Original Research Article

Teacher–Student Ratio: The Status Quo in Public Secondary Schools in Ubungo Municipality, Tanzania

ABSTRACT

The effectiveness of the teaching and learning process is typically judged by how well students perform. It has mainly been centred on the competence of teachers and their methods of instruction. However, there are exogenous factors, such as the number of students per teacher that affect effectiveness of the teaching and learning process. This study investigated the status of teacher-student ratio in secondary schools, in Ubungo Municipality. It was guided by two objectives; to assess the student-teacher ratio, and to identify the strategies that teachers use to manage large classrooms. The study employed a descriptive survey method with a combination of qualitative and quantitative research approaches in collecting, analyzing, and drawing conclusions from the data. The data collection instruments used were questionnaires, interviews, focus group discussions, and observation guide. The sample consisted of 170 respondents including ward education officers, heads of schools, academic teachers, teachers and students. The study revealed that public secondary schools in Ubungo Municipality are overcrowded because of the high teacher-student ratio. High student-teacher ratio leads to compromised teaching and learning process; it negatively affects classroom management practices, and makes it impossible for teachers to implement competence-based curriculum. Therefore, the study recommends that educational stockholders should improvise means of constructing more classrooms and/or establish new secondary schools, and employ adequate teachers to cater for an ever increasing number of students. An immediate solution would be for teachers to employ technical skills for the adaptation of large class sizes.

Keywords: *Status, Class size, teacher-student ratio, effective teaching, learning process, Ubungo Municipal*

INTRODUCTION

The effectiveness of the teaching and learning process is typically judged by how well students perform. It has mainly been centred on the competence of teachers and their methods of instruction. However, there are exogenous factors, such as the number of students per teacher that affect effectiveness of the teaching and learning process. It is commonly accepted that smaller classrooms result in greater teaching and learning because there are fewer pupils per teacher (Likuru and Mwila, 2022). According to Bayo (2005), smaller classes help all students since teachers can give each student more individualised attention, but at the secondary school level, low-achieving students benefit more. Low-attaining kids are particularly harmed when children in large classes receive too much instruction from the teacher to the entire class rather

than receiving individualised attention. Being in small classes in the early grades benefits students in the later years.

Graue & Rauscher (2009) note that student-teacher ratio can be derived from analyzing staffing patterns, and examining the number of salaried staff serving a set of students. This is a macro approach relating expenditures on per a student basis. The student-teacher ratio is different from class size because the latter is the number of students attending a class or in general terms, the average number of students in a classroom (Koc & Celik 2015). The ratio of student to teaching staff is obtained by dividing the number of full-time equivalent students at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions (CESifo, 2009). Accordingly, Koc and Celik (2015) posits that the number of students per teacher is generally associated with class size and it's mainly believed that smaller classes provide better teaching and learning.

The right of children to free and compulsory education Act stipulates a maximum student-teacher ratio of 40:1 for grades 1 through 5 and 35:1 for grades 6 through 8 at the elementary level, according to the United Nations (2012). In all OECD nations with comparable data, the average class size at the lower secondary level ranges from 20 students or fewer in Denmark, Estonia, Finland, Iceland, Luxembourg, Slovenia, Switzerland (public institutions), and the United Kingdom to more than 34 students in Korea, according to an OECD assessment from 2012. The discrepancy is even more pronounced when compared to other G20 nations that submitted statistics (such as Argentina, Brazil, China, Indonesia, and the Russian Federation); for example, in China, the average class size is 50 students. But according to Koc & Celik (2014), an important indicator of resource allocation, these nations employ the student-teacher ratio to lessen inequality. Only Turkey, Slovenia, Israel, and Austria among the OECD countries priorities socially and economically advantaged pupils and schools with access to more teachers.

