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School Population Growth and Educational Quality in Public Secondary Schools: A Case Study of Government Secondary Commercial School, Wudil, Kano State, Nigeria

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Abstract

The continuous growth of student enrolment in public secondary schools has created challenges for maintaining educational quality, particularly in developing countries such as Nigeria. Increased access to education, population growth, and demand for formal schooling have contributed to rising student populations, resulting in overcrowded classrooms, inadequate facilities, and pressure on teaching resources. This study examines the impact of school population growth on educational quality in Government Secondary Commercial School, Wudil, Kano State. The study specifically determines the extent of school population growth, examines its effect on teaching effectiveness and classroom management, assesses its influence on students' academic achievement, and identifies strategies for improving educational quality. The study adopted a descriptive survey research design. The population consisted of teachers and students of Government Secondary Commercial School, Wudil. Data were collected using a structured questionnaire and analyzed using frequency counts and percentages. The study was guided by the Class Size Theory of Learning, which explains the relationship between classroom population, teaching effectiveness, and learning outcomes. Findings revealed that excessive student population contributes to overcrowded classrooms, inadequate educational facilities, increased teacher workload, reduced student attention, and poor academic achievement. The study concludes that improving educational quality requires expansion of school infrastructure, recruitment of qualified teachers, and effective management of student enrolment.

Keywords: School population growth, Educational quality, overcrowded classrooms, Academic Achievement, Secondary Education.

Introduction

Education remains one of the most powerful instruments for national development, social transformation, and economic advancement. Nations invest heavily in education because it contributes significantly to human capital development, poverty reduction, technological innovation, and social cohesion (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023). Secondary education occupies a strategic position within the educational system as it serves as a bridge between primary and tertiary education while preparing learners for productive participation in society.

Globally, governments have expanded access to education through policies aimed at achieving universal basic education and sustainable development goals. In many developing countries,

including Nigeria, these initiatives have successfully increased school enrolment rates. However, the rapid increase in student population has not always been accompanied by corresponding improvements in educational infrastructure and resources (World Bank, 2022). School population growth refers to the increase in the number of students enrolled within an educational institution over a specific period. While rising enrolment is generally viewed as an indicator of educational progress, excessive population growth may generate challenges that adversely affect educational quality. Educational quality encompasses the effectiveness of teaching and learning processes, availability of educational resources, student achievement outcomes, teacher competence, classroom environment, and institutional efficiency (UNESCO, 2023).

In Nigeria, the implementation of the Universal Basic Education (UBE) programme and other educational reforms has contributed significantly to increased school enrolment. However, many public secondary schools continue to face infrastructural deficiencies, inadequate staffing, and insufficient learning resources. Consequently, classrooms designed for forty students may accommodate more than eighty learners, thereby creating conditions that hinder effective teaching and learning (Federal Ministry of Education, 2022). Government Secondary Commercial School, Wudil, Kano State, represents one of the public educational institutions experiencing increasing student enrolment. The growing population of students has exerted pressure on available facilities and instructional resources. Teachers are required to manage larger classes, assess more students, and provide instruction under increasingly challenging conditions. These circumstances raise concerns regarding the maintenance of educational quality and students' academic achievement.

This study therefore, examines the impact of school population growth on educational quality in Government Secondary Commercial School, Wudil, with particular emphasis on teaching effectiveness, learning outcomes, classroom management, and academic achievement.

Statement of the Problem

The expansion of educational opportunities in Nigeria has resulted in substantial increases in secondary school enrolment. Although increased access to education is a positive development, many public schools lack the necessary facilities and resources required to accommodate growing student populations effectively. Overcrowded classrooms, inadequate furniture, insufficient instructional materials, and shortages of qualified teachers have become common features of many public secondary schools.

Government Secondary Commercial School, Wudil, has experienced continuous growth in student enrolment over recent years. This increase has generated concerns among educational stakeholders regarding classroom congestion, declining instructional effectiveness, reduced student participation, and deteriorating academic performance. Teachers frequently encounter difficulties in classroom management, individualized instruction, and assessment due to excessive class sizes.

