



TEACHER CLASSROOM INSTRUCTIONAL DELIVERY; A NEXUS AT IMPROVING STUDENTS' PERFORMANCE IN THE 21ST CENTURY

^{*1}Josephine Masara JOSHUA, ²Zainab Ololade ADEWALE and ¹Ngozi UBENDU

¹Department of Educational Foundations, Federal University of Education, Zaria, Nigeria

²Faculty of Technology Education, Air Force Institute of Technology, Kaduna

*Corresponding Author: josephinejoshua53@gmail.com, 08036223639

Abstract

This paper examines the role of quality teacher classroom delivery as a critical factor in enhancing learners' academic performance in the 21st century. It also highlights that teacher quality, encompassing professional competence, pedagogical skills, classroom management, and motivation, remains one of the strongest determinants of learners' success. The paper identifies challenges such as inadequate professional training, lack of instructional resources, large class sizes, and insufficient policy support, which often hinder effective classroom delivery. The paper emphasises that quality teaching catalyzes the acquisition of 21st-century skills and improved academic outcomes. It recommends strengthening continuous professional development, integrating ICT into instruction, adopting learner-centred methodologies, motivating teachers through improved welfare, and enhancing the provision of instructional resources. It concludes that investing in quality teacher classroom delivery is indispensable for academic excellence and for equipping learners with the skills needed to thrive in a rapidly changing global environment.

Keywords: Classroom, Delivery, Learners, and Academic Performance.

Introduction

Education is widely recognised as the foundation for national development, and the teacher is central to the entire process of ensuring effective learning outcomes. The quality of teacher classroom delivery has become a major determinant of learners' academic performance, especially in the 21st century, where new pedagogical demands, technological innovations, and learner-centred approaches are emphasised (Darling-Hammond, 2017). Teachers are no longer viewed as mere transmitters of knowledge but as facilitators of learning who must create interactive, engaging, and meaningful classroom experiences that enhance students' critical thinking and problem-solving abilities (Adeosun, 2018).

Research evidence has shown that effective classroom delivery involves proper lesson planning, the use of diverse teaching methods, integration of instructional technology, classroom management, and continuous assessment to monitor learners' progress (Akpan & Umobong, 2019). In many developing countries, however, challenges such as poor teacher training, inadequate instructional materials, and large class sizes continue to hinder quality delivery, thereby affecting students' academic achievement (Ogunyemi, 2020). This underscores the need for teachers to adopt innovative strategies such as collaborative learning, project-based learning, and the integration of ICT to meet the learning needs of 21st-century students (Trilling & Fadel, 2019).

The global educational frameworks, such as the Sustainable Development Goal (SDG 4), emphasise inclusive and quality education, which requires teachers to constantly upgrade their pedagogical skills to meet changing learning demands (UNESCO, 2016). Teachers' ability to deliver lessons effectively not only improves students' academic performance but also equips them with 21st-century skills necessary for global competitiveness (OECD, 2019). It is against this background that the study on "Quality Teacher Classroom Delivery: A Criterion for Improved Learners' Academic Performance in the 21st Century" becomes relevant, as it seeks to explore how effective teaching practices can transform learning outcomes.

Concept of Academic Performance

Academic performance refers to the measurable learning outcomes of students, which indicate the extent to which educational goals and objectives have been achieved. It is often assessed through grades, test scores, class participation, and the ability of learners to apply acquired knowledge and skills in solving real-life problems

(Hornby, 2012). According to Hijazi and Naqvi (2019), academic performance is a key indicator of students' intellectual development and serves as a benchmark for evaluating the effectiveness of instructional delivery. It encompasses both cognitive outcomes, such as mastery of subject matter, and non-cognitive aspects, including motivation, discipline, and participation in learning activities (Ghazvini & Khajepour, 2011). In the 21st century, academic performance goes beyond examinations to include the demonstration of critical thinking, creativity, collaboration, and problem-solving abilities, which are essential for learners' success in a knowledge-driven society (Abdullahi et al., 2022; Trilling & Fadel, 2019).

Concept of Quality Teacher Classroom Delivery in the 21st Century

Quality teacher classroom delivery in the 21st century refers to the ability of teachers to effectively communicate knowledge, employ relevant instructional strategies, and create an engaging learning environment that promotes critical thinking, creativity, collaboration, and problem-solving skills among learners. Unlike the traditional approach to teaching that focused largely on rote memorisation and teacher-centred instruction, 21st-century classroom delivery emphasises learner-centred pedagogy, where students actively participate in the learning process and develop lifelong skills necessary for global competitiveness (Trilling & Fadel, 2019). Effective classroom delivery requires teachers to integrate pedagogical knowledge with technological tools, interactive methodologies, and differentiated instruction to cater for the diverse needs of learners (Darling-Hammond, 2017).