This is quite different in many countries in Sub-Saharan Africa, the distribution of teachers is extremely uneven. In some cases, student-teacher ratios are very high in urban areas and low in rural areas, while in other countries the converse may be true (Mehrotra & Buckland 1998). Mehrotra & Buckland (1998) states that "In East and Southern Africa the picture is quite different. The student-teacher ratio fell in ten (Botswana, Comoros, Ethiopia, Kenya, Madagascar, Mozambique, Somalia, Tanzania, Zambia, and Zimbabwe), rose to only three (Burundi, Djibouti, and Lesotho), and remained roughly constant in six (Angola, Malawi, Mauritius, Rwanda, Swaziland, and Uganda). But the education system was so under-resourced during this period that a fall in the student-teacher ratio does not necessarily translate into better learning when most of the other inputs are in short supply". According to Education Budget Brief (2018) observe that the student-teacher ratio in Tanzania remains at 1:43, higher than the Sub-Sahara average and the number commonly referred to as the international standard of 1:40.

In 2015 Tanzania introduces fee-free education aimed at enabling children from lower-income families to attend school and gain an education without putting further stress on the financial situation of their parents (African Times, 2016). The fee-free education was also in line with International Declarations such as The World Conference on Education for all (EFA), held in Jomtien, Thailand in 1990, which underscore the importance of basic education and recognized that the cost of schooling was a major stumbling block to universal primary and secondary education in sub-Sahara Africa among poor households (Jomtien Conference 2011), and the

Millennium Development Goals (MDG) in which the world leaders made the achievement of fee-free Education by the year of 2015 as one of the goals.

The fee-free policy leads to the high enrolment of students in schools. The issue is school enrollment has been raised but teacher recruitment remains low and hence classes are too full while teachers in schools are few. Many studies on the effects of fee-free suggest that there's a widening student-teacher ratio in many schools. For example, Mwananchi (2016) established that Ubungo Municipal School has 5078 students and 16 classrooms and 20 toilets, implying that every class will have more than 300 students, larger than the intended ratio of students in the class. However, the recommended number of students in a class is 40 to 43. Therefore, having a high student-teacher ratio could have certain effects on the quality of education being provided in public schools.

It is clear that most of the public schools in Tanzania are affected by the increasing number of students enrolled due to the free education policy which weakens the availability of teaching and learning resources, especially in Ubungo Municipal. These teaching and learning resources include classrooms, tables, chairs, hygiene toilets, books, teachers, and teaching aids. Kalai et al (2015) noted that while increased enrolments may suggest school systems have increased their capacity to accommodate more children, this did not necessarily translate into improved education.

However, few studies have investigated the effect of the student-teacher ratio on teaching and learning processes after the establishment of the fee-free education policy in 2015. Many studies have looked at the impact of many students in the classroom and investigated the impacts of congested classes. For instance, learning becomes difficult, poor motivation, problem with physical space for teachers to walk around, and students can have trouble seeing the blackboard and even hearing the teacher during teaching processes. As such, this particular study intended to investigate the status of teacher-student ratio in secondary schools, in Ubungo Municipality, so that best practices of teaching in such situations can be applied for effective teaching and learning.

2. RESEARCH METHODOLOGY

The study employed a descriptive survey method with a combination of qualitative and quantitative approaches in collecting, analyzing, and drawing conclusions from the data. The sample consisted of 170 participants who were four (4) Ward Education Officers, five (5) heads of school, five (5) academic teachers, fifty-seven (57) teachers, and ninety-nine 99 students. Probability and non-probability sampling techniques were used to sample the participants. The data collection instruments used were questionnaires, interviews, focus group discussions, and observation guide. Validity and reliability of the instruments results were ensured through content validation, member checking and dependability, credibility and triangulation-respectively. Quantitative data was analysed through descriptive statistics whereas thematic analysis was applied on qualitative data. Ethical consideration was ensured through participants' informed consent, confidentiality and anonymity of data source during the dissemination of the findings.

3. RESULTS AND DISCUSSION

3.1 The Student-Teacher Ratio

The study's first objective was to assess the secondary public schools' student-teacher ratio. The aim was to gather teachers' opinions regarding the student-teacher ratio in relation to the government guideline on class size. The Tanzanian educational guidelines state that there are generally 1:40 students for every teacher.

