Effect of Overcrowded Classrooms on Teaching and Learning Process in Public Secondary Schools: A Case of Ilemela Municipality, Tanzania

Abstract

With parents, teachers, and policymakers, reducing class size is a favoured education policy approach. Cursory studies had suggested that overcrowded classroom results in relatively modest in students' academic achievement. Underpinned by the Social Cognitive Theory, this study assessed the effect of overcrowded classrooms on teaching and learning process in Ilemela Municipality, Mwanza -Tanzania. The study adopted a mixed research approach and convergent parallel research design. The sample consisted of 110 respondents including 1 MSEO, 1 Quality Assurance, 8 heads of school 40 teachers and 60 students. Structured questionnaires and interview guide were used as research instruments. Data were analysed through descriptive statistics and thematic analysis. The synthesis of the findings revealed that classrooms are overcrowded –against the access bargain of 45 students per class; students exceeded 90 within a single stream. On the basis of the findings it was concluded that overcrowded classrooms has an effect on the teaching and learning process, since it limit the application and implementation of competence based curriculum and supportive classroom managements practices which aid effectiveness of teaching and learning process. The study recommends that there is a need to enforce the policy on classroom size and to construct more classroom school so as to remedy the situation.

***Key words**: Overcrowded, Effect of, Classroom, Teaching and Learning, public secondary schools.*

1. INTRODUCTION

One of the fundamental issues underpinning the education sector in Tanzania is how to increase and promote access to and equity of education in the society. This has been a key policy priority in the country since the introduction of the Education and Training Policy of 1995 revised in 2014. Ever since, the country has made a significant progress in pursuing its national goals within the context of the Millennium Development Goals (MDGs) and Education for All goals (EFA) as enshrined in the Education Sector Development Plan (ESDP 2016/2017 – 2021/2022). One of the fundamental issues in this Plan was how to increase and promote access to and equity of education in the society, URT, (2018). Thus, the government introduced Fee Free basic education from pre-primary to form four with the sole purpose of ensuring that children attained education as the basic right and that no child is left behind in education.

The implementation of the Fee Free basic education policy is said to have positively influenced the enrolment rates of learners from primary to secondary schools. According to bridged MOEVT & PO – RALG, (2018) statistics, overall enrolment increased from 401,598 in 2004 to 1,767,890 in 2017, equal to a total increase of 340.2 per cent. An average enrolment increased at the rate of 26.24 percent per year over the period of fourteen years (2004 – 2017).

The government of Tanzania is working hard to curb this situation, by expanding school infrastructure like classrooms, but the number of students is increasing every year. The

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increase in enrolment rate in secondary school education in the country is against the limited school infrastructure like classrooms, and thus leading to overcrowded classrooms.

A classroom is said to be overcrowded when the number of students exceeds the optimum level such that it causes hindrance in the teaching and learning process (Matshipi, et al., 2017). Matshipi et al, further argue that some of the causes of overcrowded classes are having one school serving big community; the Department of Basic Education take long to build classrooms or to repair the classes that are damaged, the shortage of teaching staff and principals who are looking to increase the enrolment of their school. Similarly, Epri, (2016) maintains that large classes are an issue especially for town schools. A combination of an increasing population and the implementation of the national policy have caused the increase of students' enrolment against poor and limited school infrastructure, and thus impacting the quality of education

According to UNESCO (2016), poor infrastructure leading to overcrowded classrooms had been identified as important barriers for schooling and learning in most countries in Africa. This is supported by a good number of scholarly writings (Jones,2017; Hacham,2019, and West, 2020, etc) which have all pointed out that teaching in an overcrowded classroom can cause problems; serious problem is rampant noise, and less individualized focus, discipline issues, struggling students fall behind and lack of personal connection. Hacham, (2019) contended that a crowded classroom may provide challenges that can be nearly impossible to find a solution to or even to overcome. These are just, but few sociological problems- not to mention other impacts to health and related issues. For Jones, (2017), overcrowded classroom condition not only make it difficult for students to concentrate on their lesson, but inevitably limit the amount of time teachers can spend on innovative teaching methods such as cooperative learning and group work. According to West, (2020) the South African education system is characterised by a shortage of teachers and in adequate school infrastructure which is contributing to the overcrowded nature of South African classrooms. This led to poor learning conditions because of the lack of space, fresh air and high noise levels that could lead to a lack of attention and even create stress within learners.

