

Disbursement Process of FDSE Funds and its influence on Student Retention: A case of Migori County, Kenya

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Abstract

Public provision of educational services in "Sub-Saharan Africa" according to UNESCO (2011) is constrained by unavailability of public resources. Reviewed literature clearly indicate that delays in disbursement of free day secondary education funds have indeed affected the smooth running of public secondary schools especially in West and East African regions. For example a study by Koramoah (2016) on financing secondary education in Ghana confirmed that despite the strong political commitment to redress historical inequities in educational funding mechanisms and policy actions in relation to education, financing of secondary education appear to fall short of achieving the desirable goals. Koramoah (2016) also found that there were weak internal controls and monitoring systems and that the government's inability to release funds on time led to delays of the government subsidy. Studies done in Kenya by Mueni, Kimiti and Mulwa (2019) and Koskei (2017) point to the same problem and this makes the current study in Migori County, a different geographical location, timely and relevant. The study was anchored on retention theory and targeted 215 public day schools. The actual sample was made of 19 schools, 19 school principals, 76 class teachers, 228 students, 31 parents and 1 Quality Assurance and Standards Officer. The study adopted a convergent parallel mixed method design using a cross sectional survey design for the quantitative method and a case study design for the qualitative method. Data were collected using questionnaires, interview guides, document analysis guide and focus group discussions. Descriptive and inferential statistics were generated using MS Excel 2018 and SPSS version 21. Qualitative data from the interviews and focus group discussions were analyzed thematically and report given in narrative form and direct quotes. The findings revealed that there are delays in the flow of FDSE funds from the Treasury and that late registration and not having accurate details of students in the NEMIS portal also affect the amounts sent to schools. The study recommended that the MoES&T should be prompt in releasing funds at the beginning of each term so that school programmes and budgets are not interfered with. The MoES&T needs to be consistent in evaluating the effectiveness and efficiency of the FDSE disbursement process.

Key Words: Disbursement Process, Funds, Student, Retention



1.1 Statement of the Problem

According to UNICEF (2016) funds allocated to local government authorities in Kenya are on an outdated formula which the local governments apply inconsistently. It also observed that resources at the local level of education still appear to be inadequate, resulting in insufficient capitation grants and delays of such grants. With delays in disbursement and insufficient capitation grants, teaching and learning in most public secondary schools is affected, a situation that Kenyan public secondary schools can easily identify with. A study by Muhindi (2012) on challenges facing the implementation of free day secondary education in Nyeri County, Kenya, had earlier established that the government FDSE subsidies are inadequate and are not disbursed on time.

Ndambuki (2016) also established that disbursement of funds and availability resources influenced the implementation of free secondary education in public secondary schools. He recommended that the government should disburse adequate funds so that principals can implement the curriculum. He further recommended that the government should disburse funds in good time so that the principals can plan and implement school programmes in good time. It is against this backdrop that the current study sought to establish the influence of the disbursement process of FDSE funds on student retention in Migori County, Kenya.

1.2 Rationale for the Study

The study sought to determine the influence of the disbursement process of FDSE funds on student retention in Migori County, Kenya. Reviewed literature indicate that resources at the local level of education still appear to be inadequate resulting in insufficient capitation grants and delays of such grants. With delays in disbursement and insufficient capitation grants, teaching and learning in most public secondary schools is affected, a situation that Kenyan public secondary schools can identify with. The purpose of this study was to increase knowledge and add literature related to the disbursement process of FDSE funds and its influence on student retention in Migori County, Kenya.

1.3 Theoretical Framework of the Study

The study was guided by retention theory which has its roots in the works and writings of Vincent Tinto on examination of student drop-out characteristics (Tinto, 1975). According to Atif, Richards and Bilgin (2016), "Vincent Tinto's theory of student departure seeks to explain the student withdrawal process" (p. 6). It emphasises on two main variables, goal commitment and institutional commitment. Goal commitment represents the degree to which a student is motivated to graduate or complete his/her training in an institution whereas institutional commitment represents the level at which the student is motivated to graduate from a specific institution.

The main principles of Tinto's theory on effective retention include: first, institutional commitment to students, meaning that students' welfare is given priority before the institutional goals. The second principle is educational commitment. This means that retention programmes in educational institutions must take care of all students without discrimination. The third principle is the social and intellectual community commitment to students. This means that the institutional programmes should focus on developing social and supportive educational units in which all students are absorbed and accommodated as gifted members of the institution (Tinto, 1993).



Atif, Richards and Bilgin (2016) summarised Tinto's theory in these words, "students tend to remain in the institution when they have clear goals for themselves and perceive that their institution is a powerful vehicle in achieving their goals" (p. 6). Connolly (2016) further added that according to Tinto's theory, "the decision to drop out arises from a combination of student characteristics and the extent of their academic, environmental and social integration in an institution" (p. 1). Other works by Tinto according to Connolly (2016) brought about a longitudinal explanatory model of departure where Tinto proposed that "the stronger the individual's level of social and academic integration, the greater his/her subsequent commitment to the institution and to the goal of college graduation" (p. 2).

