

**RELATIONSHIP BETWEEN PUBLIC-PRIVATE  
PARTNERSHIP FUNDING AND  
ADMINISTRATIVE EFFECTIVENESS OF  
SECONDARY EDUCATION  
IN ECONOMIC UNCERTAINTY: A STUDY OF  
ANAMBRA STATE**

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### **Abstract**

The study examined the relationship between Public-Private Partnership funding and administrative effectiveness in Anambra State. The study was guided by two research questions. This study employed correlation research design. The population of the study comprised 263 principals in public secondary schools in Anambra State. The entire principals were used as the sample size and no sampling technique was used for the study. This study used a questionnaire as the instrument for data collection. The study yielded an average reliability coefficient of 0.84. This coefficient indicated high internal consistency. The researcher and three research assistants administered the copies of the questionnaire. The data generated from the copies of the questionnaire of the research questions were analyzed using Pearson Product Moment Correlation. The study found that the infusion of Public-Private Partnership (PPP) funding for infrastructural development in secondary schools represents a tangible catalyst for elevating administrative effectiveness, ultimately benefiting the entire educational ecosystem. The study recommended that school management should form strongly alliance with private institutions so as to help when the need arises especially in economic uncertainties in providing infrastructural facilities. Government need to amend Public-Private Partnership policies so as to make it easier for private sectors to invest in education.

**Keywords: Public-Private Partnership, Funding, Administrative Effectiveness**

## Introduction

Education holds a central position in the economy, with governments and various stakeholders committing substantial resources to enhance its administrative effectiveness. This investment is motivated by the understanding that a well-structured and effective education system not only cultivates human capital but also forms the foundation for societal advancement and economic progress. Unfortunately, in certain economic scenarios such as economic downturns, adequately funding education has become a formidable challenge for many African governments. As a response, some governments have turned to Public-Private Partnerships to bridge the gap in educational investment. In recent years, the global integration and management of education through these partnerships have sparked extensive discussions regarding their meaning, purpose, status, and outcomes. This discourse is particularly intense in the education sector due to the widely-held belief that education is a multifaceted social and political endeavor that should predominantly, if not entirely, remain within the public domain, serving the interests of the public (Arogundade & Sasere, 2018).

Public Private Partnerships (PPPs) as a collaborative effort between the public and private sectors to execute a project, wherein the resources, strengths, and capabilities of each party are combined (Oyedele, 2013). This is carried out in a manner that allocates risks and responsibilities between them in a logical way, aiming to achieve an optimal balance from each perspective. Likewise, Public Private Partnerships (PPPs) entail the participation of private entities in various aspects of public sector education activities, including increasingly traditional areas of public education systems like policy formulation, educational provision, assessment, and school administration (Hatcher & Gillaspay, 2006; Helmy, 2020; Junemann & Olmedo, 2020).

In the past decades, education functioned as a social service exclusively overseen by the government, administered through the ministry of education. However, the government found it unsustainable due to factors such as rapid population growth, financial constraints, and an expanding set of responsibilities, all of which contributed to a decline in educational standards (Arogundade & Sasere, 2018). Consequently, the Federal Government, guided by the National Policy on Education (FRN 2013), mandated the private sector to take part in the administration of secondary schools. One of the primary motivations for this Public-Private Partnership (PPP) initiative is to enhance the provision of infrastructural facilities and instructional materials.

Atobauka and Jacob (2021) say it is really important to fix the problems with buildings and resources in public schools. This includes schools that do not have enough classrooms, classrooms that do not have the right furniture, science labs that do not have the right tools, and libraries that do not have good books. Teachers may face neglect, disdain, degradation, and sometimes even contempt, with some cases of salary denial. A critical concern in secondary education that has garnered stakeholders' attention is the availability and adequacy of infrastructure. However, Ogunode and Jegede (2021) pointed out that making sure high school education is good quality is also really important. This means checking if teachers are there and if they have the right qualifications. Quality assurance in education relates to the outcomes achieved by students, teachers, or institutions, measuring the extent to which they have met their educational objectives. The essence of quality assurance in education involves, in a broader sense, proactively preventing quality issues through planned and systematic efforts, ultimately promoting administrative effectiveness.