Furthermore, quality classroom delivery encompasses clarity of instruction, organisation of learning activities, feedback mechanisms, and the ability to motivate and inspire students toward academic excellence (OECD, 2019). Teachers who demonstrate professionalism, mastery of subject matter, and adaptability to new trends in education are more likely to enhance students' academic performance (Akinsolu, 2010). In this context, quality delivery is not measured solely by lesson presentation but by the overall learning outcomes, including students' ability to apply knowledge, collaborate with peers, and solve real-life problems. Thus, in the 21st century, quality teacher classroom delivery is both a pedagogical and strategic process aimed at equipping learners with the skills needed for success in a rapidly changing knowledge-driven society.

The Role of Teacher Quality in Learners' Academic Achievement

Teacher quality has been consistently identified as one of the most significant school-related factors influencing learners' academic achievement. High-quality teachers possess strong subject-matter knowledge, pedagogical competence, classroom management skills, and the ability to adapt teaching strategies to meet diverse learner needs (Darling-Hammond, 2022).

The effective teachers not only deliver content but also inspire motivation, cultivate critical thinking, and foster problem-solving skills that are essential in the 21st century (Stronge, 2018). Teachers who engage in continuous professional development and reflective practice tend to improve their instructional delivery, which directly enhances students' performance (Akpan & Umobong, 2019). Conversely, inadequate teacher preparation, lack of pedagogical skills, and poor classroom engagement have been linked to low student achievement levels, particularly in developing countries (Ogunyemi, 2020). Therefore, improving teacher quality remains central to raising educational standards and equipping learners with both academic and life skills necessary for global competitiveness.

Innovative Pedagogical Approaches in the 21st Century Classroom

The 21st-century classroom is characterised by the demand for innovative pedagogical approaches that move beyond traditional rote memorisation to instructional methods that foster critical thinking, creativity, collaboration, communication, and problem-solving skills. Teachers are increasingly expected to design student-centred learning environments where learners actively participate in knowledge construction rather than passively receiving information. Contemporary instructional strategies such as project-based learning (PBL), inquiry-based learning, flipped classrooms, experiential learning, and collaborative group work have been widely recognised as effective approaches for engaging students and improving learning outcomes (Bates, 2019; OECD, 2020). These approaches enable learners to apply knowledge to real-life situations, thereby enhancing deeper understanding, retention, and transferable skills required in modern society.

The integration of Information and Communication Technology (ICT) into teaching and learning is another defining feature of innovative pedagogy in contemporary education systems. Digital tools such as learning management systems, interactive applications, artificial intelligence-based tutoring systems, virtual simulations, and online collaborative platforms allow teachers to personalise instruction and address diverse learner needs (Nuhu et al., 2026). Recent studies indicate that when ICT is effectively integrated into classroom instruction, students demonstrate improved engagement, motivation, and higher-order thinking skills that support better academic performance (Abdulbaqi et al., 2025; Selwyn, 2016; Bates, 2019). Furthermore, innovative pedagogies emphasise continuous formative assessment, where teachers provide ongoing feedback to support learner progress, encourage reflection, and promote self-regulated learning in dynamic classroom environments.

Ultimately, innovative pedagogical approaches in the 21st-century classroom redefine the role of the teacher from a traditional knowledge transmitter to a facilitator, guide, and co-learner who supports students in developing essential academic, digital, and life skills needed for success in a rapidly changing global society. These approaches ensure that learners are not only academically competent but also adaptable, innovative, and capable of functioning effectively in technology-driven environments. As education continues to evolve, the integration of modern pedagogical practices and emerging technologies remains central to preparing learners for future challenges and opportunities in the global knowledge economy.

Classroom management is a fundamental component of effective teaching and learning in the 21st century, as it directly influences the quality of instruction, student engagement, and overall academic outcomes. In contemporary education systems characterised by diverse learners, rapid technological advancement, and competency-based curricula, teachers are required to create structured, inclusive, and supportive classroom environments that promote active participation and minimise disruptions. Effective classroom management goes beyond maintaining discipline; it involves organising instructional activities, establishing clear expectations, and fostering a positive learning climate where students feel safe and motivated to learn. Recent educational studies emphasise that well-managed classrooms enhance students' academic performance by maximising instructional time and reducing behavioural challenges that may hinder learning (Bates, 2019).