Tinto's 1993 model has four segments and according to Connolly (2016), the first is labelled "pre-entry attributes and this embraces factors linked to family background, skills, abilities and prior schooling" (p. 3). The second part is labelled "goals/commitment". This second part includes "the intention the student has and his/her external commitments to drop/stop-out decision" These two segments according to Connolly (2016) can be said to "represent characteristics the student possesses at the time of entry and a student's disposition in terms of intentions and motivational factors" (p. 4). The third part of Tinto's 1993 model includes "both formal and informal aspects of institutional experiences and the interaction/effect of the academic and social" (p. 5).

Connolly (2016) contended that according to Tinto (1993) "academic and non-academic staff are both seen as having the ability to influence the departure decision" (p. 5). The fourth part of Tinto's model is labelled "academic and social integration". Tinto found that "a student's sense of academic and social belonging impacts on his/her retention and graduation". Positive campus experiences tend to "increase integration into the academic and social systems while negative experiences tend to weaken academic/social integration" (p. 6). Like any other theory, Tinto's theory has strengths. It brings out three major sources of student departure, that is: academic difficulties, the inability of students to resolve their educational goals and their failure to become or remain incorporated in the intellectual and social life of the institution (Tinto, 1993). The theory gives "three principles of effective retention".

The first is commitment to students by institutions. This means that "effective retention programmes must be committed to the students the institution serves" (p. 10). Students' interests must be placed first among other objectives. The other principal is "educational commitment". This means that "effective retention programmes are first and foremost committed to the education of all, not just some, of the students" (p. 11). The third principle is social and intellectual community commitment. This means that effective "programmes are committed to the development of supportive social and educational communities in which all students are integrated as competent members" (p. 13). The aforementioned strengths of retention theory made its application relevant in the current study since it identifies the major sources of student departure and offers solutions for effective student retention.

2.1 Review of Related Literature

The school grants policy in Kenya faces a number of challenges especially in its implementation. A study by Muhindi (2012) on "challenges facing the implementation of free day secondary education in Nyeri County, Kenya", established that "the government FDSE subsidies are inadequate and are not disbursed on time" (p. 12). The study further established that "the cost of compulsory items and other direct payments by parents are prohibitive" (p.



12). The study adopted a descriptive survey research design and targeted all public secondary schools in Nyeri South District. There were 33 public secondary schools with an enrolment of 11,094 students and 403 teachers. Stratified random sampling was used to select 18 schools. Data were collected using questionnaires for principals and observation guides. Statistical package for social sciences was used to analyse data. The study recommended that the budgetary allocation be reviewed, that the costs of compulsory items be addressed and that disbursement of funds be timely. The study by Muhindi (2012) created both theoretical and geographical gaps that the current study intended to fill.

Muhindi (2012) was supported by UNESCO (2014) document which stated that FDSE funding formula lacks focus on equity since "it does not take into account the characteristics of the school and the pupils" (p. 3). The funding formula "has not helped decrease disparities between schools and in addition, it puts small less-established schools at a disadvantage" (p. 3). UNESCO (2014) further pointed out that the County Education Officers' lack autonomy to manage these resources. They lack authority over the school budgets since they have "no say on what schools neither receive nor influence how schools may spend the funds". According to UNESCO (2014), "the cash is transferred from the central government to schools' accounts and the schools' use of the free education grant is controlled by several Ministry of Education guidelines" (p. 3).

The observation made by UNESCO (2014) is in agreement with the MoE (2017) which stated that the Government subsidy is disbursed to public schools under the following conditions: "the school must be duly registered and headed by a Teachers Service Commission (TSC) appointed principal; the school must submit accurate and up to date enrolment data; the school must submit the relevant bank accounts to MoE among other conditions" (p. 2). UNESCO (2014) further noted that quantitative research by International Institute for Educational Planning (IIEP, 2014) on FDSE programme in Kenya "revealed under-spending on some of the vote heads and over-spending on others". This has "led to some frustration among school actors who regard the process of seeking approval for transfers of unused funds to other budget lines as overly laborious" (p. 4).

Ayako (2015) in his study on "financing post-primary education in Kenya" pointed out that "the capitation grant as a transfer mechanism aims at distributing resources in a fair and equitable way across schools" (p. 347). However he noted that "compared to other countries, the capitation grant formula in Kenya does not include any specific collection to target vulnerable groups like special needs students" (p. 347). Ayako (2015) concluded that post-primary education in Kenya is facing myriad challenges including "inadequacy and sustainability of funding both at public and private/community levels" (p. 254). The study by Ayako (2015) created a theoretical gap that the current study intended to fill. Despite the challenges mentioned by Ayako (2015) a study by Mueni, Kimiti and Mulwa (2019) on impact of prompt disbursement of free secondary education tuition fund revealed that "prompt disbursement of FDSE funds promoted quality of curriculum implementation process in public secondary schools in Makueni County, Kenya" (p. 47).

