

TRANSFORMATIVE INNOVATION AND EFFECTIVENESS OF PUBLIC SECONDARY SCHOOLS IN LAGOS STATE

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ABSTRACT

This study investigated transformative innovation and effectiveness of public secondary schools in Lagos State. Two research questions and two hypotheses guided the study. This study adopted survey research design. The sample size for this study was 3,057 respondents, comprising 2,806 teachers and 251 principals who were randomly selected across secondary schools in Lagos State. Cluster and proportionate stratified sampling techniques were used in this study. Researcher-designed questionnaires were used for collection of data. Data collected were analysed using inferential statistics of Pearson Product Moment Correlation Coefficient at 0.05 level of significance. The study revealed that there is significant relationship between blended learning and effectiveness of public secondary schools in Lagos State; and significant relationship existed between project-based learning and effectiveness of public secondary schools in Lagos State. The study concluded that transformative innovation and effectiveness of public secondary schools in Lagos State are significantly related. The study recommended among others that government should train secondary school teachers and principals in the design and delivery of blended learning experiences; and the curriculum planners should integrate project-based approaches across all the subjects in secondary schools.

Keywords: Blended Learning, Effectiveness, Innovation, Project-Based Learning, Public Secondary Schools.

INTRODUCTION

Secondary education links foundational basic education to tertiary education. It is designed to equip learners with subject-specific knowledge, skills and higher-order thinking necessary for both employment and further study. It also aimed at fostering self-reliance among the learners. However, the ultimate goal of secondary education can only be realised through institutions that empower learners with the skills to become valuable contributors to the development of their communities and society at large. Therefore, it is highly imperative for secondary schools to be effective so that they can attain the goals for which they were established.

School effectiveness is the ability of an educational institution, like secondary school to achieve its mission through improved teaching, learning, and management outcomes. It is the extent to which educational institutions achieve their mission through the efficient use of resources, staff performance, students' achievement, and overall stakeholders' satisfaction (Okoro, 2019). Effectiveness is crucial to the actualisation of the goals of secondary education. However, school effectiveness may not be achieved without adoption of transformative innovation in this 21st Century. This is based on the fact that adoption of innovative tools and

techniques may improve teaching and learning processes as well as school administrative practices. Transformative innovation can be regarded as a systematic adoption of innovative educational practices aimed at improving school effectiveness. Thus, embracing transformative innovation have the tendency to enhance effectiveness of secondary schools.

Transformative innovation involves the integration of innovative teaching and learning practices such as blended learning and project-based learning. Blended learning is a hybrid instructional approach that combines traditional classroom teaching with online learning. It combines traditional face-to-face instruction with digital tools and online platforms, providing flexibility and promoting active learning (Garrison & Vaughan, 2017). On the other hand, project-based learning is a student-centered approach that engages learners in investigating and solving real-world problems. It encourages learners to apply knowledge through real-world problem-solving, collaboration, and creativity (Thomas, 2020). According to Anderson and Dexter (2020), transformative innovation integrates models such as blended learning and project-based learning to promote flexibility, learners' autonomy, and practical application of knowledge. The emergence of digital technologies, coupled with the need for adaptive and student-centred instruction, has made these approaches (blended learning and project-based learning) essential for institutional effectiveness, particularly in public secondary schools (Adedoyin & Soyikan, 2023).

Studies have shown that transformation innovation has the tendency to enhance school effectiveness, such as public secondary schools. For instance, Anderson and Dexter (2020) found that integrating blended learning models improved teaching efficiency and learners' outcomes in high schools. Likewise, project-based learning fosters creativity, problem-solving, and teamwork, contributing to institutional success (Thomas, 2020; Okon, 2023). This is an indication that effectiveness of public secondary schools may be achieved through adoption of transformative innovation. However, there is a need to examine the extent to which transformative innovation contributes to effectiveness of public secondary schools in Lagos State. Consequently, this paper focused on transformative innovation and effectiveness of public secondary schools in Lagos State.

Statement of the Problem

Adoption of transformative innovation has critical role to play in enhancing school effectiveness and ensuring the actualisation of secondary education goals in Lagos State. Despite the global emphasis on embracing innovative tools and techniques, many public secondary schools still rely on traditional teaching and administrative approaches that limit students' engagement and critical thinking; and lead to poor teachers' motivation, and inadequate institutional outcomes. While transformative innovations such as blended learning and project-based learning have demonstrated success in various educational contexts, their implementation and impact on effectiveness of Lagos State public secondary schools remain under-researched. It therefore becomes crucial for this paper to fill this knowledge gap. Consequently, this paper investigated transformative innovation and effectiveness of public secondary schools in Lagos State.

