



## TEACHERS' EXPERIENCES WITH OVERCROWDED CLASSROOMS IN A BASIC SCHOOL IN GHANA

Joycelyn Adwoa OSAI

Mallam MA 2 Basic School, Mallam, Accra, Ghana

ORCID: <https://orcid.org/0000-0003-0523-2102>

[joycelyn.osai@yahoo.com](mailto:joycelyn.osai@yahoo.com)

Kwaku Darko AMPONSAH

PhD.: Department of Teacher Education, University of Ghana, Legon, Accra, Ghana

ORCID: <https://orcid.org/0000-0002-7824-6516>

[kdamponsah@ug.edu.gh](mailto:kdamponsah@ug.edu.gh)

Ernest AMPADU

Associate Professor, KTH Royal Institute of Technology, Stockholm, Sweden

ORCID: <https://orcid.org/0000-0001-8165-4126>

[ernesta@kth.se](mailto:ernesta@kth.se)

Priscilla COMMEY-MINTAH

PhD.: Department of Teacher Education, University of Ghana, Legon, Accra, Ghana

ORCID: <https://orcid.org/0000-0002-6575-4335>

[pcommey-mintah@ug.edu.gh](mailto:pcommey-mintah@ug.edu.gh)

**Received:** February 15, 2021

**Accepted:** April 11, 2021

**Published:** June 30, 2021

### Suggested Citation:

Osai, J. A., Amponsah, K. D., Ampadu, E., & Commey-Mintah, P. (2021). Teachers' experiences with overcrowded classrooms in a basic school in Ghana. *International Online Journal of Primary Education (IOJPE)*, 10(1), 73-88.



This is an open access article under the [CC BY 4.0 license](https://creativecommons.org/licenses/by/4.0/).

### Abstract

This research sought to investigate teachers' experiences with overcrowded classrooms: the case of new Gbawe experimental 1 basic school in Ghana's Greater Accra region. The study explicitly followed a qualitative approach to research specifically a case study design. Unstructured questionnaires and Teacher observations were utilised in the process of generating the data. This investigation's general results indicate that educators' perceptions with overcrowded classrooms are 'stressful'. Similarly, teachers described some situations in an overcrowded classroom which they defined as stressful. Some of the descriptions given by educators include insufficient learning environments, safety and health concerns, limited contact between pupils and educators, disruptive behaviour, emotional and mental challenges for educators, increased workload and insufficient time in the classroom. In addition, the factors contributing to traumatic experiences include lack of administrative support, lack of policy enforcement, insufficient teacher preparation and professional development and lack of teaching material for learning. Educators, however, suggested that they still had recourse to improvisation to allow them to handle overcrowded classrooms. Working on teacher best practices in overcrowded classrooms was suggested to be helpful in helping teachers who find themselves in such circumstances.

**Keywords:** Class size, classroom discipline, classroom management techniques, overcrowded classroom, public basic school teachers' experiences.

### INTRODUCTION

Globally, all countries both developed and developing, including Ghana, experience a fundamental challenge in education and training institutions when it comes to providing all school-going children with a satisfactory basic education. This is as a result of the unprecedented increase in enrolment in schools worldwide (Hachem & Mayor, 2019). Despite the significant steps accomplished especially in access to basic education, momentous difficulties remain, particularly in developing countries. Some of the difficulties include the issue of improving quality and expanding learning accomplishment. Accordingly, Ahmed and Arends-Kuenning (2003) posited that essentially, education is a foundation for monetary development and advancement attributable to the colossal extension in the number of



applications for its products and services around the world. Subsequently, student enrolment is on the increase thereby driving the global community, governments, and administrators of the education system to deal with the huge enrolment numbers without trading off quality. "Education is the wise, hopeful and respectful cultivation of learning undertaken in the belief that all should have the chance to share in life" (Smith, 2020: p.1). This implies that education requires a conviction that everybody holds in life and a vision of what will make people happy and prosperous.

This is in accordance with the desire or disposition of others (fear of respect, knowledge, and prudence) and collaboration (relationship with others in establishing relations and learning environments) with others. In conclusion, it is the issue of customary practice or behaviour that leads to a committed and responsible action (Carr & Kemmis, 1986; Grundy, 1987). The classroom as a unit of the school executes its role as part of the learning process. Correspondingly, a classroom, a room where children, as well as adults, learn (Moreno, Cavazotte, & Dutra, 2020), is also a study area. Classrooms can take place in all kinds of educational establishments, from preschools to universities or elsewhere, such as in religious and humanitarian institutions, for example.

Overcrowding in classrooms is an international issue that hinders an efficient teaching and learning process (Hachem & Mayor, 2019). One of the most pressing issues facing educators in the United States today is overcrowding (Hachem & Mayor, 2019). The question is a combination of population growth, the lack of educators, and a reduction in grants or support that has increased class size (Hachem & Mayor, 2019). There are about 17,400 schools that are overcrowded in the USA (Hachem & Mayor, 2019). Class sizes would be set in an ideal world for 15-20 students. Sadly, many classrooms now surpass 30 students on a daily basis, and even in some cases, schools have more than 40 learners in one class. Likewise, the only EU nation with overcrowded primary classes is the United Kingdom. In Ireland, two out of three primary pupils are also in above-average classes of 25 or more, second only to the UK in Europe (Donnelly, 2019). There were also more than 30 pupils per class in China. Among primary school and lower secondary education, the number of students per class appears to increase. A 2015 provincial survey found that in Shandong, more than 40 percent of classes in primary and middle schools were over-sized. Ten per cent had a class size of more than 666 per cent (China Xinhua, 2016). The average class size is more than 100 at a middle school in Zhoukou District, in China's most populated Henan province (China Xinhua, 2016). In China, education officials describe classes of "normal" size as those with up to 45 learners. Classes with more than 55 pupils are called "large" and "super-large" are those with more than 65. But in 15 Chinese provinces, the average for junior high schools reaches 45, and in two provinces, it is more than 55 (China Leiyang, 2018).

The problem of overcrowded classrooms in most African countries is no different. Overcrowded classrooms have been reported in some countries in Africa. Nigeria, Kenya, South Africa have all admitted congestions that are overly above the UN acceptable ratio (Motshekga, 2012; Mutisya, 2020; Onwu & Stoffels, 2005). The learner teacher ratio (LTR) (Motshekga, 2012; UNESCO Institute of Statistics, 2008) for primary education is 40:1. Pupil teacher ratio (PTR) is, however, troubling in the majority of developed countries. It was calculated by UNESCO (2008) that more than 84% of the classrooms had more than 40 learners. However, Sub-Saharan Africa and Asia, form the majority of countries with PTR over 40:1. Although Ghana was at 27.25 pupil-teacher ratio in primary schools in 2018 (UNESCO Institute of Statistics, 2020), Ghana has many more schools that are associated with a large number of pupils at the same age. Nevertheless, there have been major regional variations in national pupil-classroom ratio (PCR). According to the Ministry for Education, Ghana (2018), the PCR of public elementary schools is 55:1 for kindergarten, 38:1 for primary school, and 35:1 for junior high school (JHS).

