



Correlation between Students' Entry Characteristics and Teachers' Task Performance in Senior Secondary Schools, Education District III, Lagos State, Nigeria

Beyioku, Joseph Bankole¹; Akinyemi, Isiaka Adeniran, PhD² & Gbenu, Jide Pius, PhD³

ORCID ID: <https://orcid.org/0009-0002-7461-5166>

¹Department of Educational Management, Lagos State University of Education, Oto / Ijanikin, Lagos, Nigeria

^{2&3}Department of Educational Management, Lagos State University, Ojo, Lagos, Nigeria

Received: 28.11.2025 | Accepted: 12.12.2025 | Published: 20.12.2025

*Corresponding Author: Beyioku, Joseph Bankole

DOI: [10.5281/zenodo.17995384](https://doi.org/10.5281/zenodo.17995384)

Abstract

This study examines the correlation between students' entry characteristics and teachers' task performance in senior secondary schools in Education District III, Lagos State, Nigeria. The purpose was to determine the relationship between students' prior achievement and teachers' instructional delivery, as well as the correlation between students' academic background and teachers' classroom management. A correlational survey design was used. The sample included 365 students and 19 teachers, selected using stratified random sampling to ensure proper representation. Data was collected via a questionnaire and analyzed using descriptive and inferential statistics, including Pearson correlation. The key findings revealed a significant positive correlation between students' prior achievement and teachers' instructional delivery ($\beta=.352, p<0.05$). There was also a significant positive correlation between students' academic background and teachers' classroom management ($\beta=.479, p<0.05$). The conclusion is that what students bring to school directly influences how teachers perform their tasks, with implications for professional development and policy aimed at improving educational outcomes.

Keywords: *Instructional Planning, Classroom Management, Prior Academic Achievement.*

Original Research Articles

Copyright © 2025 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

Introduction

Teachers' task performance encompasses the core professional responsibilities through which educators facilitate effective learning. These responsibilities include instructional planning and delivery, curriculum implementation, classroom organization, assessment of learner progress, and the provision of constructive feedback. Collectively, these functions shape instructional quality and influence student learning outcomes. Recent evidence, however, indicates a gradual decline in teacher task performance within Nigerian secondary schools, frequently linked to inadequate instructional

resources, insufficient professional development, and systemic shortcomings in educational planning (Adeniji, 2025). Such constraints weaken teachers' effectiveness and compromise students' academic advancement.

Simultaneously, students enter secondary schooling with a diverse range of entry characteristics that significantly shape their readiness to learn. These characteristics include prior academic preparation, cognitive abilities, socio-economic background, motivation, age, gender, and other demographic attributes (Oladipo & Adeosun, 2025). This diversity presents teachers with complex pedagogical and



managerial demands. In classrooms where learners display wide disparities in academic preparedness, socio-cultural background, or cognitive development, teachers must adopt differentiated instructional strategies and enhanced classroom management techniques to foster engagement and ensure equity in learning opportunities (Adeniji, 2025).

The relationship between students' entry characteristics and teachers' task performance has therefore emerged as an important focus of contemporary educational research. Empirical evidence suggests that the demographic and cognitive composition of a learner group may influence a teacher's ability to implement curriculum effectively. For instance, heterogeneous levels of prior achievement may intensify classroom management pressures, complicate instructional pacing, and heighten the need for individualised feedback, thereby affecting the overall quality of teacher task execution (Adeniji, 2025). Conversely, when instructional strategies are deliberately adapted to the specific entry characteristics of students, improvements in learner engagement, behavioural regulation, and academic performance are frequently observed.

Global scholarship offers robust evidence of such associations. Research conducted in China has shown that nurturing teacher–student relationships are positively correlated with improved learner performance, underscoring the role of teacher efficacy in shaping student achievement (Zhang et al., 2025). In the United States, longitudinal evidence demonstrates that high teacher expectations exert persistent positive effects on student motivation and test performance (Halimi et al., 2025). European studies similarly reveal that teachers' academic recommendations often align with consistent student performance patterns (Glock et al., 2024). Within Africa, studies indicate that teachers' pedagogical competence predicts student success (Oladipo & Adeosun, 2025), while in Nigeria, teachers' professional traits have been found to significantly influence student performance in Lagos State (Adeosun, 2025).