Purpose of the Study

The major aim of this paper was to investigate transformative innovation and effectiveness of public secondary schools in Lagos State. The specific objectives of the paper were to:

- i. examine the relationship between blended learning and effectiveness of public secondary schools in Lagos State; and
- ii. ascertain the relationship between project-based learning and effectiveness of public secondary schools in Lagos State.

Research Questions

The following questions guided this paper:

1. What is the relationship between blended learning and effectiveness of public secondary schools in Lagos State?
2. Which relationship exists between project-based learning and effectiveness of public secondary schools in Lagos State?

Research Hypotheses

The following null hypotheses were formulated and tested in this study:

Ho1: There is no significant relationship between blended learning and effectiveness of public secondary schools in Lagos State.

Ho2: There is no significant relationship between project-based learning and effectiveness of public secondary schools in Lagos State.

Methods

This study was conducted in Lagos State, Nigeria. Survey research design was adopted for the study. The study's population was all the 672 secondary schools, 672 principals and 17,954 teachers in Lagos State (Lagos State Ministry of Education, 2023). Slovin's formula was used for the determination of the sample size for the study. The study adopted 5% margin error and 95% confidence level due to the large population of the schools in the study area. The researchers selected 251 schools as sample size based on the sample size calculator. The study employed a multi-stage sampling procedure for the selection of the sample used in the study. The researchers adopted a cluster sampling method due to the division of Education Districts into clusters. At each stage in the selection process, sampling unit was determined from higher to lower cluster. The study adopted proportionate stratified sampling to ensure even representation of teachers used in the study. Specifically, 15 percent of the total numbers of teachers in Lagos State, which was equivalent to 2693 was used as the teachers' sample size. Also, all the principals in the 251 selected secondary schools were used purposively for the study. Thus, the sample size for this study was 2,944 respondents.

Two set of questionnaires designed by the researchers were used for collection of data in this study. The questionnaires were titled: "Transformative Innovation and School Effectiveness Questionnaire for Teachers (TISEQ-T)" and "Effectiveness of Public Secondary School Questionnaire for Principals (EPSSQ-P)". TISEQ-T comprised of 10 items which measured transformative innovation through these variables: blended learning and project-based learning with a 4-point likert scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The EPSSQ-P comprised of 10 items on effectiveness of public secondary schools with a 4-point likert scales of Highly Effective (4), Effective (3), Ineffective (2), and Very Ineffective (1). The contents of the two questionnaires were validated by three experts in the field of educational administration in the Faculty of Education, University of Lagos, Akoka, Lagos. The reliability coefficients obtained for IEQ-P and TIEQ-T using Cronbach's Alpha were 0.89 and 0.83 respectively. The researchers and their six trained research assistants

administered the copies of the questionnaires to the sampled respondents. Then, the copies of the filled questionnaires were collected from the respondents. The data collected were analysed using Pearson Product Moment Correlation Coefficient at 0.05 level of significance.

Results

All the two research questions raised in this paper were hypothesised and tested in this section.

Hypothesis One

Ho1: There is no significant relationship between blended learning and effectiveness of public secondary schools in Lagos State.

Table 1: Relationship between blended learning and effectiveness of public secondary schools in Lagos State

		Blended Learning	Effectiveness of Public Secondary Schools
Blended Learning	Pearson Correlation	1	.457*
	Sig. (2-tailed)		.000
	N	2944	2944
Effectiveness of Public Secondary Schools	Pearson Correlation	.457*	1
	Sig. (2-tailed)	.000	
	N	2944	2944

*. Correlation is significant at the 0.05 level (2-tailed).

Table 1 shows that the r-calculated is 0.457, indicating a positive significant relationship between blended learning and effectiveness of public secondary schools in Lagos State. Also, the returned p-value of 0.000 is less than 0.05, which is the criterion level of significance. Hence, the null hypothesis which stated that; “There is no significant relationship between blended learning and effectiveness of public secondary schools in Lagos State” was rejected. Hence, there is a significant relationship between blended learning and effectiveness of public secondary schools in Lagos State.

Hypothesis Two

Ho2: There is no significant relationship between project-based learning and effectiveness of public secondary schools in Lagos State.

Table 2: Relationship between project-based learning and effectiveness of public secondary schools in Lagos State

		Project-based learning	Effectiveness of Public Secondary Schools
Project-based learning	Pearson		
	Correlation	1	.788*
	Sig. (2-tailed)		.002
	N	2944	2944
Effectiveness of Public Secondary Schools	Pearson		
	Correlation	.788*	1
	Sig. (2-tailed)	.002	
	N	2944	2944

*. Correlation is significant at the 0.05 level (2-tailed).

