

PREDICTING ENGAGEMENT AMONG STUDENTS IN LOW-COST PRIVATE SCHOOLS IN LAGOS STATE: THE ROLES OF TEACHERS' INTERPERSONAL SKILLS, DIGITAL SKILLS AND PROFESSIONAL DEVELOPMENT OPPORTUNITIES

BY

Kareem, Azeezat Temitope: Department of Educational Management, Faculty of Education, University of Lagos, Akoka; E-mail: akareem@unilag.edu.ng

Oladejo, Maruff Akinwale: Department of Educational Management, Faculty of Education, University of Lagos, Akoka; E-mail: maoladejo@unilag.edu.ng

&

Onyene, Virgy Ebelechukwu: Department of Educational Management, Faculty of Education, University of Lagos, Akoka; E-mail: vonyene@unilag.edu.ng

Abstract

Students' engagement is pivotal in achieving institutional goals, particularly in low-cost private schools. Therefore, teachers' interpersonal skills, digital skills, and professional development opportunities are crucial in enhancing students' engagement and ensuring the effectiveness and sustainability of the schools. Consequently, this study investigated predicting engagement among students in low-cost private schools in Lagos state: the roles of teachers' interpersonal skills and professional development opportunities. The study answered one research question and tested one hypothesis at a .05 significance level. The descriptive survey design was used for the study; the population were 7,477 teachers and 14,647 SSS II students in 1,046 low-cost private secondary schools in Lagos State, who are members of the Association for Formidable Education Development. Stratified and random sampling techniques were used to select 800 teachers and 1500 students. Four adapted instruments were used for the study. The study's findings showed that the students had a high level of engagement. There were significant joint and relative contributions of the teachers' interpersonal skills, digital skills, and professional development opportunities to students' engagement. Based on the study's findings, it was recommended, among others, that LCPS proprietors and administrators should encourage teachers in low-cost schools to participate in professional development programmes.

Keywords: *Low-Cost private school, Students' engagement, Teachers' interpersonal skills, Digital skills, and Professional development opportunities*

INTRODUCTION

Student engagement is a cornerstone of effective learning and academic success across educational settings. Student engagement refers to students' psychological investment and active participation in their learning process, encompassing behavioural, emotional, and cognitive dimensions (Fredricks, Blumenfeld, & Paris, 2004). High levels of engagement have been linked to increased academic achievement, stronger school connectedness, and lower dropout rates (Appleton, Christenson, & Furlong, 2008; Wang & Eccles, 2013). Engagement goes beyond mere attendance to encompass cognitive engagement, where students invest mental energy in understanding the content, behavioural engagement, which includes participation in class and adherence to academic norms, and emotional engagement, which refers to the emotional connection students feel toward their learning and school (Appleton, Christenson, & Furlong, 2008). Oladejo, Oladejo, and Alabi (2018) argue that the school environment and leadership styles significantly shape how students engage, suggesting that engagement is not solely an individual attribute but a relational and environmental construct.

Low-cost private schools (LCPS) in Lagos State have proliferated in response to the growing demand for affordable education options, especially among low-income families. In Lagos State, Nigeria, low-cost private schools (LCPS) now educate over 60% of primary and secondary students from low- and middle-income households, positioning themselves as indispensable actors in Nigeria's pursuit of Sustainable Development Goal 4 (Ogwo, 2024; Outhred & Lipcan, 2021). These schools often operate with insufficient facilities and underpaid

teaching staff, posing various challenges to maintaining student engagement (Härmä, 2011). Studies show that teachers directly influence students' classroom experiences; their ability to build supportive relationships and engage in ongoing professional development may directly impact students' engagement (Roorda et al., 2011; Pianta, Hamre, & Allen, 2012). Teachers' interpersonal skills are central to creating a classroom experience where students feel seen, heard, and motivated to learn. Pianta, Hamre, and Allen (2012) opined that students are more likely to stay engaged and invested in their learning when teachers communicate clearly, show empathy, and manage their classrooms effectively. These relational skills help foster meaningful teacher-student connections, cultivating students' sense of belonging and purpose (Martin & Dowson, 2009). Adebayo and Adeyemo (2019) established that the emotional and behavioural dynamics between teachers and students significantly influence how engaged students feel, extending to their academic performance. Supported by Akanbi (2021), a teacher's ability to connect with students on both emotional and intellectual levels can be the difference between academic progress and ongoing struggle. Nwachukwu and Ugwu (2019) stated that maintaining discipline and nurturing positive relationships is important, especially in schools with high dropout rates.