Literature also indicates that overcrowded is not only a factor to the teaching and learning process but also to teachers' welfare and quality education (Mwila, Wambiya, & Lyamtane, 2019). Overcrowded classrooms is said to violate the right of teachers to just compensation and human working conditions, as reported by the Republic of Philippines (2016) under the Act, The Public-School Class Size Law of 2016 (House Bill 473). It was observed that a teacher handling a class of 70 students is in fact taking the workload of two teachers. Jones, (2017) contends that teachers in congested classrooms are generally over – stretched more likely to suffer from burnout, or have a more strained relationship with their students- a situation reported to be common in developing world as while. Meador, (2019) suggests that teachers in overcrowded classroom must be exceptionally organized well prepared every day and should be creating energetic and engaging lessons. Every lesson must be enticing, energetic and fun. Derrick (2019) also posits that teachers in an overcrowded must develop fluid system through trial and error to maximize the time they have with their students. According to Derrick, teachers can generate solutions for overcrowded classrooms by: -

i. *Creating energetic and engaging lesson*: Lesson must be enticing, energetic and fun. Teachers should prepare lesson which are fast – paced, unique and full of attention. Under this point, researchers did not clarify the uniqueness of lesson whether in terms of teaching strategies or content of the subject matter. So that the lesson can attract students and lead to discipline control and classroom management.

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ii. *Tutoring struggling students who need more time after school*: This involves teaching students after class hours. A teacher should find time two or three times a week after school by giving students techniques on how to be successful in academics.
iii. *Understanding that the dynamics in an overcrowded classroom will be different*: Teachers should understand that there is difference in teaching between a 40 students' class and that of 70 or 90 students. Teachers have no control over how many students are in their classes. In public secondary schools, the government have the mandate to enrol students and not teachers. The teachers cannot allow themselves to become stressed due to beyond their control. Instead they should use their teaching profession to ensure learners attain relevant education (Derrick, 2019: 89).

URT (2000), has also observed that school materials and school infrastructure is important in order to improve the quality of education. It understands that the scarcity of school and classroom facilities remain a problem in public secondary schools, and thus compromising the teaching and learning process. This adduced evidence by URT is supported by Akech (2016) who reported that noise making, failure to attended each students' needs, restriction of teachers' movement in the class, cheating in examinations, wastage of time, setting order in the class, difficult in marking and both teachers and students being stressed are the impact resulting from over crowdedness in classrooms.

This scenario is not different from Mwanza region, particularly in Ilemela Municipality, where enrolment rate in ordinary level of education (Form I-IV) is said to have increased at an accelerating rate -in the year 2005 (22.0%), in 2006 (29.0%) and 2007 (53.0%) and again in 2016 (1.7%) and 2017 (5.5%) (URT, 2018). The rapid increase in enrolment rate in the Municipality may as well be attributed to the government focus on secondary education during those years, including the policy of building secondary schools at the Ward level, supported by SEDEP I and II and the Fee Free education policy (URT,2018). Statistics from the Ilemela Municipal Primary School Education Officer (MPEO) showed that, there are 104 primary schools in Ilemela Municipality. This includes 75 public primary schools and 29 private primary schools. These are compared to only 26 public secondary schools in Ilemela Municipality, the revealed data indicated, there was high enrolment of students in secondary schools against few number of secondary schools in the Municipality.

This scenario has raised a major concern to educational stakeholders and system administrators such as officials from the Ministry of Education, Science and Technology (MOEST). Either too, this scenario has also raised alarm among curriculum developers and implementers and policymakers, and thus have been calling upon well-established empirical evidence to delve into the relationship between overcrowded classroom and teaching and learning process, and in particular, the effectiveness of the teaching and learning process in overcrowded classroom,
So as to bridge the knowledge gap. Therefore, this study assessed the effect of overcrowded classroom on teaching and learning process in secondary schools in Ilemela Municipality.