School administrative effectiveness is one of the pillars of an effective administration because a well-functioning administrative system plays a vital role in establishing an environment conducive

to teaching and learning. Effective school administration is essential for creating a constructive and supportive learning atmosphere. It necessitates strong leadership, proficient resource allocation, and a dedication to the holistic welfare and success of both students and staff. When these components are properly in place, schools are more likely to reach their educational objectives and have a positive impact on students' lives. Researchers have extensively explored the influence of administrative effectiveness on educational outcomes. Bricker, et al., (2022) research highlights that good school management is strongly tied to better student performance and overall educational success. This underscores the direct connection between capable administration and the realization of educational aims.

As per the findings of Momoh and Obiweluzor (2015), administrative effectiveness refers to the favorable outcomes resulting from administrative endeavors and initiatives aimed at achieving specified objectives. This encompasses how well administrators perform tasks like decision-making, delegation of responsibilities, and setting precedents. McCrimmon (2007) further supports this definition by highlighting that effective administration involves achieving efficiency, accomplishing tasks with minimal expenditure. The practice of administrative effectiveness within organizations adheres to certain principles; it is not solely about achieving outcomes, but also emphasizes the importance of the "how," which entails efficiency, reaching goals with the least possible cost.

Administrative effectiveness is crucial for navigating unforeseen circumstances, including periods of economic uncertainty. This is because, similar to other sectors of the economy, the education sector encounters challenges during economic uncertainties. Economic uncertainties have detrimental effects on the economy, as noted by McMahon (2020). Tyson, et al., (2023) provides a definition of economic uncertainty as a state where a nation's economic activities experience a slowdown, resembling a stagnation in the global economy. Boardman, Greve and Hodge (2015) asserts that during economic uncertainties, there is a notable decrease in economic activity that permeates various sectors. In certain instances, these uncertainties persist for extended periods, typically evidenced in metrics such as real gross domestic product (GDP), real income, employment figures, industrial production, and wholesale-retail sales. In reality, the presence of economic uncertainty in any nation has a dampening effect on its overall economy.

During periods of economic uncertainty, Tchamyou (2020) says that managing schools is really tough for many countries around the world, and it requires a lot of money from the government and other groups involved in education. Okere and Wike (2023) added that this affects how stable the funding for education is. This challenge is exacerbated when a country experiences a recession and struggles to fulfill its financial obligations and responsibilities towards funding the education sector. Consequently, the administration of secondary education, or any other educational level, in a country grappling with recession and a shrinking economy is an exceptionally demanding endeavor.

Furthermore, as pointed out by Baker, Bloom, Davis, and Terry (2020), additional uncertainties like the COVID-19 pandemic have led to a surge in overall uncertainty, permeating nearly every aspect of various endeavors. The impact of the COVID-19 pandemic resulted in a considerable shock of uncertainty - surpassing that associated with the financial crisis of 2008-09 and comparable in scale to the surge in uncertainty during the Great Depression of 1929-1933. Unfortunately, this has also affected the administrative effectiveness of schools.

Regrettably, economic uncertainties have an adverse effect on the efficacy of secondary education. The effectiveness of any educational system is largely contingent on the level of financial backing it

receives from the current government. Economic policy uncertainties wield significant influence on a range of macroeconomic factors, and educational policies are not exempt from their impact (Ashiru & Oladele, 2023). Economic instability can lead to a reduction in government allocations for education, resulting in insufficient resources for schools. This may manifest in outdated learning materials, restricted access to technology, and a dearth of extracurricular offerings (OECD, 2016).