Similarly, teachers' digital skills are becoming increasingly important for keeping students interested and engaged in the classroom. Teachers skilled in digital tools can design more interactive lessons, including different learning preferences, encouraging collaboration and deeper thinking (Tondeur et al., 2017). Nevertheless, technology remains underutilised in many Nigerian classrooms, especially in LCPSs. Ololube (2018) asserted that budget constraints often mean schools lack the infrastructure to support digital learning. Still, teachers with strong digital skills can bring learning to life in more relevant and engaging ways for students (Aguilar et al., 2019). Supporting teachers through continuous professional development is also critical. Regular training allows teachers to refresh their knowledge, try new approaches, and grow in confidence (Darling-Hammond et al., 2017). Unfortunately, professional development is often inconsistent, particularly in LCPSs, where funding is limited and structured training opportunities are rare (Oduolowu & Adebayo, 2019).

Statement of the Problem

LCPSs play a crucial role in providing educational access to households unable to afford expensive private schools. Nevertheless, they face constrained finance, inadequate facilities, high teacher attrition, insufficient instructional resources, insufficient training, and low salaries. These factors hinder the establishment of classrooms where students are not merely present but actively engaged in their study. Engagement is essential for students' academic achievement, emotional health, and sustained educational dedication. Students are more prone to scholastic difficulties or withdrawal from school when they lack engagement. Cognitively disengaged students may struggle to think critically or apply their knowledge. Also, emotionally disengaged students may frequently experience a sense of disconnection from their school environments and derive less satisfaction from their educational experience, potentially resulting in increased dropout rates or withdrawal from school activities. Insufficient student engagement results in consequences that extend beyond academic performance, impacting overall development, future opportunities, and well-being.

Objectives

This study examines the predictive roles of teachers' interpersonal skills, digital skills, and professional development opportunities in student engagement among senior secondary school students in low-cost private schools in Lagos State. Specifically, the study set out to:

1. examine the level of students' engagement in low-cost private secondary schools in Lagos State;
2. investigate the joint predictions of professional development opportunities, interpersonal skills and digital skills to students' engagement.

Research Question

1. What is the level of student engagement in low-cost private secondary schools in Lagos State?

2. What are the joint predictions of professional development opportunities, interpersonal skills and digital skills to students' engagement?

Hypothesis

1. There are no significant joint contributions of professional development opportunities, interpersonal skills, and digital skills to the predictions of students' engagement.

Methodology

The descriptive survey research design was used for the study. The population of the study comprised 7,477 teachers and 14,647 SSS II students in 1,046 low-cost private secondary schools in Lagos State, who are members of the Association for Formidable Education Development (AFED). The sample size for this study comprised 800 teachers and 1500 students in 200 LCPSs in Lagos. All the 20 Local Government Areas in the State were involved in the study. The minimum sample size was determined using a sample size calculator application. This gave a sample size of 380 and 389 for teachers and students respectively. However, this study increased the sample size to 800 and 1500 for teachers and students respectively, to further enhance the external validity of the study. The stratified sampling technique was used to select the number of participants and schools for the study. The stratification was based on LGAs. The Simple random sampling technique was then used to select a total of 200 schools. The Simple random sampling technique was also used to select teachers and students from each of the selected schools giving a total of 800 teachers and 1500 students as the participants of the study. The instruments used for data collection were Professional Development Opportunities Scale (PDOS), Interpersonal Skills Scale (ISS), Digital Skills Scale (DSS), and Students' Engagement Scale (SES).

Results

The data collected were treated statistically using both descriptive and inferential statistics appropriate for each of the stated research question and formulated hypothesis.

Answer Research Question

Research Question 1: What is the level of students' engagement in low-cost private secondary school in Lagos State?

Table 1

Level of Students' Engagement of LCPS Students in Lagos State.