Despite the growing concern about overcrowding in Nigerian secondary schools, limited empirical studies have specifically examined the relationship between school population growth and educational quality in Government Secondary Commercial School, Wudil. This gap necessitates a systematic investigation into how increasing student population affects teaching and learning processes and students' academic outcomes. The study seeks to provide evidence-based recommendations for improving educational quality amid rising enrolment trends.

Objectives of the Study

The main objective of this study is to investigate the impact of school population growth on educational quality in Government Secondary Commercial School, Wudil.

The specific objectives are to:

1. Examine the causes of school population growth in Government Secondary Commercial School, Wudil.
2. Determine the effects of increasing student population on teaching and learning processes.
3. Assess the influence of overcrowded classrooms on students' academic achievement.
4. Identify challenges experienced by teachers and students due to excessive school population.
5. Propose strategies for improving educational quality in the face of rising enrolment.

Research Questions

The study seeks answers to the following questions:

1. What factors contribute to school population growth in Government Secondary Commercial School, Wudil?
2. How does increasing student population affect teaching and learning processes?
3. What is the relationship between overcrowded classrooms and students' academic achievement?
4. What challenges do teachers and students experience because of excessive enrolment?
5. What measures can be implemented to improve educational quality despite population growth?

Significance of the Study

The study is significant to educational policymakers, school administrators, teachers, researchers, parents, and government agencies. Findings will provide empirical evidence regarding the implications of increasing student enrolment on educational quality. Policymakers may utilize the findings to formulate effective educational planning strategies, while school administrators may benefit from recommendations for improving resource allocation and classroom management.

The study will also contribute to existing literature on educational quality and school population dynamics, particularly within the Nigerian educational context.

Scope of the Study

The study focuses on the relationship between school population growth and educational quality in Government Secondary Commercial School, Wudil, Kano State. It examines causes of increasing enrolment, effects on teaching and learning, implications for academic achievement, and strategies for improving educational quality. The study is geographically limited to Government Secondary Commercial School, Wudil.

CONCEPTUAL REVIEW

Concept of School Population Growth

School population growth refers to the increase in student enrolment within an educational institution over time. According to UNESCO (2023), rising enrolment is influenced by demographic expansion, educational reforms, urbanization, and increased societal awareness of the benefits of education. In Nigeria, population growth and government policies promoting universal access to education have significantly increased secondary school enrolment (Federal Ministry of Education, 2022). While increased enrolment improves educational access, it may also create challenges if infrastructure development fails to keep pace.

Educational Quality in Secondary Schools

Educational quality encompasses learner achievement, teaching effectiveness, learning environments, availability of resources, and institutional efficiency (UNESCO, 2023). Quality

education ensures that learners acquire relevant knowledge, skills, attitudes, and competencies necessary for personal and societal development. Research indicates that educational quality is strongly influenced by teacher quality, classroom conditions, instructional materials, and administrative effectiveness (Darling-Hammond, 2017).

Causes of School Population Growth

Several factors contribute to increasing school populations in Nigeria:

1. Population Growth: Nigeria's rapidly expanding population has significantly increased demand for educational services. The National Population Commission (2023) reports sustained population growth that continues to place pressure on educational institutions.
2. Universal Basic Education Policies: Government initiatives promoting access to education have expanded enrolment rates across all educational levels.
3. Urbanization: Migration from rural communities to urban areas has increased student concentration in public schools located within urban and semi-urban centres.
4. Public Preference for Government Schools: Many parents prefer public schools because of affordability and accessibility, resulting in higher enrolment figures.

Effects of School Population Growth on Teaching and Learning

Research consistently demonstrates that overcrowded classrooms affect educational quality in multiple ways. Large class sizes limit teachers' ability to provide individualized attention to students (Blatchford et al., 2019). Teachers often experience increased workload, making effective lesson delivery and student assessment more difficult. Overcrowding also reduces student participation, increases classroom noise levels, and complicates classroom management processes (Finn et al., 2018).

School Population Growth and Academic Achievement

Several studies have established a relationship between classroom size and academic achievement. Hattie (2023) argues that smaller classes facilitate greater interaction, individualized support, and improved learning outcomes. Overcrowded classrooms often result in reduced instructional effectiveness, increased student absenteeism, and lower academic performance. Students may struggle to concentrate due to excessive noise and limited access to learning resources.