Economic unpredictability leaves a lasting mark on the allocation of funds for education, exerting a tangible influence on the resources designated for this vital sector. This is not just a theoretical supposition but is substantiated by concrete evidence of its impact on educational budgets. For example, in the aftermath of the global financial crisis of 2008, numerous countries experienced significant cuts in their education budgets. According to a report by the Organization for Economic Cooperation and Development (OECD), more than two-thirds of OECD countries reduced their education expenditure as a percentage of Gross Domestic Product (GDP) between 2008 and 2013 (OECD, 2016).

In times of economic instability, governments, including that of Anambra State, faced challenges in providing sufficient funding for education. This circumstance might be one of the driving factors behind the pursuit of alternative financial sources for supporting secondary school education. Consequently, turning to Public-Private Partnership (PPP) funding as a means to bridge the gap caused by the government's limitations in adequately financing the education sector during economic uncertainties becomes a viable option. Given these circumstances, it becomes crucial to explore the relationship between Public-Private Partnership funding and administrative effectiveness in Anambra State.

### **Statement of the Problem**

Administering secondary schools in Anambra State is becoming increasingly challenging in Nigeria today. The government, on its own, finds it difficult to solely oversee education in Nigeria, especially in the face of uncertainties and economic downturns. There is a pressing need to engage the private sector in the management of secondary schools within Anambra State. However, it appears that private sector involvement is limited, which consequently impacts the management of secondary schools, particularly in areas concerning infrastructure provision and ensuring educational quality assurance. It is against this backdrop that this study endeavors to examine the relationship between Public-Private Partnership funding and administrative effectiveness in Anambra State.

### **Purpose of the Study**

19. Examine the relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State
20. Determine the relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State

### **Research Questions**

1. What is the relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State?
2. What is the relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State?

## Hypotheses

This study tested the following null hypotheses at 0.05 significant level

- There is no significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State
- There is no significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State

## METHODS

This study employed correlation research design. The population of the study comprised 263 principals in public secondary schools in Anambra State. The entire principals were used as the sample size and no sampling technique was used for the study. This study used a questionnaire as the instrument for data collection. The questionnaire had two sections such as Sections A to B. Section A sought for information on the demographic data of the respondents. Section B had three clusters such as Clusters I to III. Cluster I sought for information on Provision of Infrastructural Facilities (PIF), Cluster II sought for information on Provision of Instructional Materials (PIM) while the Cluster III sought for information on Administrative Effectiveness (AE). Each cluster has 8 items and structured on a 4-point scale such as Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questionnaire was validated by three experts in the Department of Educational Management and Policy in Nnamdi Azikiwe University, Awka, Anambra State. The questionnaire was trial tested using 20 principals in public secondary schools in Enugu State with Cronbach Alpha statistic to establish its reliability. Cluster I yielded reliability score of 0.85. Cluster II yielded 0.89 while Cluster III yielded 0.79. The study yielded an average reliability coefficient of 0.84. This coefficient indicated high internal consistency. The researcher and three research assistants administered the copies of the questionnaire. The study has a return rate of 256(97.34%)% of the questionnaire. The data generated from the copies of the questionnaire of the research questions were analyzed using Pearson Product Moment Correlation. The decision was based on the following range: Very Low - 0.00 - 0.20; Low - 0.20 - 0.40, Moderate - 0.40 - 0.60; High - 0.60 - 0.80 and Very High - 0.80 - 1.00. Likewise, the all hypotheses were tested using Pearson Product Moment Correlation at a significance level of 0.05 (5%). The decisions will be based on P-value < .05: Reject H<sub>0</sub> and Accept H<sub>1</sub> P-value > .05: Accept H<sub>0</sub> and Reject H<sub>1</sub>.

## RESULTS

**Research Question One:** What is the relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State?

**Table 1: The relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State**

Variables	N	R	Decision
Provision of infrastructural facilities	256	.792**	High
Administrative effectiveness	256		

The summary result of Pearson Product-Moment Correlation Coefficient in Table 1 showed that provision of infrastructural facilities and administrative effectiveness of secondary schools in Anambra State. This is because the R-value was .792 which signifies high relationship between provision of infrastructural facilities and administrative effectiveness. This implies that the funding for the provision of infrastructural facilities leads to the improvement of administrative effectiveness in secondary schools.