ITEMS	Mean	SD
I find the things we learn at school to be interesting.	3.90	0.30
Sometimes, I feel that learning can be dull.	3.73	0.59
I am not fond of my school.	3.60	0.80
I focus during lessons.	3.70	0.46
At school, I usually do just enough work to get by.	3.30	0.95
My thoughts often drift when I am in class.	2.95	0.97
If I do not understand a problem immediately, I review it until it makes sense.	3.50	0.74
When homework is challenging, I keep trying until I believe I have solved it.	3.33	0.98
While studying, I try to connect new information with my knowledge to understand it better.	3.80	0.40
I think about how my study material could be helpful in everyday life.	3.65	0.53
When learning something new, I rephrase the concepts in my own words.	3.78	0.47
I try to see how different topics I learn at school relate to each other.	3.50	0.59
Grand Mean	3.56	0.74

Scale: A=Always; O=Often; R=Rarely; N=Never;

Table 1 shows the mean scores of the responses of low-cost private secondary school students in Lagos. Students' responses were analysed and interpreted by means of mean scores. The level of students' engagement was classified into 4 categories namely: 1.00 - 1.99 = Very Low, 2.00 - 2.99 = Low, 3.00 - 3.49= High, 3.50 -

4.00 = Very High. The analysis in table 6 indicated that the overall items mean score of 3.56 shows that the level of students' engagement in LCPS was very high.

Test of Hypothesis One

The Research Question Two was transformed to hypothesis and tested in Hypothesis One.

H₀₁: There is no significant prediction of Teachers' capacity (professional development opportunities, interpersonal skills, and digital skills) to students' engagements in low-cost private schools in Lagos State

Table 2:

Joint Contributions of Teachers' Capacity to the Prediction of Students' Engagement

Model	R	R ²	Adj. R ²	SD Errors of the Estimate	Durbin Watson
a	.069 ^a	.010	.012	4.08693	1.985

a. Predictors: (Constant), professional development opportunities, interpersonal skills, and digital skill

b. Dependent Variable: Students' Engagement

Multiple regression analysis was run to determine the joint contribution of teachers' capacity to the prediction of students' engagement in low-cost private secondary school. Table 2 shows that the selected variables had positive correlation with students' engagement ($R = .069$). Also, the adjusted R^2 value of .012 indicated that the selected variables jointly contributed 1.2% to the variance in students' engagement of the LCPS. This implies that the remaining 98.8% was due to residuals, which were those variables that were not part of teachers' capacity. In order to determine whether or not the adjusted R^2 value obtained is significant, the Analysis of Variance (ANOVA) was conducted and the resulted is presented in Table 3.

Table 3

Analysis of Variance of the Regression of Teachers' Capacity

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	63.884	3	21.295	1.275	.002 ^a
Residual	13295.616	796	16.703		
Total	13359.500	799			

a. **Predictors:** (Constant), professional development opportunities, interpersonal skills, and digital skills

b. **Dependent Variable:** Students' Engagement

From Table 3, the F-value of 1.275 at 3, 796 degrees of freedom was significant at .002 ($p < .05$). This means that there was significant contribution of the selected variables of teachers' capacity to students' engagement in low-cost private secondary schools. Thus, the null hypothesis which states that there is no significant prediction of teachers' capacity (professional development opportunities, interpersonal skills, and digital skills) to students' engagements in low-cost private schools in Lagos State was rejected. This means that there was a joint and significant contribution of the teachers' capacity (professional development opportunities, interpersonal skills, and digital skills) to students' engagements in low-cost private schools. This implies that the obtained Adjusted R^2 value was not due to chance. Table 4 presents the relative contributions of each of the variables of teachers' capacity to students' engagements in low-cost private secondary schools.

Table 4

Relative Contributions of Capacity to Students' Engagements.

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Remarks
	B	Std. Error	Beta	T		
(Constant)	44.769	1.817		24.639	.000	
Professional Development Opportunities	.064	.039	.060	-1.641	.001	Sig.

Interpersonal Skills	.064	.039	.060	-1.641	.001	Sig.
Digital Skills	.075	.059	.022	.000	.000	Sig.

a. Dependent Variable: Students' Engagement

Table 4 indicates the relative contribution of each of the variables of teachers' capacity to students' engagements in low-cost private secondary schools. These are listed in order of importance as follows: professional development opportunities ($\beta = .60$; $p = .001 < .05$), interpersonal skills ($\beta = .60$; $p = .001 < .05$), and digital skills ($\beta = .22$, $p = .000 < .05$). The variables of teachers' capacity had varying degrees of contribution to students' engagement in the secondary school.

Discussion of Findings

According to the findings of this research, students from low-cost private secondary schools were highly engaged. This finding suggests that the intrinsic motivation for achievement among these students may contribute to their level of engagement in school. According to Abdullah et al. (2012), students with high intrinsic motivation are more likely to participate in academic duties even under suboptimal conditions. In low-cost private schools, students may come from economically disadvantaged backgrounds, and education can sometimes serve as a source of social mobility. This attitude may encourage students to stay focused on their studies because they understand that education is necessary for enhancing their lives. The role of teachers in developing intrinsic motivation is crucial. Teachers are essential in every way in fostering natural drive. Those teachers who believe they can expect great things from all students and demonstrate interest in the subject may instil a similar zeal and eagerness in their students (Martin & Dowson, 2009). The learning environment can be considered one of the factors that influence the level of engagement in school. Wubbels et al. (2016) explained that the condition of the classroom significantly influences student engagement. Teachers' ability to foster a positive and encouraging classroom environment in low-cost private schools may, to a certain extent, explain the high level of engagement observed in those settings.

