

**ASSESSMENT OF STUDENTS' ACADEMIC PERFORMANCE UNDER
SECONDARY EDUCATION DEVELOPMENT PLAN (SEDP I)
IMPLEMENTATION: THE CASE OF NYAMAGANA DISTRICT, TANZANIA**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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ABSTRACT

The study was conducted to assess students' academic performance under Secondary Education Development Plan (SEDP I) implementation in Nyamagana District, Tanzania. Data were collected using both structured and non-structured interviews. Field observations and secondary data supplemented the data collected using questionnaires. Purposive sampling procedure was used to select 5 schools that were in place before and after SEDP I implementation. At the school level, 12 teachers and 8 students from each school were randomly picked leading to a sample size of 100 respondents. The collected data were analyzed using SPSS software. The results indicated that there was no significant difference ($P < 0.05$) in students academic performance before and after SEDP I implementation. The results suggested that major factors which could have affected students' academic performance included poor teaching/learning environment such as inadequate classrooms, text books, basic laboratory and library equipment/facilities. These were largely attributed to inadequate funding of the planned activities, misallocation of funds, poor participation by the key stakeholders and untimely disbursement of funds. In light of the above, it is recommended that successful implementation of future similar programmes should take into consideration the following: (1) Provision of adequate funds for budgeted activities and proper financial management, (2) Sensitization of key stakeholders in programme/project management, (3) Provision of regular in service training to teachers aiming at improving teaching methodology and professional skills, and (4) training more teachers in mathematics and science based subjects in order to reduce the existing deficit.

DECLARATION

I, Susana Makoye, do hereby declare to the Senate of Sokoine University of Agriculture that this is my original work done within the period of registration and that it has neither been submitted nor being concurrently submitted in any other institution.

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Date

The above declaration is confirmed

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Date

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DEDICATION

This work is dedicated to the Almighty God the provider of guidance throughout my life, my beloved husband Mr. Ramadhani Bilal and our children Bilal R. Bilal and Clara Nyang'ala and my mother Mrs Francisca Gregory who laid down the foundation of my education with a lot of sacrifices and efforts. Almighty God blesses them forever, AMEN.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
BEMP	Basic Education Master Plan
DEO	District Education Officer
DSI	Development Studies Institute
EFA	Education for All
ESDP	Education Sector Development Programme
ESR	Education for Self-Reliance
ETP	Education and Training Policy
Fig.	Figure
GERs	Gross Enrolment Rates
GoT	Government of Tanzania
HIV	Human Immunodeficiency Virus
LAs	Local Authorities
NGOs	Non-Governmental Organizations
SE DP	Secondary Education Development Programme
SMP	Secondary Master Plan
PEDP	Primary Education Development Programme
SNAL	Sokoine National Agricultural Library
SPSS	Statistical Package for Social Sciences
SSA	Sub-Saharan Africa
TETP	Tanzania Education and Training Policy
UN	United Nations
URT	United Republic of Tanzania
UPE	Universal Primary Education
WB	World Bank

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

It is a common phenomenon for any organization to use various methods to assess and judge the quality of services it provides and the effectiveness of that organization in attaining its objectives. In a teaching-learning situation, assessment means finding the extent to which a curriculum being followed is of the acceptable standards (Margaret 2009; Aikaman and Unterhalter, 2005). The term performance or achievement is viewed as the effect of attitude and consistent overt behaviour that can be manifested by an individual through a pattern of performance in a given task (Anderson, 1942). The desire to use education for national development is very compelling. Thus, the faith of education in a given society is not only meant for political socialization but also for other functions and for economic growth (Best, 1984).

Although education is instrumental for sustainable development, one of the problems encountered in most of the developing countries is poor students' academic performance. For instance, in Nigeria there is a consensus of opinion about the fallen standard of education. Parents and the government are also in total agreement that secondary education is not yielding the desired dividend (Asikhia, 2010). In Tanzania, there is a concern about the quality of education provided in secondary schools. Different people at different times have passed the blame of poor academic performance to the government (URT, 2003). Poor academic performance is a performance that is judged by the examinee as falling below an expected standard. Students' academic failure is not only frustrating to the students and parents, its effects are equally grave on the society in terms of dearth of manpower in all spheres of the economy and politics (Aremu and Oluwole, 2000).

Following the concern by education stakeholders on poor education performance in secondary schools, the government of Tanzania established Secondary Education Development Plan (SEDP) in July 2004 in order to improve access with equity, quality, management and delivery of secondary education targeting to improve student's performance in the country. SEDP was launched due to the visible success outcomes of PEDP (Primary Education Development Plan) with a general enrolment rate of 105.3% and net enrolment rate of 88.5% and gender parity of 49.9% for girls (2003). SEDP was also developed within the context of the broad Education Sector Development Programme (ESDP) of 1997 and the Secondary Master Plan (SMP) of 2000 (URT, 2003).

The main aim of SEDP was to raise the pass rate of division I-III from 36% in 2004 to 70% by the year 2009 through in-service courses for up-grading and continuous professional development of teachers. SEDP was also involved in curriculum review, improvement of school libraries, provision of capitation grant for teaching and learning materials and other charges, improvement of examination structure, expansion of production of diploma and degree teachers including sensitization and education on HIV/AIDS, gender and environment. All these efforts were designed to improve students' academic performance in secondary schools. However, the pass rate at Certificate level for Secondary Education Examination of Division I-III is still lower than 40% after 5 years of SEDP I implementation (URT, 2010).

1.2 Problem Statement

It is now over three years since SEDP I came to an end. The focus was to improve students' academic performance by raising the pass rate from 36% to 70% through improvement of teaching/learning environment. Irrespective of the government efforts, improved academic performance is still a major problem. By the year 2009 the pass rate

was still less than 40% (URT, 2010). The objective of raising the pass rate from 36% to 70% was not realized. The question, therefore is, what is the cause of this fallen standard? Is the fault entirely that of teachers or students or both? Or is it because teachers are no longer putting in much commitment? Or is it in teachers' methods of teaching and interaction with students? Or is the poor performance caused by provision of insufficient funds that could not suffice the planned activities? The problem of poor performance in examinations is costly for any country since education is a major contributor to economic growth (Atkinson, 2000). It would appear that strategies used in implementing SEDP I as a tool for improving students' academic performance failed to achieve the intended objectives. The reasons for poor performance cannot be easily discerned without focused investigation. This study was therefore undertaken in order to identify and assess possible factors for poor academic performance in secondary schools under SEDP I.

1.3 Justification for the Study

The current National Strategy for Growth and Reduction of Poverty in cluster II emphasizes on improvement of quality of life and social well-being, especially provision of quality education. SEDP was established to improve provision of quality education by promoting students' academic performance. The study is in line with Tanzania Development Vision 2025 which accords high priority to the education sector. The Vision envisages Tanzania to be a country with a well educated and learning society by the year 2025. The education sector is seen as being pivotal in bringing about the desired socio-economic transformation required to realize the vision targets. This study was therefore conducted to assess students' academic performance under SEDP I implementation in government secondary schools in Tanzania. The outcome of this study will provide a framework for improvement of the ongoing SEDP II and other programmes intended to improve secondary school education in Tanzania.

1.4 Objectives of the Study

1.4.1 General objective

The general objective of this study was to assess students' academic performance under SEDP I implementation.

1.4.2 Specific objectives

- (i) To analyse factors likely to influence student's academic performance in Nyamagana District.
- (ii) To compare students academic performance before and after implementation of SEDP I.
- (iii) To examine major constraints faced during implementation of SEDP I.

1.5 Key Research Questions

- (i) What were the trends of student's performance before and after SEDP I implementation?
- (ii) What were the major factors which influenced students' academic performance?
- (iii) What mechanisms were put in place to ensure improvement of students' performance?
- (iv) What challenges did the schools face as far as the implementation of SEDP I is concerned?

1.6 Conceptual Framework

The current study was guided by the conceptual framework shown in Fig. I. The conceptual framework tries to put into perspective the relationship between the background variables, independent variables and intermediate variables and how these are related to the dependent variables. It allows drawing policy implications on possible ways

that would be used to improve government secondary school education. The definition of key variables (background, independent and dependent variables) used are given in Appendix 1.