This study limited itself to both input and process indicators such as the number of students in the classroom, application of teaching strategies, and students' classroom monitoring/supervision. Conceived within the context of the theoretical framework of Social Cognitive Theory and Approach by Bandura (1960); inputs, process effectiveness and quality assurance are crucial elements propelling any programme or institutional effectiveness and efficiency (Mullins, 2002). According to Thesaurus Dictionary (Visited on 19st December, 2021), process effectiveness entwines validity and reliability of procedures, succeeding courses of actions depending on sound policy frameworks and progressive guidelines –

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depicting practical methodologies to enable goal and mission realisation, as well as vision focus (Macibi, 2007).

2. STUDY OBJECTIVES

The study was guided by the following research objectives:

i. To assess the availability of school infrastructure in public secondary schools in Ilemela Municipality.
ii. To describe the number of students per class in public secondary schools in Ilemela Municipality.
iii. To identify the challenges teachers, face when they teach overcrowded classrooms in public secondary school in Ilemela Municipality.

3. METHODOLOGY

This study adopted a mixed method research approach and a convergent parallel research design. The use of this approach and design made it possible for the study to simultaneous collect both quantitative and qualitative from different source and then analysed them separately and integrated the information in the interpretation of overall results. The target population included Municipal Secondary Education Officer (MSEO), Quality Assurance Officers, Heads of Schools, School teachers, and students with total population of 34832. Probability and non-probability sampling techniques were employed to select the study sample of 110 respondents including one Municipal Secondary Education Officer, one District Quality Assurance officer, eight Heads of Schools, forty teachers, and sixty students. Data were collected using structured questionnaires administered to teachers and students and an interview guide to the Heads of Schools, Municipal Secondary Education Officer, and District Quality Assurance officer. Validity and reliability of instruments was ensured through content validation, pilot study, member checking and within source triangulation. Quantitative data were analysed using descriptive statistics with the help of SPSS version 20 and were presented in Tables, while the qualitative data were analysed thematically. Ethical issues in the form of consent form, confidentiality, honest, and anonymity were all considered.

4. SUMMARY OF KEY FINDINGS

5. School Infrastructure in Public Secondary Schools (Presentation of data and Discussion of Results) The work will make an interesting reading if the author could create a separate sub-heading for data presentation and analysis and another sub-heading for discussion of results.

Teaching and Learning process can be effective if there is conducive environment. However, it may become difficult to exercise teaching and learning process if certain facilities are not enough at school. To identify these facilities the study assessed the availability of school infrastructure in order to described it as either falling under normal classroom size or under overcrowded classrooms. A three Likert scale with the values: Quite Adequate School Infrastructure, Adequate School Infrastructure, and Inadequate School Infrastructure was used and administered to the participants. The response from "Quite Adequate School Infrastructure" and "Adequate School Infrastructure" were thereafter aggregated in the analysis in order to show positive responses while responses under "Inadequate School Infrastructure" showed negative responses. ".(The selected words marked green should be included in 'methodology while key should be created to explain the value of the assigned

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alphabets. Eg; A=Quite Adequate) Thereafter letters were assigned to describe the state of school infrastructure; where Letter A = "Quite Adequate School Infrastructure", B = "Adequate School Infrastructure", and C = "Inadequate School Infrastructure". The responses are presented in Table 1 and Table 2.

Table 1: Students *responses on availability of school infrastructure (n = 53)*

Variable	***A***	***B***	***C***
Availability of School Infrastructure	3(5.7%)	11(20.8%)	39(73.6)

Source: Field Data (2021)

Table 2: *Teachers responses on availability of School Infrastructure (n = 30)*

Variable	***A***	***B***	***C***
Availability of School Infrastructure	0(0%)	3(10%)	27(90%)

Source Field Data (2021)

Table 1 indicates that 39 student's participants equivalent to 73.6 percent of the participants exposed that they were no enough School Infrastructure in public secondary schools. Similarly, responses from teachers in Table 2 also indicated that 27 respondents equivalent to 90 percent exposed that they were no enough School Infrastructure in public secondary schools. This finding imply that in public secondary schools, school infrastructure like classrooms, toilets, and libraries were still a big challenge and this led to overcrowded classrooms. The study by Akech (2016) attest to this fact. Akech (2016) reported that majority of public secondary schools in Tanzania lack sound infrastructure that can facilitate the effective teaching and learning process. School infrastructure is important in the teaching and learning processes' for it ensures a conducive environment for learning to both students and teachers. Ojeje and Ododo (2018) argues that unattractive school buildings and overcrowded classrooms among others contribute to poor academic achievement in the school system; School facilities when provided aid teaching and learning and subsequently improve students' academic achievement.