Teacher participants were required to first respond to the question which stated , "What class size do you prefer to teach in order to enhance the teaching and learning process?" the study had developed multiple-choice answers, with A denoting a class of 40 students, B a class of 60 students, and C a class of 100 students or more." Table 1 shows the responses to the question.

Table 1

Teachers responses on the Class size like to teach

Variable	*A*	*B*	*C*
Class size like to teach	57 (92%)	5 (8%)	0 (0%)

Sources Field Data 2022

Similarly, students were asked to indicate a preferred class size for their leaning process. The responses are presented in table 2.

Table 2

Students responses on the preferred Class size like to teach (n=99)

Variable	*A*	*B*	*C*
Class size like to teach	77 (77.7%)	22 (22.2%)	0 (0%)

Sources Field Data 2022

About 57 teachers provided variable responses in response to the question, which is described in table 1. In public secondary schools, 92 percent of teachers feign to teach a class with 40 students on average. Apart from that response, table 2 of student responses revealed that 77 students, or 77.7% of the total, preferred to be taught in a class of 40 students. Finally, it was discovered that teachers and students in public secondary schools act as though there are only 40 students in the class and no more. This is contrary to what was observed as the observation showed that majority of the classrooms had over 70 students. This imply that the ratio of students to teachers is excessive in the majority of public secondary schools. This is due to high student enrollment rate, low teacher recruitment, and inadequate teaching and learning facilities. Similar to this, Likuru and Mwila, (2022) found that the number of students per teacher is generally associated with the class size and it is mainly believed that smaller classes produce better teaching and learning. Also Ikediashi & Amaechi (2012) argue that it is generally agreed that a

lower teacher student's ratio lead to a high quality education. The importance of teacher student's ratio is to make personalized teaching as close as possible so that the teacher will give each students his maximum attention. And United Nations (2012) reported that, the right of children to free and compulsory education Act provides a maximum student-teacher ratio 40:1 for grade 1 to 5 and 35:1 for grade 6 to 8 at the elementary level. Additionally, according to the social learning hypothesis, when individuals watch a model conduct a behaviour and see the results of that behaviour, they retain the order of events and utilise this knowledge to direct future behaviours (Bandura 2002). Therefore, in contrast to big class sizes where some students may not be able to witness and replicate what they experience during teaching and learning processes, small class sizes ensure that all students are attentive and observe teaching and learning processes.

A question was also developed by the researcher to find out how many students are currently enrolled in public secondary schools. During the focus group discussion, teachers and students responded to the question, "How would you describe the class size at your school?" in order to choose the pertinent current class size of public secondary schools. Table 3 shows that row A represents large, row B represents small, row C neither represents little nor large, and row D represents extremely huge.

Table 3: Teachers *responses on the class size ratio*

Variable	***A***	***B***	***C***	***D***
Class size	48 (77%)	9 (15%)	0 (0%)	5 (8%)

Sources Field Data 2022

The variables in tables 3 and 4 are the same, but the respondents are different. Table 3 shows the results from the teachers, while Table 4 shows the results from the students.

Table 4: Students *responses on the class size ratio*

Variable	***A***	***B***	***C***	***D***
Class size	72 (72.7%)	0 (0%)	7 (7%)	20 (20.2%)

Sources Field Data 2022

Table 3 reveals that 77 percent of teachers, or roughly 48 teachers, indicated that the existing public school class size is too large. In addition, replies from students in table 4 revealed that 72 pupils, or 72.7 percent, responded to variable A, indicating that the current public school class is sizable. This data suggests that class size was still a significant problem and caused congestion in public secondary schools. The vast majority of respondents in tables 3 and 4 said that their schools had big class sizes. Large class sizes diminish effective teaching and student learning because they lead to ineffective lesson demonstration and bad class management, which lowers teacher and student learning evaluation.