The study by Mueni et al. (2019) sought to establish "whether there is a correlation between the timely disbursement of free secondary education tuition fund and curriculum implementation". The study used a mixed method research design and had a sample of 31 principals, 307 form 4 students and 164 form 4 class teachers. Three research instruments were



used to collect data; questionnaires, interviews and observation schedules. Data was analysed using both qualitative and quantitative methods. The study established that timely supply of curriculum support materials to public secondary schools was significantly related to the quality of curriculum implementation process in public secondary schools in Makueni County. The study recommended that "the Ministry of Education should put in place proper strategies to ensure that all secondary schools receive the curriculum support materials early enough in order to promote quality in the curriculum implementation process" (p. 47). The study by Mueni et al. (2019) created geographical and theoretical gaps that the current study intended to fill.

Koskei (2017) made a similar recommendation as Mueni et al. (2019) that the Government should ensure that the capitation grants are disbursed to the public primary schools in time at least before the start of every term to "ensure timely preparation of the school budgets and purchase of teaching and learning materials and hence timely commencement of teaching and learning" (p. 59). The focus of the study was on Uasin Gishu County and a cross-sectional survey design was adopted. All the 400 public primary school head teachers in Uasin Gishu County made up the target population. A sample of "200 respondents were selected using stratified random sampling technique" (p. 59). Data was collected using questionnaires. Descriptive and inferential statistics were used to analyse data. The study by Koskei (2017) created geographical, theoretical and methodological gaps that the current study intended to fill.

A study by Ndambuki (2016) on administrative factors influencing implementation of free secondary school education in Makindu sub-county, Makueni County, also had similar recommendations as the aforementioned studies. Ndambuki (2016) concluded that disbursement of funds and availability of resources influenced the implementation of free secondary education in public secondary schools. He recommended that the government should disburse adequate funds so that principals can implement the curriculum. He also recommended that the government should disburse funds in good time so that the principals can plan and implement school programmes in good time. "The study was anchored on Capital Theory of School Effectiveness and Improvement" (p. 13).

All the 20 public secondary schools, 20 principals, 20 deputies and 30 heads of departments formed the target population in Ndambuki's (2016) study. The sample consisted of 20 principals, 20 deputies and 30 heads of departments. Questionnaires were used to collect data. The study by Ndambuki (2016) in Makueni County, Kenya, also created geographical, methodological and theoretical gaps that the current study intended to fill.

3.1 Methodology

The study adopted a convergent parallel mixed method research design. The purpose of the convergent design according to Creswell and Clark (2011, p. 77) is to "obtain different but complementary data on the same topic". The intent in using this design was to bring together the differing strengths and non-overlapping weaknesses of the quantitative method such as large sample size, with those of the qualitative method such as small sample, and indepth information. Creswell (2014) explains that "the researcher collects both quantitative and qualitative data concurrently and compares the two databases to determine if there is convergence, differences or some combination" (p. 213). Schoonenboom and Johnson (2017) were in agreement by stating that in convergent parallel mixed method design "the quantitative



and qualitative strands of the research are performed independently and their results are brought together in the overall interpretation" (p. 117).

The quantitative design in this study was a cross-sectional survey because the intent of the study was to establish the general understanding of how the disbursement process of free day secondary education funds has influenced student retention in Migori County. The choice of the cross-sectional survey as a quantitative design is supported by Levin (2006) who posited that "cross-sectional studies are carried out at one time point or over a short period and are usually conducted to estimate the prevalence of interest for a given population" (p. 24). Kendra (2019) was in agreement when she asserted that "participants in this type of study are selected based on particular variables of interest" (p. 1). The qualitative design was a case study since the aim of the study was to arrive at a detailed description and understanding of the disbursement process of the FDSE funds. This is in agreement with Ary, Jacobs and Razavieh (2002) who contended that "a case study is a type of ethnographic research study that focuses on a single unit such as one group or one programme and its main goal is to arrive at a detailed description and understanding of the entity (p. 29).

3.2 Sampling Procedures and Sample Size

The study used both probability and non-probability sampling techniques to draw the samples since it adopted a mixed method research design. According to Gay, Mills and Airasian (2012) "probability sampling techniques permit the researcher to specify the probability or chance that each member of a defined population will be selected for the sample" (p. 150). The researcher drew probability samples from schools, class teachers and students. Nonprobability sampling also called non-random sampling is "the process of selecting a sample using a technique that does not permit the researcher to specify the probability, or chance that each member of a population has of being selected for the sample" (Gay et al. 2012, p. 159). The researcher drew non-probability samples for the County QASO, school principals and parents.

