively related to mastery approach goals. Kahraman (2011) further established that students with higher level of task value, perceived parents performance goals and fear of upsetting important others were positively related to avoidance goals.

Ovidiu and Mihai (2011) established that people with high consciousness quotient perform better in academic work than those with lower consciousness quotient. Mirigano, Hirsh, Peterson, Pirl and Share (2010) found that frequency of academic failure decreased familiarity level with academic performance. Farooq, Chaudhry, Shafiq & Berhanus (2011) found that environment and personal characteristics of the learners play important role in academic performance of students

In Africa, Rossano (2011) established that autonomous support from teachers engenders goal motivation despite situational conditions. Semakamo, Orobia & Arinaidwe (2013) indicated that learning environment and students' attitude are positively related with academic performance and that learner's attitude causes more variation in academic performance. The study also established that evaluative judgement takes precedence in behaviour hence good academic performance. Nyangena, Getanda & Ngugi (2013) established that learners should bring their experiences and world knowledge to bear on the tasks at hand. Korir & Kipkemboi (2013) found that students with positive attitude towards academic work, teachers and attend their classes regularly perceive themselves as high achievers and tend to perform better academically than those without such attributes. Wabuke (2013) established that students'

ambitions and attitudes contribute to their performance in biology. Finally, the study noted that movement of students between micro-culture of their family and micro-culture of school science is not smooth and often limits success of performance in sciences. The study investigated the influence of learner reflection on academic performance of secondary school students.

## 2. Research Methodology

The study adopted mixed study design in which both qualitative and quantitative approaches were used to determine the influence of learner involvement on academic performance of secondary school students. Within mixed study design, Sequential explanatory design was used in the current study in which the researcher collected and analysed qualitative data before collecting and analyzing quantitative data. The purpose for using this design was to use the qualitative findings to assist in explaining and interpreting quantitative data (Creswell, 2014). The research population comprised 240 teachers and 2,500 form 4 students from boys, girls and mixed schools. The researcher used all categories of schools because academic performance is a concern for all students irrespective of the type of school. The students were selected using simple random sampling which ensured that participants had equal probability of being selected.

A questionnaire on learner involvement was used to collect information from learners. Moreover, document analysis and interview schedules were used to collect data from the participants. The responses on closed ended questionnaire were rated on 5 point Likert scale as Strongly agree, Agree, Undecided, Disagree and Strongly disagree. The instrument had a reliability coefficient of 0.83. Sub-County examination results (document analysis) were used to determine academic performance of secondary school students while interview schedules were used to obtain information that could not be directly observed. Quantitative and qualitative data analysis methods were applied.

## 3. Findings

Pearson product moment correlation coefficient was conducted to determine the influence of learner reflection on academic performance of secondary school students. The finding is shown in table 1.

**Table 1.** Correlation of Learner Reflection and Academic Performance of Participants

	Learner Reflection
Academic Achievement	0.173
Achievement Sig (2 tailed)	.001
Number	347
Significance at $P \leq 0.05$	

**Table 2.** Model Summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard error
1	.225	.510	.40	1.86124

**Table 3.**

Model	Sum of squares	DF	Mean square	F	Sig
1	Regression	63.390	4	15.847	4.575
	Residual	1184.766	342	3.469	.001
	Total		347		

**Table 4.** Coefficients

Model	Unstandardised Co-efficient		Standard Co-efficient		Sig
	Beta	Standard error	Beta	t	
1 Constant	1.218	.0948		1.285	.020
Reflection	.024	.023	.071	1.060	.030

Dependent variable performance    significance at  $p \leq 0.05$

The null hypothesis was rejected and it was established that there was statistically significant relationship between learner reflection and academic performance of secondary school students' ( $r = 0.173$ ,  $p \leq 0.05$ ). The study concluded that students who have higher levels of reflection perform better in academic work than those with lower levels of learner reflection.

The researcher conducted hierarchical regression to determine significance of the relationship of the variables. Table 2 illustrates model summary.

Table 2 indicates that R is .225 showing a positive relationship between the variables. The adjusted R<sup>2</sup> is .40 (unstandardised R was .51 showing the variables shared variability between them. The results of the analysis yielded a co-efficient of multiple regression of .51 and a multiple regression square (adjusted) of .40. This shows that learner reflection predicted 40% of variation in academic performance.

The correlation was significant as shown in table 3.

In determining the level of significance between the criterion measures (self-autonomy and self-efficacy) and academic performance, analysis of variance (ANOVA) was employed and its calculated value was 4.575 and was significant at 0.01 level ( $F_{4, 342} = 4.475$ ;  $p \leq 0.05$  hence learner reflection determines academic performance of secondary school students.

