

# A Study of Inclusive Findings Through Public Private Partnership (PPP), for Addressing Infra Structural Deficit in Welding and Fabrication in Technical Colleges in Nigeria

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Asian Journal of Information Technology Copy Right: Medwell Publications Abstract: The study investigated the study of inclusive funding through public private partnership (PPP), for addressing infra structural deficit in welding and fabrication in technical colleges in Nigeria. The study was descriptive design. The population of the study was two thousand and seventy (2,070) technical staff of welding and fabrication in Nigerian Technical Colleges. One hundred and twenty technical teachers were randomly selected through stratified random sampling techniques as sample of the study. The researchers developed instrument titled: Public Private Partnership (PPP), for Addressing Infra structural Deficit in Welding and Fabrication in Technical Colleges Questionnaire. (PPPAIDWFTCQ). The instrument was validated by three experts from industrial technical education, one from department of public administration and local government and two from educational measurement and evaluation in University of Nigeria Nsukka. The Cronbach Alpha Reliability Coefficient of the test instrument was used to determine the reliability coefficient of 0.90, is obtained which were indicates that the instrument was reliable for the study. The data collected was analyzed in line with the research questions and mean and standard deviation was used. A mean of 2.50 and above will be considered Agreed, below that were considered not agreed. The mean gain was used to answer research questions with the used of Statistical Package for Social Sciences SPSS (Vision, 22). Recommendation: The Nigerian government should endeavor to keep these programed running beyond the administration that initiated them in as much as they remain relevant and meet needs. They should not be scarified on the altar of political gerrymandering which is the trade-mark of Nigerian politics.

## INTRODUCTION

Technical Colleges are the institutions where students are trained to acquire relevant knowledge and skills in different occupation for employment in the world of work

(NBTE) according to the Federal Republic of Nigeria <sup>1</sup> Technical College is a segment of technical and vocational education (TVE) designed to produce craftsmen at the secondary school level and master craftsmen at the advance craft. The goals of Technical

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Colleges are to provide trained man power in the applied science technology and business particularly at craft advanced craft and technician levels provide the Technical knowledge and vocational skills necessary and give training and impart the necessary skills necessary for agriculture, commercial and economic development and give training and import the necessary skills to individual who shall be self – reliant economically. Technical Colleges are regarded as the principal vocational institution in Nigeria <sup>2</sup>. According to Ndomi, Technical Colleges provide technical training in a number of courses which include General Education, Electrical/electronic trades, Building trades, Woodwork trades, Printing trades, Motor Vehicle Mechanic Work and Welding and Fabrication Trade.

Welding and Fabrication Trade is a course offer in Technical Colleges in Nigeria. Welding is a process of joining two or more pieces of metal permanently. According to Larry welding is used to cover a range of building techniques, make design, construct, join and repair metal parts for different kinds of machine or equipment. While fabrication is the process of forming metals usually steel plate either by arc or gas or other forms of metal joining method. Fabrication can be carried out in construction, creating and repairing using sheet metal building gates, burglaries, ship building and bridge construction. Fabrication is a trade that provides students with many employable skills Davies also observed that students of welding and fabrication trade gain fundamental skills required to get employment as a welder. However, the Public-Private Partnership offers the only realistic root to the actualization of welding and fabrication trade in technical colleges of Nigeria's potentials.

Public-Private Partnership is an infrastructure led development made possible through combined human and material effort of both public and private sectors. According to Obozuwa Public-Private Partnership (PPP) is an arrangement between government and private sector entities for the purpose of providing public infrastructures, community facilities and related services. Such partnerships are characterized by the sharing of investment, risk, responsibility and reward between the partners. The reasons for establishing such partnerships vary but generally involve the financing, design, construction, operation and maintenance of public infrastructure and services.