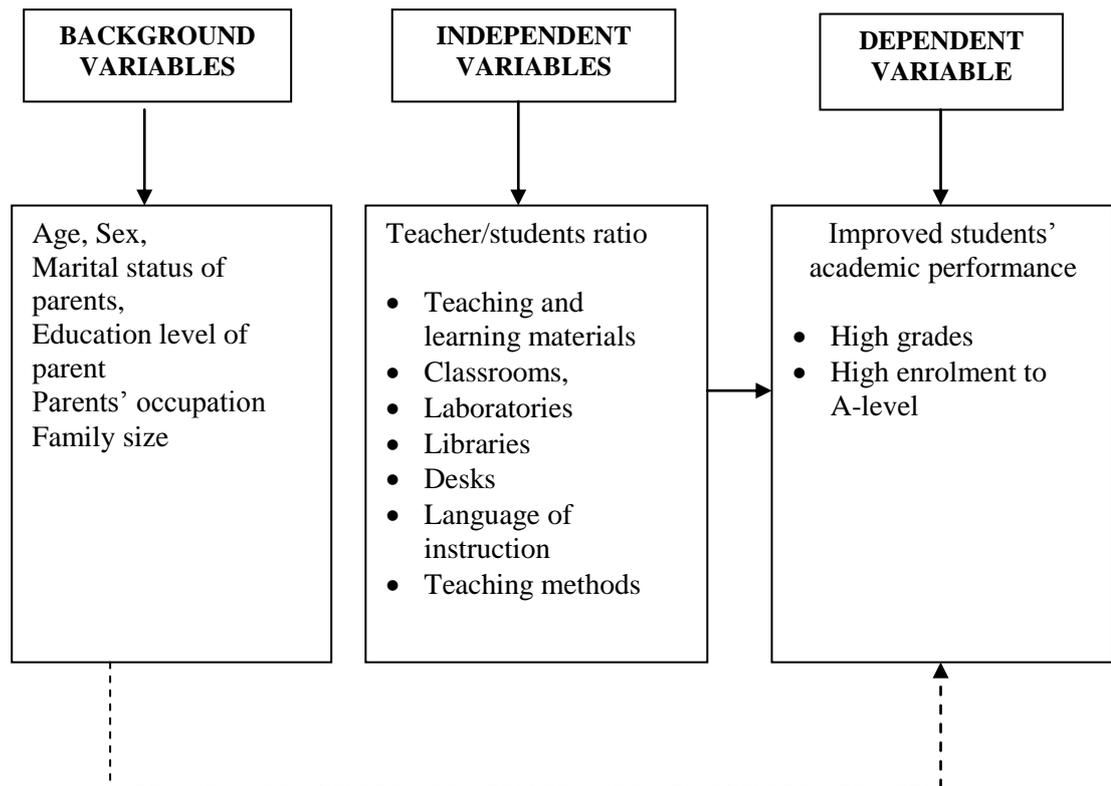


Figure 1: Conceptual Framework

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 The Concept of Education and the Role of Education in Development

Education involves the process by which people learn through instruction, teaching and learning. Instruction refers to the process of facilitating learning, by a tutor or teacher (Wikipedia, 2011). Education can be referred to as the general knowledge in basic skills. In general the concept of education is about the processing of knowledge, using inspiration, visionary ambitions, creativity, risk, ability to bounce back from failure. Education on the other hand, is a process of preparing the young generation for future membership in the society (Nyerere, 1968).

Regardless of economic, social and political development of a given country, the need to have quality education becomes the concern of all countries in the world. Quality education should therefore be maintained for increasing productivity of the people and material wealth which enhances the other sphere of development. UNESCO (2000) argues that quality education depends crucially on the teaching and learning process as well as on the relevance of the curriculum, the availability of materials and the conditions of the learning environment. Mushi and Penny *et al.* (2003) observed that in developing countries, evidence suggests that school effectiveness is direct linked to material inputs such as textbooks, teachers' quality, availability of libraries and laboratories with equipments and basic facilities.

The role of education is to impart on beneficiaries, knowledge, skills, values, attitudes and aspirations important for development and being able to function as economies and social change agents in a society (Nsubuga, 2003). Education has to do with passing ideas and

concepts to the young generation so that they may acquire knowledge that is to be used to bring about development in the society (Qorro, 1997). Quality education develops strong and acceptable culture of the society and discourages unacceptable and harmful culture. Education as a tool for liberation has to liberate both mind and the body of human beings. Education is an important tool for the development of an individual, the society and the nation at large. Education on the other hand, is a process of preparing the young generation for future membership in the society (Nyerere, 1968).

2.3 The Concept of Academic Performance

Performance in education is an incredible way to engage with students in stimulating learning and inspire interactive learning and experiences that make a difference and leave a lasting legacy (Morsha, 2000). Student's academic performance has become a source of concern to researchers, especially as the academic performance of the students' is declining. Isangedigh (1998) stresses that academic performance is regarded as participants' examination grades (Grade point average) at the end of a particular semester or programme. It could also be seen as the level of performance in a particular field of study. Higher scores indicate better academic performance. The society places great emphasis on education because it is believed to be the only avenue for national development. Karemera (2003) found that students' performance is significantly correlated with satisfaction with academic environment and service received. However, this can only be achieved if students' who are in the citadel of learning get actively involved in academic activities will enhance their academic performance.

Students' academic performance is generally associated with how well or bad have they achieved in relation to cognitive, psychomotor and affective domains (Armstrong, 2004). There is a significant relationship between teachers' years of experience and students'

academic performance (Owolabi, 2007). Abraham (2006) and Darling- Hammond (2000) agree that teachers' years of experience is a measure of quality which is important in the achievement of students' academic performance. Poor academic performance is a performance that is judged by the examinee and some other significant stakeholders as falling below an expected standard. Bakare (1994) stresses that academic failure is not only frustrating to the students and the parents but its' effects are equally grave on the society in terms of death of manpower in all spheres of the economy and politics.

Education at secondary level is supposed to be the bedrock and the foundation towards the higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development of the individual for further education and development of the society (Nconco, 2006). The role of secondary education is to lay a foundation for further education and if a foundation is laid at this level, there are likely to be no problem at subsequent levels.

2.4 The Enrolment Status of the Government Secondary Schools in Tanzania

The government of Tanzania has over the years formulated policies and strategies aimed at expanding overall access to secondary and tertiary education. Legitimate concerns arise regarding the impact of alternative patterns of expansion on equity and on learning outcomes. Rapid expansion of secondary education in Tanzania appears to be accompanied by two important developments; that is a noticeable decline in the proportion of children from peasant backgrounds and increased competition among schools for teaching staff and school heads (URT, 2005). As much it is a good as idea to expand enrolment, meaningful outcome has to be associated with provision of basic facilities and equipments in order to increase education quality. In 2004 the government embarked on

ambitious plans for the improvement of the secondary education through the Secondary Education Development Programme (SEDP). It was implemented for 5 years, with the first phase covering the period 2004-2009. The Plan identified key five areas which were: Improving quality of education, increasing access, expansion and affordability to education, equity (gender, geographical and socio-economic status) in education, efficiency (cost effectiveness) in provision of education. Other areas of focus included strengthening management capacity and control of HIV/AIDS.

2.5 Factors Likely to Influence Students' Academic Performance

A number of studies have been carried out by numerous researchers on factors that influence students' academic performance. These can be grouped as; family related factors, school related factors and those related to students.

2.5.1 Family related factors

Different home environments vary in many aspects such as parent's level of education, economic status, occupation and family size which in turn might influence students' performance physically, intellectually and emotionally (Ajila and Olutola, 2000). Increased parental involvement in academic affairs of the child is associated with positive development in communication, daily living and motor skills. For Children whose parents are more involved in school affairs they show greater mastery of basic school skills (Loxley and Heyneman, 1983). Parents' involvement has a lasting effect throughout the educational careers of students (Kasprow, 2001). According to Lawrie (1992) parents' perceptions of the abilities of their children may be a powerful developmental influence on how the children will come to view their ability. Haladyna (1982) observed that children's perceptions of their abilities will influence expectations for success, achievement, interest in school subjects and future careers. Family income level has a bearing on students'

academic performance. Students' from poor families' background can rarely access basic learning facilities such as textbooks (Bregman and Brayner, 2003). A family size also influences students' academic performance. A family size refers to the number of people in the reference family. Ajayi (1988) asserts that the larger the family the less the attention and devotion of each child by parents and the more the difficulties encountered by the parents in meeting the needs of their children both physically and emotionally.

A school's ability to add value to students' learning depends on prevailing socio-economic factors. Students from a better socio-economic background have access to supplemental resources and material to support their educational progress. Schools with a larger share of these students might perform better than their counterparts (Marches and Martin, 2002). There is evidence that parents' education will also affect students' academic achievement. According to Grissmer (2003) parents' level of education is the most important factor affecting students' academic achievement. Musgrave (2000) observed that a child who comes from an educated home will most likely emulate parents' educational behavior.