Challenges Associated with Overcrowded Schools

Major challenges include:

1. Insufficient classrooms.
2. Inadequate furniture.
3. Teacher shortages.
4. Poor sanitation facilities.
5. Increased disciplinary problems.
6. Reduced instructional supervision.
7. Teacher burnout and stress.

These challenges collectively undermine educational quality and learning outcomes.

LITERATURE REVIEW

Introduction

Education is widely recognized as a vital instrument for national development because it promotes economic growth, social transformation, political stability, and technological advancement. The quality of education, however, depends largely on the availability of adequate facilities, qualified teachers, instructional materials, and a conducive learning environment. In Nigeria, one of the major challenges facing public secondary schools is the rapid increase in student population, which has resulted in overcrowded classrooms, inadequate facilities, and declining educational quality (Lee et al., 2021; Sari, 2023; UNESCO, 2023).

School population growth occurs when student enrolment increases beyond the carrying capacity of available educational resources such as classrooms, teachers, laboratories, libraries, and learning materials. This situation has become increasingly common in Nigerian public secondary schools due to rapid population growth, urbanization, increased access to education, and inadequate educational planning (NPC, 2023). Consequently, many schools operate beyond their designed capacity, thereby affecting teaching effectiveness and students' academic achievement.

Education and National Development

Education is a process through which individuals acquire knowledge, skills, attitudes, and values necessary for personal development and societal progress. It serves as a foundation for economic productivity, technological advancement, social integration, and political development (Johnson, 1995; Eze, 2011). The contribution of education to national development depends largely on the quality of educational services provided. According to Okorie (2005), educational resources such as classrooms, libraries, laboratories, instructional materials, and qualified teachers are essential for effective teaching and learning. When these resources become inadequate due to increasing student population, educational quality tends to decline.

Ajayi and Ogunyemi (1990) observed that overcrowded classrooms reduce students' participation, concentration, and academic performance. Similarly, Awotoye (1994) argued that classroom size significantly influences teaching effectiveness and learning outcomes. Therefore, a conducive learning environment characterized by adequate facilities and manageable class sizes remains essential for achieving educational objectives.

School Population Growth and Overpopulation in Education

School population growth refers to a continuous increase in student enrolment within an educational institution over a specified period. While enrolment growth is often viewed as an indicator of educational expansion, excessive growth without corresponding development of educational facilities may result in overpopulation. Overpopulation in education occurs when the number of students exceeds the available educational resources and facilities required for effective teaching and learning (UNESCO, 2023). This condition often leads to overcrowded classrooms, shortages of instructional materials, increased teacher workload, and pressure on school infrastructure.

Nigeria experiences significant educational pressure due to its rapidly growing population. According to the National Population Commission (NPC, 2023), the increasing number of school-age children has placed considerable demands on educational institutions, particularly public secondary schools. Consequently, many schools operate under overcrowded conditions that undermine educational quality. Human Capital Theory, advanced by Schultz (1961) and Becker (1964), views education as an investment that enhances human productivity and national development. However, the effectiveness of such investment depends on the availability of adequate

educational resources. When schools become overpopulated, educational quality may decline because resources become overstretched and insufficient.

Educational Quality and Academic Achievement

Educational quality refers to the extent to which educational institutions provide effective teaching and learning experiences that enable students to achieve desired learning outcomes. It encompasses factors such as teacher effectiveness, availability of facilities, curriculum implementation, classroom environment, and students' academic performance. Academic achievement is one of the major indicators of educational quality. Bloom (1976) defined academic achievement as the extent to which students attain educational objectives and learning outcomes established by educational institutions. It is commonly measured through examination results, continuous assessment scores, classroom participation, and mastery of academic skills.

Several factors influence academic achievement, including teacher quality, parental support, learning resources, school climate, and classroom conditions (Walberg, 1984). Hoy and Miskel (2013) emphasized that a positive learning environment promotes active participation and enhances students' academic success. Studies in Nigeria have shown that overcrowded classrooms and inadequate educational facilities significantly affect students' academic performance (Owoeye&Yara, 2018; Ajayi&Adeyemi, 2020). Thus, educational quality and academic achievement are closely linked to the availability and effective utilization of educational resources.