Similar research was done in Zambia by Maulazi and Kalemba (2020), who stressed that the majority of public secondary schools were huge because of the high student enrollment relative to the employment of teachers. Additionally, Nyiwa & Gathumbi (2017) claim that overcrowded classrooms have a negative impact on the standard of instruction in low-resource schools, while Evarist (2018) contends that big class sizes lower teacher morale and lead to ineffective instruction. Similar to the study carried out in the United States of America by Odden (2016), it is important to note that many American classrooms have more than 30 students enrolled. Additionally, social learning theory places a strong focus on students actively learning to pay attention, try to retain, and replicate the intended knowledge and abilities, but a high class size makes it difficult for students to pay attention throughout the teaching delivery (Kay & Kibble 2015). Therefore, having a big class size prevents teachers from teaching well and students from learning effectively in public secondary schools.

In a thematic approach analysis, the rese delivers a qualitative analysis of data that was gathered on the ground. The information was gathered in three different ways, including interviews and observations. The interviewee's response was influenced by the following factors: the interviewer asked about the likely class size, the current student-teacher ratio, the number of classes, and any new information that came to light during the field study about the student-teacher ratio, particularly in form four classes in public secondary schools.

The study created new questions to delve deeper into the two main issues: first, the number of students enrolled in relation to the number of teachers employed in the chosen public secondary schools, and second, the number of classrooms required to accommodate the number of students enrolled in the chosen public secondary schools. The responses are presented in Table 5.

Table 5: ***The responses on students registered and teacher employed***

Schools	*Number of Students*	*Number of Teacher*	*Student-Teacher Ratio*
A	1543	26	1:59
B	1494	31	1:48
C	1264	39	1:48
D	1218	29	1:42
E	1237	28	1:42
Total	**6756**	**153**	**1:44**

Sources Field Data 2022

It was discovered during the head of school and ward educational officer interviews that they both had the same responder when it came to the quantity of teachers and students. Both the heads of schools and ward education officers concur that a class size of 40 students makes for more efficient instruction. Since there are fewer students in the class, it is easier to maintain order and keep everyone focused on the lesson at hand by removing any distractions that could otherwise keep a student from participating in the learning process.

In response, the head of school A stated that there were 1543 registered students, 26 government-employed teachers, and a ratio of 1:59, or one teacher to 59 students. The head of school B and

the ward education officer replied that there were 1494 students registered for 2022 and 31 teachers to handle the number of students, which is equal to a 1:48 ratio, or one teacher for every 48 students. According to School C's responses, the school has 1264 registered students and 39 teachers. One teacher is assigned to every 48 students, or 1:48. According to the school D head of school and the ward education officer, there were 1218 students enrolled at the school and 29 teachers, for a ratio of one teacher to 42 students. Additionally, station E disclosed that they have 1 teacher for every 42 students, or 1:28 total teachers. As a result, the government's recommendation of one teacher to every 40 pupils raises concerns about the student-teacher ratio in the majority of public secondary schools.

This is in contrast to a research conducted in the United States of America by Odden (2016), which found that most classrooms still had at least 30 children in them. For instance, the majority of primary schools in the Los Angeles Unified School District have 31 children in each classroom. The enrollment of students is double the number of teachers employed in Tanzania's public secondary schools notwithstanding the high rate of teacher recruitment. Head of the school B argues that,

> The previous year school enroll and registered 60 hundred students without any new teachers recruited. Students increase with absence teacher's recruitment, mean that that school remain with few teachers not able to accommodate the large number of students.
>
> (Interview was on 14/06/2022)

Likewise, head of school A responded one the students registered and the number of teacher employed in the school, as shown below.

> The head of school A responds that, the number of students registered was 1543 and the number of teachers employed by the government was 26 and the ratio was 1:59 ratio mean means one teacher to 59 students.
>
> (Interview was on 16/06/2022)

This is corroborated by Mgimba and Mwila, (2022), who discovered that while higher enrollment may indicate that school systems have expanded their ability to house more students, this did not always translate into higher-quality instruction. This leads to a shortage of books and other things. According to the explanation of school size provided above in relation to the employment of teachers and the number of students enrolled, public secondary school enrollment and registration of students rise annually while doing the opposite of what the employment of teachers does.