Parents who have more than a minimum level of education are expected to have a favoured attitude to the child's education background. Morish (1995) believes that well educated parents will wish their own children to benefit as they have done from their good education. Such parents assist their children with school work. They are likely to have a wider vocabulary by which the children can benefit and develop language fluency. Onocha (1985) concludes that a child from a well educated family with high socio-economic status is more likely to perform better than a child from an illiterate family.

2.5.2 School related factors

School conditions have an impact on students' academic performance. Inadequate resource materials for teaching/learning, large class sizes and teachers overload are

conditions which can lead to teachers' poor attitude to work and ineffectiveness. Bacharach and Bauer (1986) observed that lack of resource materials for teaching/learning has a direct effect on the teacher's ability to perform and an indirect impact on teacher's motivation and satisfaction. No matter how motivated or competent employees may be, lack of adequate resources will prevent them from accomplishing their responsibilities and may even result in frustration and de-motivation. A positive school climate can yield positive educational and psychological outcomes for students and school personnel whereas a negative climate can prevent optimal learning and development.

Similarly, the entire unattractive physical structure of the school building could demotivate students' to achieve academically and therefore promoting poor academic performance. Kutner (1973) observed that overcrowding in schools is a serious problem in many school systems where in some cases students find themselves trying to learn while jammed into spaces never intended, making learning quite undesirable. Sumra (2004) observed that class sizes studies in developing countries have shown influence on student academic performance and satisfaction. Having fewer children in a class reduces the distractions in the room and gives the teacher more time to devote to each child. Inadequate resource materials for teaching are indeed a major problem in government secondary schools in Tanzania. Good quality materials can motivate interest, maintain concentration and make learning more meaningful.

2.5.3 Role of teachers on students' academic performance

Teachers in schools are the ideal people as well as in the best situation to promote active learning amongst students in schools. Active learning is about energizing and sustaining attention of students, who then become very interested in doing any classroom activities. The value given from teacher to pupil and vice-versa are usually reciprocal, highlighting

additionally the personal relationship. Marches and Martin (2002) observed that teachers' expectations significantly influence students' performance. Atkinson (2000) found positive relationship between teacher motivation and students' performance. Malila (2003) observed that students' performance is affected by teachers' motivation in terms of provision of basic facilities such as housing, transport allowance and basic training including in-service courses. Adeyemo (2005) observed that motivated teachers are expected to provide quality service. Adediwura (2007) and Schacter and Thum (2004) argue that professionalism has relevant significance in education that may affect the role of teachers and their pedagogy.

Secondary school students appear to learn more from teachers with significant course and professionally trained (Darling-Hammond, 1988). Reynolds and Seymoler (2007) maintain that professional teacher's increase skills on work which make students to be able to use and adopt new learning technologies which in turn enhance academic performance. Bregman and Bryner (2003) observed that teachers with solid knowledge of the subject, interactive pedagogy, are only useful if they are able to perform effectively in teaching. Rowe and Sykes (1959) noted that the students' performance is the function of both their attitude and the interaction between them and their teachers. Effective teaching is a significant predictor of students' academic achievement.

Therefore, effective teachers should produce students of higher academic performance. Umansky (2005) observed that students of better teachers consistently achieve better learning outcomes. For teacher performance to reach and remain at acceptable levels, effective incentive structures, oversight mechanisms and teacher accountability are key. ICFE (2000) observed that students' academic performance is largely associated with qualifications of their teachers. The learner's creativity, higher order thinking and natural

curiosity all contribute to motivation to learn. Malila (2003) observed that students with intrinsic motivation in academic would have higher self-perceptions of competence in academics. Osaki (2004) believes that high motivation and engagement in learning are consistently linked to increased levels of student success.

2.5.4 Students' characteristics on academic performance

Individuals are born with and develop their own capabilities, skills and talents. Gonzalenz (2002) observed that self motivation, age of students and learning in schools emphasize the use of intentional processes that students can use to construct meaning from information, experiences and their own thoughts and beliefs. Successful students are active, goal-directed, self-regulating and assume personal responsibility for contributing to their own learning. They participate actively in class, do their task diligently and submit them on time. They do tasks with some objective or goal in mind. They are self discipline and very responsible in whatever endeavor they do. Peer groups provide experiences to those who are growing up. The adolescents take solace in interacting with their peers and they prefer to keep longer time with them than with their parents (Umansky, 2005). Buote's (2001) observed that there is a positive correlation between performance and peer relationship. According to him students failing in school are those most rejected by their peers. Students whose peers have higher educational aspirations tend to have more positive academic self-concepts themselves. They are more engaged in schools and have higher hopes for their lifelong education than students whose peers have low educational aspirations (Ibid, 2001).

2.5 5 Impact of external factors on students' performance

External factors play an important role on student's academic performance. Frequently sighted factors include external indebtedness and HIV/AIDS. Vandemoortele *et al.* (2000)

point out that one of the reasons why governments under- invest in education is the high burden of debt. Debt payments absorb 30 per cent or more of the national budget, with several countries spending more on debt servicing than on basic social services such as provision of quality education. They point out that overspending in debt savings instead of education is not only morally wrong, it is also economically inefficient. Mbelle (2002) indicated that the multiple of external debt servicing to education spending ranged from 1.7 to 4.6 in Tanzania in the 1990s. Recent evidence on the impact of HIV/AIDS points to the adverse impact on school enrolment, dropout rates and teacher availability. A high rate of prevalence among adults weakens the ability to support children in schooling (UNAIDS/ ECA, 2000; Mbelle, 2001b).

2.6 Gender Disparities on Academic Performance

In many developing countries boys outwit girls in terms of access and retention rates in education. Gender differences vary widely across countries as well as within countries depending on subject matter and grade level (ICEF, 2000). In most cases girls outperform boys at lower grades usually excelling in literacy while boys outperform girls in numeracy (Ibid, 2000). Extra domestic chores are frequently cited as one of the reasons that lead to such situation. Maliyamkono and Ogbu (1999) contend that a number of reasons have been cited to explain the relatively low academic performance of girls in Tanzania. They include cultural attitudes towards the education of girls, and women who are “required” to work more at home, early marriages and unplanned pregnancies. According to the World Bank (2010) public spending on education; total (% of GDP) in Tanzania was last measured at 6.18. Public expenditure on education consists of current and capital public expenditure on education, education administration as well as subsidies for private entities.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Description of the Study Area

This study was conducted in Nyamagana District which is one of the eight districts in Mwanza Region. It is bordered to the north by Misungwi District, Magu to the east district, Lake Victoria to the west and to the south by Ilemela District. The district comprises of eleven wards and one division. The district has thirty nine secondary schools. Among those, twenty eight are government owned and eleven are private secondary schools. This district was purposively selected to represent other districts in Tanzania in which SEDP I was implemented.