Therefore, overcrowded classrooms disrupt teaching effectively as most teachers experience teaching difficulties, discipline, physical, and appraisal problems (Iqbal & Khan 2012). Regrettably, teachers in public schools are still facing severe problems with congested classrooms (Amarat, 2011). Consequently, Oliver (2006) argues that overcrowded classrooms lead to frustration when learners



withdraw, become frustrated, and exhibit negative attitudes. Consequently, overcrowded schools have negatively affected the self-confidence of teachers and their professional satisfaction, creating a situation in the classroom whereby educators encounter countless difficulties (Fin, 2003). Learners learn at different levels and, because of a learning barrier, some learners might need individual attention. In Ghana, the School Feeding Scheme, the provision of free school uniforms and workbooks, and the “FREE, Compulsory Universal Basic Education” (FCUBE), are some recent policies introduced in the education sector (Kweitsu, 2019). From 1996-2005, the FCUBE presented an action plan to close the gender gap in primary schools, to strengthen education and the living situation of teachers (Thompson & Casely-Hayford 2014). Ghana thus scored 1 for both elementary school and high school levels in 2013 on the UNESCO Gender Parity Index (GPI) (World Bank, 2013). These policies have led to an increase in the number of students in classrooms, given the lack of appropriate school facilities (Kweitsu, 2019).

Given the strides that Ghana has made in enhancing access for all to education, obstacles remain that prevent the acquisition of knowledge in quality learning by thousands of children (Kweitsu, 2019). Normally, since schools are overpopulated, the school environment is not ideal for learning. In consequence, the low standard of education is reflected in the academic performance of the students (Shah & Inamullah, 2012). Due in part to numerous initiatives aimed at enrolling more students, some schools in the Accra Metropolis, including New Gbawe Experimental 1 Basic School, has been overcrowded during the course of time.

When the researcher examined and witnessed students studying, and teaching at New Gbawe Experimental 1 Basic School, the researcher confirmed the condition of overly crowded classrooms. The investigator noted that students sat in threes or fours on benches supposed to be occupied by two students, obstructing the movement of teachers and students alike, in the classroom, causing discomfort among students, and requiring exceptional tactics. Correspondingly, in the New Gbawe Experimental 1 Basic School, the average pupil-teacher ratio is 72. It is almost twice as much as the Ghana Education Service’s standard pupil-teacher ratio of 38 (Ministry of Education, MOE, 2018).

According to Freiberg (2013), classroom management plays a significant role in student success in a chaotic and badly controlled classroom. The classes are usually crowded and students have little space to navigate. Accordingly, Marzano and Marzano (2003) described aspects of the management of classrooms, including the creation of a place for successful class management (Saifi, Hussain, Salamat, & Bakht, 2018). Marzano and Marzano noted that the management of the classroom will involve a teacher, who will ensure that the students will have a sense of what they need to do within a given time span. A second approach would be to reorganise the seats to allow all students to participate equally in their learning experience.

Behaviourism is used in many class management investigations, where the teachers manage the atmosphere in the classroom for the students to understudy them (Edwards & Watts, 2010; Freiberg, 2013; Saifi, Hussain, Salamat, & Bakht, 2018). Particularly, the use of desks, lamps, ventilation, and the proper use of blackboard, as techniques for the management of classrooms, is continuously defined by teachers. In huge classrooms, educators often use various approaches such as the establishment of positive relationships with students; the arrangement of their instruction to improve access to learning for students; and the promotion of students' participation in academic activities using social management techniques. The rest are promotion of learners' communal abilities and trying to control one's actions, feelings and thinking in the pursuit of long-term objectives; and usage of suitable interdisciplinary approaches to support learners experiencing reactions to the social stimulation difficulties.

Nevertheless, the organisation of large and smaller classrooms is differentiated (Asodike & Onyeike, 2016). Consequently, stratagems in smaller classrooms cannot easily be translated into those with large classes. For starters, the consideration of seating arrangements because of space is useless in a large classroom. Also, the standard of the teacher and his connection with students is a fundamental



element of all other class management aspects in large classrooms. Adeyemi (2008) opined that the average number of learners in a class is reported in class size or in the number of students taught by a teacher in a single classroom. Kedney (2013), however, found that class size is a method for evaluating the educational system's success as the bigger the class size the less efficient is the instruction. An alternative opinion is held by Stepaniuk (1997) that educators' organisation could define the triumph or the non-fulfilment in instruction and learning and not the quality utilisation of the classroom even though that may depend upon class space and size. It is significant in instruction and learning, not because of the size of the class, but rather how the teacher handles their classes in terms of the classroom's size and capacity (Stepaniuk, 1997). Educators and learners alike would have trouble moving about during learning, especially when there is a lack of space. Likewise, pupil-teacher ratios (PTRs) and class size are dissimilar or inconsistent as opined by some investigators (Harfitt, 2015; O'sullivan, 2006). Unlike PTR that is the overall student enrolment at one school divided by administrators, counsellors, professional teachers, and other people supporting the school and not just the number of teachers, class size is the average number of children for which the Teacher is responsible. This thesis, therefore, examines the experiences of educators at the New Gbawe Experimental 1 Basic School as a case study of overcrowded classrooms.

### **Statement of the Problem**

Challenges with overcrowded classrooms have been reported all over the world. For instance, overcrowding is one of the most significant concerns facing schools and teachers in the United States today (Hachem & Mayor, 2019), the UK and Ireland (Donnelly, 2019), and China (China Xinhua, 2016; China Leiyang, 2018). Additionally, overcrowded classrooms are also found in some countries in Africa such as Nigeria, Kenya, South Africa (Motshekga, 2012; Mutisya, 2020; Onwu & Stoffels, 2005). Ghana is also experiencing unprecedented levels of overcrowding as a result of the FCUBE and school feeding programme (Kweitsu, 2019; Ministry for Education, Ghana, 2018). Teachers around the world, like Ghana, have trouble managing overcrowded classrooms (UNESCO Institute for Statistics, 2018). Although measures are put in place to reduce the overcrowding issue in schools, they are not enforced and cause teachers a variety of problems. Teachers are faced with overcrowded tasks, as they are responsible for instructing, learning and managing the classroom simultaneously. There are schools in Ghana with many more learners in one classroom despite the fact that the officially prescribed LTR for primary schools is 40:1 (Motshekga, 2012; UNESCO, Statistics Institute, 2008). Relatively, this accounts for an overcrowded classroom, and that of New Gbawe Experimental 1 Basic School with an LTR of 72 cannot be overemphasised.