Apart from that, the study also intended to investigate number of classroom with the relation to the number of form four students per one class. Results were as indicated in Table 6.

Table 6: ***head of schools responses on classroom ratio of form four students***

Schools	***No. student in form IV***	***No of form IV classroom***	***Average No. of students per class***
A	297	3	99

B	248	3	82
C	353	4	88
D	313	3	104
E	285	3	95

Sources Field Data 2022

The table 6 describes the responses of the heads of school. The head of school A responded that they have 297 form IV students with 3 classrooms, the ratio of students in one class suggested to carry about 99 students, head of school B respond I have 248 form IV students with 3 classrooms, the ratio of student in one class suggested to carry about 82 students, head of school C respond I have 353 form IV student with 4 classrooms, the ratio of student in one class suggested to carry about 88 students, head of school D respond I have 313 form IV student with 3 classrooms, the ratio of students in one class suggested to carry about 104 students, and the last head of school E respond I have 285 form IV students with 3 classrooms, the ratio of student in one class suggested to carry about 95 students.

The aforementioned responses demonstrate that there is a lack of classrooms with an average number of students each class in public secondary schools. Consequently, based on Tanzania's educational guidelines of ratio 1:40 or 1:42, the number of pupils in each class is equivalent to two or three classes. This shows that while there was a little difference in the teacher-to-student ratio in table 4, the discrepancy in table 4 is due to a lack of classrooms large enough to hold the majority of the pupils. The Head of the school D had to says,

> If you take the number of students and number of teachers not differ at all in term of ratio but the difference was shortage of classroom in my school, I have three classrooms with a large number of students so one classroom for the students who take science subjects takes about 60 average and two classes for the students who take the arts subjects with an average of 90 students and up to 100. (Interview was on 06/06/2022)

The ward education officer explained that,

> Every year form one student enrolment increase with little compensation of teacher to recover the gap of increases students enroll. For instance, the previous year student who finished form four was 250 and the new form one registered about 500 students double to those who finished to form four. This caused a shortage of school infrastructures such as tables and chairs, classrooms, toilet, and teaching and learning material in public secondary schools. (Interview was on 08/06/2022)

The synthesis of the findings from objective one revealed that public secondary schools had an above average balance of the students and teacher ratio of more than the required 1:40, quite different from the guidelines by Ministry of Education Science and Technology (MoEST) of 1:40 students. The study observed that within the class students range from 59 up to 104 students per with the single teacher taught in a particular period. This would compromise the quality of teaching and learning. This was comparable to the study of Maulazi (2020), who contends that the majority of the participating teachers described their classes as being large. In Zambia, some courses included as many as 70 students. This scenario, if left unresolved could hinder the quality of teaching and learning. This could also disadvantage low low-ability. As argued by

Bayo (2005), low ability students are particularly harmed when children in large classes receive too much instruction from the teacher to the entire class rather than receiving individualized attention. Therefore, more effort is needed to address this situation.

3.2 Strategies that teachers use to manage a large classroom

The second objective of this study intended to investigate the strategies that teachers use to manage a large classroom in public secondary schools. The study designed an open-ended question for the teachers and students to respond about the strategies they use to manage large class sizes. The open-ended question was asked to teachers and students while the observation was done by the researcher, and the interviews were done with the heads of schools and ward education officers. The responses are presented in Table 7.