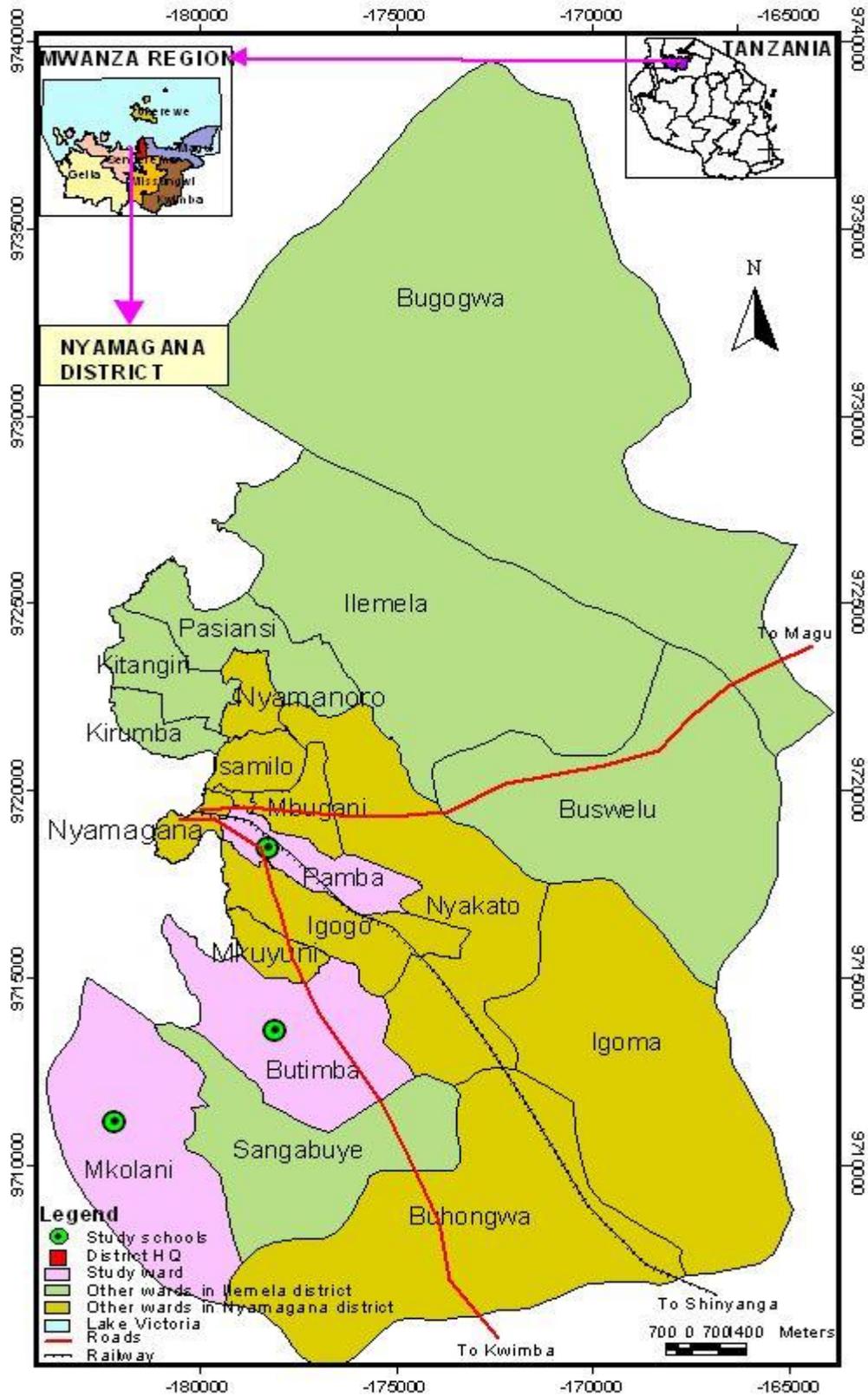


Figure 2: Map of Nyamagana district showing the study area

3.2 Research Design

A cross sectional research design was employed. This design allows data to be collected at a single point in time. It is used in descriptive research studies and is appropriate to social science research. The design is considered to save time and resources and is eventually used for determination of relationship between variables (Bailey, 1998). The design is considered to be favorable in situations of limited resources and time.

3.3 Sample Size

The study comprised of 100 respondents drawn from the study area which included 60 teachers and 40 students. This selection was also based on Bailey's (1998) observation, that regardless of the population size, a sample of 30 respondents is the bare minimum for studies in which statistical data analysis is to be done. Key informants included Nyamagana's District education officer (DEO), ward education officer (WEO) and 10 selected members of school boards.

3.4 Sampling Procedure

A multistage sampling technique was adopted because it allows more than one sampling method to be used (Bailey, 1998). Combinations of purposive and random sampling procedures were used. Purposive sampling was employed to select government secondary schools that were in place before and after SEDP I implementation. Based on a list of the names of all the schools in Nyamagana District five selected schools that is, Butimba, Mwanza, Nsumba, Pamba and Mkolani secondary schools were purposefully selected because some of the schools belong to the so called "shule za kata" it would had been to hear from the community perspective (parents). Systematic random sampling technique was used to select 100 respondents (60 teachers and 40 students) using school registers as a sampling frame whereas 12 teachers and 8 students from each school were selected.

3.5 Data Collection Instruments

3.5.1 Primary data

Primary data were collected using structured questionnaires designed to address specific objectives of the study. Open and closed-ended questions were included in the teachers and student's questionnaires designed to make sure that specific objectives were answered. Pre-testing of the questionnaire was carried out in three secondary schools which were not included in the study but with similar characteristics. Based on the results of the pre-testing the questionnaires were adjusted accordingly. These are attached as Appendices 3 and 4. Focused group discussions (FGDs) with key informants were carried out using a checklist of questions for reflecting the reality on the ground (Appendix 5). Physical observations were carried out to assess the existing facilities and infrastructure. These were done in order to verify and supplement the information collected from primary data and FGDs. Documentation was mainly through taking photographs.

3.5.2 Secondary data

Secondary data were obtained from documents reviewed from District Education Offices and websites of various institutions such as NECTA and Ministry of Education and Vocational Training.

3.5.3 Data processing and analysis

Quantitative and Qualitative methods were used to analyze data. Primary data collected through questionnaires were summarized, coded and entered into the Statistical Package for Social Sciences (SPSS) programme for analysis. Qualitative information from key informants was synthesized based on their themes. Frequencies and percentages were used in descriptive analysis in order to determine distribution among respondents' response on factors that are likely to influence students' performance. Paired samples t- test was

employed to compare student's academic performance before and after SEDP implementation.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

This Chapter discusses major findings arising from the study. The chapter is organized as follows: background and socio economic characteristics, comparison of students' performance before and after SEDP I implementation, factors that are likely to influence students' academic performance and major constraints faced during the implementation of the programme.

4.1 Background and Socio Economic Factors

Teachers and students personal characteristics have an important social connotation that could influence students' academic performance. Among the most important teachers' and students' personal characteristics dealt with in this study were sex, age, marital status, professional skills and level of education and duration of tenure in the teaching service.

4.1.1 Sex and age

It was assumed that sex of teachers and students could influence students' academic performance. The results in Table 1 show that 47.4 % of teachers respondents were males and 52.6% were females. The results also indicate that 57.5 % of the students were males whereas 42.5% were females. The numbers of male and female respondents did not differ much. A possible explanation could be that both male and female teachers/students were exposed to similar social and academic environments and assessed using the same criteria. Ugoji (2008) observed that academic performance is a matter of personal determination rather than sex category.

The results in Table 1 also indicate age of teachers and students. About 57% of the teachers were in the age group of 35-45 whereas 23.4% were over 45, and 19.3% of the teachers were in the age group of 25-35 years. These results suggest that most teachers were in the active age pointing to a possibility of performing well in their teaching/learning process. Active teaching is about energizing and sustaining attention of students, who then become interested in doing classroom activities. Owolabi (2007) observed that there is a significant relationship between teachers' years of experience and students' academic performance. Results in Table 1 also indicate that the majority of the students (82.5%) were in the age group of 12-17 years and a few (17.5%) were in the age group of 17-20 years. The results imply that most of the students were in acceptable age range for secondary school students in Tanzania. Buote (2001) showed that there is a positive correlation between performance and peer relationship that students failing in school are those most rejected by their peer group members. Students whose peers have higher educational aspirations tend to have more positive academic self. Sex and age are very important demographic characteristics. They are the most basic characteristics of a population as the information is used for a wide range of planning and administrative purposes (Mabula, 2007).

Table 1: Demographic characteristics of the respondents (n=100)

Characteristics	Teachers (n = 60)		Students (n = 40)	
	Frequency	Percent	Frequency	Percent
Sex				
Male	28	47.4	17	42.5
Female	32	52.6	23	57.5
Age				
12-17	0	0.0	33	82.5
17- 20	0	0.0	7	17.5
25-35	12	19.3	0	0.0
35-45	34	57.3	0	0.0
Over 45	14	23.4	0	0.0

4.1.2 Education level and teaching profession of teachers in the study area

Teacher's level of education and experience in teaching career is frequently cited as one of the factors that influence students' academic performance. Adu (2007) observed that effective teachers produce high performing students.