Effects of School Population Growth on Educational Quality

Classroom Congestion and Academic Achievement

One of the major consequences of school population growth is classroom congestion. Classroom congestion occurs when the number of students in a classroom exceeds the recommended capacity for effective teaching and learning. Glass and Smith (1979) found that smaller class sizes contribute significantly to improved academic performance because teachers can provide individualized attention. Similarly, Finn and Achilles (1999) demonstrated that students in smaller classes consistently outperform students in overcrowded classrooms. Sweller (2011) argued that overcrowded classrooms increase cognitive load, noise levels, and distractions, thereby reducing students' ability to process information effectively. In Nigeria, Adegbite and Omonuwa (2021) reported that students in overcrowded schools performed significantly lower than their counterparts in schools with manageable class sizes.

Teacher Effectiveness and School Population Growth

Teacher effectiveness is a critical determinant of educational quality and students' academic achievement. Hattie (2009) identified effective teaching as one of the strongest predictors of student success. However, increasing student population often reduces teacher effectiveness. Blatchford et al. (2016) found that large class sizes increase teachers' workload and reduce opportunities for individualized instruction. Olaleye et al. (2017) also reported that teachers in overcrowded classrooms frequently rely on lecture methods because interactive teaching becomes difficult. Similarly, Adeyemi (2019) observed that excessive classroom population contributes to teacher stress, burnout, and reduced job satisfaction, thereby affecting instructional quality.

Educational Facilities and Learning Outcomes

Educational facilities such as classrooms, libraries, laboratories, furniture, and instructional technologies play important roles in enhancing educational quality (Earthman, 2019). Uline and Tschannen-Moran (2008) found that students attending schools with adequate facilities generally perform better academically than those in poorly equipped schools. However, rapid enrolment growth places tremendous pressure on school facilities. Akinsolu (2018) reported that many Nigerian

public secondary schools experience shortages of classrooms, laboratory equipment, library resources, and furniture due to increasing student population. Such deficiencies negatively affect teaching and learning processes.

School Population Growth and Students' Behaviour

Overcrowding affects not only academic performance but also students' attitudes and behaviour toward learning. Studies have shown that congested classrooms often generate stress, frustration, indiscipline, and reduced motivation among learners. Research conducted in Lagos and Rivers States revealed that overcrowded classrooms contribute to distractions, poor classroom engagement, and negative attitudes toward school activities. Students in such environments often feel neglected because teachers cannot adequately attend to their individual needs.

Teacher–Student Interaction and Educational Achievement

Teacher–student interaction is fundamental to effective learning. Positive interaction enables teachers to identify students' strengths and weaknesses and provide necessary academic support. Finn and Achilles (1999) found that smaller classes promote stronger teacher–student relationships and higher academic achievement. Conversely, overcrowded classrooms limit meaningful interaction and reduce opportunities for individualized support.

Theoretical Framework: Class Size Theory of Learning

The Class Size Theory of Learning posits that the number of students in a classroom significantly influences teaching effectiveness and learning outcomes. The theory maintains that smaller classes promote individualized instruction, active participation, effective classroom management, and improved academic achievement.

Finn and Achilles (1999) demonstrated that students in smaller classes generally perform better academically because teachers can devote more attention to individual learners. Evidence from the Tennessee STAR Project further confirmed that reduced class sizes improve students' academic outcomes.

The major assumptions of the theory include:

1. Smaller classes enhance individualized instruction.
2. Manageable class sizes encourage active participation.
3. Reduced classroom population improves classroom management.
4. Better teacher–student interaction enhances learning.
5. Effective supervision leads to improved academic achievement.

The Class Size Theory explains how overcrowded classrooms affect teacher effectiveness, student participation, and academic performance. Thetheory provides a suitable framework for examining the impact of school population growth on educational quality in Government Secondary Commercial School, Wudil, Kano State.