LTR is directly related to the standard of schooling according to Lannoy and Hall (2010). Such challenges have an immense effect on teachers as teaching and learning quality in overcrowded setting decreases. Similarly, teachers find it very easy to get upset when they face challenges that hinder them from producing educational results. In addition, there is a variety in every classroom because the learners have specific needs and aspirations. Therefore, learners learn at various rates and due to learning challenges they may meet, some learners may need individual attention. As part of its pledge to Free and Compulsory Basic Education (Ghana Education Service, GES, 2014), Ghana's new education programme provides two years of Kindergarten (KG) which brings it ahead of the curve relative to other countries in sub-Saharan Africa. Ghana's education is "divided into three phases: basic education (nursery, elementary, lower secondary), secondary education (high school, technical and vocational education), and higher education (universities, polytechnics, and colleges)" (GES, 2014: p.2). Acknowledging the gains of the last two decades, Ghana has significantly higher efforts of the government through the Ministry of Education and the Ghana Education Service, GES (2014) to extend KG services equitably, particularly for its most marginalised and vulnerable children (UNESCO, 2018). The Ministry of Education and Ghana Education Service have been steadily working for universal access to basic education (UNESCO, 2018). The Inclusive Education Policy Framework delivers opportunities for the students to obtain a quality education. Ghana's Inclusive Education (IE) programme supersedes the concept of geographic location (UNESCO, 2020).





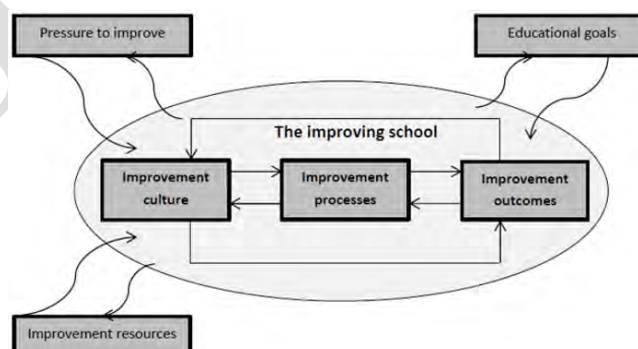
However, the strategy acknowledges the varying learning needs of the students. Teachers cannot enforce this in an overcrowded classroom.

There is no comprehensive literature regarding the disparity between the scholastic achievement of the learners and the number of learners enrolled. Although some genuinely think that large classes are detrimental to student accomplishment, (Cooper, Lindsay, & Nye, 2000), think alternatively. UNESCO (2020) has expressed the view that although the number of classrooms built in different parts of the country has not increased correspondingly, enrolment in all primary schools, especially public schools, has doubled. Yelkperli, Namale, Esia-Dankoh, and Ofosu-Dwamena (2012) researched on overcrowded classrooms at University of Education, Winneba campus. Similarly, Akoto-Baako (2018) also reported overcrowding in senior high school (SHS) in Cape Coast Metropolis, Ghana. From the above it is realised that research on overcrowded classrooms have been performed in some parts of Ghana and at certain levels of education but not in the current study area. It is against this backdrop that the research is conducted to interrogate issues regarding overcrowding in Gbawe Experimental 1 Basic School. Again, it will analyse the procedures that teachers utilise to handle overcrowded classrooms, and recognise the obstacles that educators experience as they handle overcrowded classrooms.

## Theoretical Framework

### School Improvement programme theory

Van Velzen, Miles, Elholm, Hameyer, and Robin (1985) described school improvement as "a comprehensive, concerted initiative targeted at enhancing learning environment as well as other relevant internal circumstances in one or more schools, with the overarching goals of attaining more efficiently academic objectives." Consequently, Jansen (2001) observed that school improvements are important for a school and an emphasis on results. With respect to congested schools, it's a concern for many educators worldwide and the sooner the condition is addressed the faster. In fact, school development plans are important to mitigate the issue for teachers and they help to reduce the repetitive tension that teachers face in congested classrooms on a regular basis. As a consequence, Creemers (2008) argues that a climate convenient for enhanced efficacy is perceived as important for institutions trying to implement action since this would enable them to increase productivity. While all factors relating to education are taken into account in the school improvement context, the study may concentrate on how this idea and the others mentioned earlier may be connected to the perceptions of educators to establish an initiative such that they will provide meaningful instructional interactions in the classroom. Educators are seen as an integral lever of transformation, according to Creemers (2008), so progress is visible in their classrooms and everyday activities. Furthermore, Creemers (2008) discusses that proposals for school change should often concentrate on educators who might want to enhance facets of their instruction and help to develop teaching skills. Teachers will still need preparation and encouragement to empower them with the ability to cope with the occurring challenges relative to consequences of the overcrowded classroom.



**Figure 1.** Efficient institutional amelioration related to congested classrooms (Creemers, 2008, p. 7).



Creemers (2008) further suggests that attempts to change would not just change the perceptions of teachers but also the teaching standard. In overcrowded classrooms, a study has demonstrated that often teachers feel stressed and are not prepared with the expertise to cope with overcrowded classrooms. There is a correlation between school reform and the perceptions of teachers as their perspectives will contribute to initiatives and encourage schools to reconsider methods and adopt initiatives to strengthen schools that help teachers in coping with overcrowded classrooms. Teachers often manage overcrowded classes and are struggling with them. 'Institution Reform' is the only way to make sense of how teachers treat overcrowded classes and work with them. This often causes less tension for teachers as schools are changed, as they will manage more in the classroom. Congested classes are not only a challenge but a means to build space for change and to reconsider strategies. This model indicates that productive progress contributes to better performance in achieving educational targets, according to Creemers (2008). It outlines the philosophy of school improvement and shows the theoretical basis for the essential structures of school improvement. If we strengthen the ability of teachers, it enhances learning and teaching and in essence, contributes to achieving the objectives of education. The model for the efficient institutional reduction of stress in overcrowded classrooms is shown in Figure 1.

The philosophy of school enhancement, which subsumes the constructivist theory, class management theory, conventional classroom management theory, and child-centred classroom model, supports this research. In this analysis, this theory will help to explain the data produced. The researcher considered the school improvement theoretical concept as central to the study because it indicates that instructional objectives are met through improvement and interaction.

## **Review of Related Literature**

### **Empirical Review**

The school atmosphere may have a beneficial effect on the wellbeing of the learning community or can be a huge obstacle to learning. The school atmosphere inside the schools will impact multiple places and individuals. A healthy school environment for example has been correlated with decreased mental and emotional concerns for pupils. It is also assumed that constructive organisational interactions and optional learning experiences will improve achievement behaviour for students in all educational settings. The strong student-teacher partnership provides students with a positive and welcoming school atmosphere to operate learning activities smoothly, resulting in successful academic results.

The school climate and educational attainment of standard six students were investigated by Arul and Vimala (2012). The input from 400 respondents in the study was used to assess the association between the school atmosphere and educational attainment. The outcome of this analysis showed that there is no substantial variation in gender and teaching methodology in the standard six learners' school setting. But there is a major variation in the standard six pupils' education setting in terms of the school's locality. There is a better school climate for urban learners than for rural pupils. In their everyday lives, urban learners have a traumatic or stressful world quite mostly because they live in a technological and fast-paced life. Thus, with their research, they found that the school atmosphere was not quite comfortable.

