

# Fee-Free Education and the Availability of Teaching and Learning Materials for Students with Disabilities in Public Secondary Schools in Morogoro Municipality

Ben Sanga<sup>1,\*</sup>, Dr. Daphina-Libent Mabagala<sup>2</sup>, Dr. Theresia J. Shavega<sup>3</sup>

<sup>1</sup> Department of Leadership, Ethics and Governance; The Mwalimu Nyerere Memorial Academy, Tanzania. P.O. Box 9192, Dar es Salaam

<sup>2</sup> Faculty of Education, The Open University of Tanzania. P.O. Box 23409, Dar es Salaam, Tanzania

<sup>3</sup> Faculty of Education, The Open University of Tanzania. P.O. Box 23409, Dar es Salaam, Tanzania

DOI: <https://doi.org/10.5281/zenodo.6965535>

Published Date: 05-August-2022

---

**Abstract:** Provision of fee-free education has facilitated children from poor socio-economic background to access secondary education. However, less has been known on whether the provision of fee-free education has influenced the availability of teaching and learning materials for students with disabilities in public secondary schools in Tanzania. This study, therefore, intended to examine the influence of fee-free education to the availability of teaching and learning materials for students with disabilities in public secondary schools in Morogoro Municipality. The study used cross-sectional research design, whereby, questionnaires and interviews were employed to collect data. The study sample involved one (1) Educational Officer, five (5) heads of schools, and 24 students with disabilities, who were obtained through purposive sampling technique. Other study sample included 73 teachers and 98 students without disabilities, obtained by stratified sampling technique, making a total study sample of 201 respondents. Data was analysed through factor, linear regression and correlational analyses. The study revealed that fee-free education had significant influence to the availability of teaching and learning materials for students with disabilities in public secondary schools. The study recommended to the government, the major funder of fee-free education in public secondary schools, to supply adequately all necessary teaching and learning facilities in public secondary schools to facilitate smooth learning for students with disabilities.

**Keywords:** Fee-free Education, Public Secondary Schools, Students with Disabilities, Teaching and Learning Materials.

---

## 1. INTRODUCTION

Fee-free education is arguably the most significant policy option with regard to domestic and international development, since; it ensures attainment of education to students with socioeconomic and physical diversities including the poor and those with disabilities (Birdsall, Levine & Ibrahim, 2005; UNESCO, 2002). It is widely recognized that high school fees are a barrier to access to education, and that, making education available to all children and youth including those with disabilities who qualify, is an imperative. Countries that removed fees had experienced the significant increases in enrollment rates. For example, according to Kattan (2006), Uganda increased its enrollment rates by 68 percent and Malawi by 49 percent after their decision to offer free education. The same enrolment increase was experienced in Cameroon, Uganda, Cambodia, Zambia and Tanzania after eliminating school fees (ibid). Kattan, however, was silent on whether the

named countries had special budget to fund students with disabilities and their learning environments, including making available teaching and learning resources.

People with disabilities are arguably regarded as the most disadvantaged group in various life aspects, education being the one (WHO, 2011). According to Mcleod (2014), students with disabilities experiences personal limitations in school environments that not only affect them socially and psychologically, but also in their academic progresses. The situation is much elongated once students with disabilities, especially those from poor socioeconomic background misses access to education due to inability to afford school fees. As equality to education became a world widespread matter, fee-free education provision has managed to increase students' accessibility to education, including students with disabilities (URT, 2016). However, examination of the influence of fee-free education to the learning environment of students with disabilities is a major concern.

Provision of fee-free education to all students including those with disabilities, regardless of their diversities, is an international demand. The Convention on the Rights of Persons with Disabilities of 2006 was an international convention advocating for the rights of persons with disabilities in specific (Right to Education Project, 2014). The second paragraph of Article 24 directs that;

*"...States Parties shall ensure that persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;*

The convention, as revealed by Right to Education Project (2014), acknowledges the importance of providing fee-free primary and secondary education to students with disabilities. The convention provides a great call for state parties to ensure their education systems accommodates appropriately persons with disabilities especially providing them with fee-free education. Obviously, as fee-free education facilitates the increase of students' enrolment at schools, learning environment and all facilities for students with disabilities, especially teaching and learning materials need to be prepared to accommodate the enrolled number of students. Yet, only less knowledge existed in many of public secondary schools with big number of students on whether the situation influenced the availability of teaching and learning environment particularly to students with disabilities.

Following the international mandate to provide fee-free education to all children including students with disabilities in specific, various countries worldwide have implemented the named demand, varying in levels of education, periodization and history of implementing the policy. In the United States, for example, in 1975, Congress passed Public Law 94-142, Education for All Handicapped Children Act, making free, appropriate education available to all eligible students with disabilities (Chambers & Hartman, 1983). Putting the right to free education for students with disabilities in national law interprets the governments' obligation and high commitment to offer education with favorable and accessible learning environment for students with disabilities. Since United States marked a good lesson to put right to free education for disabled children in national law, and the situation was less known in other countries particularly Africa, the need to study countries' laws status relating to disabled persons' rights is significant.

