

# Relationship between Teacher Turnover and Students' Academic Performance at Uganda Certificate of Education Level in Bugangaizi County West, Kakumiro District, Uganda

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## Abstract

Teacher turnover could have a negative effect on students' academic achievement, and teaching workload. The aim of this paper was to investigate the relationship between teacher turnover and students' academic achievement in selected secondary schools in Bugangaizi County West, Kakumiro District, Uganda. The target population was 19 secondary school head teachers while 14 head teachers were used as the sample size. Data was collected using document analysis and interview guide. The instruments were tested to see if the questions were relevant, clear and unambiguous. Research experts who had content in the area under investigation were consulted and their comments used to improve the questions in the interview guide as a way of ensuring face validity. For quantitative data obtained, they were first edited for completeness, coded and entered into the Statistical Package for Social Scientists (SPSS) version 20.1. The data was tabulated to generate descriptive statistics in addition, Pearson Correlation analysis was used to test the relationship between independent and dependent variables. Qualitative data was organized, interpreted, patterns in the data identified, data patterns related to research themes. Some important prepositions from the participants was quoted verbatim in the appropriate sections of the discussion. The data was finally used as a basis for informed and verifiable conclusions. The paper found out that there was a significant negative correlation between teacher turnover and students' performance ( $r = -.729$ ;  $p = .007$ ). The paper concluded that high teacher turnover affects students' academic performance negative. The paper recommended that Ministry of Education and Sports in Uganda should put in place a system that captures the statistics of teacher turnover and make right decision through replacements.

**Keywords:** Relationship; Teachers; Turnover; Academic Performance

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## 1.0 Introduction

Education is a fundamental part of the young people's preparation for their future lives and a central pillar in the development of nations. This pillar of development and better lives for the citizens of nations across the globe hinges on the performance of learners at school. According to National Centre for Statistics (2018), 80-84 percent of high school students pass their exams and graduate from high school in the US every year. In China, 94.1 percent and 92.5 percent of students graduate from middle and high schools annually respectively. In Kenya, 15-20 percent of the candidates who sit their Kenya Certificate of Secondary Education (KCSE) achieve university entry grades while about 30 percent of the students fail to obtain other tertiary level entrance grades (Ministry of Education, 2018).

Theoretically, academic performance which, is regarded as the extent to which a student or an educational institution has achieved its short or long term goals is affected by a number of factors (Crosnoe, Johnson & Elder, 2004). These factors may be termed as student factors, family factors, school factors and peer factors. Student factors relate to circumstances that are student centred such as regular attendance, commitment, and mental abilities, among others. Family or home factors relate to the student's home environment such as family income, parental support, parental control, educational level of parents, and religion. The school factors are those circumstances in the school context that influence performance such as quality of teaching, availability of teachers, and scholastic environment; while peer factors relate to the relationships between students in terms of negative or positive influence on students' behaviour and learning outcomes.

Teacher turnover, which, may be described as the rate at which teachers leave the teaching profession or occupation requiring replacement per 100 teachers affects academic performance (Bulawat, 2020). On average, globally, the education sector at primary and secondary levels loses 15-50 percent of the teaching professionals leaving learners without teachers or in the hands of untrained teachers (Ingersoll, Merrill & Stuckey, 2014). Most of the teachers leave the profession within five years of entry in the primary and secondary education levels.

According to Adnot, Dee, Katz and Wyckoff, (2017) though teacher turnover in practice appears to have a negative effect on students' performance, teacher turnover can as well have large positive effects under a policy regime in which low-performing teachers are accurately identified and replaced with more effective teachers. Replacement of poor performers with better performers can yield benefits such as higher pass rates, low class

repetitions, and regular student attendance. The perspectives of Adnot et al. (2017) point to an existence of mixed effects of teacher turnover, though more evidence points to the negative effects. This study conceptually directed by the arguments of Dolton and Newson (2003) about the link between teacher turn over and students' academic performance.

In Uganda, the education system has undergone a number of reforms in a bid to improve academic performance at different educational levels. At the secondary level, Universal Secondary Education Policy 2008 was implemented to increase students' enrolment and funding to the education sector was prioritized (Kyambadde, & Khumalo, 2022). Moreover, salary enhancements for teachers specifically for science teachers were done to enhance academic performance. However, at national level, statistics show that on average, over 10 percent of the students who sit UCE exams fail to obtain grades for further education while the majority of the candidates over 40 percent pass in fourth grade, the lowest promotable grade for further education.