Despite this, other studies present divergent findings. Research in China suggests that negative teacher

student relationships can hinder student autonomy and reduce academic outcomes (Lei et al., 2022). Similarly, a mixed-methods study in the United States found no direct association between students' perceptions of teacher–student relationships and academic achievement (Gholson, 2022). Evidence from Europe shows that students' personal challenges, such as poor work-life balance can impair academic performance independently of teacher behaviour (Trentepohl et al., 2023). Furthermore, African studies reveal that school resource inadequacy can diminish both teacher effectiveness and learner motivation (Omodan & Ikwu, 2021), while in Nigeria, some research attributes academic failure more to student attitudes than to teacher shortcomings (Adewunmi, 2021). These inconsistencies underscore the complexity of the relationship between learner characteristics and teacher performance and highlight the need for context-specific analysis.

Although previous studies in Nigeria and Lagos State have examined related constructs, a notable gap persists: no published research has specifically investigated the correlation between student entry characteristics and teachers' task performance within Lagos State Education District III. This district, distinguished by its demographic diversity and concentration of secondary schools, represents a unique micro-context for interrogating how students' demographic, cognitive, and socio-economic profiles interact with teachers' instructional and managerial responsibilities (Adeosun, 2025; Adewunmi, 2021).

Against this backdrop, the present study seeks to address this gap by providing a focused, evidence-based examination of the relationship between students' entry characteristics and teachers' task performance in senior secondary schools within Lagos State Education District III. Findings from this inquiry are expected to contribute meaningfully to educational planning, policy formulation, and teacher development initiatives.

Literature Review

Students enter school with a constellation of dispositional, cognitive, and socio-contextual attributes collectively termed entry characteristics that shape how they engage with instruction and

adapt to new learning environments (Jenert & Brahm, 2021). These characteristics encompass prior exposure to academic resources, socio-economic background, cognitive preferences, gender identity, and motivational dispositions, all of which influence how students interact with peers, negotiate learning tasks, and respond to instructional expectations (Shaqour et al., 2020; Sandsør et al., 2021). Understanding such diversity is fundamental to designing inclusive curricula and tailoring pedagogical scaffolds that offer equitable access to learning opportunities (Veidemane et al., 2021). Teachers who ignore these initial differences risk delivering generic instruction that inadvertently disadvantages students whose preparation does not align with normative assumptions (Klasik & Strayhorn, 2018).

A critical dimension of student entry characteristics is prior achievement, which provides the clearest empirical indicator of a learner's existing competencies and potential areas of difficulty (Geiser & Santelices, 2007). Prior academic performance predicts study habits, cognitive readiness, and the likelihood of future success, making it a central diagnostic tool for instructional planning (Matt et al., 1991; Hein et al., 2013). In classrooms characterised by wide achievement disparities, teachers must adopt differentiated instructional approaches to avoid exacerbating performance gaps; misalignment between instructional demands and students' existing knowledge frequently results in boredom for advanced learners and disengagement among those who struggle (Kowski, 2013). Analysing prior performance therefore enables educators to identify learners needing remediation or enrichment and supports early identification of students at risk of academic decline or dropout (Soland, 2017; Meijer et al., 2018).

Students' academic background, including the quality of prior schooling, curricular exposure, and the academic culture of previous institutions, also shapes their expectations, learning routines, and responses to classroom norms (Chingos, 2018). Those transitioning from highly structured or academically rigorous environments often display behavioural and cognitive orientations that differ markedly from peers with less supportive

educational histories (Clagett, 1991; Haas & Hadjar, 2019). Teachers who are aware of these variations manage classroom interactions more effectively by adjusting expectations, clarifying behavioural norms, and providing transparent instructional routines that accommodate differing academic socialisation experiences (Shaqour et al., 2020). Such informed adjustments promote equity and strengthen the continuity of learning across diverse student cohorts (Jenert & Brahm, 2021).

Within this conceptual frame, teacher task performance is a central determinant of student outcomes. It encompasses core professional responsibilities such as lesson planning, instructional clarity, classroom organisation, pedagogical communication, and monitoring of student progress (Anisah et al., 2020; Anggraeni, 2021). High-quality task performance depends on teachers' expertise, motivation, and emotional stability, all of which shape their ability to maintain orderly classrooms and facilitate meaningful learning experiences (Suryani et al., 2020). Effective performance not only supports immediate academic attainment but also strengthens the long-term instructional capacity of the school system (Gabriel & Allington, 2012).