Empirical Review

Several studies have examined the relationship between school population growth, classroom congestion, and educational quality.

Adegbite and Omonuwa (2021) found a significant negative relationship between overcrowding and students' academic achievement. Olaleye et al. (2017) also reported that classroom congestion adversely affects academic performance in secondary schools. Abubakar et al. (2023) observed that high teacher–student ratios reduce teaching effectiveness and learning outcomes. Similarly, King-

Agboto and Ugorji found that overcrowded classrooms contribute to poor educational quality and low academic achievement. International studies support these findings. Finn and Achilles (1999), through the Tennessee STAR Project, found that students in smaller classes consistently performed better academically. Blatchford et al. (2011) also reported that large classes negatively affect classroom interaction, individualized instruction, and students' learning outcomes.

Overall, empirical evidence indicates that excessive school population negatively influences educational quality through classroom congestion, inadequate facilities, reduced teacher effectiveness, and poor academic achievement.

Summary of Literature Review and Research Gap

The literature reviewed established that school population growth significantly influences educational quality. Studies consistently show that overcrowded classrooms, inadequate educational facilities, reduced teacher effectiveness, and limited teacher–student interaction negatively affect students' academic achievement.

The theoretical review revealed that the Class Size Theory of Learning provide useful explanations for understanding how school population growth influences educational outcomes. Empirical studies conducted in Nigeria and other countries further confirmed the negative effects of overcrowding on educational quality.

Despite the extensive literature on classroom congestion and academic achievement, there is limited empirical evidence specifically focusing on Government Secondary Commercial School, Wudil, Kano State. This gap justifies the present study, which seeks to examine the impact of school population growth on educational quality in the school and contribute to educational planning and policy formulation in Kano State and Nigeria at large.

Methodology

The study adopts a descriptive survey research design. The population consists of all teachers and students in Government Secondary Commercial School, Wudil. A stratified random sampling technique may be employed to ensure adequate representation of both teachers and students. On the instruments for data collection, it may be collected through structured questionnaires, semi-structured interviews, and, classroom observation schedules. Experts in educational research and measurement will validate the instruments. Reliability may be established through pilot testing using Cronbach's alpha coefficient. More so, data will be analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations. Inferential statistics may also be employed where necessary.

School Population Growth and Educational Quality in Government Secondary Commercial School, Wudil

A total of 121 questionnaires were administered, out of which 96 were properly completed and returned, representing a response rate of 79.3%. The responses obtained were considered adequate for analyzing the objectives of the study.

Response Rate of Respondents

Table 1: Distribution and Retrieval of Questionnaires

Category	Distributed	Returned	Percentage (%)
Teachers	32	21	65.6
Students	89	75	84.3
Total	**121**	**96**	**79.3**

Source: Field Survey (2026)

Table 1 indicates that 96 out of the 121 questionnaires distributed were successfully retrieved, giving a response rate of 79.3%. The teachers recorded a return rate of 65.6%, while students recorded 84.3%. The overall response rate was sufficient for meaningful analysis and interpretation of the findings.

Analysis Based on Research Objectives

Research Objective One: Determine the extent of overpopulation in Government Secondary Commercial School, Wudil.

Table 2: Respondents' Perception of Classroom Overpopulation

Items	SA	A	D	SD	Total Agreement (%)
Classroom contains too many students	30	63	3	0	96.9
Classroom facilities are insufficient for students	60	30	6	0	93.8
Admission should match available facilities	72	18	3	3	93.8

Source: Field Survey (2026)

The findings in Table 2 reveal that overpopulation is a major challenge in Government Secondary Commercial School, Wudil. A large majority of respondents (96.9%) agreed that classrooms contain excessive numbers of students. Similarly, 93.8% agreed that available facilities are insufficient for the existing population, while 93.8% supported regulating admission based on available resources. This implies that the increasing student population has placed significant pressure on classrooms and school facilities, thereby affecting the quality of education provided.

Research Objective Two: Examine the effect of overpopulation on teaching effectiveness and classroom management.