Diversities on the provision and implementation of fee-free education to students with disabilities can as well observed in Sweden, where, all children who join secondary school including the disabled ones learn for free (Khamati & Nyongesa, 2013), which is different from various developing countries which offers fee-free education at lower educational levels. North Africa's education, particularly Algeria, access to free education at all levels is guaranteed if student qualify by passing the previous cycle, however, no special considerations are given to students with disabilities (Rose, 2015). In Egypt, since 1950s, the government has taken up the responsibility of financing education to achieve the principles of justice; equality and equal opportunity to all her citizens including those with disabilities, hence, even the learning environment for students with disabilities are considered in most of schools (Zahir, Bayoumy, El Shukhebi & Abdel, 2006).

In East Africa, particularly Kenya, a campaign for fee-free primary education began after independence in 1963. From 2003, education in public primary schools became free and compulsory and mostly favors children from poor family background and students with disabilities who are in need of special learning environment (Kenya Constitution, Article 53, 2010) (Wikipedia). Following abolition of user fees, enrolments rose from about six million to about 7.2 million pupils, resulting in a gross enrolment rate of 104 percent compared with 87.6 percent in 2002 (Riddell, 2003). The steps taken to offer free education in Kenya, however, considered primary level of education, leaving aside secondary and higher levels

education a burden at the hands of parents with diverse socioeconomic backgrounds. As well, it was less known that the increase of students' enrolment at schools went parallel with preparation of special teaching and learning materials for students with special needs such as those with disabilities.

Recently, Tanzania has widened its fee-free education provision in secondary school level from 2016 which involved the elimination of all forms of fees and contributions (Taylor, 2016). Along with international demand for free education, fee-free education at public secondary schools was executed as a step to implement the goals by Education and Training Policy of 2014. Fee-free education was also grounded in Article 9 and 11 of the Constitution of the United Republic of Tanzania of 1977. The constitution addresses the issues of eradication of injustice and discrimination, and the right to education respectively (URT, 2005), intending to include also the right to education for children and youth with disabilities, as far as this study is concerned. Fee-free education provision was also grounded from the National Policy on Disability (2004) which provides guidelines and sets parameters for services delivery by strongly focusing on the development, rights and dignity of people with special needs, education being one (The Kesho Trust, 2013).

Establishment of fee-free education at public secondary schools in Tanzania has brought a significant rise of students' enrolment. For example, according to URT (2009) and URT (2016), enrolment has increased from 4744 in year 2009 to 7512 in 2016 respectively, following the implementation of fee-free education in public secondary schools. Besides, enrolment has been reported to increase yearly since the establishment of the program in public secondary schools (Mashala, 2019; Shukia, 2020). Students with disabilities are among the beneficiaries of fee-free education provision. However, learning needs of students with disabilities differs from those without disabilities, hence demanded special learning environment. Consequently, provision of fee-free education in public secondary schools in Tanzania, has left knowledge gap on its influence to the availability of teaching and learning materials for students with disabilities, which called for this study.

## 2. RESEARCH METHOD

This study employed cross-sectional survey design. Cross-sectional survey design involves collection of data at one point in time across respondents (Cresswell, 2012; Saunders, Lewis & Thornhill, 2016). The study choose cross-sectional design because fee-free education provision has been provided in a wider sphere of public secondary schools all over the country and that, employing of this design facilitated collection of data from a larger number of participants in a single time quickly.

The area of this study was Morogoro Municipality, Morogoro, Tanzania. Morogoro Municipality is one among the districts of Morogoro region. The rationale behind the choice of Morogoro Municipality as a study area was that, several educational institutions within the area had learning environment and facilities which were not supportive to students with disabilities prior to the provision of fee-free education in public secondary schools (Kabuta, 2014). It is due to the named challenges, Morogoro Municipality had been sought to be an appropriate area to examine whether the provision of fee-free education had managed to influence the availability of teaching and learning materials for students with disabilities in public secondary schools.

The total population for this study was 5385 people. Sample size for this study was 201 respondents, including; one district educational officer, five (5) heads of schools, twenty five (24) students with disabilities, seventy three (73) teachers and ninety seven (98) students without disabilities. The sample sizes for teachers and students were determined by Yomane's (1967) formula. Purposive sampling technique was employed to obtain the sample of district educational officer, head of schools and students with disabilities. The choice of purposive sampling technique was of the reason that the number of heads of schools and district educational officer was known and fixed, while students with disabilities were selected basing on their availability in the study area. On the other hand, stratified sampling technique was employed to obtain students without disabilities and teachers sample. Stratified sampling technique was employed so as to provide opportunity for equal chance of the population to participate in the study on the proportionate basis.