In 2015, UNEB registered a 9.7 percent failure rate. This increased to 13.2 percent in 2016, then dropped to 8.6 percent in 2017 and rose again to 12.87 percent in 2018 (UNEB, 2019). This rate is high compared to the failure rate of 4.2 percent registered in 2011. Students who fail to obtain a grade are supposed to repeat senior four thus wasting time and other resources. According to the Monitor Publication (21st February, 2018), government blames this failure rate on the teachers but does not specify how teachers were responsible for this failure rate. In 2013, national average teacher attrition was estimated at 5% while it was as high as 20-50 percent in some schools especially in rural areas (Ávalos, & Valenzuela, 2016).

Bugangaizi County West, Kakumiro District like other parts of Uganda has benefited from government's salary enhancement interventions for teachers in the secondary schools and provision of scholastic materials for better learning environment and academic performance. In addition, private schools have been encouraged to ensure teachers are remunerated appropriately and the learning environment supports better academic performance. With the above, schools in Bugangaizi County West, Kakumiro should be competitive posting good grades.

However, no single school in Bugangaizi County West, Kakumiro was among the best 300 schools in 2018 UCE exam results. Over 90 percent of the candidates in 2018 passed in divisions 2, 3 and 4 while over 20 percent did not obtain any grade and are meant to repeat senior four. This situation threatens the ability of the community in Bugangaizi county West, Kakumiro to benefit from the dividends of an educated population. The cause of this disturbing situation is not well studied and as Jackson (2010) demonstrates that gaps in teacher turnover and students' performance calls for in-depth analysis in order to provide ground for policy makers to make policies that can promote high performance through reducing teacher turnover.

## 2.0 Literature Review

The composition of the teachers at the school is altered by turnover, and depending on whether the new teachers are of a higher or lower caliber than the teachers who left, the overall "compositional" effect of turnover on student learning could be either positive or negative, claim Adnot et al. (2017). Positive when academic performance is better as measured by exam grades, and negative when academic performance is subpar.

In contrast to what Staiger and Rockoff (2010) assert, teacher turnover is advantageous when less effective instructors leave and are replaced by more effective teachers. According to Rothstein (2015), it is occasionally necessary to let teachers go in order to better match the academic performance of the pupils. Finding and replacing employees whose performance falls below the threshold for good performance pays off with improved learning strategies, elevated learner motivation, and improved exam results overall.

Munthali (2016) found that teacher turnover affects the quality of instruction, which in turn affects the quality of academic performance in terms of low exam grades and the acquisition of knowledge and skills. This was discovered while analysing the effects of teacher turnover on the quality of instruction. This analysis supports a previous study by Ronfeldt, Loeb, and Wyckoff (2013), which indicated that poor achievement schools are particularly affected by large aggregate teacher turnover. There is proof that teacher turnover hurts kids, even in courses with stayed-at professors.

According to Adnot *et al.*, (2017), there are various ways in which a teacher's departure could impact students' academic achievement. First, turnover may lessen the total amount of general and specialized human capital that is available to support learning, which could lead to worse academic grades. In addition, brand-new teachers at a school might not have any past classroom experience. The value added may be lowered by a large number of new hires coming from the lower quality distribution or being asked to teach at levels they have not previously taught (Ronfeldt *et al.*, 2013). In the end, this can result in the students receiving poor results on their final exams. These studies besides being from developed country experience, differ methodological from this study which seeks to correlate teacher turnover and students' academic performance basing on the actual figures of teachers' turnover in schools and the academic grades realised over time.

When Allensworth, Ponisciak, and Mazzeo (2009) looked more closely at the variables that affect student accomplishment, they discovered that high turnover rates can result in a variety of organizational issues and

lower academic performance across the board in schools. Others claim that teacher turnover can improve students' academic performance (Adnot, et al., 2017). Despite the opposing viewpoints, it is unavoidable that minority and low-income schools are disproportionately affected by greater rates of teacher turnover (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008). Furthermore, Allensworth *et al.* (2009) came to the conclusion that additional study is required to establish the causal relationships, if any, between turnover and student performance. An appropriate setting for such a study is a developing nation like Uganda in light of their claims.