Table 2: Education level and teaching profession of the teachers in the study area

Characteristics	Frequency	Percentage
Education level		
Ordinary Diploma	29	48.4
Degree	31	51.6
Professionalism		
Professionally teachers	58	97.0
Other professions	2	3.0

The findings given in Table 2 show that 51.6% of the teachers were degree holders whereas 48.4 % were ordinary diploma holders. The results suggest that a significant proportion of teachers had modest levels of education that could enable them to perform in terms of provision of quality education. Bregman and Bryner (2003) observed that teachers with solid knowledge of the subject, interactive pedagogy are only useful if they are able to perform effectively in teaching. ICFE (2000) observed that students' academic performance is associated with school-related factors such as qualifications of teachers. Improved education level among teachers point to a possibility of enhanced awareness in terms of learning new practices and technologies hence improved students' academic performance. Lassa (2000) observed that education cannot be provided by just anybody; it requires a teacher who plans and delivers the lessons or instruction in such a way that objectives can be achieved. Thus, there is a need to focus on teachers' adequacy and competency in respect to their pedagogical practices and strategies and mastering the curriculum and subject content. The results also indicated that 97% of teachers were professional teachers whereas 3% were specialised in other fields. Professionalism has

relevant significance in education that may affect the role of teachers and their pedagogy, which in turn may affect student's ability to learn effectively (Darling-Hammond, 1988). Reynolds and Seymoler (2007) maintain that professional teachers are usually skillful enough to be able to use and adopt new learning technologies in enhancing students' academic performance.

4.1.3 Students' social, demographic and economic backgrounds

The interviewed students were asked to indicate occupation, education level, family size and marital statuses of their parents. Different home environments varied in many aspects such as parent's level of education, economic status, occupation and family size which in turn might influence students' performance physically, intellectually and emotionally.

The results in Fig. 3 indicate that 62.5% of parents had primary level of education whereas 12.5% had secondary school education. Generally, the results suggest that most of parents' in the study area have low level of education. This implies that parents with low level of education may have limited follow up to their children pointing to a possibility of poor academic performance (Atkinson, 2000). Grissmer (2003) argues that parents' level of education is the most important factor affecting students' academic achievement. Ogunlade (1995) observed that children of illiterate homes are likely to perform worse than their counterparts. The results in Fig. 3 also indicate that 76.7% of the parents were engaged in petty business which could be related to their level of education. Low socio-economic status level strongly affects the achievement of students, dragging them down to a lower level (Sander, 2001). Durojaiye (1997) observed that income and occupation do correlate with child academic skill development. Moreover, the results in Fig. 3 indicate that 58.4% of families constituted family sizes ranging from 6 to 10 people whereas 19%

had family sizes of less than 5 people. The results suggest that most families in the study area had big family sizes. The family size in which a child grows may affect student's intellectual development (Ajayi, 1988). A parent with a small family is expected to provide physical needs to his/her children and will also be in a position to give them attention, encouragement, stimulation and support with their school work (Loxley and Heynemann, 1983).

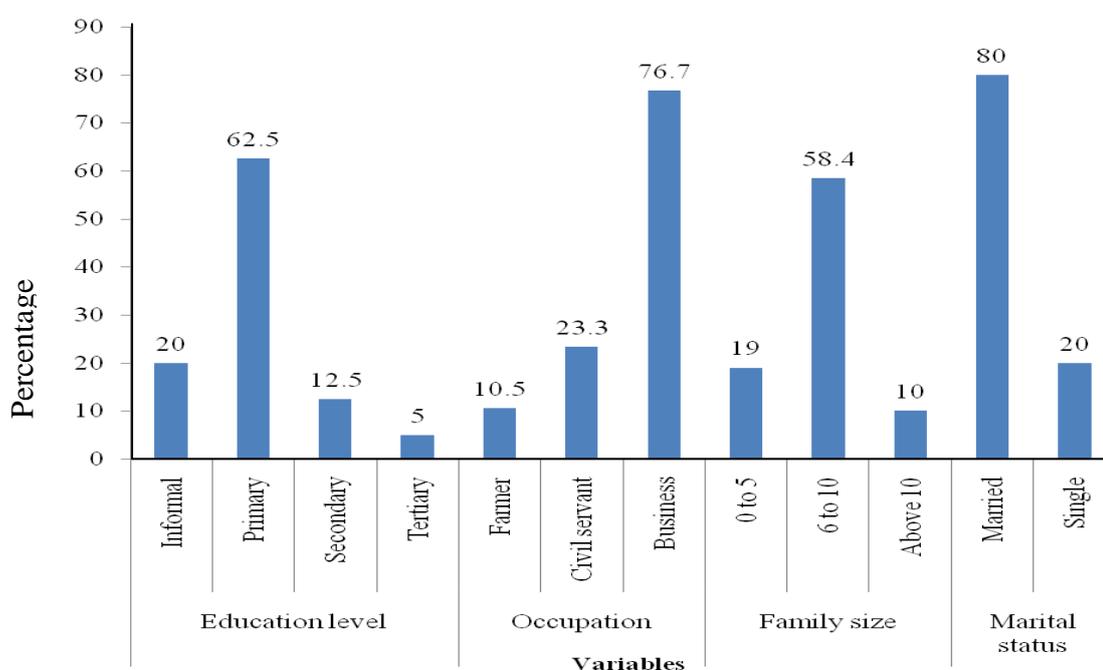


Figure 3: Parents' education level, occupation, family size and marital status

The results in Fig. 3 further indicate that most of the students (80%) came from households with married couples whereas 20% were from single parent households. The implication is that most of the students were more likely to enjoy stability in terms of material and moral support. Similarly Buote, (2001) observed that married couple favours development of well adapted, mature and integrated children.

4.2 Factors Likely to Affect Students' Academic Performance

4.2.1 Responses on availability of selected facilities

In this study facilities refer to items such as classrooms, desks, laboratories, libraries books, teachers' houses and stores. They also include chairs and tables, teaching aids like science kits, computers and chemicals, among others. The results in Table 3 show that 76% of teachers indicated that there were inadequate classrooms whereas 20% reported that there are adequate classrooms. Similarly, 82.5% of students reported that there were inadequate classrooms whereas 12.5% indicated that there were adequate classrooms.

Table 3: Responses on selected teaching/ learning facilities (n=100)

Items	Teachers Frequency	(n = 60) Percent	Students Frequency	(n = 40) Percent
Classrooms				
Adequate	12	20.0	10	5.0
Inadequate	46	76.0	25	82.5
Undecided	2	4.0	5	12.5
Desks				
Adequate	6	10.0	5	12.5
Inadequate	53	87.0	32	80.0
Undecided	1	3.0	5	7.5

These results are consistent with information in Plate 1 and that in Table 4 both of which suggest inadequacy of such facilities. Under such a situation, students' academic performance is likely to be affected. Kutner (1973) observed that inadequate classrooms and unmanageable class sizes make teaching/learning quite undesirable. Sumra (2003) points out that class sizes studies in developing countries have shown significant association with students' performance and satisfaction. Having fewer children in a class reduces the distractions in the room and gives the teacher more time to devote to each student.

The results in Table 3 further show that 87% of the teachers indicated that there were inadequate desks whereas 10% reported that there were adequate desks. The results also indicated that 62.5% of students reported that there were inadequate desks whereas 12.5% reported that there were adequate desks. The problem of too large population of students in classrooms does not create favourable situation for learning which can lead to poor academic performance of students (Kostman, 1977).

Table 4: Availability of classrooms and desks in the interviewed schools

I terms	School name	Available	Required	Deficit
Classrooms	Butimba	16	23	7
	Mwanza	26	30	4
	Nsumba	17	25	8
	Pamba	22	48	26
	Mkolani	12	22	4
Desks	Butimba	710	936	226
	Mwanza	1137	2408	1271
	Nsumba	931	952	21
	Pamba	955	1075	120
	Mkolani	942	1001	59

Source: Nyamagana District Educational Office



Plate 1: Students studying in a congested classroom in Nyamagana District

4.2.2 Responses on availability of selected facilities

Enough and quality facilities facilitate the provision of a sound education which makes both teaching and learning process fairly possible. Results in Table 5 indicate that 93.3% of the teachers reported that there are inadequate laboratories whereas 5% of them reported that there are adequate laboratories. Similar results were reported by students whereby a significant proportion of (87.5%) indicated insufficient laboratories and relevant facilities such as chemicals and furniture. Results also show that 90% of teachers reported that there are insufficient libraries whereas 80% of the students reported that there were inadequate libraries and associated facilities.

These are serious problems since most students cannot access such facilities. Under such a situation teaching science subjects becomes a mere dream. Awokoya (1975) agrees that we live in a world where science and technology have become an integral part of the world culture; therefore the role of science and technology should not be overlooked. Morsha (2000) observed that there is a direct link between availability of basic teaching/learning facilities and students academic performance.