The study employed questionnaire method to collect data from respondents on their knowledge, perception and experiences on implementation of fee-free education and its influence on availability of teaching and learning materials for students with disabilities. The rationale for choosing questionnaire method was its ability to accommodate bigger number of respondents within short period of time. Also, it offered higher freedom for respondents to participate in the study. Besides, the study employed factor, linear regression and correlational analyses to analyse data. Initially, Factor analysis was used to examine variable items by rejecting items with poor loading factor while variable items with higher loading factor were

retained for further analyses. Linear regression analysis was employed to examine the overall contribution of independent variable to the dependent variable, as well as examining significance of the study. Correlational analysis on the other hand examined the strength and direction of relationship between independent and depend variable and contribution of independent variable to the dependent variable.

### 3. RESULTS AND DISCUSSION

#### 3.1 Factor Analysis for Fee-Free Education

'Fee-free education' was the independent variable on this study. The variable items under 'fee-free education' included abolition of; tuition fee, examination fee, academic fee, desks fee, construction fee, security fee, caution fee, and identity fee. The study employed confirmatory factor analysis to examine the validity of the attributes/variable items used in this study. Factor analysis was carried out in order to find out whether fee-free education was directly linked with the availability of teaching and learning materials for students with disabilities in public secondary schools. In factor analysis technique, the extraction of data was carried out whereby; the acceptable loading cut-off point as recommended in studies (Hair et al., 2010; Pallant, 2010 & Musabila, 2012) was normally +0.500. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was used to verify suitability of data for factor analysis. The result for KMO and Bartlett's Test was .936 sampling adequacy which is highly acceptable value as shown in Table 1. Also, factor analysis was significant whereby Significance value was .000 (Sig. value "p = .000) which is below the recommended value of  $\leq 0.5$  (Hair et al., 2010; Pallant, 2010 & Musabila, 2012).

**Table 1: Kaiser-Meyer-Olkin and Bartlett's Test for Free Education**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.936
Bartlett's Test of Sphericity	Sig.	.000

Source: Field Data, (2022)

After such procedure, through the use of factor analysis, two (2) out of eight (8) variable items were removed or dropped since they were poor loaded factors, while six (6) variables with higher loading factor were identified and retained for further analysis of the study as shown in Table 2. Table 2 also shows the Cronbach's Alpha for Fee-Free Education variable which was .925, an acceptable value as recommended by Musabila (2012).

**Table 2: Retained and Removed Loading Factors for Fee-Free Education Variable**

Code	Variables	Value	Decision
C1	Abolition of tuition fee	.668	Retained
C2	Abolition of examination fee	.842	Retained
C3	Abolition of academic fee	.789	Retained
C4	Abolition of desks fee	.766	Retained
C5	Abolition of construction fee	.706	Retained
C6	Abolition of security fee	.696	Retained
C7	Abolition of caution fee	.451	Removed
C8	Abolition of identity fee	.451	Removed
		Cronbach's Alpha (Overall)	.925

Source: Field Data, (2022)

#### 3.2 Factor Analysis for the Teaching and Learning Materials

The dependent variable of this study was Teaching and Learning Materials. Here, the study aimed at examining whether fee-free education had influence on availability of teaching and learning materials for students with disabilities in public secondary schools. Before further analysis, the study conducted factory analysis for teaching and learning materials, to examine the validity of variable items. After running factor analysis, the result of Kaiser-Meyer-Olkin Measure of Sampling

Adequacy (KMO) was .912 which is considerable acceptable value for further analysis. The significant level (p value) was .000 which is acceptable value as shown in Table 3.

**Table 3: Kaiser-Meyer-Olkin and Bartlett's Test for Teaching and Learning Materials**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
Bartlett's Test of Sphericity	Sig.	.000

Source: Filed Data, (2022)

The study used 0.500 as a cut-off point in determining the loading factors for teaching and learning materials' variable. Four (4) out of 12 variable items were removed or dropped since they were poor loaded factors. The rest of variable items were retained for further analytical procedures as indicated in Table 4. In addition to that, the Cronbach's Alpha result as indicated in Table 4 for Teaching and learning materials variable was .842 which is an acceptable value for further analysis.

**Table 4: Retained and Removed Loading Factors for Teaching and Learning Materials**

Code	Variable	Value	Decision
DB36	Teaching and learning materials availability	.397	Removed
DB37	Teaching and learning materials adequacy	.353	Removed
DB38	Teaching and learning materials accessibility	.763	Retained
DB39	Teaching and learning materials condition	.722	Retained
DB40	Teaching and learning materials relevance	.413	Removed
DB41	Teaching and learning materials applicability	.701	Retained
DB42	ICT facilities and equipment availability and adequacy	.480	Removed
DB43	Students with disabilities' position of using ICT facilities	.558	Retained
DB44	Special classroom programs for students with learning difficulties	.605	Retained
DB45	Remedial classes for students with learning difficulties	.670	Retained
DB46	Examination procedures for students with disabilities	.674	Retained
DB47	Extra cost of schooling affordability	.670	Retained
		Cronbach's Alpha (Overall)	.842

Source: Field Data, (2022)

### 3.3 Regression Analysis on the Influence of Fee-Free Education on Availability of Teaching and Learning Materials

After Factor analysis technique, the study employed linear regression analysis to test the relationship among Fee-Free Education and Teaching and Learning Materials. Using linear regression analysis; the model summary describes the overall contribution of the predictor (Fee-Free Education) to the dependent variable (Teaching and Learning Materials). The results in Table 5 show that the value of  $R^2$  is 75.4%, with the Adjusted  $R^2$  of .753. This implies that Fee-Free Education which includes abolition of several fee items is direct linked with availability of Teaching and Learning Materials for students with disabilities in public secondary schools.