Chepkonga (2017) indicated that the consistency of school amenities tends to have an indirect impact on learning and instruction. This suggests that educational outcomes are dependent on, class size, instructional methods, Teacher competence and abilities, instructional and learning atmosphere, and subject matter, all affecting educational outcomes in both of these respects (Finn, Walton, & Elliott-White, 2000). As stated by Shamaki (2015), the content of the learning atmosphere is closely associated with the performance of the students in different subjects, so that literature surveyed from different developing countries in Africa, notably from Mozambique, Uganda, Zimbabwe, and Nigeria, revealed the connection between class size and learner success (Motshekga, 2012; Mutisya, 2020; Onwu & Stoffels, 2005).



According to Siperto (2017) in Mwanza, the overpopulated classrooms have been identified as increasing and sustaining problems that obstruct successful teaching and learning operation. According to Siperto, the proportion of learners she researched in the classes was too high for the small space of the classroom to be accessible. Siperto found that in all the schools studied, the teacher-student ratio ranged from 1:80-90. In such a scenario, educators were finding it impossible to implement successful teaching methodology. The investigator also noticed that educators were overwhelmed in such a way as not to be able to walk around a classroom.

Similarly, Mutisya (2020) published research in Kenya with the same experience as Siperto's in Mwanza. Free primary education in Kenya culminated in dangerously overpopulated classes in which the learner-centred method was quite challenging for the educators to introduce. Mutisya complained that although most of the classes were built to fit 45 students, the classrooms had between 80 and 90 students, beyond the number prescribed by the Ministry of Education. The consequence of this is that during classroom interaction, it continues to hinder teacher-student and student-student engagement, with detrimental effects on their academic success. Although Jason (2006) mentioned that large classrooms are major pitfalls, including stressed interpersonal relationships between learners and educators with a small variety of instructional techniques, teachers teaching a large class are uncomfortable.

In addition, he noted that amid a contradictory definition among investigators about class size and learners' success, small class size retains an advantage on the level of results. It was noted that large-scale instructional techniques have an influence on the efficacy of instructional practices. Similarly, she observed that in a typical classroom where the teacher-centred approach is used, marked by a high percentage of pupils with instructional practices, pupil innovation, and interest are therefore reduced.

### **Research Questions**

This research aims to answer the following questions, in line with the objectives:

- i. What experiences do teachers have with overcrowded classrooms?
- ii. What challenges do teachers encounter as they manage classrooms that are overcrowded?
- iii. What strategies do teachers use to manage overcrowded classrooms?

## **METHOD**

### **Research Design**

The appropriate research design that was employed for this study is the case study. It is the framework that was created to seek answers to the research questions. The case study design subsequently supported the investigator to gain detailed information from educators concerning their experiences in congested classrooms (Burns & Grove, 2010) in New Gbawe Experimental 1 Basic School. As previously mentioned, this investigation took the form of a case study. The purpose of the case study is to understand the case in depth and in its natural environment, to understand its sophistication and meaning (Punch, 2009). In addition, Neale, Thapa, and Boyce (2006) postulated that a case study offers the story behind the result by documenting what happened to bring about a scenario. Neale et al. (2006) propose that case studies are necessary when there are special or interesting stories to be told. Case studies offer even more comprehensive information (Neale et al., 2006). This is also confirmed by Lee and Brennenstuhl (2010), who argue that an in-depth overview, discovery, or interpretation of a study is given by a case study.

In addition, the main principle of a case study is that it is necessary to discuss the 'how' and 'why' questions with the respondents (Lincoln, 2010). Consequently, the case study design supported the investigator to collect in-depth educator knowledge and how the public school faced congested classrooms. The data generation tools used enables the investigator to raise and explore questions about how and why. This was significant because it offered educators with a chance to offer in-depth information about their overpopulated classroom encounters. Additionally, Creswell



(2013) argued that a case study is related to offering a detailed overview of the circumstances involving persons, incidents and how their relationship with their setting is influenced in the research project. Cohen, Manion, and Morrison (2011) postulate in the same vein that case studies are very descriptive. The investigator selected a case study for this study to investigate a particular community of educators within a specific school to investigate their perceptions of overcrowded classrooms.

### **Population**

The population for the study was centred on the teaching staff of New Gbawe Experimental 1 Basic School. It is located in the Weija Gbawe District of the Greater Accra Region. The school has 11 classrooms with staff strength of 14. New Gbawe Experimental 1 Basic School was preferred due to the surge in enrolment in every classroom in the school, which exceeds the pupil to teacher ratio of 35:1 as indicated by Ghana Education Service (MOE, 2018).

### **Sample and Sampling Techniques**

Five participants were selected for the study based on the highest-class enrolment. The class teachers for the following classes, 2, 3, 4, 5, and 6, were used in this study. The study adopted both purposive sampling and convenience sampling for the investigation.

#### **Purposive Sampling**

Purposeful sampling means that respondents with certain features or characteristics are tested by the investigator (Koerber & McMichael, 2008). In this research, only those educators who work in a school with congested classrooms were chosen. Intentional sampling is synonymous with qualitative inquiry, Palys (2008) suggests. In order to obtain in-depth data on their encounters in these classrooms, educators who have overpopulated classrooms were selected. Creswell (2013) has suggested that the investigator must acknowledge the objectives of the study when choosing a sampling procedure.

Based on the objective of this study, the respondents were selected to participate in the research. Palys (2008) states that what exactly they want to achieve is the main question any investigator requires to ask themselves. The investigator decided to illustrate and identify the experiences educators have in a congested classroom in this report. The purposive sampling methodology was suitable as it matched the purpose of this study's investigative goals.

#### **Convenience Sampling**

The convenience sampling is described by Farrokhi and Mahmoudi-Hamidabad (2012) as comprising respondents who are easily accessible to contact. While this concept stresses easily accessible, certain convenience samples are more widely available than others, as per Koerber and McMichael (2008), but although a study is convenient, certain work would definitely be required in accessing respondents from that study. This sampling approach was used because respondents from the Municipality of the Investigator were chosen and were readily available and easy to collect information from.

### **The Sample**

Three classrooms with the largest number of learners were used for observation although there were five respondents in this research. The following is included in the sample: educators with the largest number of students were selected for the research investigation; schoolrooms with the largest admission in the whole school were selected; and although three classes were observed, all five educators took part responding to the questions. The sample is presented in Table 1.