**Research Question Two:** What is the relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State?

**Table 2: The relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State**

Variables	N	R	Decision
Provision of instructional materials	256		
		.774**	High
Administrative effectiveness	256		

Table 2 shows the summary of the relationship between provision of instructional materials and administrative effectiveness of secondary schools in Anambra State. The result revealed that the R-value was .774 which signifies that the relationship between provision of instructional materials and administrative effectiveness of secondary schools in Anambra State is high. This implies that funding the provision of instructional materials leads to improved administrative effectiveness of secondary schools in Anambra State.

## Research Hypotheses

The following null research hypotheses were tested at 0.05 level of significance.

H<sub>01</sub>: There is no significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of public secondary schools in Anambra State.

### Correlations

		Infrastructural facilities	Administrative effectiveness
Infrastructural facilities	Pearson Correlation	1	.792**
	Sig. (2-tailed)		.000
	N	256	256
Administrative effectiveness	Pearson Correlation	.792**	1
	Sig. (2-tailed)	.000	
	N	256	256

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results in the test of hypothesis one revealed the significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of secondary schools in Anambra State. The results revealed that the R-value is .792 and the p-value is .000. This shows that the p(.000) is less than 0.05 level of significance. The null hypothesis was rejected while the alternative hypothesis was upheld. Thus, there is significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of secondary schools in Anambra State. This signifies that the Public-Private Partnership funding for the

provision of infrastructural facilities leads to the improvement of administrative effectiveness in secondary schools in economic uncertainties.

H<sub>02</sub>: There is no significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of public secondary schools in Anambra State.

Correlations

		Administrative effectiveness	Instructional materials
Administrative effectiveness	Pearson Correlation	1	.774**
	Sig. (2-tailed)		.000
	N	256	256
Instructional materials	Pearson Correlation	.774**	1
	Sig. (2-tailed)	.000	
	N	256	256

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results in the test of hypothesis two revealed the significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of secondary schools in Anambra State. The results revealed that the R-value is .774 and the p-value is .000. This shows that the p(.000) is less than 0.05 level of significance. The null hypothesis was rejected while the alternative hypothesis was upheld. Thus, there is significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of secondary schools in Anambra State. This signifies that Public-Private Partnership funding for the provision of instructional materials also leads to the improvement of administrative effectiveness in secondary schools in economic uncertainties.

## Discussions

The results in the test of hypothesis one revealed that the significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of secondary schools in Anambra State. The results revealed that the R-value is .792 and the p-value is .000. This shows that the p(.000) is less than 0.05 level of significance. Thus, there is significant relationship between Public-Private Partnership provision of infrastructural facilities and administrative effectiveness of secondary schools in Anambra State. This signifies that the Public-Private Partnership funding for the provision of infrastructural facilities leads to the improvement of administrative effectiveness in secondary schools. Public-Private Partnership (PPP) funding has been demonstrated to significantly enhance the provision of infrastructural facilities, consequently leading to a marked improvement in administrative effectiveness within secondary schools (Gustafsson-Wright, Smith & Gardiner, 2017). Kayode-Ajala (2023) mentioned that working together in this way combines the strengths and knowledge of both public and private sectors. This helps build and keep up-to-date, well-equipped buildings that make administrative work run smoother.

Studies have consistently shown that access to quality infrastructure positively impacts administrative functions, ranging from streamlined logistics management to improved safety measures (Hanushek et al., 2019). These enhancements, made possible through PPP funding, enable administrators to allocate their time and resources more effectively, ultimately contributing to heightened administrative effectiveness in secondary educational institutions. Furthermore, the involvement of private entities often introduces innovative solutions and technologies, which can further streamline administrative processes and contribute to overall effectiveness (Gustafsson-Wright, Smith & Gardiner, 2017). This infusion of fresh perspectives and practices can lead to more



efficient resource allocation, budget management, and decision-making within the school administration (Hatcher, et al., 2006).