3.3 Data Collection Procedures

Creswell and Clark (2011) contended that "in mixed methods research, the data collection procedures consist of several key components" (p.171). The components include "sampling, gaining permissions, collecting data, recording the data and administering the data collection" (p. 171). Data collection in this study proceeded along two strands: quantitative and qualitative. The "intent of probabilistic sampling in the quantitative strand was to select a large number of individuals who are representative of the population" (Creswell & Clark, 2011, p. 174). In the qualitative strand, "inquirer purposefully selected individuals who could provide the necessary information" (Creswell & Clark, 2011, p. 173). She sought permission to collect data from participants. In order to collect the required data, four research assistants had an orientation with the researcher. The orientation involved briefing of research assistants on key terms used in the tools and the main information targeted from the tools. All items in the questionnaires were discussed with the research assistants.

While in the field, the researcher introduced the research assistants to the Ministry of Interior and Coordination of National Government officials, the Ministry of Education, State Department of Early Learning and Basic Education officials, the Quality Assurance and Standards Officer and schools principals. The research permit given by NACOSTI was used to access the County Commissioner, County Director of Education and the school principals.



Finally the school principals gave permission to the researcher to have access to teachers, parents and students. Once permission was granted, the researcher booked appointments and organised with the teachers and students when to distribute the questionnaires. The researcher also organised with class teachers how to get parents for the focus group discussions. She made appointments with the school principals and County QASO and arranged for appropriate times for the interviews. "Collection of quantitative and qualitative data in this convergent parallel mixed method design was done concurrently" (Creswell & Clark, 2011, p. 180). Each set of data were given equal weight.

3.4 Data Analysis/Interpretive Procedures

Onwuegbuzie and Combs (2011) contended that "mixed analysis is a term used for analysing data in mixed research" (p. 2). According to Onwuegbuzie and Combs (2011), mixed analysis "involves the use of both quantitative and qualitative analytical techniques within the same framework" (p. 3). In this study, the analysis of quantitative and qualitative data occurred concurrently. Burke and Larry (2014) called this class of analysis "multidata-multianalysis because both quantitative and qualitative analytical techniques are used" (p. 795). Quantitative data was edited, cleaned for completeness, accuracy and consistency. Coding was done using MS Excel 2018 software and analysis followed using version 21 of the SPSS software. A "regression analysis" was used to find out whether the independent variables predicted the given dependent variable (Burke & Larry, 2014, p. 707). A "correlation coefficient analysis" was also used to show the relationship between the independent variable and dependent variable (Burke & Larry, 2014, p. 752).

Qualitative data analysis involved preparing and organising data, reducing data into themes through a process of coding and condensing the codes and finally representing data in narrative form as recommended by Creswell, (2013, p. 180) and Boeije (2013, p. 76). The "process of coding involved aggregating the texts into small categories" (Creswell, 2013, p. 184). These categories eventually formed themes. The researcher then interpreted the themes guided by the research questions and finally represented data in narrative form and direct quotes.

4.1 Findings, Interpretation and Discussions

According to the MoES&T (2017), "the first disbursement of FDSE funds in Kenya is made in December and subsequent disbursements are made in April and August each year or as resources flow from the Treasury" (p. 2). The disbursement is given at a ratio of 50:30:20. The Government subsidy is "disbursed to public schools under the following conditions that": "the school must be duly registered" and headed by a TSC appointed principal; "the school must submit accurate and up to date data enrolment"; "the school must submit the relevant bank accounts to MoE and all bank accounts operated by the school must be registered with the MoE at all its level" (MoES&T, 2017, p. 2).

It is also a requirement that schools seek authority from the County Education Boards (CEBs) under the operation account, to vire savings or surplus funds from one item to another when it is absolutely necessary but the same does not apply for tuition account except for items within the vote heads like text books, laboratory equipment or chalk. A study by Muhindi (2012) however established that "government FDSE subsidies are inadequate and are not disbursed on time" (p. 12). This seems to be in agreement with the findings of the current study.



4.1.1 Disbursement of FDSE Funds and Student Retention

The QASO Migori County had this to say on the disbursement process and student retention:

Funds are released at the beginning of the term but depends on availability of funds at the treasury and accurate information feed into the NEMIS (National Education Management Information System) portal.

The process used to disburse the FDSE funds to schools is electronic called Electronic Funds Transfer (EFT) which is deemed safe and secure and the amount is based on the school students' population. This process can be improved by enhanced early registration and accurate details of students in the NEMIS portal. (QASO, personal communication, July, 8, 2019)

The "National Education Management Information System" (NEMIS) is "a web data management system which collects data and information from education institutions; processes and reports the status of designed indicators giving the sector a solid ground for effective management to ensure that every learner counts" (Republic of Kenya, 2020, p. 1). The remark made by the QASO that the amounts given to schools is based on the school students' population is supported by EC report (2014) which stated that funding methods in Europe are also "based on given variables such as the number of pupils" to distribute funds to schools (p. 33).

School principals interviewed shared their frustration with the disbursement process. Principal A from Awendo sub-county had this to say: "The disbursement process is not efficient, the Ministry does not update their data on enrolment and in most cases the funding is less, the Ministry should update their data termly" (Principal A, Awendo sub-county, personal communication, 28 June, 2019). The principals also gave their responses on when they received the FDSE funds during the 3 school terms and these are presented in Figure 1.