**Table 5: Model Summary of Fee-Free Education and Teaching and Learning Materials**

Model	R	R Square	Adjusted R Square
1	.868 <sup>a</sup>	.754	.753

a. Predictors: (Constant), Fee-Free Education

Source: Field Data (2022)

Along with overall contribution as presented in Table 5, the study revealed that, Fee-Free Education has positive significant relationship with Teaching and Learning Materials for students with disabilities in public secondary schools by a Significant value of .000 which is less than the recommended value of  $\leq 0.5$  (Hair et al., 2010; Pallant, 2010 & Musabila, 2012), and hence, an acceptable value. Finally, Fee-Free Education has shown positive significance with Teaching and Learning Materials with a contribution on Beta value of .868 ( $\beta = .868$ ) as shown in Table 6.

**Table 6: Linear Regression Analysis for Fee-Free Education, Teaching and Learning Materials**Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B		Beta	
1	(Constant)	.822		.000
	Fee-Free Education	.763	.868	.000

a. Dependent Variable: Teaching and learning materials

Source: Field Data (2022)

**3.4 Correlations between Fee-Free Education and Teaching and Learning Materials**

The study wanted to examine the relationship or association between fee-free education and availability of teaching and learning materials for students with disabilities in public secondary schools. The study found that, there was a positive and strong relationship between Fee-Free Education and availability of Teaching and Learning Materials as revealed by a Pearson correlation ( $r = .868^{**}$ ) and a p-value of ( $p = 0.000$ ) as shown in Table 7. This implies that, fee-free education attributes including abolition of tuition fee, academic fee, examination fee, academic fee, desks fee, construction fee and security fee has positive impact towards availability of teaching and learning materials for students with disabilities in public secondary schools.

**Table 7: Correlational Analysis between Fee-Free Education, Teaching and Learning Materials**

	Teaching and learning materials	Fee-Free Education
<b>Teaching and learning materials</b>	Pearson Correlation	1
	Sig. (2-tailed)	.868 <sup>**</sup>
	N	.000
<b>Fee-Free Education</b>	Pearson Correlation	1
	Sig. (2-tailed)	.868 <sup>**</sup>
	N	.000

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

Source: Field Data (2022)

**3.5. Discussion of the Findings**

The study sought to determine the influence of fee-free education on teaching and learning materials for students with disabilities in public secondary schools in Morogoro Municipality. Fee-free education with its significant variables is constant and discussed as a single entity and predictor of teaching and learning material variable. The significant teaching and learning materials variables discussed includes; teaching and learning materials accessibility, teaching and learning materials condition, teaching and learning materials applicability, position of using ICT facilities, special classroom programs, remedial classes, examination procedures and extra cost of schooling affordability.

The findings of the study reveal that, increasing of fee-free education provision is allied with increasing likelihood of teaching and learning materials accessibility for students with disabilities. This is in line with the study done by Ngwaru and Oluga (2015) who noted that, with the increase of educational funding from Roman Catholic Mission, special visually impaired section was better resourced with learning materials than other schools and learning materials were accessible to students with disabilities. The findings results from Ngwaru and Oluga was possibly contributed by the nature of Roman Catholic Church to adequately fund its various institutions including missionary schools including making accessible all the teaching and learning materials for students with disabilities. The same findings were observed by Khamati and Nyongesa (2013) who revealed that accessibility for teaching and learning materials for students with disabilities is affected once government delays in making fund available. Delaying of government in funding schools as observed by Khamati and Nyongesa is undoubtedly contributed by limited financial resources together with little government priority to invest in education for students with disabilities.

Similarly to the findings of the current study, Eleweke and Rodda (2002) as well, noted that learning materials to accommodate students with disabilities were accessible within the urban centres but none in rural areas, since little consideration in funding education was given in such areas. These results from Eleweke and Rodda were probably due to the reason that, many of learning materials for students with disabilities are unique, expensive, scarce and rarely distributed or sold in rural areas whether through bookshops or by aids. This situation needs very higher commitment from government to make them available in rural areas equally to urban areas. The findings of the current study are also in line with Kabuta (2014) who revealed that infrastructural barriers such as stairs, unnecessary steps and narrow paths hindered students with disabilities to access libraries, science laboratories, language laboratories and ICT labs where most of teaching and learning materials were locating. Kabuta further noted that inaccessibility of libraries and laboratories where learning materials were found was linked with little funding on improvement of such premises to accommodate students with disabilities. The reason behind inaccessibility of learning materials as revealed by Kabuta's study findings was probably facilitated by higher cost of construction or renovation of libraries and laboratories that suit needs of students with various kinds of disabilities.