As maintained by Barrett.et al., (2019), key inputs to the education system such as curricula, teachers, and education infrastructure helped to improve the quality of education. The finding implies that stakeholders should put more efforts in building and upgrading schools infrastructure like classrooms. Classroom space is very important in learning such that the students can work to solve problems and communicate easily and effectively. In reviewing different literature, the situation is that, in order to have conducive environment for learning, school's infrastructure is the most important aspect in education systems.

The study also investigated the types of school infrastructure available in area of the study. A four Likert scales with the following levels "Quite Adequate, Adequate, Inadequate, and Quite Inadequate" was developed to identify types of infrastructure available in the study area. "Quite adequate" and "Adequate" were aggregated to show positive responses and "Inadequate and Quite Inadequate" to show negative responses towards the research questions. In the analysis, number were assigned to the levels in question where: 1 = Quite Adequate, 2= Adequate, 3 = Inadequate, and 4 = Quite Inadequate. Results are presented in Table 3 and Table 4 respectively.

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Table 3: ***Students Responses on types of School Infrastructure facilities (n = 53)***

Variable	*1*	*2*	*3*	*4*
Classrooms	1(1.9%)	11(20.8%)	37(69.8%)	4(7.5%)
Laboratories	21(39.6%)	18(34%)	13(24.5%)	1(1.9%)
Library	0(0%)	1(1.9%)	9(17%)	43(81.1%)
Toilets	0(0%)	2(3.8%)	39(73.6%)	12(22.6%)

Source: Field Data (2021)

Table 4: ***Teachers Responses on types of School Infrastructure facilities (n = 30)***

Variable	*1*	*2*	*3*	*4*
Classrooms	0(0%)	8(26.7%)	22(73.3%)	0(0%)
Laboratories	6(20%)	21(70%)	2(6.7%)	1(3.3%)
Library	2(6.7%)	0(0%)	6(20%)	22(73.3%)
Toilets	0(0%)	1(3.3%)	23(76.7%)	6(20%)

Source: Field Data (2021)

Table 3 indicates that 41 students equivalent to 77.3 percent of the respondents revealed that classrooms were not enough in public secondary schools by showed negative responses in the study. Furthermore, responses from teachers in Table 4 indicated that 22 respondents equivalent to 73.3 percent revealed that classrooms were not enough in public secondary schools by showed negative responses in the study. This further indicated that overcrowded classrooms in public secondary schools were resulted due to insufficient classrooms in relations to student's enrolment. Kabiru and Arshad (2016) argue that in examining school's infrastructure compared to the number of students in any secondary school, classrooms, laboratories, and libraries should be constructed according to the student's ratio. This can enable reduction of overcrowded classrooms and favoured conducive environment for learning. Accordingly, Mgimba & Mwila, (2022) argues that school infrastructure plays a critical role in education in terms of resolving issues with students' access to the educational system and improving their performance. They argue proper infrastructure, such as chairs, tables, desks, lights, sanitary facilities, and internet access, allows kids to stay and learn comfortably in school, while instructors and other school staff members properly do their school-related activities.

Also according to Constructivist Learning Theory proposed by Jean Piaget (1896 – 1980 and Levy Vygotsky (1896 – 1934) learning is a dynamic and active process of constructing meaning and transforming self – constructed understanding in interaction with environment. This imply that few classes in public secondary schools led to overcrowded classrooms which cannot favour conducive learning environments, this reduce interactions between teachers and students during the process of teaching and learning hence affect effective teaching.

5.1 Classroom Size in Public Secondary Schools

The study investigated the number of student per each streams against the education guideline. The aim was to understand how overcrowded classrooms is a critical problem in public secondary schools. In order to obtain data for this objective, questions were against the policy guideline on classroom ratio and class size per stream as describe by MoEST policy documents. The following scale was used: Letter A = 40 student's in a classroom, B = 50 – 60 students in a classroom, and C = 60 – 80 students in a classroom. The responses to the questions are presented are presented in Table 5 and Table 6 respectively.