According to Anderson's (2008) study, teacher turnover is negatively correlated with both math and language arts performance, with a 1% increase in teacher turnover translating to a nearly 8% drop in student performance on math and language assessments. The study was conducted in four sizable, primarily Latin American cities. Other academics, however, have different opinions.

Even though it is generally accepted in the educational community that lower academic success among students results from high teacher turnover. According to Adnot et al(2017) .s study, there isn't enough data to show a statistically significant negative association. According to these studies, if excellent instructors are hired to replace departing low performers, student progress may improve. These researchers calculated that student achievement may increase by 50% of a standard deviation if low performing teachers were replaced on an annual basis with highly effective teachers using data-driven hypotheses to mimic such impacts. Similar to this, Fitzpatrick and Lovenheim's (2014) investigation into a large-scale turnover brought on by Early Retirement Incentives (ERI) suggests that there is no proof that this kind of turnover has a negative impact on students' academic performance as determined by the results of state tests. These researchers discovered that despite the ERI program decreased teacher experience levels, test results were not affected and, in some cases, improved student accomplishment resulted. The authors suggest that ERI may offer a successful prospective solution to raise test scores and save money by substituting less expensive new teachers for costlier veteran teachers. Their situation is distinct from Uganda's, a developing nation. As a result, it offers a platform for analysing the variations among the researchers questioned.

In Uganda, most studies have addressed one side of the study that is teacher turnover with a focus on the causes of teacher turnover in schools without investigating the downside effects of teacher turnover on academic performance in terms of final grade scores. The closest to this study is one by Serunkuma (2014) which focused on perceptions of antecedents of teacher turnover and academic achievement in Luwero district. The current paper delved on the relationship between teacher turnover and students' academic performance at Uganda Certificate of Education Level in Bugangaizi County West, Kakumiro District.

### 3.0 Research Methodology

This study adopted the use of mixed-methods where both qualitative and quantitative data collection and analysis approaches were used (Fetters, & Molina-Azorin, 2020). The researcher used the quantitative research approach to be able to collect existing statistical data on teacher turnover from the selected schools (DeCuir-Gunby, 2020). In addition, the approach enabled the researcher to manipulate the data to describe and correlate the variables in the observed phenomenon of teacher turnover and students' academic performance. The cross-sectional design aided the researcher to collect data about different cross sections of the population at one point in term. Cross-sectional studies are easier to conduct where there is limited time such as in this case. This was done to ensure that all schools in the study area were taken into consideration.

The target population comprised of 19 secondary schools both government and private owned. These schools were spread across Kakumiro District. The primary target population was the secondary schools that had been in existence for over 10 years and whose students had sat UCE exams for at least 10 years. The secondary target population was the head teachers of the selected secondary schools. The unit of observation were schools whereby the head teachers were targeted to provide relevant information for analysis. Based on Krejcie and Morgan (1970) sample size determination Table, 1970, 14 schools were selected for the research and this gave a sample size of 14 key informants (head teachers).

Purposive sampling was used to select secondary schools which had sat f UCE exams for at least 10 years. Thereafter simple random sampling was used to select individual schools to participate in the study. The simple random sampling technique was preferred because it enabled the researcher obtain reliable and un-biased data. It also gave equal chance to all sampling units in the sample frame to participate in research process. In each of the selected schools, the head teacher was purposively sampled to take part in the study.

Document reviews were used to obtain data on staff turnover in terms of number of teachers who had left their schools and replacements that were made and also the students' academic achievement. Additionally, interviews were conducted with the secondary school head teachers to obtain the opinions about the status of teacher turnover. Document checklist and the interview guide were reviewed before data collection to ensure validity of the instrument. The instruments were tested to see if the questions were relevant, clear and unambiguous as outlined by Mikkonen *et al.*, (2010). Research experts who had content in the area under investigation were consulted and their comments used to improve the questions in the interview guide as a way

of ensuring face validity. Permission to conduct the research was first sought from district administrators. In addition, informed consent was sought from the key informant who were also the schools' head teachers after introduction. Document review on teacher turnover was conducted in each of the schools visited followed by head teachers' interviews on the subject matter.

For quantitative data obtained, they were first edited for completeness, coded and entered into the Statistical Package for Social Scientists (SPSS) version 20.1. The data was tabulated to generate descriptive statistics. Pearson Correlation analysis was performed at  $p=0.05$  level of significance to determine the relationship between teacher turnover and students' academic achievement. Qualitative data was organized, interpreted, patterns in the data identified, data patterns related to research themes. Some important prepositions from the participants was quoted verbatim in the appropriate sections of the discussion. The data was finally used as a basis for informed and verifiable conclusions.