Table 2 shows that the r-calculated is 0.788, indicating a positive significant relationship between project-based learning and effectiveness of public secondary schools in Lagos State. Also, the returned p-value of 0.002 is less than 0.05, which is the criterion level of significance. Hence, the null hypothesis which stated that: “There is no significant relationship between project-based learning and effectiveness of public secondary schools in Lagos State” was rejected. Thus, a significant relationship existed between project-based learning and effectiveness of public secondary schools in Lagos State.

Discussion of Findings

This study found a significant relationship between blended learning and effectiveness of public secondary schools in Lagos State. This may be due to the fact that blended learning enhances teaching and learning, increases flexibility and accessibility, promotes students’ success and institution effectiveness. Supporting this finding, Halverson, Graham, Spring, Drysdale and Henrie (2014) found a significant relationship between blended learning and institutional effectiveness. Similarly, Stanley and Aggarwal (2019) reported that a significant relationship existed between blended learning and school effectiveness. It also supports the finding of Alhassan and Adegboye (2022) which indicated that blended learning enhances collaboration, teachers’ efficiency, and students’ performance.

This study also revealed that significant relationship existed between project-based learning and effectiveness of public secondary schools in Lagos State. This may be due to the fact that project-based learning enhances deeper learning and retention, collaboration and teamwork, and increases students’ engagement in schools. Supporting this finding, Ravitz (2009) reported that a significant relationship existed between project-based learning and school effectiveness. Also, Okon (2023) reported that project-based learning fosters creativity, problem-solving, and teamwork, contributing to institutional success. Likewise, Sagar (2023) found significant relationship between project-based learning and school effectiveness.

Conclusion

Transformative innovation has the potential to revolutionise teaching and learning in public secondary schools by promoting flexible and skill-oriented education. The integration of blended learning and project-based learning contributes to secondary school effectiveness

when supported by adequate infrastructure and teachers' training. Therefore, it can be concluded based on the findings of this study that transformative innovation and effectiveness of public secondary schools in Lagos State are significantly related.

Recommendations

Based on the findings of this paper, the following recommendations are hereby suggested:

1. Government should train secondary school teachers and principals in the design and delivery of blended learning experiences. This will promote effective teaching and learning, and actualisation of the objectives of secondary education in Lagos State.
2. Curriculum planners should integrate project-based approaches across all the subjects in secondary schools. This will aid teachers' adoption of project-based approaches for effective teaching and learning, and actualisation of the objectives of secondary education in Lagos State.

References

- Adedoyin, O. B., & Soyikan, E. (2023). COVID-19 pandemic and online learning: The challenges and opportunities, *Interactive Learning Environments*, 31(3), 403–421.
- Alhassan, R., & Adegboye, O. (2022). ICT integration and blended learning adoption in Nigerian public schools, *Journal of Education and Practice*, 13(2), 22–35.
- Anderson, R. E., & Dexter, S. (2020). School technology leadership: An empirical investigation of prevalence and effect, *Educational Administration Quarterly*, 56(2), 211–243.
- Garrison, D. R., & Vaughan, N. D. (2017). *Blended learning in higher education: Framework, principles, and guidelines*. Jossey-Bass.
- Halverson, L. R., Graham, C. R., Spring, K., Drysdale, J., & Henrie, C. (2014). A thematic analysis of the most highly cited scholarship in the first decade of blended learning research. *The Internet and Higher Education*, 20(1), 20–34.
- Lagos State Ministry of Education (2023). *Summary of Annual School Census Report 2023*. Lagos: Author.
- Okon, P. (2023). Project-based learning and institutional performance in secondary schools, *Nigerian Journal of Educational Research*, 9(1), 65–78.
- Okoro, A. (2019). Institutional effectiveness and quality assurance in public secondary schools, *Journal of Educational Research*, 15(2), 45–59.
- Ravitz, J. (2009). Introduction: Summarising implementations and research on project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 3(1), 132 -145.
- Sagar, S. (2023). Innovation and sustainability in business: Navigating the future landscape. *IOSR Journal of Business and Management (IOSR-JBM)*, 25(12), 51-60.
- Stanley, D. S. & Aggarwal, V. (2019). Impact of disruptive technology on human resource management practices, *International Journal of Business Continuity and Risk Management*, 9(4), 351-361.
- Thomas, J. W. (2020). *A review of research on project-based learning*. The Autodesk Foundation.