Furthermore, classroom management in the modern educational context integrates both pedagogical and technological strategies to support learner engagement. With the increasing use of digital learning tools, teachers are expected to manage both physical and virtual learning environments effectively. This includes guiding students in the appropriate use of technology, encouraging collaborative learning, and ensuring that digital platforms are used to enhance, rather than disrupt, learning processes. According to the Organisation for Economic Co-operation and Development (2020), effective classroom practices that combine strong management skills with digital competence significantly improve student motivation, participation, and learning outcomes in 21st-century education systems.

Ultimately, classroom management remains a critical foundation for successful teaching in the modern era, as it supports the development of essential skills such as critical thinking, collaboration, communication, and self-regulation. Teachers who effectively manage their classrooms are better able to implement innovative teaching strategies, accommodate diverse learner needs, and prepare students for future academic and career challenges. Therefore, strong classroom management practices are essential for ensuring that educational goals are achieved in an increasingly complex and technology-driven learning environment.

The Role of Teacher Motivation in Enhancing Classroom Delivery

Teacher motivation plays a critical role in ensuring effective classroom delivery and, consequently, improved academic performance of learners in the 21st century. A motivated teacher is more committed, enthusiastic, and innovative in delivering lessons, which creates a positive learning environment that fosters student engagement and achievement (Fatai et al., 2021; Usop et al., 2013). Motivation also enhances teachers' willingness to adopt modern teaching strategies and integrate technology, which is essential for meeting the diverse needs of 21st-century learners (Deci & Ryan, 2022). Conversely, lack of motivation often leads to poor lesson preparation, reduced classroom control, and limited interaction with students, all of which negatively impact academic performance (Afe, 2021). Therefore, sustaining teacher motivation through adequate incentives, recognition, and professional development is fundamental to achieving quality classroom delivery and improved learning outcomes.

Challenges Affecting Effective Classroom Delivery

Despite the growing emphasis on quality teaching in the 21st century, teachers face numerous challenges that hinder effective classroom delivery, which include;

1. **Inadequate Teacher Preparation and Professional Development:** Many teachers enter the classroom without sufficient pedagogical skills or exposure to innovative teaching methods, thereby limiting their ability to engage learners effectively (Darling-Hammond, 2010). In developing contexts such as Nigeria, limited access to continuous training and professional development further compounds this problem (Akpan & Umobong, 2019).
2. **Lack of Adequate Instructional Materials and Technological Resources:** quality teaching in modern classrooms requires the integration of digital tools, interactive media, and well-structured teaching aids, yet many schools suffer from shortages or outdated facilities (Yusuf & Adigun, 2010).
3. **Problem of Large Class Size:** for quality classroom delivery, there is a need for the classroom to be manageable by the teacher. Overcrowded classrooms, which are a common norm in our education system, will not necessarily permit the teacher to use 21st-century tools in teaching and learning. Obiakor and Oguejiofor (2020) found that large classes prevented teachers from being able to provide in-depth content coverage due to the loss of instructional time occurring since the teachers spend more time handling students' behavioural issues. Large class sizes also pose a challenge, as teachers struggle to give individual attention, manage student behaviour, and use participatory teaching methods effectively (Blatchford et al., 2011).
4. **Socio-economic Factors and Policy Constraints Negatively Affect Classroom Delivery:** In low-resource environments, poor teacher motivation due to delayed salaries, heavy workloads, and lack of incentives reduces teachers' commitment to innovative practices (Ogunyemi, 2020). Similarly, inconsistent education policies and a lack of government support undermine teachers' capacity to deliver effectively (UNESCO, 2016). These challenges collectively hinder the realisation of quality classroom instruction, which is essential for improving learners' academic performance and equipping them with 21st-century skills.

Quality Classroom Delivery as a Catalyst for 21st Century Skills Development

Quality classroom delivery goes beyond the transmission of academic knowledge; it serves as a platform for nurturing 21st-century skills such as critical thinking, creativity, collaboration, communication, and digital literacy (Shuaib et al., 2023). Teachers who adopt interactive and learner-centred pedagogies create opportunities for students to analyse, synthesise, and apply knowledge in real-world contexts, thereby fostering problem-solving and innovation (Trilling & Fadel, 2019). Effective classroom practices such as project-based learning, inquiry-based instruction, and collaborative group work help learners build teamwork and communication skills that are essential for success in the global knowledge economy (Bell, 2010).

The integration of Information and Communication Technology (ICT) in classroom delivery also plays a pivotal role in developing digital competence among learners. Studies show that when teachers incorporate digital tools into their instructional delivery, students not only achieve higher academic outcomes but also develop technological skills necessary for future careers (Voogt & Roblin, 2012). Moreover, quality teaching practices that emphasise formative assessment and reflective learning encourage self-regulation and lifelong learning habits among students (Black & Wiliam, 2019).