Table 3: Effect of Overpopulation on Teaching Effectiveness

Items	SA	A	D	SD	Total Agreement (%)
Overcrowded classrooms affect teaching effectiveness	75	12	9	0	90.6
Teachers cannot control large classes effectively	48	36	12	0	87.5
Teachers experience stress in large classes	81	6	0	9	90.6
Overpopulation affects classroom discipline	57	33	6	0	93.8

Source: Field Survey (2026)

Table 3: shows that overcrowding negatively affects teaching effectiveness and classroom management. About 90.6% of respondents agreed that overcrowded classrooms reduce teaching effectiveness. Also, 87.5% believed that teachers experience difficulty controlling large classes, while 90.6% agreed that large class sizes increase teacher stress. Furthermore, 93.8% confirmed that overpopulation contributes to classroom discipline problems. This indicates that excessive student enrolment affects teachers' ability to effectively deliver lessons and maintain proper classroom organization.

Research Objective Three: Examine the impact of overpopulation on students' academic achievement and learning outcomes.

Table 4: Effect of Overpopulation on Academic Achievement

Items	SA	A	D	SD	Total Agreement (%)
Students receive little attention in overcrowded classrooms	63	30	3	0	96.9
Overpopulation affects academic performance	51	27	9	9	81.2
Overpopulation affects students' concentration	75	15	3	3	93.7
Students perform better in smaller classes	72	24	0	0	100
Overcrowded classrooms reduce learning effectiveness	66	30	0	0	100
Overpopulation reduces educational quality	63	33	0	0	100

Source: Field Survey (2026)

The results in Table 4 indicate that school population growth has a strong influence on students' academic achievement. About 96.9% of respondents agreed that students receive less individual attention in overcrowded classrooms. Also, 81.2% agreed that overpopulation affects academic performance, while 93.7% confirmed that it reduces students' concentration. All respondents agreed that students perform better in smaller classes and that overcrowded classrooms reduce learning effectiveness and educational quality. Therefore, excessive student population negatively affects students' learning experiences and academic outcomes.

Research Objective Four: Identify possible solutions to the problem of overpopulation in schools.

Table 5: Suggested Measures for Addressing Overpopulation

Items	SA	A	D	SD	Total Agreement (%)
Government should build more classrooms	84	6	0	6	93.8
More teachers should be recruited	90	6	0	0	100

Source: Field Survey (2026)

Table 5 reveals that respondents strongly support measures aimed at reducing overcrowding. A total of 93.8% agreed that government should provide additional classrooms, while 100% supported the recruitment of more teachers. This suggests that increasing school infrastructure and improving teacher availability are important strategies for reducing the negative effects of population growth and improving educational quality.

Summary of Findings

Based on the analysis of the data collected, the following findings were established:

1. Overpopulation is a significant challenge in Government Secondary Commercial School, Wudil, as classrooms are overcrowded and existing facilities are inadequate for the student population.
2. Large class sizes negatively affect teaching effectiveness by increasing teacher workload, reducing classroom control, and creating difficulties in maintaining discipline.
3. Overpopulation has a negative impact on students' academic achievement due to reduced individual attention, poor concentration, and decreased learning effectiveness.
4. The quality of education is affected by excessive student enrolment, as overcrowded learning environments limit effective teaching and student participation.
5. Respondents identified the construction of additional classrooms and recruitment of more teachers as effective solutions to address school population growth and improve educational quality.

Summary of the Study

This study examined the influence of school population growth on educational quality among students of Government Secondary Commercial School, Wudil, Kano State. The study was undertaken due to increasing concerns regarding rising student enrolment, overcrowded classrooms,

inadequate educational facilities, and their effects on effective teaching and learning in public secondary schools.

The study was guided by four objectives: to determine the extent of overpopulation in Government Secondary Commercial School, Wudil; examine the effect of overpopulation on teaching effectiveness and classroom management; assess the impact of overpopulation on students' academic achievement; and identify possible strategies for addressing the challenges associated with excessive student population.

A descriptive survey research design was adopted for the study. The population of the study consisted of 939 respondents, including 32 teachers and 907 students. A sample size of 121 respondents was selected through simple random sampling. Out of the 121 questionnaires administered, 96 were successfully completed and retrieved, representing a response rate of 79.3%. Data collected through structured questionnaires were analyzed using frequency counts and percentages.