Table 5: Responses on availability of selected basic facilities (n=100)

I terms	Teachers (n = 60)		Students (n = 40)	
	Frequency	Percent	Frequency	Percent
Laboratories				
Adequate	3	5.0	4	10.0
Inadequate	56	93.3	35	87.5
Undecided	1	1.7	1	2.5
Libraries				
Adequate	3	5.0	5	12.5
Inadequate	54	90.0	32	80.0
Undecided	3	5.0	3	7.5

Secondary data (Tables 6) also indicate a serious deficit of basic facilities such as classrooms, desks, laboratory and library confirming responses by teachers and students on availability of such facilities. Teaching/learning process is significantly affected by availability of sufficient basic materials and facilities. Teaching/learning resources enhance understanding of abstract ideas and improves performance. Information on Plates 2 and 3 and Table 8 show that laboratory and library equipment are not adequate. Reference text books, chemicals and basic furniture are also inadequate. This makes teaching and learning quite difficult. Aslam (2009) observed that in most developing countries inadequacy of basic teaching and learning materials is a major problem.



Plate 2: A typical laboratory with insufficient furniture and laboratory equipments in Nyamagana District

Table 6: Available laboratories and libraries in selected schools

School facilities	Available	Required	Deficit
Laboratories			
Butimba	0	4	4
Mwanza	4	4	0
Nsumba	4	3	1
Pamba	3	4	1
Mkolani	3	4	1
Libraries			
Butimba	0	1	1
Mwanza	1	1	0
Nsumba	1	1	0
Pamba	0	1	1
Mkolani	1	1	0

Source: Nyamagana District Educational office



Plate 3: A typical library with insufficient furniture in Nyamagana district

4.2.3 Teacher: Student ratio status

In order to get an overview on availability of teachers' information on number of teachers as well as students was sought. Teacher: student ratios were then computed for the respective schools. The results in Table 7 indicate that the ratios ranged from 1:12 to 1: 31. These ratios are far below the intended ratio of 1:45 in SEDP 1.

Looking at the teacher: student ratios *per se*, one is tempted to jump to a conclusion that there were adequate teachers in the study area. However, when subject wise analysis was carried out it was evident that the distribution of teachers was somewhat skewed as reflected in Table 8 for selected schools. The results in Tables 8 and 9 indicate that there was a serious shortage of teachers in mathematics and science subjects as compared to the arts subjects. The results agree with observations by McDermott and Edward (1999) who indicated that in most developing countries there is a serious shortage of science and mathematics teachers.

Table 7: Teacher student ratio

School name	Number of teachers		Number of students		T/SR
	M	F	M	F	
Butimba	21	15	502	444	1:26
Mwanza	41	37	1088	1042	1:27
Pamba	30	29	1127	724	1:31
Mkolani	23	29	481	324	1:16
Nsumba	35	11	-	549	1:12

Source: Nyamagana District Education Office

Table 8: Distribution of teachers (subject wise) in selected secondary schools

School Name	Subject	Available	Required	Deficit
Mkolani	Physics	0	9	9
	Basic maths	2	16	14
	Biology	1	9	8
	Chemistry	0	9	9
	Civics	2	5	3
	English	9	13	4
	Geography	4	8	4
	History	7	8	0
Pamba	Kiswahili	4	8	4
	Physics	2	5	3
	Basic maths	2	6	4
	Biology	4	1	3
	Chemistry	3	6	3
	Civics	3	4	1
	English	8	6	2
	Geography	7	7	0
History	7	7	0	
Kiswahili	8	9	1	

Source: Nyamagana District Educational Office

Table 9: Distribution of teachers (subject wise) in selected secondary schools

School name	Subjects	Available	Required	Deficit
Butimba	Physics	1	2	1
	B/ mathematics	2	4	2
	Biology	2	4	2
	Chemistry	2	2	-
	Civics	1	2	1
	English	3	6	3
	Geography	2	6	4
	History	5	5	-
	Kiswahili	2	3	-
Mwanza	Physics	5	5	-
	B/ mathematics	4	6	2
	Biology	9	10	1
	Chemistry	10	10	-
	Civics	5	5	-
	English	11	11	-
	Geography	9	9	-
	History	7	7	-
	Kiswahili	9	9	-
Commerce	4	4	-	
Nsumba	Physics	2	5	3
	B/ mathematics	4	6	2
	Biology	4	3	1
	Chemistry	3	5	2
	Civics	3	6	3
	English	8	6	2
	Geography	7	7	-
	History	7	7	-
	Kiswahili	6	9	3
	Commerce	2	4	2

Source: Nyamagana District Educational Office

4.2.4 Teachers' responses on teaching strategies/methods

Analysis was also carried out on teaching strategies/methodology employed by teachers.

Teacher respondents were asked a variety of questions which revolved around assessing teaching strategies/methods used. Their responses are summarized in Table 10 below.

The results in Table 10 indicate that most of the teachers (83%) relied heavily on use of chalk board.

Table 10: Strategies/ Methods employed by teachers (n=60)

Strategy/Method	Frequency	Percentage
Use of chalk board	33	83.0
Use of visual material	3	7.0
Use of audio-visual materials	2	5.0
Group discussions	2	5.0

Other interactive strategies such as use of audio-visual materials and group discussions were rarely used. Focused group discussions indicated that the teaching approach was mainly teacher-centred whereby teachers rely heavily on the use of chalk board giving very little room for meaningful interaction with students. Although most of teachers were conversant with participatory teaching methods, the existing situation in the schools can hardly permit use of such methods. In a focus group discussion one respondent commented emotionally as follows:

“In my school, classes are very large with an average of 70 students per class. The situation is very difficult because sometimes up to 6 students share one desk. Besides, the teaching workload is very high due to the shortage of teachers, particularly in mathematics and science subjects” (FGD respondent, Nyamagana).

Problems discussed earlier on, such as crowded classrooms, insufficient teaching materials (Table 3, 4, 5 6, 8, 9 and Plates 2 and 3) are consistent with the observed inadequate use of participatory teaching methods. Olekambaine (1991) observed that due to acute shortage of teaching/learning facilities in secondary schools in Tanzania the majority of teachers rely heavily on the lectures and use of chalkboard which often lead to low interaction and concentration by students. Bacharach and Bauer (1986) claim that, no matter how motivated or competent employees may be, lack of resources will prevent them from accomplishing their responsibilities and may even result into frustrations.

4.2.5 Teachers' opinions on language of instruction

An assessment on language of instruction used in teaching was also carried out. The responses are summarized in Fig. 4. The results indicated that only 15.0% of the teachers used English as a language of instruction whereas 85.0% used a mixture of English and Kiswahili in teaching/learning processes. This is a serious problem since English is the official instruction language in Tanzania. Under such a situation effective teaching and learning cannot be expected. Omary (2006) asserts that most secondary school teachers in Tanzania cannot effectively use English as a communication language. The majority of Tanzanian students lack adequate skills in English language which erodes the ability to comprehend well hence poor performance in their examinations.

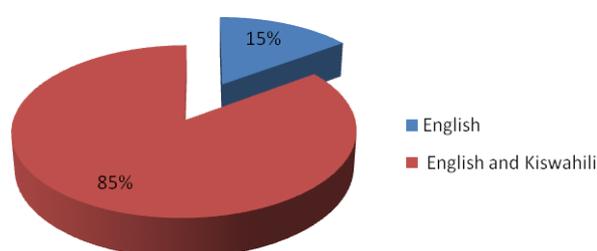


Figure 4: Language of instruction and communication in the study area

4.3 Students' Academic Performance Before and After SEDP I Implementation for the Selected Schools

In order to establish whether there was any significant difference in students' academic performance before and after implementation of SEDP I, paired samples t- test was carried out. Data used for the analysis were statistics on academic performance of five years before SEDP I (1999-2003) and five years after SEDP I implementation (2004-2009) (Appendix 2).

The results in Table 11 indicated that although there was slight decline in academic performance there was no significant difference ($p < 0.05$) in students' academic performance before and after SEDP I implementation. The average performance was still below the targeted 70% for SEDP I. The results in Tables 4, 5, 6, and 8 suggest uncoducive teaching/learning environment based on the analysed parameters. For example, results in Tables 3 and 4 indicate a serious shortage of classrooms and desks. Results also indicate shortage of facilities in the surveyed laboratories and libraries (Tables 5 and 6). The results also indicated shortage of teachers, particularly in the fields of science and mathematics (Tables 8 and 9). The importance of the above to successful academic achievement cannot be overemphasised. According to Isangedigh (1998), such a learner's environment mismatch promotes poor academic performance. Morsha (2000) contends that quality education is achieved through improvement of teaching/learning facilities, adequate number of teachers and classrooms. Homeshel (2005) argues that the quality and relevancy of teaching/learning is embedded in a quality national education system which requires government policies support. These will affect the way in which resources will be allocated.