**Table 1.** Profile of educators who participated in the investigation

Teachers' Name	Gender	Age	Class	Class Size	Highest Qualification	Teaching Experience	Years spent in the research school
Teacher A	Female	44	2	68	B.Ed.	20	9
Teacher B	Female	34	3	62	B.Ed.	12	4
Teacher C	Female	38	4	80	B.Ed.	14	3
Teacher D	Female	47	5	74	B.Ed.	17	10
Teacher E	Female	36	6	68	B.Ed.	10	4





These educators in the New Gbawe Experimental 1 Basic School assisted the investigator with invaluable data about their perceptions of overpopulated classrooms at the public school.

### **Methods of Data Generation**

In view of the qualitative aspect of this investigation, the investigator selected unstructured questionnaire and observation as data generation approaches. According to Adejimi, Oyediran and Ogunsanmi (2010), data generation is a very critical step in any investigative process, and investigation includes the identification of relevant data. According to Kothari (2004), all investigation involves the generation of suitable information. This information is invaluable since the outcomes of the research are decided by the knowledge that is produced. The investigator is responsible for choosing data collection methods that they believe can provide them with rich and suitable data to answer the research questions. The investigator selected unstructured questionnaire and observation as approaches of data generation for this qualitative study.

### **Unstructured Questionnaire**

An unstructured questionnaire was utilised in this investigation as the main instrument for generating data. Fife Schwa (2001) noted that a questionnaire is the single most common research tool used owing to its simplicity and usability. Adejimi et al. (2010) argue that by adding more open-ended questions, it is possible to structure a questionnaire to add further value.

An unstructured questionnaire poses open-ended questions, according to Cohen et al. (2011). Wilkinson and Birmingham (2003) argue that open-ended questionnaires do not place any constraints and encourage the participant to answer any question. This form of a questionnaire was chosen because, without any limitations, the investigator wanted participants to openly share their encounters. It also gave participants enough time to think about their answers and complete their questionnaire and submit it on completion to the investigator. This questionnaire was structured with several questions as this would allow one to extract rich insightful details about the perspectives of educators in overpopulated classrooms with various how and why. It is also very easy to utilise investigation tool and encourages you to ask as many questions as you can. Personal views, opinions, feelings, and experiences were created by the questionnaire.

### **Observations**

According to Crossman (2019), and Simpson and Tuson (2005), observation takes note of behaviours, actions, situations, artefacts, and habits of people. Cohen et al. (2011) noted that it allows the researcher the opportunity to collect 'live' information from naturally occurring social contexts. The method of observation was chosen as one of the data collection methods because it allowed the researcher to observe educators teaching in overcrowded classrooms. Simpson and Tuson suggest that what should be looked at and is grouped into categories is defined by an observation plan. There was the highest degree of enrolment in the school in the classrooms chosen to observe. The study assumed that it was important to observe and integrate these classrooms so that the researchers could also have first-hand knowledge of what is happening.

The researcher was a non-participatory observer and tried to remain as inconspicuous as possible. A colleague helped with the recording of the observation in order to compare notes. As what was happening in a natural environment was registered, this allowed the researcher to gather rich information. Cohen et al. (2011) argue that observations are powerful methods to gain insight into conditions. This data collection technique was ideal because it allowed the researcher to examine first-hand what was going on in overcrowded classrooms.

### **Data Analysis**

The analysis of the data was carried out using a thematic analysis approach. The thematic analysis is a tool for defining, analysing, and reporting trends (themes) within the data, according to Braun and Clarke (2006). A theme captures something meaningful about the research questions' information and expresses some degree of patterned response or context inside the data (Braun & Clarke, 2006). Braun and Clarke (2006: p.79) also note that there are "six thematic analytical phases that include:



- Data familiarisation: This includes transcribing the content, reading, and re-reading the data and noting initial ideas. The researcher transcribed the content by reading and re-reading the data and taking note of the initial concepts.
- Generating initial codes: This refers to the quest for interesting patterns or features in the data collected. The investigator looked for interesting patterns in the data collected.
- Checking for themes: the compilation of codes into potential themes and the compilation of all relevant details for each potential theme. The researcher checked by creating codes into potential themes and compiling all the significant details for each potential theme.
- Reviewing themes: Check if the themes work on the coded extracts and the whole data collected. In reviewing the themes, the researcher compared the coded extracts with the themes by considering all the data collected.
- Defining and naming the themes: For each theme, simple meanings and names. The researcher provided simple and names for each theme to refine the data.
- Producing the report: making the investigation a scholarly document by writing up.” Finally, the investigator wrote up the report based on the information generated through the thematic process.

The material was read carefully and extensively for this study and then transcribed and analysed. The investigator searched for trends in the data as the data was coded and put them into various categories. The investigator then grouped similar categories and placed them under three specified themes. In order to ensure a rich explanation of the data, the thematic analysis was selected as it offers a rich thematic explanation of the entire data collection so that the reader gets a sense of the prevalent and significant theme (Braun & Clarke, 2006).

## RESULTS

### **RQ1: Educators encounter “stress” in congested classrooms**

Research question one investigated the experiences teachers have with overcrowded classrooms. The findings from this research suggest that teachers' encounters with congested classrooms are overwhelming. Teachers themselves have described such situations in an overcrowded classroom which are stressful (Mutisya, 2020; Muthusamy, 2015; Shah, & Inamullah, 2012; Yelkiperi, Namale, Esia-Dankoh, & Ofosu-Dwamena, 2012). Such conditions were insufficient classroom space, safety and health issues, limited contact between learners and teachers, destructive conduct, mental and psychological challenges encountered by educators, elevated responsibilities, and limited time (Asadullah, 2005; Muthusamy, 2015; Shah, & Inamullah, 2012). Some of the opinions expressed by the teachers are as follows:

*"One classroom has too many kids. The classroom is inadequate for student numbers in the classroom. It minimises movement." "There's little room for students to sit down, 4 learners are required to share, instead of 2 per seat." "Sixty-four students in a summer class are a nightmare. Fans don't work. Learners are nervous, very restless, and not centred." "Because the classrooms lack space, they become extremely hot and uncomfortable to become impatient learners." "I do most of the talk, essentially. Sometimes the learners do not answer questions. It's hard to pay attention individually." "To involve the learners in the lesson is hard. It's loud, and you can't pay attention individually." "Personally, I have issues with the discipline. The learners are particularly too noisy when there's a feature that kids get into a frenzy." "Learners suffer a lot over trivial issues such as fighting one another for losing their possessions as their belongings have no location to be kept. And I do settle inconsequential issues that can trigger severe disciplinary concerns. That takes time away from teaching." "I can't deal with it at all. I am constantly nervous. I am still depressed and I sob." "I am really angry, and the despondent learners are behaving poorly, and they don't matter. I am also*



*depressed because my Headteacher does not support me." "Since it is difficult to mark at school, I take marking at home. This removes me since personal time. My daughter laments I ignore her. Often I disregard her need to get my job done and that creates trouble." "I find myself solving minor discipline problems and that takes time off teaching. I always take the marking at home as there is not enough time to mark the work of the learners."*