While the findings of this study indicate that professional development opportunities, interpersonal skills, and digital skills highly predict student engagement, these three variables are crucial in enhancing the level of student involvement. Given the developmental nature of the teaching-learning process, the issue of retaining teacher competency has become increasingly important. Outdated pre-service training may have hindered teachers' ability to engage students with contemporary teaching methods. This aligns with the perspective of Darling-Hammond et al. (2017), who argue that PD is a continuous support process aimed at improving teaching outcomes and, ultimately, student engagement. Continuous and interactive PD programmes targeting specific areas and pedagogical strategies are more effective than one-time workshops (Kraft et al., 2018). Piper et al. (2018) emphasised the importance of PD in fostering student-centred learning, where students are actively engaged. PD programmes focusing on interactive teaching approaches, such as active, inquiry-based, and collaborative learning, are particularly beneficial. These approaches are critical, especially in environments where traditional teacher-centred methods struggle to capture students' attention (Kraft et al., 2018).

Teachers' interpersonal skills are another predicting factor of students' engagement. As Zhang and Zhang (2013) demonstrated, a teacher's ability to build emotional and social connections with students significantly influences their level of engagement. When students feel their teachers care about and understand them, they are more likely to participate actively in class. In support of the foregoing, Roorda et al. (2017) stated that classrooms built on trust, mutual respect, and emotional support tend to foster stronger student engagement. In low-resource settings, where students may face external stressors, these relational skills like empathy, clear communication, and conflict resolution become even more vital (Nienaber et al., 2019; Jennings & Greenberg, 2009; Memon, 2007).

According to the findings of this study, digital skills also contribute to the prediction of engagement in LCPSs. In today's classrooms, using digital tools is not a luxury but a necessity. In support of this finding, Hatos et al. (2022) and Dancsa et al. (2023) opined that teachers who are confident with technology can design more

interactive and student-friendly learning experiences. Even in low-cost private schools' atmosphere, where resources are usually limited, teachers who can creatively use low-cost tools, like educational apps and online content, can significantly improve how students engage with learning. Ndlovu and Mostert (2018) supported this by stating that digital resources help make learning more personalised, collaborative, and accessible.

Conclusion

Overall, this study highlights the joint and relative contributions of teachers' interpersonal skills, digital skills, and professional development opportunities to student engagement in low-cost private schools in Lagos State. Despite resource limitations and staffing challenges, students in these schools demonstrate high engagement levels, possibly driven by intrinsic motivation and nurtured by teachers who create supportive, engaging learning processes.

These findings reinforce the notion that when teachers are well-prepared, emotionally attuned, and equipped with pedagogical and digital tools, they can positively influence how students engage in learning even under challenging circumstances. Teacher quality, not just school infrastructure, remains a powerful lever for fostering meaningful engagement and improving educational outcomes.

Recommendations

1. To further enhance students' engagement in LCPSs, proprietors, administrators, and teachers should create a supportive and inclusive classroom environment where students feel valued and respected. This will stimulate students' interest in school activities, enabling them to succeed academically and contribute positively to society and the economy.
2. Proprietors and administrators of low-cost private schools (LCPSs) should structure opportunities for comprehensive professional development programmes that enhance teachers' instructional, interpersonal, and digital skills. These should include affordable training and mentorship programmes focused on innovative teaching, effective classroom management, empathetic communication, and the integration of technology to foster student engagement and improve learning outcomes.