The findings demonstrate that, increasing fee-free education provision is linked to the increasing likelihood of the improving teaching and learning materials' condition for students with disabilities. The findings are in line with Muindi (2011) study in Kenya who revealed that once government continues supporting schools financially, the condition of teaching and learning materials in public schools would improve tremendously and in the long run, and 1 textbook to 1 student ratio would be attained. Likewise, Kabuta (2014) revealed that the quality of teaching and learning materials were comprehensive enough to favor and suit the needs of students with and those without physical disabilities, a situation contributed by adequate government funding in such area in specific. The findings from Muindi (2011) and Kabuta (2014) show that quality of teaching and learning materials for students with disabilities can be ensured only if government commits itself in disbursing enough funds to its schools.

Teaching and learning materials kept in better condition, favour students, particularly students with disabilities to learn easily and attain their academic goals. This was also observed by Momoh (2010) in West Africa schools that quality material resources have a significant effect on student's achievement since they facilitate the learning of abstract concepts and ideas and discourage rote-learning. The same observation was given by Okongo, Ngao, Rop and Nyongesa (2015) that availability of quality teaching and learning materials enhances the effectiveness of schools as they are the basic assets that bring about good academic performance to students especially students with disabilities. When teaching and learning materials are inadequate and conditionally unfavorable, education is compromised and this certainly is reflected in low academic achievement, high dropout rates, problem behaviors, poor teacher motivation and unmet educational goals.

The findings also designate that, increasing fee-free education provision is interconnected with increasing likelihood of teaching and learning materials applicability for students with disabilities. This is in line with Kumar (2017) who revealed that teaching and learning materials were irrelevant and inapplicable to students, including students with disabilities, since its financing were ignored and given minimal priority. The same findings were observed by HakiElimu (2008) in various public schools in Tanzania, where, teaching and learning materials were not inclusive to students with disabilities as a result of less funding of education. Findings by Kumar (2017) and HakiElimu (2008) implies that teaching and learning materials needs to reflect potential diverse characteristics among students such as abilities to see, hear, read, manipulate objects and communicate, where all of these demands increase of educational funding. Findings are consistent with Grindei and Benloch-Dualde (2015) who stated that relevant teaching and learning materials should be applicable to all academic activities to maximize the learning of students with the wide variety of characteristics including students with disabilities.

The findings display that, improving fee-free education provision is allied with increasing likelihood of good position of using ICT in learning for students with disabilities. Findings of the present study is similar with the study by Ertmer (2005) who revealed that adequate funding of educational programs at schools particularly ICT, results to increased ability of students with disabilities to access ICT in learning equally with students without disabilities. Ertmer's observation was propounded by Quinn (1996) and Pillay (2000) that information and communications technologies (ICT) can play an essential role in supporting high quality education for learners with disabilities once ICT programs are given higher priorities at schools. The named argument was given precaution by Sanchez (2002) that the use of ICT as an effective and efficient learning system is entirely useless in educational field if its adaptation and use makes another form of social marginalization for students with disabilities. This imply that the increase of government funding for ICT programs and integration of ICT programs with teaching and learning process create fairly atmosphere for all students, including students with disabilities to learn easier and achieve their academic goals.

The findings of this study specify that, increasing fee-free education funding is connected to the increasing likelihood of the provision of special classroom programs for students with disabilities. The findings of the present study goes parallel with the findings of Alnahdi (2014) who found that, lack of adequate financial resources impacted to the minimal provision of special learning programs for students with disabilities. Alnahdi added that there were approximately 1,000 programs and institutes throughout the country for students with intellectual disability, which makes it difficult for the Ministry of Education to ensure the validity and supervision of the diagnostic process, particularly with the shortage of fund and specialists in many important areas. Similarly, Imaniah and Fitria (2018) study noted a close relationship between increases of educational funding, in this context free education, and rising ability of providing special learning programs for students with disabilities.

The findings of the current study, Alnahdi (2014) and Imaniah and Fitria (2018) findings are probably came due to the fact that provision of special learning programs for students with disabilities is a challenge in most of developing countries where the studies were conducted. As revealed by the study findings, special classroom programs are necessary to students with disabilities, although determined by level of country's development, commitment and investment to education. As in line with Alwabli (2006), students with learning difficulties particularly students with disabilities needs extra special learning assistance to coup with coverage of respective knowledge and skills to be acquired. Such situation needs extra time, special teaching and learning resources, special teachers and mostly adequate financial resources under a systematic learning program.