Two components of teacher task performance, instructional delivery and classroom management are especially relevant to the present study. Instructional delivery concerns the strategic organisation of teaching methods, content presentation, and learning activities that promote comprehension and engagement (Babah et al., 2020). Evidence demonstrates that clear, sequential, and interactive instructional approaches enhance cognitive processing, retention, and task completion, whereas monotonous or poorly scaffolded instruction impedes comprehension and fosters disengagement (Tomaszewski et al., 2022; Tutar, 2023). In heterogeneous classrooms, instructional responsiveness becomes essential, as teachers must adjust pacing, modality, and interaction patterns to match divergent academic histories and achievement levels (Colclasure et al., 2022).

Classroom management, on the other hand, refers to the routines and behavioural structures that sustain psychological safety and minimise disruptions (Egeberg et al., 2016; Gbenu, et al 2022). Effective

management establishes predictable norms and smooth daily transitions, enabling students to concentrate on academic tasks rather than behavioural uncertainty (Thornton et al., 2021). Poorly managed environments reduce instructional time, increase behavioural incidents, and compromise the effectiveness of even well-designed lessons (Angelo et al., 2023). Emerging evidence suggests that teachers' management practices must be attuned to students' prior experiences and behavioural expectations, as uniform approaches often fail in heterogeneous classrooms (Altunova & Kalman, 2020). Calibrating management strategies to students' academic backgrounds thus becomes essential for maintaining productive classroom climates (Egeberg et al., 2016).

Collectively, the conceptual framework positions students' entry characteristics including prior achievement and academic background as foundational inputs that shape teacher task performance through their influence on instructional delivery and classroom management. By acknowledging the mutual adjustments required between learners' academic histories and teachers'

pedagogical actions, the framework underscores the dynamic and interdependent nature of the teaching–learning process.

The study is anchored on the understanding that students enter secondary school with diverse entry characteristics, including prior academic achievement, socio-economic background, cognitive readiness, motivation, and academic history which strongly shape how they respond to instruction (Jenert & Brahm, 2021; Shaqour et al., 2020). These characteristics influence learning readiness and determine the level of pedagogical adjustments teachers must ensure effective instruction.

Teacher task performance comprising instructional delivery, classroom management, assessment is viewed as an adaptive process shaped by student inputs (Anisah et al., 2020). When classrooms contain students with widely varying prior achievement and academic backgrounds, teachers must modify instructional strategies, pacing, behavioural expectations, and engagement routines to maintain learning efficiency (Colclasure et al., 2022; Egeberg et al., 2016).

Table 1: Variables and their Measurable Indicators (Student Entry Characteristics)

STUDENT ENTRY CHARACTERISTICS			
S/N	Variable	Conceptual Definition	Measurable Indicators
1	Prior Academic Achievement	This refers to the documented level of knowledge, skills, and competencies a student has attained in formal education before entering a new course or educational stage.	Previous Test scores Grade Point Average (GPA): Aggregate score from previous courses or years of study.
2	Socio-Economic Status (SES)	The social standing or class based on education, income, and occupation.	- Estimated family income. - Availability of home learning resources (books, computer, internet). - Parental education level and occupation.
3	Cognitive Abilities	Cognitive abilities refer to the core mental skills and processes involved in acquiring knowledge, manipulating information, and reasoning.	Verbal Comprehension and Perceptual Reasoning
4	Motivation	Motivation is the driving force behind a student's engagement with learning tasks	-Intrinsic Motivation and ·Extrinsic Motivation

5	Health and Emotional Stability	Health refers to a state of complete physical well-being. Emotional Stability is a personality trait characterised by predictability, calmness, and resilience in the face of stress.	Physical Health: Number of school days missed due to illness.
6	Nutrition	Nutrition refers to the intake of dietary nutrients necessary for health, growth, and development. Adequate nutrition is a prerequisite for optimal physiological and neurological functioning.	<ul style="list-style-type: none"> · Dietary Quality: Frequency of consumption of fruits, vegetables, whole grains, and protein sources versus high-sugar/fat snacks. · Food Security: Access to sufficient, safe, and nutritious food,.
7	Demographic Factor	Demographic factors are the background characteristics that define a student's position within the social structure. They are often fixed attributes that correlate with significant social experiences and opportunities.	<ul style="list-style-type: none"> Age: Chronological age at school entry. · Gender: Male/Female/Non-binary (as per data collection categories). · Ethnicity/Race: Cultural and racial background. · Home Language: First language spoken at home. · Geographical Location: Urban, suburban, or rural residence.