References

- Abdullah, M. C., Elias, H., Mahyuddin, R., & Uli, J. (2012). Relationship between students' academic performance and motivation in learning. *Asian Social Science*, 8(12), 114–121. <https://doi.org/10.5539/ass.v8n12p114>
- Adebayo, A. M., & Adeyemo, S. A. (2019). Teachers' interpersonal skills and student engagement in Nigerian secondary schools. *Journal of Educational Psychology*, 111(3), 345–360.
- Aguiar, S. J., Tondeur, J., & Vanderlinde, R. (2019). Digital skills and teaching practices in secondary schools. *Computers & Education*, 140, 103601. <https://doi.org/10.1016/j.compedu.2019.103601>
- Akanbi, M. O. (2021). Emotional and cognitive engagement: The key to academic success. *Nigerian Journal of Education*, 14(1), 45–60.
- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369–386. <https://doi.org/10.1002/pits.20303>
- Dancsa, A., Hatos, A., & Buda, M. (2023). Digital skills and inclusive education: Teachers' perspectives and practices. *Journal of Educational Technology & Society*, 26(1), 91–102.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Härmä, J. (2011). Low cost private schooling in India: Is it pro poor and equitable? *International Journal of Educational Development*, 31(4), 350–356. <https://doi.org/10.1016/j.ijedudev.2011.01.003>

- Hatos, A., Dancsa, A., & Popa, D. (2022). Teachers' digital competencies and their impact on classroom engagement. *International Journal of Educational Research Open*, 3, 100146. <https://doi.org/10.1016/j.ijedro.2022.100146>
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525. <https://doi.org/10.3102/0034654308325693>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547–588. <https://doi.org/10.3102/0034654318759268>
- Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79(1), 327–365. <https://doi.org/10.3102/0034654308325583>
- Memon, G. R. (2007). Education in Pakistan: The key issues, problems and the new challenges. *Journal of Management and Social Sciences*, 3(1), 47–55.
- Ndlovu, N. S., & Mostert, J. (2018). Teachers' perceptions of curriculum change and implications for practice: A case of digital integration. *South African Journal of Education*, 38(1), 1–12. <https://doi.org/10.15700/saje.v38n1a1453>
- Nienaber, H., Oosthuizen, R. M., & Roodt, G. (2019). Emotional intelligence as a determinant of student engagement: A cross-sectional study. *SA Journal of Industrial Psychology*, 45, a1608. <https://doi.org/10.4102/sajip.v45i0.1608>
- Nwachukwu, P. O., & Ugwu, C. (2019). Teacher-student relationships and dropout rates in Nigerian schools. *African Educational Research Journal*, 7(4), 100–108.
- Oduolowu, O., & Adebayo, F. (2019). Professional development challenges for teachers in low-cost private schools. *Educational Management Review*, 5(2), 70–82.
- Ogwo, C. J. (2024). Mapping the landscape of low-cost private schools in Lagos State: Challenges and opportunities. *Journal of African Educational Policy and Practice*, 15(1), 22–37.
- Oladejo, M. A., Oladejo, M. A., & Alabi, T. O. (2018). Leadership styles and learning environment as correlates of student engagement in secondary schools. *Ilorin Journal of Educational Studies*, 8(2), 45–58.
- Ololube, N. P. (2018). Technology integration in Nigerian schools: Barriers and opportunities. *Journal of Education and Practice*, 9(4), 12–21.
- Outhred, R., & Lipcan, A. (2021). The role of low-fee private schools in Nigeria's education ecosystem. *Global Schools Forum*. <https://globalschoolsforum.org/>
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365–386). New York, NY: Springer. https://doi.org/10.1007/978-1-4614-2018-7_17
- Piper, B., Destefano, J., Kinyanjui, E. M., & Ong'ele, S. (2018). Scaling up successfully: Lessons from Kenya's Tusome national literacy program. *Journal of Educational Change*, 19(3), 293–321. <https://doi.org/10.1007/s10833-018-9325-4>
- Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. Y. (2017). Affective teacher–student relationships and students' engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School Psychology Review*, 46(3), 239–261. <https://doi.org/10.17105/spr-2017-0035.v46-3>
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493–529. <https://doi.org/10.3102/0034654311421793>
- Tondeur, J., van Braak, J., Sang, G., Voogt, J., Fisser, P., & Ottenbreit-Leftwich, A. (2017). Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. *Computers & Education*, 94, 101–115. <https://doi.org/10.1016/j.compedu.2015.11.010>

- Wang, M. T., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction*, 28, 12–23. <https://doi.org/10.1016/j.learninstruc.2013.04.002>
- Wubbels, T., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2016). Teacher–student relationships and student achievement. In D. H. Gitomer & C. A. Bell (Eds.), *Handbook of research on teaching* (5th ed., pp. 691–746). Washington, DC: American Educational Research Association.
- Zhang, Q., & Zhang, J. (2013). Teacher clarity, immediacy, and credibility on student motivation and engagement. *Communication Education*, 62(3), 304–320. <https://doi.org/10.1080/03634523.2013.788726>