In every society, infrastructure is crucial to society development. Societies with inadequate or underdeveloped infrastructure are bound to experience slow economic growth, and in some cases, social unrest with the attendant human and material casualty, . When an economy is faced with the challenge of infra structural deficiency, it is generally unattractive to capital, domestic or foreign. Such economy cannot successively develop sustainable human capital base or attract best skilled man

power of welding and fabrication trade of technical colleges. Therefore, countries desirous of competing for investible capital and exploiting the benefits of sustainable development need to upgrade their infrastructure to world investment standard, According to <sup>3</sup>, infra structural deficiencies remain a major challenge undermining welding and fabrication students of technical colleges, with capacity to complete in the global market . Infra structural dificuit not only stunts society's growth and reduces international competitiveness; it also seriously undermines the poverty reduction efforts of Nigeria regimes,. In the case of Nigerian infra structural situation in technical colleges, it is either obsolete, over utilized or out of use. Apart from the fact that it does not meet the needs of the investors, it inhibits investment and scales up the cost of transacting business in the country (FRN). To address the problem of infrastructure in Nigeria, government requires an annual infrastructural investment of between USD 6 and 9 billion, which only the private sector is in a better position to mobilize,

The imperative need for alternative source of infrastructure financing welding and fabrication students of technical colleges in Nigeria of which among the other themes of NPM (Privatization, Commercialization, deregulation, downsizing, etc), emphasized the technical colleges in Nigeria, Public-Private Partnership (PPP appears to be more appropriate and applicable in welding and fabrication trade of technical colleges in Nigerian context and at this time. Fashola capped it thus: the stark reality is that Public-Private Partnership offers the only realistic root to the actualization of welding and fabrication trade in technical colleges of Nigeria's potentials. It's against this background that the study seeks to investigate the Inclusive funding through public private partnership (PPP), for addressing infrastructural deficit in metal work trades in Technical Colleges in Nigeria.

## MATERIALS AND METHODS

Public-Private Partnership arrangement can be considered to be a policy of the government where by the government decides to enter into a contract with the private sector to provide service hitherto provided exclusively by the government. It is noted that every policy has its own challenges so the PPP arrangement is not an exception and the challenges often come out at the implementation stage. The challenges can emanate from both the public and private sectors. This implies that the absence or the inadequacy of these public facilities or infrastructure of welding and fabrication trade in technical colleges of Nigeria will have adverse developmental effects on the development of such nations.

Despite the established positive link between infrastructure availability and the total economic development of a Nigeria, most Technical Colleges in

Nigeria developing world and in welding and fabrication trade for that matter are yet to achieve the provision of adequate infrastructure to support economic growth <sup>4</sup>. Factors such as rapid population growth and lack of capital, among others, on the part of these developing welding and fabrication trade in technical colleges of Nigeria have been identified as contributing to the deficit in the provision of infrastructure facilities in the Nigeria.

More so, in spite of the role PPP plays in helping bridge the gap in infrastructure provision, not much research work has been done especially at the various welding and fabrication trade in technical colleges levels to identify the key issues pertaining to the implementation of public-private partnership projects so as to ensure its success and sustain ability at the technical colleges in Nigeria. It's against this study to investigate the Inclusive funding through public private partnership (PPP), for addressing infra structural deficit in metal work trades in Technical Colleges in Nigeria.

**Objectives of the Study**: The general objective of this study is to investigate the Inclusive funding through public private partnership (PPP), for addressing infra structural deficit in metal work trades in Technical Colleges in Nigeria. The specific objectives are to:

- To identify the ways by which private investors can be attracted in to Welding and Fabrication Trade in Technical Colleges in Nigeria
- Throw more light on the PPP as a concept for development in Welding and Fabrication Trade in Technical Colleges in Nigeria
- To find out the effectiveness of PPP in the development of infrastructure in Welding and Fabrication Trade in Technical Colleges in Nigeria

### **Research Questions**

- 1. How can private investors be attracted in to Welding and Fabrication Trade in Technical Colleges in Nigeria?
- 2. What are the more light on the PPP as a concept for development in Welding and Fabrication Trade in Technical Colleges in Nigeria?
- 3. What is the effectiveness of PPP in the development of infrastructure in Welding and Fabrication Trade in Technical Colleges in Nigeria?