Source Researcher Concept, 2025

Table 2: Variables and their Measurable Indicators (Teachers' Task Performances)

TEACHERS' TASK PERFORMANCE.			
S/N	Variable	Conceptual Definition	Measurable Indicators
1	Lesson Plans and Instructional Delivery	Proficiency in planning, presentation, and instructional strategy.	<ul style="list-style-type: none"> - Classroom observation scores on technique. - Ability to stimulate student interest. - Quality of notes.
2	Classroom Management and Discipline	Ability to establish a conducive, orderly learning environment. - Classroom observation scores on management. - Frequency of disciplinary incidents.	<ul style="list-style-type: none"> - Overall student conduct during lessons.
3	Record Keeping and Documentation	Systematic and accuracy of documentation, organization and storage of information.	<ul style="list-style-type: none"> -Accuracy completeness of mark books -Entered correctly and timely with clear description for assessment
4	Assessment and Evaluation	Regularity, fairness, and constructiveness of evaluating progress. Frequency and quality of tests/assignments.	<ul style="list-style-type: none"> - Timeliness in marking and recording scores. - Quality of feedback given to students.

Source Researcher Concept, 2025

Theoretical Framework.

The Systems Theory, developed by Ludwig Von Bertalanffy, explains how the behaviour of any organisation emerges from the interaction of its interconnected parts rather than from isolated elements (Drack & Schwarz, 2010). In schools, this framework captures the interdependence between students, teachers, and institutional structures, highlighting how changes in one component generate system-wide effects (Hieronymi, 2013). Although criticised for overlooking micro level behaviours in complex social environments (Haag & Matschonat, 2001; Finkelstein, 2005), the theory remains valuable for understanding how student entry characteristics act as inputs that influence teachers' instructional decisions, classroom management, and overall task performance (Kainz et al., 2017; Wrigley, 2019). By viewing teacher performance as a systemic response shaped by learners' prior achievement, socio-cognitive readiness, and behavioural tendencies, Systems Theory provides a coherent lens for analysing the interconnected variables in this study and for explaining their effects within the educational environment of Lagos State (Tramonti et al., 2019; Jerab, 2025).

Statement of the Problem

Despite sustained public investment in education, a persistent mismatch remains between students' entry characteristics and teachers' task performance, leading to disengagement, inefficient instructional delivery, and declining academic outcomes (Umar & Muhammad, 2024). When instruction is not adapted to learners' prior knowledge and achievement levels, students particularly those with weaker academic foundations are further disadvantaged, reinforcing a cycle of poor performance (Idris & Usman, 2022).

Classroom management also becomes problematic when teachers are unable to respond effectively to diverse learning backgrounds, resulting in disruptive behaviours and deteriorating instructional quality (Oladipo & Adeosun, 2025). Although previous studies have examined teacher characteristics, student performance, and contextual factors, they have not jointly addressed these variables within the metropolitan setting under study, nor have they isolated the instructional tasks most affected (Adeosun, 2025; Adewunmi, 2021; Umar & Muhammad, 2024; Idris & Usman, 2022). This study therefore addresses this gap by employing a focused, questionnaire based methodology to generate context specific quantifiable evidence, on how student entry characteristics shape teacher task performance in Senior Secondary Schools, Education District III, Lagos State.

Research Questions

1. What is the correlation between students' prior achievement and teachers' instructional delivery in senior secondary schools in Education District III, Lagos State, Nigeria?
2. What is the correlation between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State, Nigeria?

Research Hypotheses

H₀₁: there is no significant relationship between students' prior achievement and teachers' instructional delivery in senior secondary schools in Education District III, Lagos State, Nigeria.

H₀₂: there is no significant relationship between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State, Nigeria.

Table 3: Internal Consistency Reliability Result

S/N	Variables	Number of Items	Cronbach's Alpha	Composite Reliability
1	Correlation between students' prior achievement and teachers' instructional delivery in senior secondary schools in Education District III, Lagos State.	10	0.78	0.81
2	Correlation between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State.	10	0.82	0.85

Source: Field Survey, 2025

The table shows the reliability of the research instruments, Reliability coefficients above 0.70 are considered acceptable, while scores above 0.80 are often seen as good or high. Therefore, the reliability instrument used in this study is hereby considered acceptable.

Results

Research Question one: What is the correlation between students' prior achievement and teachers' instructional delivery in senior secondary schools in Education District III, Lagos State, Nigeria?