Table 7: Teachers' response on the strategies on managing large classrooms

Strategies	*Frequency*	*Percentage*
Subject attendance book	4	6
Using group discussion	18	29
Question and answer	26	42
Administering remedial classes	8	13
Positive or negative reinforcements	6	10
Total	**62**	**100**

Sources researcher 2022

Table 7 shows that, 4 teachers, equivalent to 6 percent agreed that they preferred to use subject attendance books before the teaching and learning processes. Another response shows that 18 teachers, equivalent to 29 percent agreed that they preferred the use of group discussion during teaching and learning processes. Also, 26 teachers, equivalent to 42 percent agreed that they preferred the use of question and answer during teaching and learning processes. Apart from that, 8 teachers, equivalent to 13 percent agreed that they preferred the use of administering remedial classes, moreover, 6 teachers, and equivalent to 10 percent agreed that they preferred the use of positive or negative reinforcements during the teaching and learning processes.

Likewise, the study develop the same question to students during the focus group discussion and their responses were aggregated as presented in table 8.

Table 8*: Students response on classroom management*

Strategies	*Frequency*	*Percentage*
Sitting arrangement	8	8
Punishment	13	13
Group discussion	27	27
Class exercises	9	9
Questions and answers	42	43

Total	**99**	**100**

Sources researcher 2022

Table 8 indicates that 8 students, equivalent to 8 percent agreed that they preferred to arrange the table and chair in proper arrangements before the teaching and learning processes. Another response shows that 13 students, equivalent to 13 percent agreed that they preferred to punish indiscipline students during teaching and learning processes. A part from that 27 students, equivalent to 27 percent agreed that they preferred to group the students for the discussion during the teaching and learning processes. Also, 9 students, equivalent to 9 percent agreed that they preferred to give class exercises for managing the classroom, furthermore, 42 students, equivalent to 43 percent agreed that they preferred to question and answer during teaching and learning processes. One respondent wrote,

> I normally group the students and give them a task for discussion, after that, they came to present in front of the classroom and their fellow students ask questions and contribute what they know about the presentation. Later, I give them clarification about their presentation.

Similar to Kadelya's (2015) study, this one asserts that interactive teaching methods are the pedagogical strategies that enable teachers to effectively involve students in the lesson throughout the teaching and learning processes. In this instance, social learning theory places a strong emphasis on how teaching and learning are environmentally sustainable. Children are more interested in environmental issues when the adults around them are environmentally conscious and behave well (Ata, 2018). Therefore, interactive teaching creates a healthy atmosphere for teaching and learning processes for all types of learners (slow learners and quick learners).

Additionally, data from focus groups, interviews, and observation were gathered as qualitative topics in this section. Through the examination of qualitative data, a number of themes and techniques for managing large classes by teachers during teaching and student learning processes emerged. Control of discipline, methods for teaching and learning that are most effective in a large classroom, and teaching and learning evaluation were the main issues that emerged.

Discipline control

Through interviews, focus groups, and observations, many respondents claim that while many people hold the government responsible for the provision of ineffective teaching and learning facilities that may result in students not being properly disciplined while in class, teachers themselves have the power to regulate the behaviour of the students. These themes were broken down into a few categories based on the respondent's and the researcher's observations, including the control of students' irrational movements during the teaching and learning processes, the control of students' egotism, seating arrangements, and teachers' physical and mental demonstrations of lessons. According to the Chua and Mosha (2015) study, rules and regulations were helpful in maintaining order at school, which in turn aided students in paying attention, working hard, and performing well. This shows that school administrators created a climate where teachers felt comfortable and motivated to complete their duties at their institutions.

A teacher must maintain strict classroom discipline because a poorly managed class can bring chaos and unhappiness for a large number of students by acting like a runaway lorry (Farrant 2004). According to the social learning theory, a learner will pay attention to formal or informal examples of either acceptable or bad behaviour. The student retains the desired and undesirable behaviours. The learner imitates desired behaviours and reduces or eliminates unwanted ones (Kay & Kibble 2015). Students were made to change to the desired habit of not moving in the class without permission or compelling reasons thanks to earlier discussions with them on stopping unnecessary movements. This causes teaching to be done effectively as it is being done.