Table 11 : Students' Academic Performance before and after SEDP 1on selected public secondary schools (1999-2009)

Name of the school	Before	After	t	Significance level
Mwanza	45.56	40.78	0.906	0.388
Nsumba	51.94	54.04	0.373	0.718
Pamba	75.85	47.81	2.138	0.076
Mkolani	43.35	45.41	0.163	0.876
Overall	54.17	47.01	0.902	0.402

Source: Ministry of Education and Vocational Training in 2012

4.4 Major Constraints Faced During SEDP I Implementation

In order to establish major constraints faced during SEDP I implementation, teachers respondents were asked to indicate the key constraints. The results in Fig. 5 show that a significant proportion (55%) of respondents indicated inadequate funding as one of the key constraints. Others were: inadequate stakeholders' participation (16%), misallocation of funds intended for implementation of the planned activities (10%), and untimely disbursement of funds (16%). The results in Fig. 5 were confirmed by Focused group discussions (Table 12) which also indicated inadequate funding, misallocation of funds, untimely disbursement of funds and inadequate participation of the key stakeholders as the key problems faced during the implementation of the programme.

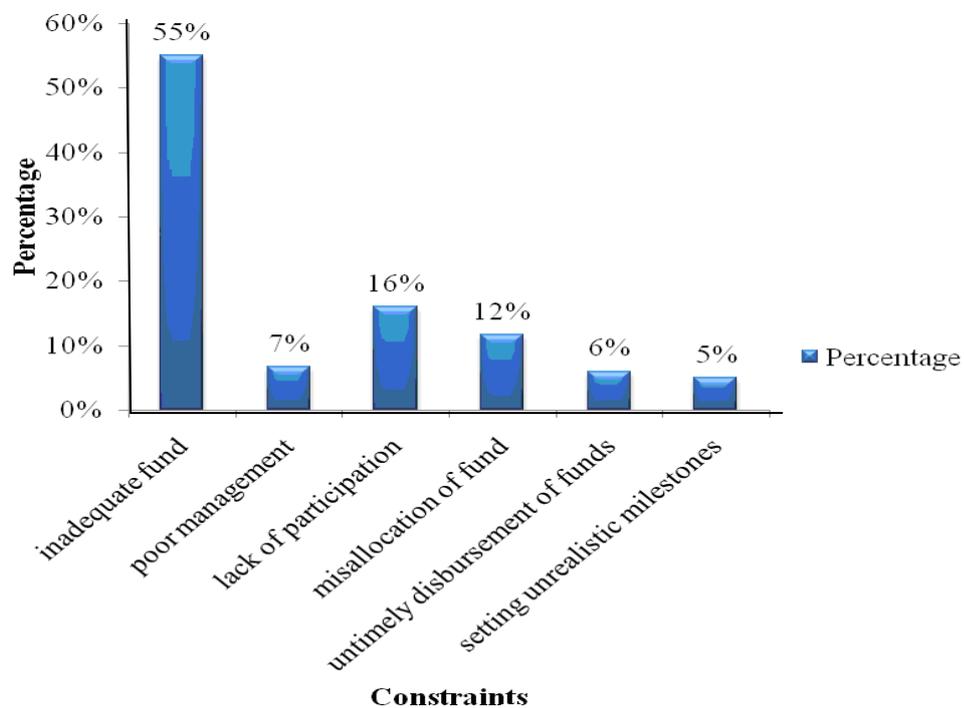


Figure 5: Major constraints faced SEDP I implementation

Table 12: FGDs Pair wise ranking for major constraints during SEDP1 implementation

	Inadequate Funds	Poor management	Lack of Participation	Misallocation of funds	Untimely delivery of Funds	Scores	Rank
Inadequate Funds	X	Inadequate funds	Inadequate funds	Poor management	Inadequate funds	4	1
Poor Management		X	Inadequate funds	Misallocation of funds	Inadequate Funds	0	5
Lack of participation			X	Lack of participation	Inadequate funds	1	4
Misallocation of funds				X	Misallocation of funds	3	2
Untimely disburse of Funds					X	2	3

Source: Focused group discussions

The secondary data for the funds disbursed as capital grant (CG) in the study schools (Table 13) and those disbursed in Government secondary schools in the eight districts of Mwanza Region (Table 14) are consistent with the results in Fig. 3 and Table 12 which indicated that shortage of funds was a major problem which affected implementation of SEDP I.

4.5 Disbursement of the Capitation Grant in the Study Schools

The results in Tables 13 and 14 indicate a serious deficit of the funds which were supposed to be disbursed as CG (Tshs 30 000/student/year). The results also indicate variation in terms of the amount disbursed from 2005 to 2008. Generally, the disbursed CG decreased over the four years analysed and ranged from Tshs. 20 000 (in 2005) to Tshs 3258 (in 2008).

According to the revised financial management and accounting guidelines for the SEDP I (MOEC, 2005), capitation grant (CG) was supposed to cover the cost of books, teaching materials and teaching aids, laboratory equipment and chemicals, repairs, capacity

building, school administration including stationary and catering expenses where applicable. The grant was determined on a per head per year basis. The budgeted amount per student in Government secondary schools was Tshs 30 000. Sources of SEDP funds were central Government, World Bank, development partners, Local Government Authorities, parent/guardians, contributions from local communities. It would appear that there was a serious problem of funds from the anticipated sources. Inadequate funding will certainly have a bearing on the implementation of any development programme since it will derail the planned activities. Gonzalez (2002) observed that factors revolving around financial management have a negative connotation in implementation of development programmes since the intended objectives can rarely be achieved.

Table 13: Disbursement of the capitation grant in the study schools

Year	School name	Number of students	Amount disbursed	Amount/student /year	Deficit (Tshs)
2005	Mkolani	433	8 660 000	20 000	10 000
	Mwanza	1597	31 945 000	20 000	10 000
	Butimba	302	6 040 000	20 000	10 000
	Pamba	608	12 160 000	20 000	10 000
	Nsumba	515	10 300 000	20 000	10 000
2006	Mkolani	629	3 691 467	5 868	294 132
	Mwanza	1351	7 928 832	5 868	294 132
	Butimba	502	2 946 131	5 868	294 132
	Pamba	730	4 284 215	5 868	294 132
	Nsumba	784	4 601 129	5 868	294 132
2007	Mkolani	750	8 343 500	11 124	1 8 876
	Mwanza	1457	16 216 410	11 130	18 870
	Butimba	598	6 655 740	11 130	18 870
	Pamba	944	10 506 720	11 130	18 870
	Nsumba	1025	11 408 250	11 130	18 870
2008	Mkolani	787	2 564 133	3 258	26 742
	Mwanza	1529	4 981 651	3 258	26 742
	Butimba	675	2 199 225	3 258	26 742
	Pamba	1072	3 492 695	3 258	26 742
	Nsumba	1026	3 342 822	3 258	26 742

Budgeted Capitation grant = Tshs 30 000/student/year

Source: Ministry of Education and Vocational Training in 2012

Table 14: Disbursement of capitation grant for Mwanza region secondary schools under SEDP I (2005- 2008)

District	Year	Amount /student/year	Deficit (T shs)
Geita	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Ilemela	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Kwimba	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Magu	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Misungwi	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Nyamagana	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Sengerema	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742
Ukerewe	2005	20 000	10 000
	2006	5 868	24 132
	2007	11 130	18 870
	2008	3 258	26 742

Budgeted capitation grant = Tshs 30 000/student/year

Source: Ministry of education and Vocational Training in 2012

4.6 Teachers' Suggestions for Improvement of Similar Programmes/Projects

In order to get an overview of suggestions for improvement of similar programmes, various questions were posed to teacher respondents. The responses are summarized in Table 15. The results show that 58% of the respondents suggested that funds should be allocated according to the budget. About 20% of the respondents suggested that sensitization of key stakeholders should be done as a way of enhancing participation in development projects. Timely disbursement of adequate funds was also suggested by 18% of the respondents as one of the means for improving implementation of the future programmes. Inadequate participation by key stakeholders in any development projects is likely to lead to poor performance (Howllett and Nagu, 1997).

Table 15: Suggestions for improvement of future programmes (n=60)

Suggestion	Frequency	Percentage
Allocation of adequate funds	35	58.0
Sensitization of key stakeholders	10	20.0
Timely disbursement of funds	11	18.0
Good governance	4	4.0

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The objective of this study was to assess students' academic performance in government secondary schools under SEDP I implementation. The results indicated that there was no significant difference ($p < 0.05$) between students' academic performance before and after SEDP implementation.