Table 4: Correlation between Students' Prior Achievement and Teachers' Instructional Delivery

Variables	Students' Prior Achievement	Teachers' Instructional Delivery
Students' Prior Achievement	1	.352
Teachers' Instructional Delivery	.352	1

 $r = .352$, Sig. (2-tailed) = .000

Interpretation: The data show a moderate, positive, and significant link ($p < 0.05$) between students' past scores and how students rate your teaching. When entry marks are high, pupils tend to say your delivery is strong.

Question two: What is the correlation between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State, Nigeria?

Table 5: Gives the numbers for this test.

Variables	Students' Academic Background	Teachers' Classroom Management
Students' Academic Background	1	.479
Teachers' Classroom Management	.479	1

 $N = 365$, $r = .479$, Sig. (2-tailed) = .000

Interpretation: The result from the analysis reveals a moderate-to-strong positive and statistically significant correlation in the analysis ($p < 0.05$) between students' academic background and teachers' classroom management. This indicates that

stronger academic backgrounds are linked to more effective classroom management by teachers.

Test of Hypothesis

Ho₁: *there is no significant relationship between students' prior achievement and teachers'*

instructional delivery in senior secondary schools in Education District III, Lagos State, Nigeria.

Table 6: Regression Analysis of the study showed Students' Prior Achievement and Teachers' Instructional Delivery

Model	Unstandardized B	Std. Error	Beta	t	Sig.
(Constant)	1.932	.143	—	13.51	.000
Prior Achievement	.482	.071	.352	6.80	.000

R = .352, R² = .124, F = 46.21, p = .000

Interpretation: The regression result from the analysis showed a significant positive relationship between students' prior achievement and teachers' instructional delivery in the analysis ($\beta = .352$, $p < 0.05$). Thus, the study therefore rejected the null hypothesis. This further implies and showed that there is a significant relationship between students' prior achievement and teachers' instructional

delivery in senior secondary schools in Education District III, Lagos State, Nigeria.

Ho₂: *There is no significant relationship between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State, Nigeria.*

Table 7: Regression Analysis of Students' Academic Background and Teachers' Classroom Management

Model	Unstandardized B	Std. Error	Beta	t	Sig.
(Constant)	1.684	.137		12.29	.000
Academic Background	.545	.054	.479	10.07	.000

R = .479, R² = .229, F = 101.42, p = .000

Interpretation: The regression result reveals a significant positive relationship between students' academic background and teachers' classroom management ($\beta = .479$, $p < 0.05$). Therefore, the null hypothesis is rejected. This implies that is a significant relationship between students' academic background and teachers' classroom management in senior secondary schools in Education District III, Lagos State.

Discussion of Findings

The correlation between students' prior achievement and teachers' instructional delivery in senior secondary schools in Education District III, Lagos State

The regression analysis revealed a significant positive relationship between students' prior achievement and teachers' instructional delivery ($\beta = .352$, $p < 0.05$). Strong prior academic performance is correlated with more favourable evaluations of instructional practice, reflecting a mechanism whereby previous success conditions later appraisal. Allensworth and Clark (2020) found that GPAs predict future success. Chingos (2018) showed that students who prepare before exams earn better marks. Prior knowledge shapes how they learn new skills, which builds the base for later grades. Strong past results are also linked to better classroom order.

This supports the findings of Mozenter (2019). He noted that teacher skill depends on class makeup.

Strong management works best when students already have a solid academic record. Gage et al. (2017) showed that planned steps can guide student behaviour. A calm class makes teaching easier. These study also suggest classroom management is not only about teacher control. Student strengths also shape how learning happens. Strong teaching support can prevent many behaviour problems. Policies should join teaching and behaviour plans. Teacher training should also stress classroom strategies that match student needs.

Conclusion

The study found a link between past grades and clear teaching. Students who are ready, help the teachers to teach better. This gives new students the tools they need to think and learn. School leaders can use the results to shape teacher training. Training should focus on teaching methods that fit different student levels. Teachers can also use the findings to check their own work. They may see ways to change lessons or class rules to make learning feel personal. Linking lessons to each student's way of thinking and past experience can spark interest and improve results.

Student entry characteristic, such as prior academic knowledge, cognitive abilities, motivation, and socio-economic background play a critical role in shaping how well students engage with classroom activities and respond to instructional strategies.

When teachers possess strong task performance skills, including effective lesson preparation, delivery, assessment practices, classroom management, and record keeping, they can better support diverse learners and mitigate disparities arising from individual differences. Strengthening both variables is therefore essential for attaining improved learning outcomes in senior secondary schools.