The findings demonstrate that, increasing fee-free education provision is linked to the increasing likelihood of provision of remedial classes for students with disabilities. The present findings are paralleled with the findings of Karibasappa, Nishanimut and Padakannaya (2008) who found that there was close relationship between financing of education and increased need for remedial teaching for students with mathematical disabilities. Similarly, the study by Schwartz (2012) revealed that, there is no possibility of handling remedial classes once financial resource is scarce. The results of the current study, Karibasappa et al (2008) and Schwartz (2012) studies are caused by the fact that adequate financing, in this context free education provision, is a cornerstone of preparing and providing remedial classes for students, particularly students with disabilities, to catch up with the required knowledge and skills missed in regular classroom hours. Special teachers need to be motivated financially to conduct remedial teaching out of regular working ours to support students with learning difficulties. Not all students with disabilities requires remediation, however, due to disability conditions, some of students with disabilities faces learning difficulties hence needs extra learning sessions to catch up with lessons. Remedial classes are not only beneficial in imparting knowledge and skills left during regular teaching sessions, but also ensures fairness in provision of quality education to all students including students with disabilities. With absence of any remedial learning support, as revealed by Karibasappa et al (2008), children in such schools are moving from one grade to the next higher grade without mastering the necessary academic skills.

The findings reveal that, increasing fee-free education provision is connected to the increasing likelihood of improved examination procedures for students with disabilities. Hussu and Strle (2010) findings concurs with the present study that, provision of free education to all, regardless of any form of diversity consideration, has significant influence on conduction of assessment procedures that are inclusive and considerate. The same was also revealed by ElSaheli-Elhage and Sawilowsky (2016) that in Third-World countries, where the economy is not stable and educational sector is not well invested, assessment practices that accommodate all students without their disability conditions equally, are not well practiced. The reason behind the current study results, Hussu and Strle (2010) and ElSaheli-Elhage and Sawilowsky (2016) studies is absolutely due to the fact that, preparation of quality, fair and inclusive examination procedures are costly and affected to the higher extent by the level of economy among educational providers. Harris and James (2006) cemented that it is necessity to identify and implement assessment practices that can support students with disabilities achieve learning objectives and ensure the acquisition of the necessary skills. In parallel to that, government investment in financing education, particularly free education for all, will ensure availability of all necessary materials at schools for facilitating examination processes that are fair and inclusive to all students, including students with disabilities.

The findings reveal that, increasing fee-free education provision is connected to the increasing likelihood of extra costs of schooling affordability for students with disabilities. The findings are in line with Nakpodia (2010) who revealed that free education provision contributed to increasing ability of parents to incur indirect/additional costs of education since free educational provision reduced parents' financial burden. Unlike the findings of this study, the study by Sanga (2016) found high increase of extra schooling expenses such as transport, school uniforms and meals early years of the establishment of

free primary and secondary education in Tanzania. This might probably be caused by instability of fee-free education provision at the beginning of the program to the extent that parents, including parents of children with disabilities did not easily afford extra costs of schooling.

After introduction of fee-free education, the huge burden of paying schools fees which was previous parents' responsibility was now taken by government, while parents' remained with responsibility of paying extra costs of schooling only. This has increased to the higher extent parents' ability to send their children to school, since, many of them came to afford extra cost of schooling comparing to the time before fee-free education provision. However, along with the findings from Sanga (2016), studies shows that extra cost of schooling such as transport fee, meal and school uniform remains a burden to parents from poor social economic backgrounds including parents with children with disabilities (Dachi & Garrett, 2003; Chugh, 2011). Once government and educational stakeholders increases width of fee-free education provision by covering extra expenses such as school uniforms and meal costs, it will not only increase students' enrolment but also reduce parents' burden to send their children to school.

#### 4. CONCLUSION AND RECOMMENDATIONS

With regard to findings from the study, it is concluded that, fee-free education have significant influence on availability of teaching and learning materials for students with disabilities in public secondary schools ( $\beta = .868, P = .000$ ). An increased ability to provide fee-free education by abolition of various school fees, and increasing fund to finance schools, provides greater assurance of supply of teaching and learning materials for students with disabilities. Teaching and learning materials for students with disabilities are not only unique and expensive but also difficultly available for students with disabilities particularly those from poor socio-economic backgrounds. With presence of government' priority and commitment in financing fee-free education adequately, teaching and learning materials in public secondary schools will be made available, accessible while its conditions will be favorable to students with disabilities. Availability of teaching and learning materials in a school is major cornerstone of students' academic achievement particularly to students with disabilities.

From the findings of this study, it is recommended that; government as a major funder of fee-free education in public secondary schools should allocate sufficient budgets to finance schools to enable provision of education in a friendly manner to all students including students with disabilities. Likewise, special budget for students with disabilities in public schools should be introduced. It is also recommended that, general welfare of students with disabilities in all public secondary schools should be well observed and took into consideration by government and all educational stakeholders. In adhering to provision of quality and equitable education for all, executives are advised to supply necessary learning facilities, special teachers and friendly infrastructures in public schools to facilitate smooth learning for students with disabilities.

Also, it is recommended that further studies be conducted on the influence of fee-free education to the learning environment of students with disabilities in public primary schools level, so as to get a wider view of a matter from lower level of education and comprehend generalization of the findings.