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Table 5: ***Students Response on Classroom ratio per stream according to education guideline (n= 53)***

Variable	***A***	***B***	***C***
Classroom ratio according to guideline	42(79.2%)	2(3.8%)	9(17%)

Source: Researcher (2021)

Table 6: Teachers response on Classroom ratio per stream according to education guideline (n = 30)

Variable	**A**	**B**	**C**
Classroom ratio according to guideline	19(63.3%)	7(23.3	4(13.3)

Source: Researcher (2021)

Table 5 indicates that 42 students equivalent to 79.2 percent revealed that education guideline directs the public secondary school's to accommodates 40 students per each stream while Table 6 indicates that 19 teachers equivalent to 63.3 percent revealed that education guideline directs the public secondary schools to accommodates 40 students per each stream. This imply that every stream in public secondary school should contain no more than 40 students. This eliminate the problem of overcrowded classrooms and ensure effectiveness on teaching and learning process.

Students and teachers were further required to identify the current number of students within the class stream in public secondary schools. The aim was to check to what extent the classrooms was overcrowded, the question was also developed to both students and teachers with three responses A, B and C; where A = 40 students , B = 50 – 70 students, and C = 80 – 100 students. B and C were aggregated to represent extent of overcrowded classrooms.

Table 7: ***Students Response on current number of students in each stream (n = 53)***

Variable	*A*	*B*	*C*
Number of students in a stream	0 (0%)	23 (43.4%)	30(56.6%)

Source: Researcher (2021)

Table 8: ***Teachers Response on current number of students in each stream (n = 30)***

Variable	*A*	*B*	*C*
Number of students in a stream	0(0%)	12(40%)	18(60%)

Source: Researcher (2021)

Table 7 indicates that 53 students equivalent to 100 percent revealed that in public secondary school each class contained 50 up to 100 students while Table 8 indicates that 30 teachers equivalent to 100 percent agreed that in public secondary schools each class stream contain 50 up to 100 students. UNICEF (2019) observed that, in Tanzania pupil's teacher's ratio is 131:1 in public school, moreover, the average class size is 70, students per stream in public secondary school which is more than 2.5 times the Sustainable Development goal target of 27 to 28 pupils per class. This finding is far from (MoEST) guideline for School establishment and registrations, (2020) in which it directs all public and private secondary schools to register 40 students per each stream. And according to Bandura (1989) in Social Cognitive Theory in conducive environments, teachers can work to improve their student's emotional states and to correct their faulty self – belief and habits of thinking to improve their academic

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skills and self – regulatory practice (behaviour). The theory revealed that overcrowded classroom does not support conducive environment for learning to both students and teachers.

However, this imply that in most public secondary school, overcrowded classroom is a problem for teaching and learning process. Students in some of schools exceeded 100 within the class streams. Absence of school infrastructure like classrooms, high enrolment of pupils from primary schools to secondary schools and few secondary schools compared to number of primary schools was among the factor which led to overcrowded classrooms in public secondary schools.

Classroom Ratio according to education guideline

During interview with head of sample schools the researcher investigated that there was new directive which direct school heads to accommodate 50 students per each stream that is 1:50 students, but this was not a circular, it was unwritten (verbal directive). Heads of schools agreed that education guideline direct all streams in public secondary schools to have 40 up to 45 students but they had been directed to accommodate 50 students in each stream.

For example, one Head of school from school E had the following to say:

> The guideline from Ministry concerned with education guide all public secondary schools to accommodates 40 up to 45 students, but they had been directed to accommodate 50 students per each stream as a new guideline from Local government (TAMISEMI) but he/she agreed that this was unwritten (verbal guideline). (Interview with head of school E: 3/09/2021).