From the sampled opinions of the teachers, it is realised that in the school, teachers do not have adequate room so the tables and chairs are cramped and the students become very irritated (Asadullah, 2005). There is no wandering around the classroom for students as the mobility is very minimal. Health and safety problems have been reported as a result of room limitations. Interacting with learners is very difficult for the Teacher since these circumstances limit contact. As a consequence of the limited student-Teacher involvement that led them to indulge in destructive actions, pupils felt inferior. Educators also feel very nervous and stressed in a congested classroom, causing them to develop social and emotional difficulties (Mutisya, 2020; Shah, & Inamullah, 2012). Similarly, because of the increasing number of students in the school, the teachers' workload tends to be quite high. Educators' responses suggested that they did most of their school work, such as teaching and teaching-learning materials (TLMs) preparation and marking at home. They stated that such patterns have an effect on their personal and family lives, depriving their families of quality time. The educators argued that the process of teaching and learning is often disrupted constantly while they waste time settling disputes instead of teaching. From the above, the enumerated situations encountered by educators indicate that the interactions of teachers in congested classrooms are 'stressful' and can impair their classroom effectiveness.

## **RQ2: Various and nuanced factors leading to stressful interactions for educators**

Research question two interrogated issues regarding the challenges teachers encounter as they manage classrooms that are overcrowded. Sampled comments made by the teachers are as follows:

*"Sometimes I'm not inspired and I don't know how to manage those problems and no-one wants to help. And I just find out what to do on my own." "The number of learners exceeds that prescribed by the Ghana education service." "The number of learners at the school is more than 50 learners in a single classroom." "The lessons cannot be thrilling because the classrooms are so overcrowded and the facilities are not enough that you completely lose hope." "We share what we have with the learners. There are inadequate resources and insufficient funds to provide services because school fees are a major issue." "Practical sessions are too complex to carry out. There are inadequate resources for making lessons interesting and exciting. I don't have enough teaching-learning materials. It's hard but I'm improvising."*

Teacher comments and our observation suggest that stressful experiences with congested classes, such as those identified in the New Gbawe Experimental 1 Basic School, are frequent and complicated. Career development and shortage of resources, policy compliance (Muthusamy, 2015), teacher readiness, and lack of institutional help are some of the reasons that are creating challenging circumstances for educators (Onwu & Stoffels, 2005). The direction or assistance offered by the school management, in particular, the head teacher is insufficient. The results have suggested that New Gbawe Experimental 1 Basic School is not following the policies as required by law. Secondly, any classroom enrolment exceeds what the policy states. The learner-teacher ratio is 35:1 according to the Ministry for Education, Ghana (2018). However, enrolment in the New Gbawe Experimental 1 Basic School is higher than the learner-teacher ratio of 35:1, suggesting at this stage the policy is not being implemented. Unfortunately, teachers may not have the expertise to contend with overcrowded classrooms, and their capacity to cope with this has been compromised (Mweru, 2010). At New Gbawe Experimental 1 Basic School shortage of funding was a big problem and this influenced teaching and learning. Teachers suggested that, due to lack of resources, the lessons cannot be informative and exciting. Both of the above factors are contributing to traumatic teachers' experiences.



### **RQ3: Perspectives of educators handling congested classrooms**

In research question three, we investigated the strategies teachers use to manage overcrowded classrooms. Sampled comments made by the teachers are as follows:

*"There are social exercises conducted outside to reduce movement and noise. I take one step at a time to ensure all prescribed work is complete. I like to scream a lot. I reward them with candy, occasionally. Nobody talks except for putting their hand up." "Group work is an efficient way for learners to provide guidance and test work. Consolidating and testing work in groups is easier for me." "I am basically struggling with problems to keep things from worsening. I try to hold the students engaged constructively from the beginning of the lesson till the end so that they do not get impatient, and mess with other learners. I plan lessons that make it interesting." "I lay down simple guidelines for handling classrooms. I don't neglect lesser discipline problems as they save me time to solve a small issue, then bigger ones. I do the training without interrupting the lesson. I offer rules and bonuses for good behaviour." "I'm using corporal punishment and I'm giving students tons of notes to copy and write and they're occupied but they're always crying and yelling and behaving like your invisible." "I am trying to keep an optimistic and relaxed outlook and I am trying to find answers to problems. I know the learners are victims. They have no alternative in terms of what school will they go to."*

We found that though educators' encounters with congested classrooms are daunting, the problem is often addressed by them (Yelkpieri, Namale, Esia-Dankoh, & Ofosu-Dwamena, 2012). Educators normally rally their resources to enable them to control overcrowded classrooms (Muthusamy, 2015). Correspondingly, in order to actively involve learners in their lessons and enhance learner achievement, educators designed cooperative learning activities. Similarly, the teachers used incentives to encourage positive learner behaviour. Additionally, educators suggested specific rules and guidelines should be set. Although some teachers were reported to use innovative methods to handle overcrowded classes, there were others who used offensive tactics such as insulting, yelling, and corporal punishment (Muthusamy, 2015). Findings from this study revealed that despite the challenges in overcrowded classrooms encountered by educators in New Gbawe Experimental 1 Basic School, they are still keen on working hard within the constraints of inadequate resources and the huge student numbers, suggesting that they have the best interest of the learners.

## **DISCUSSION and CONCLUSION**

### **Discussion**

The results of the study have shown that there are a multitude of difficulties for educators to face in congested classrooms. The results also suggest that the 'no effort' and often challenging methods used by educators have shown the Teacher's role in managing congested classrooms and transforming their schools and classrooms as agents of change (Donnelly, 2019; Fatima, Mushatq, & Fatima, 2019; Hachem & Mayor, 2019; Khanare, 2009; Marais, 2016; Muthusamy, 2015). The value of the school reform system driving this research highlights facets of how even the smallest interventions can be nurtured in the psycho-social well-being of children (Donald & Lotwana, 2006; Donnelly, 2019; Hachem & Mayor, 2019; Marais, 2016; Muthusamy, 2015). Thus, the researcher suggested in the results as to why the teachers are getting the experiences they do. The teachers still do this given the pressures of running overcrowded classrooms. Some teachers had shared optimism and positivity anyway. This research focused on the theoretical structure for school improvement and is perfect, because teachers are already familiar with and dealing with congested classrooms as they have a sense of school improvement and coping strategies. Thus, according to Creemers (2008), educators are seen as an important tool for progress, as transformation is evident in their classrooms and day-to-day activities, but effective school initiatives are still needed to bring about change. The emphasis was on educator interactions with congested classrooms, and why they have the experience they have, and what management techniques they use to deal with congested classroom challenges.