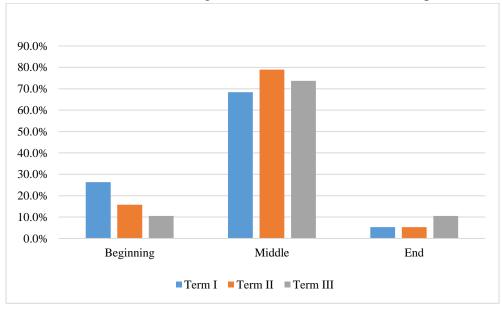


Figure 1. Responses of School Principals on Disbursement of FDSE funds across School Terms, Researcher 2020.



Figure 1 gives a summary of responses made by school principals on disbursement of FDSE funds across school terms. According to the school principals, very little of the FDSE funds get to schools at the beginning of each of the 3 terms. Figure 1 shows that schools get (26%) of the FDSE funds at the beginning of term 1, fifteen percent at the beginning of term 2 and 10% at the beginning of term 3. A larger amount of the FDSE funds is released to schools in the middle of the school terms. Schools get 68% of the funds in the middle of term 1, seventy nine percent in the middle of term 2 and 74% in the middle of term 3. The least amount of FDSE funds is released at the end of each term. Five percent is released at the end of term 1, seven percent is released at the end of term 2 and 10% released at the end of term 3.

Principal B from Migori sub-county had this to say: "Many times we receive the FDSE funds in the middle of the term and this poses a big challenge to our school budget, these monies should be disbursed within the first weeks of opening of each term" (Principal B, Migori sub-county, personal communication, July, 3, 2019). The responses given by the school principals indicate that the beginnings and end of each school term is difficult for most public day secondary schools. This does not however reflect the Ministry disbursement guideline of 50:30:20 in December and subsequent disbursements in April and August (MoES&T, 2017, p. 2). A study by Ndambuki (2016) on "administrative factors influencing the implementation of free secondary education in public secondary schools in Makueni County in Kenya" confirmed that FDSE funds are released late and so supports the principals' responses. Ndambuki (2016) did recommend that "the government should disburse funds in good time so that principals are able to plan and implement school programmes in good time" (p. 13).

When asked for their opinion on the process used by the MoES&T to disburse the FDSE funds, 58 (76%) of the class teachers indicated that the MoES&T should release FDSE funds at the beginning of the term to enable the schools acquire learning resources in good time. The class teachers pointed out that cases of delay of funds affected the learning process and encouraged student absenteeism. There were 18 (24%) of the class teachers who did not show preference of when the funds should get to schools. They indicated that the amount sent to schools was less than what the schools expected. The views of the 58 class teachers and those of the school principals are supported by Mueni, Kimiti and Mulwa (2019) who recommended that "the Ministry of Education should put in place proper strategies to ensure that all secondary schools receive the curriculum support materials early enough in order to promote quality in the curriculum implementation process" (p. 47). Koskei (2017) made a similar recommendation that the Government should ensure that the capitation grants are disbursed to the public primary schools in time at least before the start of every term to "ensure timely preparation of the schools budgets and purchase of teaching and learning materials and hence timely commencement of teaching and learning" (p. 59).

4.1.2 Changes observed by School Principals and Class Teachers on Gender attendance between Terms I & III

Other than internal school factors such as lack of student motivation, negative attitude to education, poverty and discipline, school principals and class teachers also observed changes in attendance caused by delays in the disbursement of FDSE funds between terms' I and III. Their argument was that delays in disbursement of funds affect the provision of learning resources which in turn affect student attendance and retention. This trend is illustrated in Figure 2

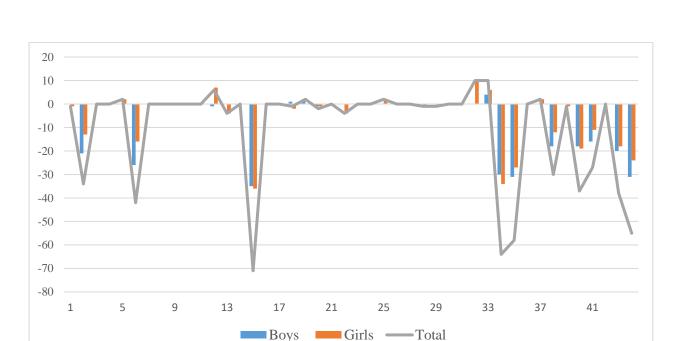


Figure 2. Changes noted by School Principals and Class Teachers in Gender attendance between

the Three School Terms, Researcher, 2020.