Using participatory teaching methods

The use of participatory methods was pointed out to be among the most effective strategies of managing large classrooms. Participants pointed out methods such as discussion methods, brainstorming, fied work, demonstration, question and answer method-etc to be effective when teaching larger classes. Carpenter (2006) claims that use of the jigsaw approach, which combines lecture, discussion, case studies, and team projects, help students absorb the material in huge classes. Similar to the social learning theory, which contends that matching non-examples, illustrative examples, instructional explanations, and demonstrations are all crucial in directing student learning. Similar to this, the importance of practise with constructive criticism is emphasized (Ertmer, & Newby, 2013).

This is comparable to a Majani study (2020) additionally, encouraging the class during the lesson delivery helps the pupils participate in class. Additionally, Evarist (2018) contends that the environment in the classroom should encourage the discovery of meaning in order to establish a productive learning environment. It ought to enable participation, communication, and socialisation within the classroom. According to social learning theory, human mental processes are crucial to comprehending personality and that people learn by observing what others do (Bandura 1986, cited by Nabavi, 2012). Effective teaching by teachers and student learning are essential for a successful lesson demonstration, particularly in public secondary schools where big class numbers are the norm.

Understanding the learner characteristics

The study also found that, schools can identify their students and group them according to their physical and mental characteristics to ensure effective teaching and student learning in the class. Similar to the researcher's observations, deaf students sit in front of the class and even attempt to ask questions if they do not fully comprehend the topic being covered during the discussion. Teachers frequently employ regulated interaction amongst students during class activities to increase students' engagement, academic accomplishment, and learning experience, according to Olagbaju & Nnorom (2019) and Sellah, Jacinta, and Helen (2017).

According to Asodike and Onyeike (2015), teachers make plans to meet each student's unique needs, such as when they need to collect supplies for class. Additionally, Asodike and Onyeike (2015) contend that knowing students' names and using at least some of them while teaching has an effect on students and makes teachers appear more approachable and friendly. Students thereby learn the importance of complete engagement in the teaching process.

Planning lesson according to the objectives

The study found that planning lessons according to the objective is one among the most effective ways of managing larger classrooms. This is by considering structuring the lesson plan, lesson development, the material used, and time management. This was reported to influence students' attention and thus leading to full participation and involvement in the teaching and learning process. Emmanuel, (2013) (2015) argue that, there is a need for teachers to plan lessons to overcome the issue of instructional time, and plan the physical and psychological environment to manage the classroom effectively.

Also, the teacher can develop interactive teaching in different ways, such as giving students question and answer at the end of the lesson, and leaving gaps in the hand-outs or lesson notes on the blackboard for students (Keith, et al. 2016). Teaching large classes should attempt to include constructive, active teaching methods in their courses whenever possible (Carpenter 2006). Kay & Kibble (2015) in social learning theory argue that, the learner pays attention to demonstrations (formal or spontaneous) of desirable or undesirable behavior. Therefore, planning a lesson according to the objective facilitates the learner to understand the desired goal need to archive in the lesson hence, students become active to understand the lesson through teacher planning.

Time management

A strong theme emerged during the interview and focus group discussion by considering time as the way to strategies of controlling the large classroom. This study revealed that teachers of school B before going to class prepare a lesson plan with consideration of the limited time frame of teaching. In the lesson delivery teacher arranged time in every lesson stage of the lessons. Asodike and Onyeike (2015), who contend that large classes put a strain on the teacher's capacity to manage time and necessitate more time be committed to instruction, corroborate this claim. Additionally, according to Keith et al. (2016), teachers offer students a deadline for finishing a task to convey to them that class time is valuable and should be utilised as effectively as feasible. The instructor had every minute of class time planned out to encourage learning.