#### REFERENCES

- [1] Alnahdi, G. H. (2014). Special Education Programs for Students with Intellectual Disability in Saudi Arabia: Issues and Recommendations. *The Journal of the International Association of Special Education*. 15 (1): 83-91.
- [2] Alwabli, A. M. (2006). The importance of applying certain procedures to identify students with mental retardation and their individual educational programs by special education programs in Saudi Arabia. *The Educational Journal*. Kuwait. Retrieved from <http://repository.ksu.edu.sa/jspui/handle/123456789/13388?locale=en>
- [3] Birdsall, N., Levine, R., & Ibrahim, A. (2005). Towards Universal Primary Education: Investments, Incentives, and Institutions. *Eur. J. Educ.* 40, 337-349. DOI: <https://doi.org/10.1111/j.1465-3435.2005.00230.x>
- [4] Chambers, J. G. & Hartman, W. T. (1983). *Special Education Policies: Their History, Implementation, and Finance*. Philadelphia: Temple University Press.
- [5] Chugh, S. (2011). *Dropout in Secondary Education: A Study of Children Living in Slums of Delhi*. New Delhi: NUEPA.
- [6] Dachi, H.A., & Garret, R.M. (2003). *Child Labour and Its Impact on Children's Access to and Participation in Primary Education: A Case Study from Tanzania*. London: DFID.

- [7] Eleweke, C. J., & Rodda, M. (2002). The Challenges of Enhancing Inclusive Education in Developing Countries. *International Journal of Inclusive Education*. 6(2), 113-126. DOI: <https://doi.org/10.1080/13603110110067190>
- [8] ElSaheli-Elhage, R., & Sawilowsky, S. (2016). Assessment practices for students with learning disabilities in Lebanese private schools: A national survey. *Cogent Education*. 3(2016):1-20. DOI: <https://doi.org/10.1080/2331186X.2016.1261568>
- [9] Ertmer, P. A. (2005). Teacher Pedagogical Beliefs: The Final Frontier in Our Quest for Technology Integration? *Educational Technology, Research and Development*. 53, 25-40. DOI: <https://doi.org/10.1007/BF02504683>
- [10] Grindei, L. & Benlloch-Dualde, J. (2015). *Adapting Learning Materials for Students with Disabilities*. (SALEILE - Project funded by the EU Lifelong Learning Programme), UK. Retrieved from [http://www.saleie.co.uk/SSSH/text/docs/Adapting\\_teaching\\_materials\\_V6\\_12May.pdf](http://www.saleie.co.uk/SSSH/text/docs/Adapting_teaching_materials_V6_12May.pdf)
- [11] Hair, J. F., Black, W. C., & Anderson, R. E. (2010). *Multivariate Data Analysis. A Global Perspective, 7th Edition*. Upper Saddle River: Pearson Education.
- [12] HakiElimu (2017). *The Impact of the Implementation of Fee-Free Education Policy on Basic Education in Tanzania: A qualitative study*. Retrieved from: <https://searchworks.stanford.edu/view/12184145>
- [13] Hussu, A. M., & Strle, M. (2010). The Assessment of Children with Special Needs. *Procedia Social and Behavioral Sciences*. 2, 5281–5284. DOI: <https://doi.org/10.1016/j.sbspro.2010.03.861>
- [14] Imaniah, I., & Fitria, H. (2018). *Inclusive Education for Students with Disability*. Retrieved from [https://www.researchgate.net/publication/322763722\\_Inclusive\\_Education\\_for\\_Students\\_with\\_Disability/link/5a6f1f200f7e9bd4ca6dab6c/download](https://www.researchgate.net/publication/322763722_Inclusive_Education_for_Students_with_Disability/link/5a6f1f200f7e9bd4ca6dab6c/download)
- [15] Karibasappa, C. N., Nishanimut, S. P., & Padakannaya, P. (2008). A Remedial Teaching Programme to Help Children with Mathematical Disability. *Asia Pacific Disability Rehabilitation Journal*. 19(2): 76-90.
- [16] Kattan, R. B. (2006) Implementation of Free Basic Education. *Education Working Paper Series*, No. 7.
- [17] Khamati, M. J., & Nyongesa, W. J. (2013). Factors Influencing the Implementation of Free Secondary Education in Mumias District, Kenya. *Journal of Social Science for Policy Implications*. 1(1): 32-47. Retrieved from [http://jsspi.com/journals/jsspi/Vol\\_1\\_No\\_1\\_June\\_2013/4.pdf](http://jsspi.com/journals/jsspi/Vol_1_No_1_June_2013/4.pdf)
- [18] Kumar, D. N. (2017). Role of Teaching Learning Materials in Quality Education of Children with Disabilities. *International Journal of Information Research and Review*. 04 (09): 4477-4480. Retrieved from <https://www.ijirr.com/sites/default/files/issues-pdf/2313.pdf>
- [19] Mashala, Y. P. (2019). The Impact of the Implementation of Free Education Policy on Secondary Education in Tanzania. *International Journal of Academic Multidisciplinary Research*, 3 (1), 6-14. Retrieved from <http://ijeais.org/wp-content/uploads/2019/01/IJAMR190102.pdf>
- [20] Momoh, S. O. (2010). Instructional Strategies and Students Performance in Secondary Schools. *Science Journal of instructional psychology*. 35 (2). DOI: 10.5897/IJEAPS2014.0347
- [21] Muindi, M. M. (2011). *Impact of Free Secondary Education on Quality of Secondary Education in Katangi, Yatta District, Machakos County, Kenya*. (Masters' Research Project), Kenyatta University, Kenya.
- [22] Musabila, A. K. (2012). *The Determinants of ICT Adoption and Usage among SMEs: The Case of the Tourism Sector in Tanzania*. Amsterdam: VRIJE Universiteit, Academisch Proefschrift.
- [23] Nakpodia, E.D. (2010). An Analysis of Dropout Rate among Secondary School Student in Delta State, Nigeria (1999-2005). *Journal of Social Sciences*, 23(2), 99-103. DOI: <https://doi.org/10.1080/09718923.2010.11892817>
- [24] Ngwaru, M., & Oluga, M. (2015). Educational Infrastructure and Resources for Sustainable Access to Schooling and Outcomes: The Case of Early Literacy Development in Southern Tanzania. *Africa Education Review*. 12 (1): 88-108. DOI: 10.1080/18146627.2015.1036570