This idea differed with the one shared with Education Officer A who quoted that:

> In public secondary schools, education guideline directed all schools to accommodate 40 students in each stream. But the officer further argue that this is difficult to be applied due to overcrowded classroom in public secondary schools and agreed that in reality most of class exceed 100 students in public secondary schools. (Interview with education Officer A: 15/09 2021)

The quotation indicated that, in public secondary schools there were no classes with an average of 40 students in a single stream. This is similar to data obtained from questionnaires which show that there were no class with an average of 40 students in public secondary schools and the response rate was 0 percent for both students and teachers. Furthermore, even though the Ministry of Education Science and technology directed all public secondary schools to accommodate not more than 40 students in a single stream (URT,2020) guideline for school establishment and registration but due to overcrowded classroom they introduce new unwritten directive of 50 students per each stream in public secondary school. This imply that overcrowded classroom is a problem for teaching and learning process in public secondary school in Tanzania.

Number of students within the Class stream

During this study it was noted that the number of students in most classrooms (within a single stream) in the selected secondary school exceeded 80 students. Absence of school infrastructures, high enrolments, and few public secondary schools led to overcrowded classrooms.

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For example, Education Officer A had the following to say about number of students within the single stream in public secondary school:

> The Ministry responsible in guiding, controlling, and supervising education direct all public secondary schools to enrol 40 students in a single stream, but in reality most stream in public secondary schools exceed 100 students and other up to 120 students due to overcrowded classrooms. Education Officer A further argue that in the class most school lack teaching and learning facilities for example table, chairs, and desks, this led to unconducive teaching and learning environment. (Interview with Education Officer A: 15/09 2021).

The quotation indicates that in public secondary schools the average classroom number within a single stream is 90 students. This is almost 2 times the education guide line target of 40 to 45 students per stream. This is similar to UNESCO (2016) on school resources and learning environment in Africa report that, class size is a key factor affecting learning outcomes especially where classes are very large and the average class size exceeds 70 students per class in Tanzania.

5.2 Challenges Faced by Teachers in Teaching Overcrowded classrooms

The study also aimed at identifying the challenges faced by teachers in teaching overcrowded classrooms in public secondary schools. Through structured questionnaires to the students and teachers and interview guide to the heads of schools and Education Officers, Various challenges were identified. Data is presented in Table 9 and Table 10.

Table 9: ***Challenges facing students in learning due to overcrowded classroom (n= 53)***

Challenges	***Frequency***	***Percentage***
Poor interaction between students and teachers	13	24.5
Indiscipline of students during the lesson	7	13.2
Noise in the class during the lesson	19	35.8
Failure to understand the lesson	9	17
Spread of communicable diseases	5	9.4
Total	**53**	**100**

Source: Researcher (2021)

Table 10: ***Teachers Response on Challenges faced by teachers in teaching overcrowded classrooms (n = 30)***

Challenges	***Frequency***	***Percentage***
Failure to attend individual student during the lesson	4	13.3
Difficult in applying participatory teaching method.	5	16.7
Students noise	3	10
Difficult to cover the intended lesson and syllabus	2	6.7
Poor classroom management	10	33.3
Indiscipline of students	2	6.7
Failure to make proper evaluation	2	6.7
Difficult in marking student work	2	6.7
Total	**30**	**100**

Source: Researcher (2021)

Table 9 and Table 10 identified various challenges emerged due to overcrowded classrooms including poor interaction between students and teachers, students noise, indiscipline of

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students, and spread of communicable diseases. Furthermore, other challenges were failure to attend individual students during the lesson, difficult in applying participatory teaching method, poor classroom management and difficult to cover the intended lesson and syllabus. Based on the qualitative data which was collected through interviews a number of themes on challenges faced by teachers in teaching overcrowded classrooms in public secondary school were raised up. Major themes that emerged in this research objective include: Interference of national calendar of students learning, Poor classroom managements, teachers fail to identify each student need, and Failure in applications and implementations of competence based learning strategies.

Interference of national calendar of students learning

Interviews conducted to the heads of schools and education officers, agreed that overcrowded classrooms affects teaching and learning processes by interfered national calendar of students learning due to prolonged period of examinations.