The study was based on the Class Size Theory of Learning, which explains the relationship between classroom population, teacher effectiveness, student participation, and academic outcomes. The theory emphasizes that manageable class sizes create better opportunities for interaction, individualized attention, and improved learning achievement.

The findings revealed that school population growth is a major challenge in Government Secondary Commercial School, Wudil. Most respondents confirmed that classrooms are overcrowded and that existing facilities are insufficient to accommodate the increasing number of students. This indicates that the growth in enrolment has placed considerable pressure on available learning resources.

The study further revealed that overpopulation negatively affects teaching effectiveness and classroom management. Large class sizes increase teachers' workload; create difficulties in maintaining discipline; and limit teachers' ability to provide individual attention to students.

The findings also showed that overcrowding affects students' academic achievement. Respondents agreed that excessive classroom population reduces students' concentration, limits teacher-student interaction, decreases learning effectiveness, and contributes to poor academic performance. The study established that students learn better in smaller classes where teachers can provide adequate guidance and support.

Finally, the study found that the construction of additional classrooms and the recruitment of more qualified teachers are important measures for reducing overcrowding and improving educational quality in the school.

Conclusion

Based on the findings of the study, it is concluded that school population growth has a significant negative effect on educational quality and students' academic achievement in Government Secondary Commercial School, Wudil. The continuous increase in student enrolment without a corresponding improvement in school facilities, classrooms, and teaching personnel has resulted in overcrowding and pressure on available resources. This situation affects the effectiveness of teaching and creates challenges in maintaining a suitable learning environment.

The study established that overcrowded classrooms negatively affect teachers by increasing workload, causing stress, and making classroom management more difficult. Similarly, students experience reduced individual attention, limited classroom participation, poor concentration, and reduced learning opportunities. The findings support the principles of the Class Size Theory of

Learning, which emphasizes that smaller and manageable classes encourage effective teaching, stronger teacher-student relationships, and improved academic performance.

Therefore, addressing school population growth requires proper educational planning, expansion of school infrastructure, recruitment of additional teachers, and effective management of student enrolment. Without these measures, the quality of secondary education and students' academic achievement may continue to decline.

Recommendations

Based on the findings and conclusion of the study, the following recommendations are made:

1. The government should construct additional classrooms in Government Secondary Commercial School, Wudil, and other public secondary schools to reduce overcrowding and create a more conducive learning environment.
2. More qualified teachers should be recruited to improve the teacher-student ratio and enhance effective teaching and classroom interaction.
3. School admission policies should be properly regulated to ensure that student enrolment corresponds with available classrooms, facilities, and teaching resources.
4. Adequate educational facilities such as desks, chairs, libraries, laboratories, and instructional materials should be provided to support effective learning.
5. Regular maintenance, expansion, and renovation of school infrastructure should be carried out to accommodate increasing student population.
6. Educational authorities should ensure compliance with recommended class-size standards contained in national education guidelines to promote effective classroom management.
7. Teachers should be provided with continuous training and professional development programmes to improve their ability to manage large classes effectively.
8. Parent-Teacher Associations (PTAs), community organizations, and other educational stakeholders should support government efforts toward improving school facilities.
9. School administrators should regularly monitor student enrolment, classroom capacity, and resource availability to maintain favourable learning conditions.
10. Further research should be conducted in other public secondary schools across Kano State and Nigeria to provide wider evidence on the relationship between school population growth and educational quality.

Contribution to Knowledge

This study contributes to existing knowledge by providing empirical evidence on the effects of school population growth on educational quality among students of Government Secondary Commercial School, Wudil, Kano State.

The study demonstrates the relationship between overcrowded classrooms, inadequate facilities, teacher effectiveness, classroom management, and students' academic achievement. It highlights that excessive student population affects not only physical learning conditions but also the quality of instruction and educational outcomes.

The findings provide useful information for government agencies, educational planners, school administrators, teachers, researchers, and other stakeholders involved in improving the standard of secondary education in Nigeria. The study also serves as a reference point for future studies on school population management and educational development.

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