Recommendations

1. Train teachers to be flexible in how they teach the student for better performance.
2. Government needs to increase funding for instructional materials, classroom technology, and infrastructure that support differentiated teaching for varied student backgrounds.
3. Educational planners should develop policies promoting learner profiling, ensuring every

school systematically collects data on students' academic history, socio-economic background.

4. School principals need to create an academic structure, such as remedial classes and counselling, for students with weak entry characteristics and strengthen instructional supervision to ensure teachers consistently apply effective lesson preparation, delivery, and assessment strategies.
5. Teachers' to use differentiated instruction to cater to varying cognitive abilities, learning styles, and motivation levels and maintain accurate records of students' learning progress to inform targeted interventions.

References

- Adeniji, A. O. (2025). Teachers' instructional task performance and quality assurance of students' learning outcomes in Nigerian secondary schools. *International Journal of Research Studies in Educational Technology*. Retrieved from https://www.researchgate.net/publication/314365312_Teachers'_instructional_task_performance_and_quality_assurance_of_students'_learning_outcomes_in_Nigerian_secondary_schools.
- Adeosun, A. M. (2025). Teachers' Professional Traits and Students' Academic Performance in Lagos State Senior Secondary Schools. *Research Gate*. Retrieved from https://www.researchgate.net/publication/348716454_Teachers'_Professional_Traits_and_Students'_Academic_Performance_in_Lagos_State_Senior_Secondary_Schools
- Adewunmi, S. (2021). A Study of Teachers' Professional Traits as Predictors of Students' Academic Performance. *ResearchGate*. Retrieved from https://www.researchgate.net/publication/348716454_Teachers'_Professional_Traits_and_Students'_Academic_Performance_in_Lagos_State_Senior_Secondary_Schools
- Allensworth, E., & Clark, K. (2020). High School GPAs and ACT Scores as Predictors of College Completion: Examining Assumptions About Consistency Across High Schools. *Educational Researcher*,

- 49(3), 198.
<https://doi.org/10.3102/0013189x20902110>
- Altunova, N., & Kalman, M. (2020). Factors affecting classroom teachers' job performance: A qualitative-dominant analysis with Q-sorting. *Research in Pedagogy*, 10(2), 285-300.
<https://doi.org/10.5937/istrped2002185a>
- Angelo, M., Lajom, P., Neil, R., Cajucum, D., Batobalonos, C., John, E., & Santos, V. (2023). Enhancing Academic Performance through Effective Classroom Management and Output Distribution. *International Journal of Social Sciences and Educational Studies*, 10(3).
<https://doi.org/10.23918/ijsses.v10i3p424>
- Anggraeni, N. (2021). Efforts to Improve Teacher Performance: A Theoretical Review. *Eduvest - Journal of Universal Studies*, 1(7), 596-602.
<https://doi.org/10.36418/edv.v1i7.98>
- Anisah, A., Gistituati, N., & Rusdinal, R. (2020). Analysis of Factors Affecting Teachers' Productivity. *Proceedings of the 5th Annual International Seminar on Transformative Education and Educational Leadership*, 57-61.
<https://doi.org/10.2991/assehr.k.201209.256>
- Babah, P. A., Odumah, L., Mensah, R. O., Yalley, C. E., & Sakyi-Darko, M. (2020). Assessing the Pedagogical Approaches of Social Studies Tutors Instructional Delivery in the Colleges of Education in the Eastern and Greater Accra Regions of Ghana. *Journal of Studies in Education*, 10(4), 15-28.
<https://doi.org/10.5296/jse.v10i4.17656>
- Chingos, M. M. (2018). What Matters Most for College Completion? academic preparation is a key predictor of success. *aei paper & Studies*.
<https://www.questia.com/library/journal/1G1-542968414/what-matters-most-for-college-completion-academic>
- Clagett, C. A. (1991). Institutional Research: The Key to Successful Enrolment Management. *ERIC*. Retrieved from <http://files.eric.ed.gov/fulltext/ED332745.pdf>.
- Colclasure, B. C., Thoron, A. C., & Dempsey, J. (2022). Factors relating to agriculture teachers' perceived use of instructional methods. *Advancements in Agricultural Development*, 3(4), 1-13.
<https://doi.org/10.37433/aad.v3i4.235>
- Drack, M., & Schwarz, G. M. (2010). Recent developments in general system theory. *Systems Research and Behavioral Science*, 27(6), 601-610.
<https://doi.org/10.1002/sres.1013>
- Egeberg, H., McConney, A., & Price, A. (2016). Classroom Management and National Professional Standards for Teachers: A Review of the Literature on Theory and Practice. *The Australian Journal of Teacher Education*, 41(7), 1-18.
<https://doi.org/10.14221/ajte.2016v41n7.1>
- Finkelstein, L. (2005). Problems of measurement in soft systems. *Measurement*, 38(4), 267-271.
<https://doi.org/10.1016/j.measurement.2005.09.002>
- Gabriel, R., & Allington, R. L. (2012). Constructing and Measuring Teacher Effectiveness in Global Education Reform. *International perspectives on education and society*, 16, 203-228. [https://doi.org/10.1108/s1479-3679\(2012\)0000016014](https://doi.org/10.1108/s1479-3679(2012)0000016014)
- Gbenu, J. P., Lawal, R. O., & Gbesoevi, E. S. (2022). *The Science of Facilities Planning and Management*, Ogun, Laide Ventures
- Gholson, K. (2022). Mixed Methods Study of the Relationship Between Students' Perceptions of School Climate, Attendance, and Academic Achievement. Digital Commons@Lindenwood University. Retrieved from <https://digitalcommons.lindenwood.edu/cgi/viewcontent.cgi?article=1005&context=dissertations>.
- Glock, S., Krol, K., & Böhmer, J. (2024). Inconsistency in student achievement across subject domains: examination of associations with students' gender, socioeconomic status, and teachers' track recommendations. Taylor & Francis. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/13803611.2024.2345197>.
- Haag, D., & Matschonat, G. (2001). Limitations of controlled experimental systems as models for natural systems: a conceptual assessment