The direction of relationship between the variables is determined from signs of beta value of each of the variables in SPSS coefficient output. The direction of the relationship is shown in table 4.

The contribution of learner reflection to academic performance was ( $\beta = 0.071$ ). The results therefore show that lack of learner reflection contributes to poor academic performance among secondary school students.

## 4. Discussion and Conclusions

The study findings indicated that the students who possessed high levels of learner reflection performed well in academic unlike their counterparts who had lower levels of learner reflection. The findings corroborate findings of Kang (2010) that reflection helps students identify their weaknesses and strengths in order to address the weaknesses and improve on their strengths. The results confirm the findings of Edens (2006) that learner reflection enables learners to establish personal agenda for learning by setting direction in planning, monitoring and evaluating learning process. Jahanshir & Qavan (2011) found that self-assessment increases or motivates students to higher academic achievements. Similarly, Bakari and Balarabe (2013) in a study in Ghana established that school teachers should create a collaborative environment where there is good inter-student relationship. In Kenya, Wango (2006) argued that negative comments demotivate students in their academic pursuits and there was need for school counselors and teachers to put in place comprehensive programmes that are friendly to learners. Korir & Kipkemboi (2013) found that students who have positive attitude towards academic work and attend their classes regularly tend to perform better academically than those who do not have such attributes. Oundo (2013) in a study in Kenya established that counselors need to deal with psychological and social aspects of learning such as study skills, motivation, attitude and learning environment. The assertions imply that school counselors and teachers should equip students with social and self-awareness skills in order for them to ward off distracters.

Contrary to the current findings, Vialle et al (2005) in a study carried in U.S.A found that there was no difference in

measured self-reflection between gifted and non gifted students. Harley therapy (2015) posits that knowing one's weaknesses and strengths may make one lose motivation and stress on weak points hence perform poorly in any endeavour.

Qualitative data from students and teachers indicated that students who have high levels of learner reflection seek help from friends to help them out of their social problems as well as understand various concepts. Student 10 mentioned that:

'I seek for assistance from friends when I am in problems or when I fail to understand some concepts.'

According to student 10, social problems at times weigh down students making them unable to perform well in academic work. The fact that efficacious students seek help is important in counseling because clients are expected to initiate counseling process.

Some students do reflect into the future as they engage in appropriate learning activities. Student 3 noted that: *I look at my current performance against the future opportunities* implying that the learning activities he engages in are geared towards securing him a future and therefore he works hard to ensure a bright future. The findings show that learners reflect on their goals in order to improve their academic performance. Students who possessed high levels of learner reflection reported that they have social skills which enable them to concentrate on academic work and at the same time keep off distracters. Student 1 had this to say: *I am assertive and I don't entertain students who come to disturb me when I am studying.*

The study results confirm Szymanski (2011) findings that human beings compare their success with those of other people. On the same note, Kang (2010) in a study in U.S.A established that reflection is central in learning experience because it enables students to act in a deliberate and intentional way.

On the other hand, students who have low levels of learner reflection do not seek for help when they are in problems as was reported by teacher 5:

'Some students are shy and do not seek for assistance even when they are facing social and academic problems. Indeed, some shy students keep quiet if you pose any question to them.'

On a similar note, teacher 10 claimed that: some students suffer from low self-reflection as a result of family background and as such they cannot concentrate on academic work hence they perform poorly. It is imperative for teachers and school counselors to know the background of all students so that right measures can be put in place to help them.

The current findings buttress the findings of a study conducted in Germany by Berber (2009) which established low self-efficacy is linked to low academic performance. The study also established that students with low self-efficacy rarely seek for help from teachers. Gibbs & Poskitt (2010) in a study in U.S.A reported that engaged students seek out activities inside and outside the classroom that lead to academic success. Oundo (2013) in a study in Kenya established that counselors need to deal with

psychological and social aspects of learning such as study skills, motivation, attitude and learning environment. The implication of the current study is that teachers and school counselors should address psychological and social aspects of learning so that students can concentrate on their academic work.

The study concluded that learner reflection contributes to academic performance of secondary school students. The study recommends that teachers and school counselors should use fora with parents to impress upon them the need to encourage students they are capable of performing well in their academic work. In addition, the study recommends that school teachers and counselors should put in place peer tutoring to help students who experience difficulties to be helped by their peers. Besides, it is imperative for teachers and school counselors to positively reinforce students when they perform well in both curriculum and extra-curriculum activities. Finally, Ministry of Education, Science and Technology should strengthen counseling services in schools. Further studies could focus on the role of school atmosphere on academic achievement of learners.

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