Figure 2 shows that attendance of both boys and girls drop towards the end of term one. The attendance improves and is quite even in term two when most of the FDSE funds are released to schools. This is again followed by a drop in term three when the disbursement of funds is delayed. Any extra charges the schools make towards the provision of teaching and learning resources especially in terms one and three affect the majority of vulnerable and poor learners especially the girl child who has a tendency of staying at home. Principal A from Rongo subcounty had this to say: "Our enrolment is low and so the funds we get are not sufficient, learners only miss school when these funds delay and some parents are not able to supplement, otherwise FDSE has encouraged attendance" (Principal A, Rongo sub-county, July, 4, 2019). These reasons are in agreement with a study by Abungu (2015) which established that "there was direct influence of finance on retention of girls in primary and secondary schools in Ndiwa, District, Homa- Bay County, Kenya" (p. 11). The study by Abungu (2015) confirmed that students from poor backgrounds are readily affected by delays in FDSE funds.

The changes in attendance observed by school principals, class teachers are supported by a study done by Mueni, Kimiti and Mulwa (2019) on the "impact of prompt disbursement of free secondary education tuition fund and the quality of curriculum implementation in public schools in Makueni, Kenya". Mueni et al. (2019) established that "timely supply of curriculum support materials to public secondary schools was significantly related to the quality of curriculum implementation process in public secondary schools in Makueni County" (p. 47). Mueni et al. (2019) recommended that "the Ministry of Education should put in place proper strategies to ensure that all secondary schools receive the curriculum support materials early enough in order to promote quality in the curriculum implementation process" (p. 47). It is only



when FDSE funds are disbursed early in the school term that school managers can plan with precision and be able to retain students in schools.

4.1.3 Test of Hypothesis

The researcher tested the null hypothesis that:

H₀ There is no statistical significant relationship between disbursement intervals of FDSE funds and student retention across the forms in Migori County. To test this hypothesis, the study utilised ANOVA, Chi-Square test, t-Test and Retention Regression model to generate output tables presented in Tables 1, 2, 3 and 4.

Table 1. *Anova Test*

Model		Sum	of	df	Mean Square	F	Sig.
		Squares					
1	Regression	2.209		2	1.105	1.701	.195ª
	Residual	25.977		40	.649		
	Total	28.186		42			

Note. Researcher, 2020.

Table 1 shows that the p value stands at 0.195 which is greater than 0.05 level of significance, (p > 0.05) the study therefore failed to reject the null hypothesis and thus concluded that there is no statistical significant relationship between disbursement intervals of FDSE funds and student retention across forms in Migori County. The study confirmed that other than delays in the disbursement of FDSE funds, other factors like poverty, early marriages, FGM, attitude of the girl child towards education, child labour, drug and substance abuse among others also affect student retention. The findings of Ganira, Inda, Odundo, Akondo and Ngaruiya (2015) that "untimely and coerced marriages are prevalent in the rural areas" in Migori also support the conclusion that there are other factors affecting student retention. A study by Ouma (2013) is also in agreement since it concluded that "socio-cultural factors result in early marriages, male preference in family, and negative attitude of girls in education" affect "participation of the girl-child in secondary education" in Migori (p. 11).

Table 2. *Chi-Square Test*

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.545 ^a	48	.802
Likelihood Ratio	37.828	48	.854
Linear-by-Linear Association	.100	1	.752
N of Valid Cases	43		
a. 66 cells (97.1%) have expected cou	nt less than 5. The mi	nimum expected	count is .02.

Note. Researcher, 2020.

The Chi-square Test in Table 2 shows that the p value is .802 which is greater than 0.05 level of significance, with Chi-Square value being $\chi^2 = 39.545$, df = 48, p>0.05. The study failed to



reject the null hypothesis and thus concluded that there is no statistical significant relationship between disbursement intervals of FDSE funds and student retention across forms in Migori County.

Table 3. *T-test*

Co	oefficients ^a										
M	odel	Unstandardized		Standardized	t	Sig.	95% Confidence		Correlations		
		Coefficients		Coefficients			Interval for B				
		В	Std.	Beta			Lower	Upper	Zero-	Partial	Part
			Error				Bound	Bound	order		
1	(Constant)	4.093	.125		32.812	.000	3.841	4.345			
	Boys	042	.033	578	-1.256	.217	109	.026	020	195	194
	Girls	.048	.037	.593	1.288	.205	027	.122	.049	.200	.200

a. Dependent Variable: Retention

Note. Researcher, 2020.

The T-test in Table 3 shows that the p-values of both independent variables (boys & girls) are greater than 0.05 level of significance and therefore the study failed to reject the null hypothesis and thus concluded that there is no statistical significant relationship between disbursement intervals of FDSE funds and student retention across form levels in Migori County. Table 4.

Regression Retention Model

Coefficients ^a										
Model	Unstandardized		Standardized	t	Sig.	95% Confidence		Correlations		
	Coeffic	ients	Coefficients			Interval	for B			
	В	Std.	Beta			Lower	Upper	Zero-	Partial	Part
		Error				Bound	Bound	order		
1 (Constant)	4.093	.125		32.812	.000	3.841	4.345			
Boys	042	.033	578	-1.256	.217	109	.026	020	195	194
Girls	.048	.037	.593	1.288	.205	027	.122	.049	.200	.200
a. Dependent Va	riable: Ret	ention								

Note. Researcher, 2020.