For example, one head of school from school F had the following to say:

> Overcrowded classrooms enable the schools to conduct examinations in shifting, for example when form one and three conducted examinations form two and four wait until the examinations is over then they resume the examinations. This is for internal examinations, but during national examinations, non-examinations classes are supposed to closed the school and wait until the examinations is over, this affects teaching and learning processes". (Interview with head of school F: 30/08/2021)

The quotations from different heads of schools indicates that overcrowded classroom interfere national calendar of students learning due to prolonged period for examinations both internal and national examinations. For example, the calendar for study this year was 91 days for first term and 101 days for second term, due to examinations which are conducted in shifting some days for learning are replaced for examinations and learners failed to learn effective and teachers failed to finish their syllabus at a time. Students to conducted examinations in shift was done in order to create conducive environment for examinations and learning in general. This is reflected in the Social Cognitive Theory (1960) which holds that learning occurs in a social context with dynamic and reciprocal interaction of the person, environment and behaviour. But although conducive environment is needed as proposed by Social Cognitive Theory but examinations reduce the number of studying day and interfere studying calendar.

Ways to overcome challenges facing teachers in teaching overcrowded classroom

The fourth research objectives aimed to investigate different ways to solve the challenges facing teachers in teaching overcrowded classroom. Through open end questionnaires to students and teachers and interview guide to the head of schools and education officers, various solutions had been identified. Table 11 and Table 12 shows ways obtained from students and teachers responses.

Table 11: ***Students responses on solution to the challenges facing students due overcrowded classroom (n = 53)***

Solutions	***Frequency***	***Percentage***
To increase number of classes	30	56.6
Enrolment should consider high pass mark	7	13.2
Government should increase number of secondary school	13	24.5
Teacher should have remedial teaching	3	5.7

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Total	**53**	**100**

Source: Field Data (2021)

Table 12*: Teachers responses on solution to the challenges facing teachers due to overcrowded classrooms (n=30)*

Solutions	***Frequency***	***Percentage***
The government should increase the number of secondary	2	6.7
Constructions of more classes	12	40
Enrolment should consider high pass mark	13	43.3
Class session	3	10
Total	**30**	**100**

Source: Field Data (2021)

Table 11 and 4.12 identifying different ways to overcome challenges facing teachers in teaching overcrowded classrooms, this included to increase number of classes, government should increase number of secondary school, class session and enrolment should consider high pass mark. Based on the qualitative data which was collected through interviews a number of themes emerged on ways to overcome challenges facing teachers in teaching overcrowded classroom in public secondary schools. Major themes that emerged during the study including, the government should build more schools nearby existing primary school, Constructions of more classes in order to meet specific ratio of students per each class stream, the government should increase the number of secondary schools in relation to primary schools, Students from primary schools should be enrolled to other institutions like Vocational Training example VETA, and Open and Distance Learning, through Adult educations.

Constructions of secondary schools to the nearby existing primary school

Interviews with the heads of schools and education officers suggested that overcrowded classroom is a big challenge to our society and this can be eliminated by good government planning on education system to our country. The first theme mentioned by different respondent was that the government should construct secondary schools to the nearby primary schools so that the students should continue to its own school from standard one up to form four.

For example, one education officer A had the following to say:

> The government introduced basic education from pre-primary up to form four this led to high enrolment of students in secondary schools. The number of primary differed from secondary schools this led to overcrowded classroom in our secondary schools My suggestion is that so longer education is basic to all children secondary should be constructed to the nearby primary school so that the students can be able to study from standard one up form four on the same school and no need of standard seven examination. (Interview with education officer A: 15/09/2021)

The quotation from education officer A imply that the system of education favoured all children who are able to join in education program should go to school as the government planning. The government and community were supposed to construct secondary schools to nearby primary schools to ensure the learners continue to its own school from pre-primary to form four this can eliminate the problem of overcrowded classroom.

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The government should increase the number of secondary schools in relation to primary schools available

Second theme emerge in increasing the number of public secondary schools in relations to primary schools available this also argued by different respondent during interviews, 6 heads of schools and 1 education officer argued almost the same ideas, in reality the number of primary schools exceeds secondary schools to the area of the study, this led to public secondary schools to over enrolled the students.