In addition, the 21st-century classroom requires teachers to serve as facilitators who empower learners to take ownership of their learning process. Quality classroom delivery, therefore, acts as a catalyst for holistic development, ensuring that learners are equipped with cognitive, social, and emotional skills needed to thrive in an increasingly interconnected and competitive world (OECD, 2019). Thus, the effectiveness of classroom delivery is directly linked not only to academic performance but also to the development of transferable skills that prepare learners for future challenges.

Strategies for Enhancing Teacher Classroom Delivery

Enhancing the quality of teacher classroom delivery requires deliberate strategies aimed at improving teachers' professional competence, instructional methods, and access to resources.

1. **Continuous Professional Development:** where teachers engage in regular training, workshops, and seminars to update their pedagogical skills and knowledge of subject content (Darling-Hammond et al., 2017). Research shows that professional learning communities, peer mentoring, and collaborative lesson planning improve teachers' instructional practices and ultimately enhance learners' academic performance (Vescio et al., 2019).
2. **Integration of Information and Communication Technology (ICT) into the classroom:** providing teachers with access to modern digital tools and training them to effectively integrate these tools into instruction enhances interactive teaching and equips learners with digital skills required in the 21st century (Mishra & Koehler, 2019).
3. **Teacher Motivation:** effective classroom delivery can be improved through better teacher motivation, such as timely payment of salaries, recognition of performance, and provision of conducive working environments (Ogunyemi, 2020).
4. **Adopting Learner-Centered Teaching Strategies:** strategies such as inquiry-based learning, project-based learning, and collaborative group work fosters active participation and deeper learning among students (Bell, 2010).
5. **Adequate Provision of Instructional Material:** governments and school administrators also play a critical role by ensuring adequate provision of instructional materials, reducing class sizes, and formulating policies that support innovative teaching practices (UNESCO, 2016). When these strategies are implemented, teachers are better positioned to deliver quality instruction that not only improves learners' academic outcomes but also prepares them with skills to thrive in the 21st-century global economy.

Conclusion

Quality teacher classroom delivery remains a cornerstone for improved learners' academic performance in the 21st century. The effectiveness of a teacher's delivery not only determines how well students grasp subject content but also shapes their acquisition of critical thinking, creativity, collaboration, communication, and digital literacy skills needed for lifelong success. Evidence from research underscores that teacher quality, innovative pedagogical approaches, and learner-centered practices significantly influence learning outcomes more than material resources or infrastructural provisions. However, challenges such as inadequate professional development, limited instructional resources, large class sizes, and weak policy support continue to hinder effective teaching. Addressing these barriers through continuous teacher training, integration of ICT, improved teacher motivation, and supportive educational policies will enhance instructional delivery. Ultimately, when teachers deliver quality instruction, learners are better equipped not only to excel academically but also to thrive in a rapidly changing global society, making teacher classroom delivery a vital criterion for educational transformation in the 21st century.

Recommendations

1. Teachers should be provided with regular training, workshops, and seminars to update their pedagogical skills, classroom management techniques, and subject-matter knowledge. This will enable them to effectively adopt innovative teaching methods suitable for the 21st-century classroom.
2. Schools should ensure the provision of adequate technological resources such as computers, projectors, smart boards, and reliable internet access. Teachers should also be trained on how to integrate these tools into instruction to enhance interactivity, digital literacy, and academic achievement among learners.
3. Teachers should adopt modern pedagogical methods such as project-based learning, inquiry-based learning, and collaborative group work. These approaches encourage critical thinking, creativity, and problem-solving skills, thereby preparing learners for global competitiveness.

4. Governments and school administrators should improve teacher welfare by ensuring timely payment of salaries, providing incentives, and creating conducive teaching environments. Motivated teachers are more likely to deliver quality instruction that enhances learners' performance.
5. Education stakeholders should ensure adequate supply of teaching aids, textbooks, and digital resources. Policymakers should also formulate and implement supportive educational policies that encourage innovative teaching practices and reduce barriers such as large class sizes.