- of experimental practices in biogeochemistry and soil science. *The Science of The Total Environment*, 277(1-3), 199-211. [https://doi.org/10.1016/s0048-9697\(00\)00878-0](https://doi.org/10.1016/s0048-9697(00)00878-0)
- Haas, C., & Hadjar, A. (2019). Students' trajectories through higher education: a review of quantitative research. *Higher Education*, 79(6), 1099-1115. <https://doi.org/10.1007/s10734-019-00458-5>
- Halimi, I., et al. (2025). Correlations and comparisons of teacher expectations achievement motivation academic achievement and creativity. *Frontiers*. Retrieved from <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2025.1516405/full> .
- Hein, V., Smerdon, B., & Sambolt, M. (2013). Predictors of Postsecondary Success. *ERIC*. Retrieved from <http://files.eric.ed.gov/fulltext/ED555671.pdf> .
- Hieronymi, A. (2013). Understanding Systems Science: A Visual and Integrative Approach. *Systems Research and Behavioral Science*, 30(5), 580-590. <https://doi.org/10.1002/sres.2215>
- Idris, A., & Usman, M. (2022). Teachers' challenges in promoting students' learning outcomes in rural secondary schools in Nigeria. *Journal of Educational Review*. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1311032.pdf> .
- Jenert, T., & Brahm, T. (2021). The interplay of personal and contextual diversity during the first year at Higher Education: Combining a quantitative and a qualitative approach. *Frontline Learning Research*, 9(2), 50-68. <https://doi.org/10.14786/flr.v9i2.669>
- Jerab, D. (2025). An Overview of Complexity Theory and Characteristics of Complex Adaptive Systems. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.5094533>
- Kainz, K., Lippold, M. A., Sabatine, E., & Datus, R. (2017). A systemic intervention research agenda for reducing inequality in school outcomes. *Journal of Children and Poverty*, 24(1), 69-86. <https://doi.org/10.1080/10796126.2017.1401900>
- Klasik, D., & Strayhorn, T. L. (2018). The Complexity of College Readiness: Differences by Race and College Selectivity. *Educational Researcher*, 47(6), 334-345. <https://doi.org/10.3102/0013189x18778598>
- Kowski, L. E. (2013). Does High School Performance Predict College Math Placement? *Community College Journal of Research and Practice*, 37(7), 514-521. <https://doi.org/10.1080/10668926.2012.754730>
- Lei, X., et al. (2022). The association among teacher-student relationship, subjective well-being, and academic achievement: Evidence from Chinese fourth graders and eighth graders. *PMC*. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC9909438/> .
- Matt, G. E., Pechersky, B., & Cervantes, C. (1991). High School Study Habits and Early College Achievement. *Psychological Reports*, 69(1), 91-96. <https://doi.org/10.2466/pr0.1991.69.1.91>
- Meijer, E., Cleiren, M. P. H. D., Dusseldorp, E., Buurman, V. J. C., Hogervorst, R. M., & Heiser, W. J. (2018). Cross-Validated Prediction of Academic Performance of First-Year University Students: Identifying Risk Factors in a Nonselective Environment. *Educational Measurement Issues and Practice*, 38(1), 36-49. <https://doi.org/10.1111/emip.12204>
- Mozenter, Z. (2019, January 1). Teacher Effectiveness and Classroom Composition. *Proceedings of the 2019 AERA Annual Meeting*. <https://doi.org/10.3102/1430192>
- Oladipo, G. T., & Adeosun, A. M. (2025). Relationships between teachers' characteristics, students' characteristics and academic performance. *AAU JOURNAL OF BUSINESS EDUCATORS*. Retrieved from <http://aaujbe.com.ng/index/index.php/aaujbe/article/download/127/137> .
- Omodan, B. I., & Ikwu, L. N. (2021). The influence of educational provision on teacher performance and learner outcomes in selected public secondary schools in South