**Methodology**: The study was descriptive design. The population of the study was (2,070) technical staff of welding and fabrication in Nigerian Technical Colleges. 120 technical teachers were randomly selected through stratified random sampling techniques as sample of the study. The researchers developed instrument titled: Public Private Partnership (PPP), for Addressing Infra structural Deficit in Welding and Fabrication in Technical Colleges Questionnaire. (PPPAIDWFTCQ) the instrument was

validated by three experts from industrial technical education, one from department of public administration and local government and two from educational measurement and evaluation in University of Nigeria, Nsukka. The reliability of the instrument was determined using test retest reliability. The reliability coefficient of the study was 0.89 Pearson moment correlation was used to answer the research questions and to test the null hypotheses at 0.05 level of significance

#### RESULTS AND DISCUSSION

**Research Question One**: How can private investors be attracted in to Welding and Fabrication Trade in Technical Colleges in Nigeria?

Table 1: mean and standard deviation of the private investors be attracted in to Welding and Fabrication Trade in Technical Colleges in Nigeria.

Table 1 shows the mean responses of 3.21 to 3.50 that items number 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 are above 2.50 meaning the items are having agreed. While standard deviation ranges from 0.02 to 1.06 meaning there is close relationship in the means responses.

Research Question Two: What are the more light on the PPP as a concept for development in Welding and Fabrication Trade in Technical Colleges in Nigeria? Table 2: mean and standard deviation of the more light on the PPP as a concept for development in Welding and Fabrication Trade in Technical Colleges in Nigeria Table 2 shows the mean responses of 2.79 to 3.8 that items number 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 are above 2.50 meaning the items are having agreed. While standard deviation ranges from 0.86 to 1.02 meaning there is close relationship in the means responses

Research Question Three: What is the effectiveness of PPP in the development of infrastructure in Welding and Fabrication Trade in Technical Colleges in Nigeria? Table 3: mean and standard deviation of the effectiveness of PPP in the development of infrastructure in Welding and Fabrication Trade in Technical Colleges in Nigeria Table 3 shows the mean responses of 2.79 to 3.58 that items number 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 are above 2.50 meaning the items are having agreed. While standard deviation ranges from 0.91 to 1.00 meaning there is close relationship in the means responses.

## **CONCLUSIONS**

The fundamental responsibility of good government is service delivery. When any government becomes incapable of delivering services to its citizenry that implies its expiration. Therefore, government endlessly seeks for the most cost-effective means of delivering services to the Technical Colleges in Nigeria while keeping afloat. As such, successful governance in this

Table 1: Mean and standard deviation of the private investors be attracted in to Welding and Fabrication Trade in Technical Colleges in Nigeria.

S/:	1 Items statement	Mean	S/D	Remark
1	The service or project cannot be provided with the financial resources or expertise of the government alone	3.21	0.93	Agree
2	A private partner would increase the quality or level of service from that which the government could provide on its own	3.49	1.05	Agree
3	A private partner would allow the service or project to be implemented sooner than if only the governments were involved.	3.50	1.01	Agree
4	There is support from the users of the service for the involvement of a private partner.	3.34	1.00	Agree
5	There is an opportunity for competition among prospective private partner in the provision of services or a project.	3.41	0.97	Agree
6	The output of the service can be measured and priced easily	3.25	0.02	Agree
7	The cost of the service or project can be recovered through the implementation of user fees	3.37	0.95	Agree
8	The project or service provides an opportunity for innovation	3.32	0.98	Agree
9	There is a track record of partnerships between government and the private sector	3.21	0.99	Agree
10	There are opportunities to foster economic development	3 30	1.06	Agree

Table .2: Mean and standard deviation of the more light on the PPP as a concept for development in Welding and Fabrication Trade in Technical Colleges in Nigeria