The results in the test of hypothesis two revealed the significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of secondary schools in Anambra State. The results revealed that the R-value is .774 and the p-value is .000. This shows that the  $p(.000)$  is less than 0.05 level of significance. Thus, there is significant relationship between Public-Private Partnership provision of instructional materials and administrative effectiveness of secondary schools in Anambra State. This signifies that Public-Private Partnership funding for the provision of instructional materials also leads to the improvement of administrative effectiveness in secondary schools. Public-Private Partnership (PPP) funding has been recognized as a catalyst for enhancing the provision of instructional materials, consequently leading to a notable improvement in administrative effectiveness within secondary schools (Batjargal & Zhang, 2022). This collaborative approach harnesses the resources and expertise of both public and private sectors, resulting in the procurement and distribution of high-quality instructional materials that facilitate more efficient administrative operations (Jones, 2020).

Empirical studies have consistently demonstrated that access to quality instructional materials positively impacts administrative functions, including curriculum planning, teacher training, and student performance monitoring (Hanushek et al., 2019). These improvements, made possible through PPP funding, equip administrators with the necessary tools to enhance the teaching and learning process, ultimately contributing to heightened administrative effectiveness in secondary educational institutions. Furthermore, private sector involvement often introduces innovative solutions and technologies, which can further streamline administrative processes and contribute to overall effectiveness (Batjargal & Zhang, 2022). This infusion of fresh perspectives and practices can lead to more efficient resource allocation, budget management, and decision-making within the school administration (Hatcher, et al., 2006).

## Conclusion

The infusion of Public-Private Partnership (PPP) funding for infrastructural development in secondary schools represents a tangible catalyst for elevating administrative effectiveness, ultimately benefiting the entire educational ecosystem. Some of these infrastructural facilities include classrooms, laboratories, library administrative offices and auditorium or assembly hall among others. By leveraging the strengths of both public and private sectors, schools are better equipped to overcome logistical challenges and create a conducive environment for learning and growth. More so, Public-Private Partnership (PPP) involves in providing This category includes textbooks, workbooks, worksheets, handouts, and other written materials. These instructional materials also encompass a wide array of digital resources such as videos, audiotapes, podcasts, and multimedia presentations. Visual aids like charts, graphs, diagrams, and illustrations are also considered part of this category.

## Recommendations

Based on the findings of the study, the following recommendations were made:

10. School management should form strongly alliance with private institutions so as to help when the need arises especially in economic uncertainties in providing infrastructural facilities.
11. Government need to amend Public-Private Partnership policies so as to make it easier for private sectors to invest in education.