- Africa. South African Journal of Education. Retrieved from <https://www.ajol.info/index.php/saje/article/view/211996>. .
- Sandsør, A. M. J., Hovdhaugen, E., & Bøckmann, E. (2021). Age as a merit in admission decisions for higher education. *Higher Education*, 83(2), 379-396. <https://doi.org/10.1007/s10734-020-00662-8>
- Shaqour, A. Z., Salha, S., Tafal, A., & Shtaya, H. (2020). Students' Readiness to Succeed and Persist in Their University Study. *Universal Journal of Educational Research*, 8(12), 6908-6916. <https://doi.org/10.13189/ujer.2020.081257>
- Suryani, N., Guswandi, & Wachyudi. (2020). The effect of teacher competence and motivation on performance through work satisfaction of teachers at Junior High School 7 Jakarta. *Global Journal of Engineering and Technology Advances*, 5(3), 129-138. <https://doi.org/10.30574/gjeta.2020.5.3.0120>
- Thornton, K. M., Easterly, R. G., & Osborne, E. (2021). Foundations of Effective Classroom Management. *EDIS*, 2021(1), 1-5. <https://doi.org/10.32473/edis-wc381-2021>
- Tomaszewski, W., Xiang, N., Huang, Y., Western, M., McCourt, B., & McCarthy, I. P. (2022). The Impact of Effective Teaching Practices on Academic Achievement When Mediated by Student Engagement: Evidence from Australian High Schools. *Education Sciences*, 12(5), 358. <https://doi.org/10.3390/educsci12050358>
- Tramonti, F., Giorgi, F., & Fanali, A. (2019). General system theory as a framework for biopsychosocial research and practice in mental health. *Systems Research and Behavioral Science*, 36(3), 332-343. <https://doi.org/10.1002/sres.2593>
- Trentepohl, M. H., et al. (2023). Psychological Factors Impacting Academic Performance Among Business Studies' Students. MDPI. Retrieved from <https://www.mdpi.com/2227-7102/15/2/121>. .
- Total, Ö. (2023). Active learning improves academic achievement and learning retention in K-12 settings: A meta-analysis. *I-Manager's Journal on School Educational Technology*, 18(3), 1-15. <https://doi.org/10.26634/jsch.18.3.19288>
- Umar, A., & Muhammad, B. (2024). Factors influencing students' academic performance in Nigerian secondary schools: A meta-analysis. *International Journal of Educational Research and Reviews*. Retrieved from https://www.researchgate.net/publication/348716454_Teachers'_Professional_Traits_and_Students'_Academic_Performance_in_Lagos_State_Senior_Secondary_Schools. .
- Veidemane, A., Kaiser, F., & Crăciun, D. (2021). Inclusive Higher Education Access for Underrepresented Groups: It Matters, But How Can Universities Measure It? *Social Inclusion*, 9(3), 44-55. <https://doi.org/10.17645/si.v9i3.4163>
- Wrigley, T. (2019). The problem of reductionism in educational theory: Complexity, causality, values. *Power and Education*, 11(2), 145-156. <https://doi.org/10.1177/1757743819845121>
- Zhang, F., et al. (2025). The association between teacher-student relationship and academic achievement: The moderating effect of parental involvement. ResearchGate. Retrieved from https://www.researchgate.net/publication/355177886_The_association_between_teacher-student_relationship_and_academic_achievement_The_moderating_effect_of_parental_involvement.