One head of school from school E said the following

> Since the project of Secondary Education Development plan which concentrate on constructions of ward schools, now our government did not increase the number of secondary schools. Only ward schools which constructed during SEDP I and SEDP II, the schools remain constant and only few schools are constructed in few areas. For example, in our Municipality only 3 schools were constructed in current year and one is on progress. For this reasons the government fail to fulfil the basic project of basic education by adding more schools to ensure all children attained education as the basic rights. (Interview with head of school E: 3/09/2021)

In support of this theme education officer A had the following to say:

> In our Municipal there are few public secondary schools compared to primary schools available, statistics showed that our public secondary schools do not exceed 30 and there are more than 100 primary schools including public and private schools. For this reasons the number of students increased every year in secondary schools, so there is a need now to plan to increase secondary schools in our community instead of adding classes on existing secondary schools. This increase the burden to our teachers and led to poor management of schools. (Interview with education officer A: 15/09/2021)

In addition to that another head of school from school F suggested that:

> Now it is a time for our government and community to increase school's infrastructure in order to solve the problem of overcrowded classrooms. This includes the constructions of more schools in our Municipal Council in order to reduce the burden of large class size. For example, in recent year our local government divided most primary schools into two or three on the same area, it reaches a time one secondary schools enrolled students from 6 different primary schools with limited school's infrastructures. The community and government should plan to increase the number of secondary schools now this probably can reduce large number of students in our secondary schools. (Interview with head of school F: 30/08/2021)

The quotation from heads of schools and education officer A imply that among the reasons for overcrowded classroom is few secondary schools compared to primary schools available in Ilemela Municipality. The respondent suggests to the government to increase the number of secondary schools compared to primary schools available, since the projects of ward schools the government increase only 3 public secondary schools and one is in progress, is not yet opened. Respondents further explained the issue of local government to split one primary school into two, three, or four on the same area, this increased the burden of one

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secondary schools to enrol students from more than 6 different primary schools and caused overcrowding in public secondary schools. In addition to that secondary schools should be constructed to the nearby primary schools so that the students can proceed in schooling on the same area and the same environment from pre-primary up to form four. This can fulfil the need of basic education by ensuring all children who are able to join the school they get basic education. The community surrounding the school should assist the government through provision of materials and man power in constructions of new school to their area. This argument supports statistics obtained from the Municipal Primary School Education Officer (MPEO) showed that there were 104 primary schools in Ilemela Municipality. This includes 75 public primary schools and 29 private primary schools. These were compared to only 26 public secondary schools in Ilemela Municipality due to statistics from Municipal Secondary Education Officer (MSEO). From the data the number of primary schools is 4 times the number of secondary schools available, for this reasons there is a need to increase number of secondary schools in order to solve the challenges of overcrowded classrooms.

6. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

On the basis of the findings, this study concluded that, overcrowded classroom affect teaching and learning process, for it hinders effective teaching and learning process since teachers and learners cannot be able to have effective contacts during the lesson. As a result of overcrowding, teachers are an able to apply and implement competence based learning strategies which is child centred mode of learning. public secondary school are overcrowded as a results of higher enrolment of students from primary schools to secondary school education –against a limited number of school infrastructure especially classrooms, and few number of secondary schools compared to number of primary schools. Additionally, most public secondary schools have no class have a class size of 90 students per stream- against the average recommended class size of 40 students per stream. As a result teachers and students are made to suffer during the teaching and learning process and thus affecting the overall teaching and learning process.

5.2 Recommendations

Based on the findings and conclusion reached by this study, it is recommended that the government through the Ministry of Education Science and Technology (MoEST) and President Office Regional Administrative and Local Government (PO – RALG) should plan on the ways of increasing the number of secondary schools instead of adding more classes and streams to the existing schools. This may reduce the problem of overcrowded classroom, because the number of secondary schools can increase in relation to the available primary schools. Preferably, there should be a secondary school in between two or three primary schools. In addition, MoEST should ensure that new schools are well equipped before registration; they should meet all requirement including key school infrastructure like adequate number of classrooms, Administrative Block, Library, enough Toilets blocks for both staff and students, Laboratories, play grounds, Water, and Room for first Aid. This can reduce different problems arise due to school's infrastructure. Furthermore, Curriculum Implementer's that is teachers, Quality Assurance Officers, and Districts Education Officers should advise system administrators such as officials from the MoEST and PO – RALG through their seminars and workshops on how overcrowded classroom affects teaching and learning process, this can enable them to solve the problem by taking immediate actions

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including adding more schools and improvising suitable mode of selections into secondary school education.

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