Table 4 gives the Regression model as:

Retention = 4.09 - 0.042 boys' change in attendance + 0.048 girls' change in attendance. Assuming that there is no change in school attendance, retention level increased by 4.09 between terms' I and III. With change in attendance, retention decreased by 0.042 for every unit change in boys' attendance and increased by 0.048 for every unit change in attendance by girls. The observed significance is greater than 0.05 and so we conclude that the disbursement intervals do not make significant contribution to student retention.

4.1.4 Views on Disbursement of FDSE Funds

According to the MoE (2017) all learners in public day schools receive Kshs.22, 244 and this was effected from January 2018 (p. 1). All school managements, especially principals are "expected to ensure prudence in the use of school funds and adhere to the laid down financial regulations as stipulated in the financial management instructions' handbook and the Public Finance Management Act, 2012" (p. 4). The disbursement is spread across the school terms in the ratio of 50:30:20. School principals and class teachers in the study had an



opportunity to give their views on the disbursement process and these are presented in Table 5.

Table 5. Views of School Principals and Class Teachers on Disbursement of FDSE Funds

Views	School Princ	ipals	Class Tea	chers
	F	%	F	%
Satisfied	4	20	10	13
Not Satisfied	7	35	46	61
Needs Improvement	8	42	20	26
Totals	19	100	76	100

Note. F=Frequency, Researcher 2020.

Table 5 shows that 8 (42%) of the school principals felt that there is a need for the Ministry to improve the disbursement process because currently there are delays. This view was supported by 20 (26%) of the class teachers who also felt that the government needed to improve the disbursement process since delays affected learning. Seven school principals (35%) said that they were not satisfied with the process because it lacked efficiency and consistency. Principal C, from Migori sub-county had this to say: "We appreciate the money given by the Government, but unfortunately the disbursement is always delayed ... we get it in the middle of the term and I feel the process of disbursement is not efficient... Can these funds be released in good time so that we do not compromise teaching and learning" (Principal C, Migori subcounty, personal communication, July, 27, 2019). These views were in conformity with the views of 46 (61%) class teachers who raised issues of corruption among the personnel involved in the disbursement process. There were 4 (20%) of the principals who were satisfied with the disbursement process since FDSE funds are transferred to school accounts through the EFT system which is deemed safe and secure by stakeholders. This view was similar to that of 10 (13%) of class teachers who were also satisfied with the disbursement process pointing out to the fact that the disbursement process is not totally flawed.

Parents in the study had similar concerns about the disbursement process. They were in agreement that FDSE funds were released late in the middle of the term and this affected student attendance and learning in schools. They argued that the delays with FDSE funds forced schools to charge extra levies to facilitate teaching and learning and this affected students who are economically challenged. Other than the delays, most parents supported the EFT system of disbursement since it is safe and secure for schools. Parents from Kuria West Focus group discussion had the following to say on the disbursement process:

The funds get to schools in second term, the delays are a major challenge since most of us depend on these FDSE funds and do not have the money to pay for extra fees...yes delays of these funds affect student attendance since most of the poor children tend to remain at home. Even though funds delay bank transfer is the best so that money doesn't get lost. It is important to involve BOM members in the management of school affairs. (Kuria West, July, 12, 2019)

The views of the school principals, class teachers and parents on the disbursement process are supported by Kamau and Wambugu (2017) who asserted that "there are several impediments



that hinder government efforts to provide free day schooling" among them is "corruption in the ministry of education" (p. 63). Kamau and Wambugu (2017) recommended that "the government should hire private auditors to ensure prudent use of public resources" (p. 63). Koskei (2017) also recommended that there should be 'timely disbursement of funds to schools to enable effective and efficient management of learning resources (p. 59).

4.1.5 Proposals by School Principals and Class Teachers on Improvement of the Disbursement Process

School principals and class teachers also gave their proposals on how the government can improve the disbursement process of FDSE funds since they are the main implementers of the FDSE programme. Among these proposals are early distribution of funds, having the accurate number of students in schools and involving BOM and PA in improving the school programmes. These proposals are presented in Table 6.

Table 6.

Proposals on Improvement of the Disbursement Process by School Principals and Class
Teacher

Proposals	School Princ	cipals	Class Teachers	
	F	%	F	%
Early disbursement of funds	12	64	93	41
Determine number of	2	10	48	21
students in good time Involve BOM and PA in the	2	10	32	14
Process for accountability				
Ministry to work closely with	3	16	55	24
County Government				
Totals	19	100	228	100

Note. F=Frequency. Researcher, 2020.