Evaluating teaching and students' learning

During the field study, the study investigated different methods used to evaluate the success of the delivery of the lesson. The methods used by the teachers were self-reflection, giving tasks with clearing instructions, and providing the student's feedback. Through the interview, focus group discussion, and observation of research are explained as follows. Carpenter,(2006), who did a study akin to this one, claim that evaluation is necessary to ascertain which techniques are most beneficial at boosting academic achievement in large classes. When the teacher does not deliver the lesson in accordance with students' expectations, pupils may engage in distracting conduct out of boredom or demotivation (Gibson et al., cited in Majani 2020). According to Zhou & Brown (2015), this connects to the social learning theory, which contends that people are most likely to emulate actions that lead to an outcome they value and if the conduct appears to be successful for the models who displayed it. Consequently, self-reflection aids in lowering teachers' boredom. As a result, self-reflection helps teachers feel less bored and supports interactive teaching for successful instruction and student learning.

Giving student task with the clear instruction

The study noticed many questions that teachers asked that they wanted students to answer during the observation. Teachers' questions should have clear instructions that might help students comprehend the question and make it easier for them to adapt competence-based curriculum to real-world situations outside of the classroom. In order to efficiently manage time, particularly during teaching processes, the study observed that giving students a task with clear instructions helps them answer well and also decreases the number of times they ask the same question from the teacher. According to Asodike and Onyeike (2015), teachers choose assignments that are pertinent to their learning objectives and results and create tasks that demonstrate whether students can apply what they are learning to every situation rather than just understanding the procedures and clear instructions of all assignments. Additionally, Majani (2020) emphasises that when students are involved, clear instruction makes it easier to create a setting that is conducive to lesson understanding. Make sure they fully understand what they must accomplish in order to succeed in the classroom.

The synthesis of the findings by this objective indicates that different strategies are used as managerial tactics when teaching large classrooms. These include Discipline control, using participatory teaching methods, understanding the learner characteristics, and planning lesson according to the objectives. Others include time management, evaluating teaching and students' learning, and giving student task with the clear instruction. All these strategies were applied to manage the large class size and were reported to be effective in making the class attentive during the lesson delivery. Olagbaju & Nnorom (2019), classroom dynamics such as class arrangement, class size, and class control or management can significantly contribute to teachers' effectiveness and students' learning outcomes Also, the study conducted by Majani (2020) emphasize that, classroom management will be controlled by students sitting plans. Kay and Kibble (2015) argue that, the learner becomes more active in the learning process, although the concept of the learner is still one of a natural response to environmental stimuli. Student sitting arrangements accelerate the good environment stimuli for enhancing teaching and learning processes.

4. CONCLUSION AND RECOMMENDATIONS

The conclusion is based on the findings of the study while the recommendations are given on the bases of the findings and the conclusion of the study.

Conclusion

It is commonly accepted that smaller classrooms result in greater teaching and learning because there are fewer pupils per teacher (Koc & Celik 2014). Based on the findings of this study, it is concluded that public secondary schools in Ubungo Municipal are overcrowded because of the high teacher-student ratio necessitated by inadequate classrooms. This is against the guideline by the Ministry of Education Sciences and Technology (MoEST) which stipulated a teacher-student ratio of 1:40. Such high teacher- student-ratio leads to compromised teaching and learning process; it negatively affects classroom management practices, and makes it impossible for teachers to implement competence-based curriculum. As opined by Bayo (2005), low-attaining kids are particularly harmed when children in large classes receive too much instruction from the teacher to the entire class rather than receiving individualised attention.

Recommendations

the government through the Ministry of Education Science and Technology and the President Office Regional Administrative and Local Government (PO-RALG) should plan the way teachers are employed according to the needs of the specified public secondary schools. It should prioritise employing teachers, building more new secondary schools and/or adding more classrooms to existing secondary schools. These would lead to efficiency and effectiveness of the teaching and learning process.

Moreover, the education stakeholder should play a part in effective teaching and learning processes. Government representatives, charitable organizations, and worker trade unions especially Chama Cha Walimu Tanzania (CWT) should consider donating money to aid the construction of more classrooms and new secondary schools. Also, education policymakers and Universities should provide in-services training for the secondary schools' teachers on how to manage and teach large class sizes, especially in public secondary schools.

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