- [25] Okongo, R. B., Ngao, G., Rop, N. K., & Nyongesa, W. J. (2015). Effect of Availability of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-School Centers in Nyamira North Sub-County, Nyamira County, Kenya. *Journal of Education and Practice*. 6 (35): 132-141. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1086389.pdf>
- [26] Pallant, J. (2010). *SPSS SURVIVAL MANUAL: A Step by Step Guide to Data Analysis Using SPSS, 4th edition*. Maidenhead - Berkshire, England: McGraw - Hill Education.
- [27] Pillay, H. (2000). Cognition and Recreational Computer Games: Implications for Educational Technology. *Journal of Research on Computing in Education*. 32(1): 32-41. DOI: <https://doi.org/10.1080/08886504.1999.10782624>
- [28] Quinn, C. N. (1996). Designing an Instructional Game: Reflections for Quest on Independence. *Journal of Education and Information Technologies*. 1(1): 251-269. DOI: <https://doi.org/10.1007/BF02350662>
- [29] Riddell, A (2003) The Introduction of Free Primary Education in Sub-Saharan Africa. *Education for All Global Monitoring Report 2003/4, Gender and Education for All: The Leap to Equality*. Retrieved from <http://unesdoc.unesco.org/images/0014/001469/146914e.pdf>
- [30] Right to Education Project (2014). *International Instruments: Free and Compulsory Education*. Retrieved from [http://www.right-to-education.org/sites/right-to-education.org/files/resourceattachments/RTE\\_International\\_Instruments\\_Free\\_and\\_Compulsory\\_2014\\_en.pdf](http://www.right-to-education.org/sites/right-to-education.org/files/resourceattachments/RTE_International_Instruments_Free_and_Compulsory_2014_en.pdf)
- [31] Rose, M. (2015). *Education in North Africa since Independence Country Profile: Algeria*. British Council. Retrieved from <https://www.britishcouncil.org/sites/default/files/education-in-north-africa-since-independence-algeria.pdf>
- [32] Sanga, B. (2016). The Rising Cost of Schooling and the Rate of Dropout among Ward Secondary School Students in Morogoro Urban District. *International Journal of Social Science and Humanities Research*, 4 (4), 180-185. Retrieved from <https://www.researchpublish.com/pdfviewer/THE%20RISING%20SCHOOLING%20COSTS%20AND%20THE%20RATE%20-3863.pdf>
- [33] Shukia, R. (2020). Fee-free Basic Education Policy Implementation in Tanzania: A 'Phenomenon' Worth Rethinking. *Huria Journal*: 27 (1), 115-138. Retrieved from <https://www.ajol.info/index.php/huria/article/view/204346>
- [34] The Kesho Trust (2013). *Access to and Provision of Pre-Primary and Primary Education to Children with Disabilities in Tanzania*. Retrieved from [with-disabilities-in-Tanzania.pdf](http://www.keshotrust.org/with-disabilities-in-Tanzania.pdf).
- [35] UNESCO (2002). *EFA Global Monitoring Report 2002 "Education for All: is the World on Track?"* UNESCO Publishing. Retrieved from <http://www.unesco.org/en/efareport/reports/2002-efa-ontrack/>.
- [36] URT (2009). *Basic Education Statistics in Tanzania*. Dar es Salaam: Government Printers.
- [37] URT (2005). *Constitution of the United Republic of Tanzania*. Dar es Salaam: Government Printers.
- [38] URT (2016). *Enrolment in Secondary Schools by Gender and Grade 2016*. Retrieved from <http://statistics.go.tz/dataset/uandikishaji-katika-shule-za-sekondari-kwa-jinsi-na-darasa-2016/resource/50542f08-4a9a-4ff4-a881-42414728b752>
- [39] WHO (2011). *World Report on Disability*. Malta: WHO Press.
- [40] Zahir, D. D., Bayoumy, K. H., El Shukhebi, A. & Abdel, K. M. (2006). *Education Finance in Egypt*. Dakar: CODERSIA-ADEA.