#### 4.0 Results

The aim of this paper was to determine the relationship between teacher turnover and students' performance in selected secondary schools in Bugangaizi County West, Kakumiro District. To achieve this, a null hypothesis was formulated and it stated that;

**H<sub>01</sub>:** There is no significant relationship between teacher turnover and students' performance in selected secondary schools in Bugangaizi County West, Kakumiro District.

Pearson correlation analysis was used to determine the relation. The results are presented in Table 1.

**Table 1: Correlation between teacher turnover and students' performance**

		Academic performance
Teacher turnover	Correlation Coefficient	-.729**
	Sig. (2-tailed)	.007
	N	12

\*\* . Correlation is significant at the 0.01 level (2-tailed)

Table 1 shows that there was a negative significant correlation between teacher turnover and students' performance ( $r = -.729$ ;  $p = .007$ ). This means that at 95% confidence level the  $r$  value for teacher turnover was .729 showing a strong negative correlation with students' performance. The  $r$  value was negative implying a negative correlation which means that high teacher turnover affects negatively students' performance. Thus, the null hypothesis which stated that there is no significant relationship between teacher turnover and students' performance in selected secondary schools in Bugangaizi County West, Kakumiro District was rejected and the alternate accepted. The study accepts the alternative hypothesis that there is a significant relationship between teacher turnover and students' performance in selected secondary schools in Bugangaizi County West, Kakumiro District.

The significant relationship implies that teacher turnover may influence the students' academic performance both negatively. In interview with head teachers, over 80% noted that teacher turnover affects academic programs in school negatively as students miss lessons due to lack of teachers to teach. They further noted that turnover makes many students fail to cover the syllabus in time which influences poor academic performance. The impact of turnover is paramount on performance of students since sometimes new teachers find it hard to be accepted by students in case the teacher who left was more experienced than the replacement made. Likewise, they argued that schools find problems in achieving the goal in time as the teachers who have been with students leave, then the new teachers have to undergo orientation to fit in the system which may impact on the performance of the students.

As the head teachers noted that depending on the type of teacher who has left, students' academic performance is either positive or negative. Staiger and Rockoff (2010) claim that teacher turnover is beneficial when less effective teachers leave and are replaced by more effective teachers while the contrary holds. The findings of the current study show a positive performance which implies that teacher turnover impacts on students' performance positively.

In pursuit of the impacts of turnover on performance, Adnot *et al.*, (2017) provide a contrasting view of the behavioural effects of quitters on the remaining staff. Quitters may have a demoralising effect on the remaining staff leading to further decline in service delivery and ultimately poor academic grades. The scenario may be possible in all sorts of places rural or urban. However, the current study did not look at the effect on staff who remained rather on students' performance. Erick (2016) while analysing effects of teacher turnover on the quality of instruction in Texas in the United States of America, discovered that teacher turnover affects the quality of instruction which ultimately affects the quality of academic performance in terms of low exam grades and knowledge and skill acquisition.

It follows that teacher turnover has an impact on pupils' academic achievement. The results thus support earlier research from Wyckoff *et al.*, (2013), who discovered that low academic performance is negatively impacted by high aggregate teacher turnover, particularly in schools with lower academic achievement. There is



proof that teacher turnover hurts kids, even in courses with stayed-at professors. Similar to this, Adnot et al. (2017) contend that teacher departure could impact academic achievement via a variety of avenues. First, turnover may lessen the total amount of general and specialized human capital that is available to support learning, which could lead to worse academic grades. In addition, brand-new teachers at a school might not have any past classroom experience. The value added may be lowered by a large number of new hires coming from the lower quality distribution or being asked to teach at levels they have not previously taught (Ronfeldt *et al.*, 2012). In the end, this can result in the students receiving poor results on their final exams.

## 5.0 Conclusion and Recommendations

### 5.1 Conclusion

The paper concluded that there was a significant negative correlation between teacher turnover and students' academic performance showing that high teacher turnover negatively affects students' academic performance.

### 5.2 Recommendations

The paper recommends that the Ministry of Education and Sports should put in place a system that captures the statistics of teacher turnover and make right decisions through replacements in order to enhance students' academic achievement and reduce teacher workload.

## 6.0 References

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