## Conclusions

Teachers' overcrowded classroom experiences are "stressful." There are causative factors leading to traumatic situations for teachers but they often handle the overcrowded situation with tactfulness. As improvement is the main factor to bring about intervention, it is expedient that the problem is actionised in order to mitigate it. This will enhance the experience of teaching and learning for both teachers and learners. In order to cope with overcrowded classrooms in traditional schools, there are a number of approaches that schools may use to increase teacher ability and school performance as revealed in this research. From this study, we observed that teachers used different approaches to enable them overcome overcrowding in their classrooms. Some of the approaches mentioned include the following. Some teachers use group work in a flexible way to ensure that different ability groups are taken care of while helping to overcome overcrowding as well. Others used improvisation to improvise materials to stimulate and maintain the confidence and excitement of students (Marais, 2016; Muthusamy, 2015; West & Meler, 2020). One aspect that the researchers were not enthused about was the use of corporal punishment. It is also not advisable for some teachers to keep the lesson too long in an overcrowded classroom. Keeping the lesson short is very helpful so that teachers can devote as much time as possible to working with a variety of groups. Keeping learners busy right from the start of a lesson is very crucial in successful overcrowded classroom management. As a result, it's important that the teacher keeps the entire class occupied as much as possible. Thua, at the beginning of each period, get the students to work straight away (Kriegel, n.d.; West & Meler, 2020 ).

## Recommendations

It is believed that when the required action is taken, schools experiencing overcrowding across the country can be improved. The research can be broadened to a number of schools from other backgrounds such as semi-urban and rural areas to get a clearer picture of the nature of congested classrooms. It is suggested that research involving other respondents like pupils using a variety of pedagogic approaches would be fascinating such as art-based approaches to make the learners' voices heard in their classrooms over-crowded. It is recommended that the Ghana education service takes a critical look of these behaviour that is exhibited by some teachers in overcrowded classrooms.

## Limitations of the Research

This study was conducted in an overcrowded urban school where all the teachers observed and interviewed were females. It would have been helpful if some of the teachers were males so that their divergent views could have been compared. Also overcrowded classrooms in semi-urban and rural areas could have also been considered to compare how teachers and learners will fare in these locations. It is suggested that further research be undertaken by including the aforementioned variables.

## Acknowledgment

We wish to acknowledge the teachers used in this study for making themselves available and also allowing us to observe their classroom practice.

## REFERENCES

- Adejimi, A., Oyediran, O. S., & Ogunsanmi, E. B. (2010). Employing qualitatively enriched semi structured questionnaire in evaluating ICT impact on Nigerian 'construction chain integration'. *The Built & Human Environment Review*, 3(1), 49-62.
- Adeyemi, B. A. (2008). Effects of cooperative learning and problem-solving strategies on junior secondary school students' achievement in social studies. *Electronic Journal of Research in Educational Psychology*, 6(3), 691-708.
- Ahmed, A. U., & Arends-Kuenning, M. (2006). Do crowded classrooms crowd out learning? Evidence from the food for education program in Bangladesh. *World Development*, 34, 665–684.



- Akoto-Baako, H. (2018). *Perceived influence of large class size and psychological classroom environment on students' academic performance*. Retrieved October 01, 2020, from <https://erl.ucc.edu.gh/jspui/bitstream/123456789/3421/1/HANSEN%202018.pdf>
- Amarat, S. M. (2011). The classroom problems faced teachers at the public schools in Tafila province, and solutions. *International Education Science*, 3(1), 37-48.
- Arul, A. S. L., & Vimala, A. (2012). School environment and academic achievement of standard IX students. *Online Submission*, 2(3), 210-215. <https://eric.ed.gov/?id=ED542331>
- Asodike, J. D., & Onyeike, V. C. (2016). Managing large classes in developing countries. *Global Journal of Educational Research*, 15(1), 31-39. DOI:10.4314/gjedr.v15i1.4.
- Burns, N., & Grove, S. K. (2010). *Understanding nursing research-eBook: Building an evidence-based practice* (5<sup>th</sup> ed.). Philadelphia: Saunders.
- Carr, W., & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. Lewes: Falmer.
- Chepkonga, M. C. (2017). Influence of learning facilities on provision of quality education in early childhood development centres in Kenya. *International Journal of Education and Research*, 5(6), 15-26.
- China L. (2018, September 13). *Anger grows in China over school crowding*. Retrieved September 28, 2020, from <https://www.economist.com/china/2018/09/13/anger-grows-in-china-over-school-crowding>
- China, X. (2016, March 29). *Chinese urban schools strive to 'slim' oversize classes*. Retrieved September 28, 2020, from [https://www.chinadaily.com.cn/china/2016-03/29/content\\_24167862.htm](https://www.chinadaily.com.cn/china/2016-03/29/content_24167862.htm)
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education*. (7<sup>th</sup> ed.). London: Routledge.
- Cooper, H., Lindsay, J. J., & Nye, B. (2000). Homework in the home: How student, family, and parenting-style differences relate to the homework process. *Contemporary educational psychology*, 25(4), 464-487.
- Creemers, B. (2008). *Effective school improvement-Ingredients for success, organisational effectiveness and improvement in education*. Buckingham: Open University Press.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Crossman, A. (2019). *An overview of qualitative research methods: Direct observation, interviews, participation, immersion, focus groups*. Retrieved September 28, 2020, from <https://www.thoughtco.com/qualitative-research-methods-3026555>.
- Donnelly, K. (2019, October 16). *Cram school: Two-thirds of primary school pupils stuck in overcrowded classrooms*. Retrieved September 28, 2020, from <https://www.independent.ie/irish-news/education/cram-school-two-thirds-of-primary-school-pupils-stuck-in-overcrowded-classrooms-38316566.html>
- Edwards, C. H., & Watts, V. J. (2010). *Classroom discipline & management* (2<sup>nd</sup> ed.). Milton, Qld.: John Wiley & Sons.
- Emmer, T., & Stough, L. (2010). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist*, 36(2), 103-112.
- Farrokhi, F., & Mahmoudi-Hamidabad, A. (2012). Re-thinking convenience sampling: Defining quality criteria. *Theory and Practice in Language Studies*, 2(4), 784-792.
- Fatima, Z. U. A., Mushatq, M., & Fatima, Q. U. A. (2019). Overcrowded classroom problems faced by school teachers in district Muzaffarabad. *International Journal of Academic Research in Progressive Education and Development*, 8(4), 328-339.
- Fife Schwa, T. (2001). There are many steps in carrying out successful research. *The Journal of Educational Research*, 2(4), 113-125.
- Fin, J. D. (2003). Tennessee's class size study: Findings, implications, misconceptions. *Education Evaluation and Policy Analysis*, 21(2), 97-109.
- Finn, M., Walton, M., & Elliott-White, M. (2000). *Tourism and leisure research methods: Data collection, analysis, and interpretation*. New York City: Pearson education.
- Freiberg, H. J. (2013). Classroom management and student achievement. *International Guide to Student Achievement*, 228-230.
- Ghana Education Service (GES) (2014). *Basic education curriculum*. Retrieved 09 April 2020 from <https://web.archive.org/web/20140525195225/http://www.ges.gov.gh/?q=content%2Fbasic-education-curriculum-1>.