Table 6 shows that 12 (64%) of the school principals proposed that the funds should be released early enough for effective planning of the school programmes. Principal B from Uriri subcounty had this to say: "FDSE funds should be released in good time, before schools open" (Principal B, Uriri sub-county, personal communication, July, 9, 2019). This was supported by 93 (41%) of the class teachers who were also of the opinion that FDSE funds should get to schools early enough to promote teaching and learning. A study by Koskei (2017) is in agreement with this proposal since Koskei (2017) recommended timely disbursement of funds to schools to enable effective and efficient management (p. 59). Ndambuki (2016) is also in agreement since he recommended that the government should disburse funds in good time so that the principals can plan and implement school programmes in good time (p. 13). A study by Mwangi, Cheloti and Obae (2017) also recommended that the government should "remit the funds in good time to public day secondary schools so that the school managers can plan with precision and be able to retain students in school" (p. 112).

There were 2 (10%) of the school principals who proposed that the names of students enrolled in the school should be sent to the MoES&T in good time to avoid missing funds. Principal B from Awendo sub-county had this to say: "the Ministry needs to confirm the



number of students enrolled with the school principals before release of funds" (Principal B, Awendo sub-county, personal communication, July, 19, 2019). This proposal was supported by 48 (21%) of the class teachers who also suggested that school principals need to be prompt in sending the number of students to the Ministry through the NEMIS portal to avoid missing out on the FDSE funds. A study by Itegi (2016) does support this proposal when it concludes that "planning teams in schools need to possess requisite management skills to oversee the process of allocating resources coupled with effective communication to enhance meeting set timelines (p. 955).

Table 6 also shows that there were 2 (10%) of the school principals who proposed that the County Director of Education should involve members of the Board of Management and Parents Association (PA) in the disbursement process for accountability purposes. Principal D from Migori sub-county had this to say: "The County Director needs to work closely with BOM and PA members for proper and effective planning of school programmes and projects" (Principal D, Migori sub-county, personal communication, July, 26, 2019). The same proposal was given by 32 (14%) of the class teachers as one way of ensuring efficiency and transparency. This proposal is supported by Honingh, Ruiter and Sandra (2018) who asserted that "school boards have a central position in educational institutions because they have to guarantee quality, monitor results and intervene if needed in the school programmes" (p. 1). The Basic Education Act 2013 also supports this proposal because it states that the functions of the Board of Management includes among others: "promoting the best interests of the institution and ensure its development", "ensure and assure the provision of proper and adequate physical facilities for the institution" and "administer and manage the resources of the institution" (p. 254-255).

There were 3 (16%) of the school principals who proposed that the Ministry of Education should work closely with the County Government to ensure that the FDSE funds get to school in good time. Principal C from Nyatike had this to say: "The Ministry should work closely with the County Government. ...many times we experience gaps and this slows down a lot of programmes" (Principal C, Nyatike sub-county, July, 13, 2019). There were 55 (24%) of the class teachers who gave the same proposal showing convergence in this proposal. This proposal is also supported by Kamau and Wambugu (2017) who pointed out that corruption in the Ministry of Education was among the many impediments that have hindered the government effort to provide free day secondary schooling.

The findings on FDSE disbursement process and student retention are in agreement with the concepts of retention theory. When teaching and learning is affected or delayed then the goal commitment and institutional commitment of a student is affected therefore making Tinto's retention theory relevant. Goal commitment in retention theory represents the degree to which a student is motivated to complete his/her studies in a school/institution while institutional commitment is the motivation a student has to graduate from a specific school. Delays in the disbursement process of FDSE funds can easily affect personal and institutional goals which in turn affect student retention in public day secondary schools.

5.1 Conclusion and Recommendations

From the study findings, the following conclusions were drawn: that the process used to disburse the FDSE funds to schools is the Electronic Fund Transfer (EFT) system which is deemed safe and secure. However, the process does not seem to be efficient. There are delays



in the flow of FDSE funds from the Treasury which does not reflect the MoES&T's ratio of 50:30:20. Late registration and not having accurate details of students in the NEMIS portal affect the amounts sent to schools.

From the findings and conclusions drawn, the following recommendations were made to different implementers and education practitioners with the aim of improving the disbursement process of FDSE funds in public day secondary schools. These recommendations are important because investing in secondary education has many development benefits and Kenya's vision 2030 recognises education as the route to economic prosperity.

The study recommended that the Ministry should be prompt in releasing funds at the beginning of each term so that school programmes and budgets are not interfered with. The MoES&T needs to be consistent in evaluating the effectiveness and efficiency of the FDSE disbursement process. There is a need for the MoES&T to set up monitoring and evaluation systems that support efficiency, transparency, timeliness and consistent audits of school accounts and proposed projects. Budgetary allocation should be constantly reviewed by the MoES&T and the costs of compulsory items such as school uniforms should also be addressed.

The study also recommended that school principals should ensure early registration of students and they should have accurate details of students in the NEMIS portal. They should also spend funds as designated by the Government through the tuition account. Principals should work closely with the County Government for proper and effective planning of the school programmes and projects.

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