## REFERENCES

- Arogundade, B. B., and Sasere, O. B. (2018). Roles of Public Private Partnership Towards the Development of Higher Education in Nigeria. *Social Science Education Journal 1 (1)*.
- Ashiru, Y., & Oladele, L. (2023). Impact of Economic Policy Uncertainty on Inflation in Nigeria: Evidence from ARDL Model. *Available at SSRN 4481113*.
- Atobauka, I. S., & Jacob, O. N. (2021). Inadequate infrastructural facilities in Nigerian public universities: causes, effects and ways forwards. *American Journal of Social and Humanitarian Research, 2(4)*, 92-102.
- Baker, S. R., Bloom, N., Davis, S. J., & Terry, S. J. (2020). *Covid-induced economic uncertainty* (No. w26983). National Bureau of Economic Research.
- Batjargal, T., & Zhang, M. (2022). Review on the Public-Private Partnership. *Management, 10(1)*, 1-11.
- Boardman, A. E., Greve, C., & Hodge, G. A. (2020). Introduction: Comparative Analyses of Infrastructure Public-Private Partnerships. In *Institutions and Governance in Comparative Policy Analysis Studies* (pp. 38-44). Routledge.
- Bricker, D. D., Felimban, H. S., Lin, F. Y., Stegenga, S. M., & Storie, S. O. M. (2022). A proposed framework for enhancing collaboration in early intervention/early childhood special education. *Topics in Early Childhood Special Education, 41(4)*, 240-252.
- Gustafsson-Wright, E., Smith, K., and Gardiner, S. (2017). Public-private partnerships in early childhood development: the role of publicly funded private provision. *Center for Universal Education at Brookings*.
- Hanushek, E. A., Peterson, P. E., Talpey, L. M., and Woessmann, L. (2019). The achievement gap fails to close. *Education next, 19(3)*, 8-17.
- Hatcher, P. J., Hulme, C., Miles, J. N., Carroll, J. M., Hatcher, J., Gibbs, S., ... & Snowling, M. J. (2006). Efficacy of small group reading intervention for beginning readers with reading-delay: A randomised controlled trial. *Journal of Child Psychology and Psychiatry, 47(8)*, 820-827.
- Hatcher, R. L., & Gillaspay, J. A. (2006). Development and validation of a revised short version of the Working Alliance Inventory. *Psychotherapy Research, 16(1)*, 12-25.
- Helmy, R., Khoushed, N., Wahba, M., & Bary, A. A. E. (2020). Exploring critical success factors for public private partnership case study: The educational sector in Egypt. *Journal of Open Innovation: Technology, Market, and Complexity, 6(4)*, 142.
- Junemann, C., & Olmedo, A. (2020). New policy intercessors: Philanthropy and Public Private Partnerships. In *Critical Reflections on Public Private Partnerships* (pp. 115-133). Routledge.
- Kayode-Ajala, O. (2023). Establishing cyber resilience in developing countries: an exploratory investigation into institutional, legal, financial, and social challenges. *International Journal of Sustainable Infrastructure for Cities and Societies, 8(9)*, 1-10.
- McCrimmon, M. (2007). What is management effectiveness? Retrieved from: <http://mitchMCCRIMMON.suite101.com/whatismanagementeffectiveness-928590>.
- Mcmahon, M. (2020). Why is uncertainty so damaging for the economy? Available at: <https://www.economicsobservatory.com/why-uncertainty-so-damaging-economy>
- Momoh, U. and Obiweluzor, N. (2015). Principals' administrative effectiveness in the implementation of quality assurance standards in public secondary schools in Edo and Delta States. *Sokoto Educational Review, 16(1)*, 125-134. Retrieved from : <https://www.researchgate.net/publication/333096188>
- National Policy on Education (FRN 2013). Federal Government of Nigeria. Lagos NERDC Press.
- Ogunode, N. J., & Jegede, D. (2021). evaluation of factors responsible for inadequate infrastructural facilities in public universities in north central Nigeria. *Intercedra, 46(1)*.

- Okere C. P. O. & Wike, R. E. (2023). Administration of secondary education in a dwindling economy and teachers' effectiveness in secondary schools in Rivers State. *International Journal of Social Research and Development*, 5(1), 3 – 8.
- Organization for Economic Cooperation and Development (OECD) (2016). Financing education. Retrieved from: <https://gpseducation.oecd.org/revieweducationpolicies/#!node=41705&filter=all>
- Oyedele, L. (2013) Avoiding performance failure payment deductions in PFI/PPP projects: Model of critical success factors. *Journal of Performance of Constructed Facilities*, 27 (3) pp. 283-294. ISSN 0887-3828 Available from: <http://eprints.uwe.ac.uk/21611>
- Tchamyou, V. S. (2020). Education, lifelong learning, inequality and financial access: Evidence from African countries. *Contemporary Social Science*, 15(1), 7-25.
- Tyson, L. D. A., Zysman, J., & Judge, B. (2023). *The New Logic of Globalization: Uncertainty, Volatility, and the Digital Economy*. Berkeley, University of California, Berkeley Roundtable on the International Economy.