- Hachem, H., & Mayor, P. (2019, October 04). *Overcrowding in schools: Why is it a huge Issue?* Retrieved September 28, 2020, from <https://patch.com/michigan/dearborn/overcrowding-schools-why-it-huge-issue>.
- Harfitt, G. J., & Tsui, A. B. (2015). An examination of class size reduction on teaching and learning processes: A theoretical perspective. *British Educational Research Journal*, 41(5), 845-865.
- Iqbal, P., & Khan, M. (2012). Overcrowded classrooms: A serious problem for teachers. *Elixir International Journal*, 2(5), 10162-10165.
- Kedney, R. J. (2013). *Performance measurement in non-advanced further education: The use of statistics*. (Unpublished doctoral dissertation). University of Lancaster, United Kingdom.
- Kothari, C. R. (2004). *Research methodology: Methods & techniques*. New Dehli: New Age International (P) Limited Publishers.
- Kriegel, O. (n.d.). *3 tips on how to manage an overcrowded classroom*. Retrieved April 02, 2021, from <https://www.wgu.edu/heyteach/article/3-tips-how-manage-overcrowded-classroom1809.html>
- Kweitsu, R. (2019). *Ghana's education sector: Key challenges hindering the effective delivery of education and the way forward*. Retrieved June, 11, 2020, from <https://www.modernghana.com/news/579629/ghanas-education-sector-key-challenges-hindering.html>
- Lannoy, A., & Hall, K. (2010). *Statistics on children in South Africa*. Cape Town: Cape Town University Press.
- Lee, E., & Brennenstuhl, S. (2010). *How to critically evaluate case studies in social work*. London: SAGE Publications.
- Marais, P. (2016). "We can't believe what we see": Overcrowded classrooms through the eyes of student teachers. *South African Journal of Education*, 36(2), 1-10.
- Marzano, R. J., & Marzano, J. S. (2003). The key to classroom management. *Educational Leadership*, 61(1), 6-13.
- Ministry of Education (MOE), Ghana (2018). *Education sector analysis*. Retrieved on April 09, 2020 from <https://sapghana.com/data/documents/Ghana-Education-Sector-Analysis-2018.pdf>.
- Moreno, V., Cavazotte, F., & Dutra, J. P. (2020). Psychosocial and organisational antecedents of knowledge sharing in the workplace. *Revista de Administração Contemporânea*, 24(4), 283-299A.
- Mutisya, M. (2020, February 24). *Some Kenyan schools are dangerously overcrowded. What must be done?* Retrieved September 01, 2020, from <https://theconversation.com/some-kenyan-schools-are-dangerously-overcrowded-what-must-be-done-131774>.
- Muthusamy, N. (2015). *Teachers' experiences with overcrowded classrooms in a mainstream school*. (Unpublished M.Ed. dissertation). Durban, South Africa: University of KwaZulu-Natal. Available at <https://researchspace.ukzn.ac.za/bitstream/handle/1>
- Neale, P., Thapa, S., & Boyce, C. (2006). *Preparing a case study: A guide for designing and conducting a case study for evaluation input*. London: Routledge.
- O'Sullivan, M. C. (2006). Teaching large classes: The international evidence and a discussion of some good practice in Ugandan primary schools. *International Journal of Educational Development*, 26(1), 24-37.
- Oliver, R. (2006). Exploring a technology-facilitated solution to cater for advanced students in large undergraduate classes. *Journal of Computer Assisted Learning*, 22(1), 1-12.
- Onwu, G., & Stoffels, N. (2005). Challenges of large class teaching. *Journal of South African Education*, 12(10), 14-26.
- Palys, T. (2008). *Purposive sampling*. London: Routledge.
- Punch, F. K. (2009). *Introduction to research methods in education*. London: Sage Publications Ltd.
- Saifi, I. L., Hussain, M., Salamat, L., & Bakht, I. (2018). Impact of classroom management on students achievement at university level. *Asian Innovative Journal of Social Sciences and Humanities*, 2(2), 13-27.
- Shah, J., & Inamullah, H. M. (2012). Overcrowded classrooms: A serious problem for teachers. *The Journal of Educational Strategies*, 5(1), 772-789.
- Shamaki, T. A. (2015). Influence of learning environment on students' academic achievement in mathematics: A case study of some selected secondary schools in Yobe State-Nigeria. *Journal of Education and Practice*, 6(34), 40-44.
- Simpson, M., & Tuson, J. (2005). *Using observation in small-scale research*. Glasgow: SCRE Publications.
- Siperto, J. (2017). Secondary school teachers experience in managing large classes: The case of secondary schools in Buchosa district council Mwanza. <http://repository.out.ac.tz/1915/1/Dissertation%20%20BENJAMIN%20SIPERT%20%20Final.pdf>



- Smith, M. K. (2020). *What is education? A definition and discussion. The encyclopaedia of pedagogy and informal education*. Retrieved on April 07, 2020, from <https://infed.org/mobi/what-is-education-a-definition-and-discussion/>.
- Stepaniuk, V. I. (1997). *The use of classroom space in urban schools: The case of Ukraine*. The Economics of Education in the USSR (ed) and Translated by Harold J Noah, New York: Frederick A Praeger Publishers.
- Thompson, N. M., & Casely-Hayford, L. (2014). *The financing and outcomes of education in Ghana*. The University of Cambridge. pp. 9–14. Retrieved June 13, 2020, from <http://ceid.educ.cam.ac.uk/publications/WP16.pdf>
- UNESCO Institute for Statistics (2008). *Education for all: Global monitoring report 2008*. Paris: UNESCO.
- UNESCO Institute for Statistics. (2018). *Ghana: Making inclusive education a reality*. <http://www.iiep.unesco.org/en/ghana-making-inclusive-education-reality-4564>
- UNESCO Institute for Statistics (2020). Ghana: Student teacher ratio, primary school. Retrieved 21 March 2020 from <http://uis.unesco.org/>
- Van Velzen W., Miles, M., Elholm, M., Hameyer, U., & Robin, D. (1985). *Making school improvement work*. Leuven: Belgium ACCO.
- West, J., & Meler, C. (2020). Overcrowded classrooms – The Achilles heel of South African education? *South African Journal of Childhood Education* 10(1). DOI:10.4102/sajce.v10i1.617
- Wilkinson, D., & Birmingham, P. (2003). *Using research instruments*. London: Routledge.
- World Bank (2013). *Ratio of girls to boys in primary and secondary education (%)*. Retrieved March 21, 2020, Available online: [www.worldbank.org](http://www.worldbank.org)
- Yelkiperi, D., Namale, M., Esia-Dankoh, K., & Ofosu-Dwamena, E. (2012). Effects of large class size on effective teaching and learning at the Winneba campus of the University of Education, Winneba, Ghana. *US-China Education review A*. 3, 319-332.