S/n	Items	Mean	S/D	Remark
1	Improve service delivery by allowing both sectors to do what they do best. Government's core business is to set policy and serve the public.	2.98	0.92	Agree
2	It is better positioned to do that when the private sector takes responsibility for non-core functions such as operating and maintaining infrastructure.	2.95	0.97	Agree
3	Improve cost-effectiveness, by taking advantage of private sector innovation, experience and flexibility, PPPs can often deliver services more cost-effectively than traditional approaches. The resulting savings can then.	2.79	1.01	Agree
4	Increased investment in public infrastructure, investments in hospitals, schools, highways and other provincial assets have traditionally been funded by the State and, in many cases, have added to levels of overall debt.	3.15	0.86	Agree
5	PPPs can reduce government's capital costs, helping to bridge the gap between the need for infrastructure and the State's financial capacity.	3.12	0.86	Agree
6	Reduce public sector risk by transferring to the private partner those risks that can be better managed by the private partner.	3.30	0.89	Agree
7	Better positioned than the government to manage risks associated with the changing demands of commercial real estate. Deliver capital projects faster, making use of the private partner's increased flexibility and access to resources.	3.58	1.02	Agree
8	Transferring risk to the private sector can reduce the potential for government cost from unforeseen circumstances during project development or service delivery. Services are provided at a predictable cost, as set out in contract agreements.	3.58	0.97	Agree
9	Private sector partners are motivated to use facilities fully, and to make the most of commercial opportunities to maximize returns on their investments.	3.49	0.95	Agree
10	The result can be higher levels of service, greater accessibility, and reduced occupancy costs for the public sector	3.42	0.96	Agree

Table 3: Mean and standard deviation of the effectiveness of PPP in the development of infrastructure in Welding and Fabrication Trade in Technical Colleges in Nigeria								
S/n Items		Mean	S/D	Remark				
1	To deliver significantly improved public services, by contributing to increases in the quality and quantity of investment	3.42	0.94	Agree				
2	To release the full potential of public sector assets, including state owned businesses and hence private value for the tax payer and wider	3.41	0.95	Agree				
	benefits for the economy			-				
3	To allow stakeholders to receive a fair share of the benefits of the PPP, This includes customers and users of the service being	3.52	0.91	Agree				
	provided, the tax payers and employees at every level of the organization							
4	Varying levels of responsibility assumed by the public and private sectors.	3.30	0.94	Agree				
5	length of the contract period	3.29	1.00	Agree				
6	The degree of risk allocation between the public and private sectors	3.30	0.93	Agree				
7	The effective public-private partnership is only possible through mutually designed, analyzed and accepted instruments of	3.58	0.99	Agree				
	cooperation and collaboration.			_				
8	The roles and responsibilities of the partners vary from project to project.	3.03	0.96	Agree				
9	The key consideration is the allocation of risk between the partners which affects other aspects of the partnership agreements,	2.94	0.98	Agree				
	including rewards and investments.							
10	The roles and responsibilities of the private and public sector partners may differ on individual servicing initiatives, the overall role and	2.79	1.00	Agree				
	responsibilities of government do not change because Public-Private Partnership is one of a number of ways of delivering public							
	infrastructure and related services							

21st century requires every hand on the desk i.e. partnership where possible and at all levels. It has become old fashioned to argue whether public ownership was always the best or whether privatization was the only answer. Government firmly believes it will only deliver the modern, high quality public services that the public want and increasingly expect to draw the best from both public and private sector. What matters most to the government is the approach that will most likely deliver the Technical Colleges needs in Nigeria. Following the daunting recurring political and economic challenges to the government both at state and federal level, collaborative government has become the order of the day and good enough; the Nigerian government is updated with the trend.

## RECOMMENDATIONS

Government in Nigeria is popular for programers abandonment and discontinuity, especially when there

is administration change. As was earlier noted currently there are massive PPP programers in Nigerian and to a reasonable extent they are all working. The Nigerian government should endeavor to keep these programers running beyond the administration that initiated them in as much as they remain relevant and meet needs. They should not be scarified on the altar of political gerrymandering which is the trade-mark of Nigerian politics.

Therefore, there is the need to open up the rural areas the more through infra structural establishments. This will decongest technical college's students to overcrowd and encourage rural-urban migration in the Nigeria.

## REFERENCES

1. National Educ. Policy, 2013. National Policy on Education – 6th Edition (2013). https://educatetolead. word press. com/2016/02/22/national-policy-on-education-6th-edition-2013/

- 2. Okoro, O. M. 2006. Principles and Methods in Vocational and Technical Education. http://www.sciepub.com/reference/34207
- 3. Otairu, A., A.A. Umar, N.A.W.A. Zawawi, M. Sodangi and D.B. Hammad, 2014. Slow adoption of PPPs in developing countries: Survey of Nigerian construction professionals. Procedia Eng., 77: 188-195.
- 4. World Bank, 2007. World Development Report. WORLD Dev. Rep, 10.1596/978-0-8213-6807-7