The results also indicated that factors which likely contributed to poor students' performance included inadequate teaching/learning facilities such as classrooms, textbooks, laboratory and library and its equipments/facilities.

The results further indicated that the main problems faced during SEDP I implementation revolved around provision of inadequate funds, misallocation and untimely disbursement of funds and inadequate participation by key stakeholders.

It was therefore concluded that despite the governments' good intention of increasing enrolment and enhancing academic performance such efforts were not significantly successful due to shortage of the basic teaching/learning facilities which were largely caused by provision of insufficient funds.

5.2 Recommendations

- (i) In order to achieve meaningful implementation of similar future programmes timely allocation of adequate funds should be provided according to the planned activities. This should be associated with proper financial management which among others restricts misallocation of funds.
- (ii) Sensitization of key stakeholders should be instituted before initiation of similar future programmes. This will enhance community participation of such programmes.
- (iii) Students' enrollment should take into account provision of adequate teaching/ learning facilities for enhancing attractive teaching/learning environment.
- (iv) Teachers should be provided regular in service training. This will significantly shape their professional skills.
- (v) Deliberate efforts should be directed towards training adequate mathematics and science based teachers because these are pivotal to the growth of science and technology.

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APPENDICES

Appendix 1: Definition of key variables

Variables	Operation definition
Age	Number of years lived since birth by individual
Sex	Biological differences between male and female
Level of education	Number of years spent in formal schooling
Family size	Number of people in a household
Occupation	Any activity that occupies a person's attention
Location	A point or an extent in space
Academic performance	Ability of scoring in test or examination, transition to A-level
Education curriculum	Subjects comprising a course of study in a school or college
Teaching/learning environment	Condition which instruction is given in a particular discipline
Student self determination	Commitment of the student in study
Educational quality	Levels of educational inputs and outputs

Appendix 2: Percentage on students' academic performance before and after SEDP

Name of schools	Before SEDP					After SEDP					
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Butimba	50	32	38	40	41	13.33	21.2	26.1	40.6	26.4	27.23
Mwanza	55.2	38.8	43.3	42.2	48.3	39.26	39.7	36.3	55.6	48	25.87
Nsumba	56	50.8	54.7	39	59.2	67.82	45.5	58.2	53.9	59.5	39.25
Pamba	51.5	49.3	58.5	95.8	55.9	50.26	46.7	53.2	63.8	46.5	26.4
Mkolani	48.5	52.5	35.5	23.1	63.6-	55.38	55	54.2	40.6	38.4	28.86

Source: Ministry of Education and Vocational Training (2012)

Appendix 3: Questionnaire for teachers

A: General Information

Circle the correct answer and fill the blanks where necessary

- Questionnaire serial number.....
1. Name of school.....
 2. Name of respondent.....
 3. School location 1=Urban area, 2=Rural area
 4. Sex: 1=Male 2 = Female 5. Ageyears
 6. Education: 1= Certificate 2= Ordinary diploma 3= Advanced diploma
4= Graduate 5= Post graduate
 7. Is teaching your profession? 1= Yes 2= No
If no what is your profession.....
 8. For how long have you been teaching?
1= 0 to 4 years 2= 4 to 8 years 3= 8 to 12 years 4= over 12 years
 9. For how long have you been teaching in this school?
1= 0 to 4 years 2= 4 to 8 years 3= 8 to 12 years 4= over 12 years
 10. Where do you reside? 1=School compass 2= off campus
If off campus how far is the school from your home?...km
 11. What time do you report at work place?.....
 12. How many hour do you spend in teaching every day?
 13. What do you do after working hours?
 14. How many hours per week do you get involved in none-academic activities?
.....
 15. How often do you prepare work and lesson plan?
1= Never 2= Very rare 3= Sometimes 4= Very often 5= Always
 17. Is the allocated time for teaching enough to cover the syllabus?
1= Yes 2= No
 18. If no what do you do to accomplish your syllabus
 19. To what extent do students find national examination difficult to attempt?
1=Never 2= Seldom 3= Often 4= Very often 5= Always
 19. Is students discipline a problem in your school? 1= Never 2= Somehow
3= Always

20. Do syllabuses contain topics which are difficulty for students to comprehend?
1= Unable to answer 2= strongly disagree 3= Disagree 4= Neutral 5= Agree
6= strongly agree
21. Do work environment motivates teaching?
1= Unable to answer 2= Yes 3= No
22. If no mention two problems you face.(a).....(b).....
- 23 Do you know what SEDP is? 1= Yes 2= No
- 24 If yes mention two activities that SEDP do? (a).....(b).....
25. What are the major uses of funds provided by SEDP at your school?
26. Do funds provided by SEDP adequate to implement planned activities?
27. Did teachers benefit from SEDP? 1= Yes 2= No If yes how?
28. Do you think SEDP has met its planned objectives? 1= Yes 2= No
29. If no what are the possible reasons for not meeting its planned objectives?
- 30 Are there adequate teachers to teach subjects offered in your school?
1= Adequate to all subjects 2= Inadequate to art subjects 3=Inadequate to science subjects
31. Based on your observations, what Language do students often use when communicating at school? 1=English 2= Kiswahili 3= Both English and Kiswahili 4= Vernacular and English 5= Vernacular, English and Kiswahili
32. What Language do you use when teaching subjects 1=English 2= Kiswahili 3= Both English and Kiswahili 4= Vernacular, English and Kiswahili
31. What Language do you use when communicating at school 1=English 2= Kiswahili 3= Both English and Kiswahili 4= Vernacular, English and Kiswahili.
32. What was the trend of performance in form 4 examination in 2004-2009?

C. Teachers' response on factors which are likely to influence student's academic Performance

Below is the list of 6 statements that show the factors which are likely to influence student's academic performance. Kindly indicate your response against the statements described

Statements	Adequate	Inadequate	Uncertain
Teaching/learning materials			
School environment			
Classrooms and basic furniture			
Reference books			
laboratories and libraries			
Teachers housing			

D. Major constraints faced SEDP I implementation

(a) What were the major constraints faced during SEDP I implementation?

.....

(b) What should be done for improvement of future related programmes?

Appendix 4: Students' questionnaire

Circle the correct answer and fill the blanks where necessary.

A: Students' personal characteristics

1. Sex of respondent: 1 = Male, 2 = Female..... []
2. What is your age? 1 = <14 years, 2 = 14-17 years, 3 = >17 years ... []
3. If form 1 and 2, indicate your area of subject specialization.....
(Science/Arts) and any additional subjects.....

B: Situational characteristics

4. How many are you in your family? 1 = 0-5, 2 = 5-10, 3 = more than 10.... []
5. Mention the occupation and marital status of your parents/guardians?
6. Mention education level of your parents
7. Do your parents/guardians afford to pay your school expenses?
1 = YES, 2 = NO []
8. If No, where do you get the funds?
1 = Government scholarship
2 = Working after school hour
3 = Doing business after school hour

C: Students' response on factors which are likely to influence student's academic

Performance

Below is the list of 10 statements that show the factors which are likely to influence student's academic performance. Kindly indicate your response against the statements described.

8: State your response on the following statements in relation to your school

S/n	Statement	Opinion		Reason
		Adequate	Inadequate	
1.	School library and laboratory			
2.	Fluently in English language			
3.	Classrooms			
4.	Text books			
5.	Sensitization and education HIV and AIDS			
6.	Desks			
7.	Audio- visual facilities			
8.	Optimum utilization of teachers			
9.	Chemicals for laboratories			
10.	Basic furniture for laboratories			

9. What are the key problems facing your school that could be addressed by the government.....
10. What strategies do you apply in order to improve your academic performance?
.....

Appendix 5: Checklist of questions for key informants and focused group discussions

1. What was the trend of students' performance in form four National examinations from 2004- 2009?
2. Are you aware of the SEDP programme 1= Yes, 2=No?
3. If yes what has been done by the programme at your school?

3. Did SEDP meet its planned activities in a given school?
4. If not what could be the reasons for not achieving the planned activities?

5. Are there enough teachers for teaching all subjects in your school?
6. Does the school environment motivate teaching/learning process?
7. Did the teachers benefit from SEDP programme?
8. If yes how?
9. What were the major constraints during SEDP I implementation?
10. What were the key reasons for students' poor academic performance?
11. What measures should be taken to improve students' academic performance?
12. How much fund has SEDP provided in your school since 2004 to 2009?