References

- Abdulbaqi, S. Z., Isiaq, A. T., Balogun, O. S., Ibrahim, A. K., & Tejideen, T. O. (2025). Sociological assessment of operating AI and re-thinking capacity of undergraduate students in Southwestern Nigeria. *Indian Journal of International Studies*, 5(1), 37-58. <https://doi.org/10.5281/zenodo.15833644>
- Abdullahi, H. A., Oba, A. I., & Suleiman, A. (2022). Effectiveness of demonstration-brainstorming on students' performance in agricultural science. *Journal of Environmental and Science Education*, 2(2), 92-97.
- Adeosun, O. (2018). *Teacher Quality and Classroom Effectiveness in the 21st Century Education*. University of Lagos Press.
- Afe, J. O. (2021). *Reflections on Becoming a Teacher and the Challenges of Teacher Education*. Inaugural Lecture Series 64, University of Benin.
- Akinsolu, A. O. (2010). Teachers and students' academic performance in Nigerian Secondary Schools: Implications for planning. *Florida Journal of Educational Administration & Policy*, 3(2), 86-103.
- Akpan, C., & Umobong, M. E. (2019). Teacher Classroom Practices and Students' Academic Achievement in Secondary Schools. *Journal of Education and Practice*, 10(5), 45-52.
- Bates (2019). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. Tony Bates Associates Ltd.
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83(2), 39-43.
- Black, P., & Wiliam, D. (2019). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5-31.
- Blatchford, P., Bassett, P., & Brown, P. (2011). Examining the effect of class size on classroom engagement and teacher-pupil interaction: Differences in relation to pupil prior attainment and primary vs. secondary schools. *Learning and Instruction*, 21(6), 715-730.
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291-309.
- Darling-Hammond, L. (2022). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1-44.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Deci, E. L., & Ryan, R. M. (2022). The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4), 227-268.
- Fatai, K., Oba, A. I., Muhammed, A. O., Afolabi, K. O., Shuaib, S. B., & Jimoh, S. B. (2021). Teachers' perception on factors affecting effective teaching and learning of agricultural science in secondary schools in Ilorin Metropolis, Kwara State, Nigeria. *African Journal of Science, Technology and Mathematics Education*, 7(2), 88-94.
- Ghazvini, S. D., & Khajepour, M. (2011). Attitudes and motivation in learning English as a second language in high school students. *Procedia – Social and Behavioural Sciences*, 15(1), 1209-1213.
- Hijazi, S. T., & Naqvi, S. M. M. R. (2019). Factors affecting students' performance: A case of private colleges. *Bangladesh e-Journal of Sociology*, 3(1), 1-10.
- Hornby, A. S. (2012). *Oxford Advanced Learner's Dictionary* (8th ed.). Oxford University Press.

- Mishra, P., & Koehler, M. J. (2019). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Nuhu, K. M., Oba, A. I., Alabi, O. A., Lawal, M. A., Adewuyi, A. S., & Olumorin, C. O. (2026). Effect of artificial intelligence tools on achievement in complex STEM concepts among senior secondary school students in Ilorin, Kwara State, Nigeria. *Federal University Gusau Faculty of Education Journal*, 6(3), 92–101. <https://doi.org/10.64348/zije.2026383>
- Obiakor, M. I & Oguejioffor, C. N (2020) Impact of Classroom Size on Academic Performance of Secondary School Students in Enugu North Local Government Area of Enugu State, Nigeria. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 1(1).
- Ogunyemi, B. (2020). Challenges of teacher effectiveness in Nigerian classrooms. *African Journal of Education*, 12(2), 112–124.
- Organisation for Economic Co-operation and Development (OECD) (2020). *Education in the Digital World: OECD Policy Perspectives*. OECD Publishing.
- Organisation for Economic Co-operation and Development (OECD). (2019). *Future of education and skills: Education 2030*. OECD Publishing.
- Selwyn (2016). *Education and Technology: Key Issues and Debates*. Bloomsbury Publishing.
- Shuaib, S. B., Adesanya, E. O., Oba, A. I., Afolabi, K. O., & Jimoh, S. B. (2023). Assessing agricultural literacy among senior school students in Kwara, Nigeria: Implication for educational interventions. *Indonesian Journal of Curriculum and Educational Technology Studies*, 11(1), 1–8.
- Stronge, J. H. (2018). *Qualities of effective teachers* (3rd ed.). ASCD.
- Trilling, B., & Fadel, C. (2019). *21st century skills: Learning for life in our times*. Jossey-Bass.
- UNESCO. (2016). *Education 2030: Incheon declaration and framework for action for the implementation of SDG 4*. UNESCO.
- Usop, A. M., Askandar, D. K., Kadtong, M. L., & Usop, D. A. S. O. (2013). Work performance and job satisfaction among teachers. *International Journal of Humanities and Social Science*, 3(5), 245–252.
- Vescio, V., Ross, D., & Adams, A. (2019). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80–91.
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*, 44(3), 299–321.
- Yusuf, M. O., & Adigun, J. T. (2010). Integrating information and communication technologies in Nigerian tertiary education. *The African Symposium*, 10(2), 75–87.