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**PUBLIC-PRIVATE-PARTNERSHIP FOR EFFECTIVE DELIVERY OF  
TECHNICAL VOCATIONAL EDUCATION IN ENHANCING GRADUATE  
EMPLOYABILITY SKILLS DURING THE ERA OF COVID-19 PANDEMIC IN  
NIGERIA**

**Oladiran Stephen Olabiyi<sup>1\*</sup>, Sunday Odunayo Okeowo<sup>2</sup>, Gideon O. Adedayo<sup>3</sup>, Akinseyi Ipinlaye<sup>4</sup>**

<sup>1),2),3),4)</sup> University of Logos, Nigeria

E-mail: [olabiyidiran@gmail.com](mailto:olabiyidiran@gmail.com)\*

\*Correspondence Author

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**ABSTRACT**

The study investigates a public-private partnership for enhancing TVE delivery towards graduate employability skills during the era of the COVID-19. Survey research design was employed. Three research questions and three null hypotheses were tested at .05% level of significance, guided the study. The respondents for the study consisted of 139 human resources managers in Organised private sectors and TVE lecturers. Data was obtained using a structured questionnaire. The reliability coefficient of the instrument yields  $\alpha = .76$ , Using Cronbach Alpha. Mean and standard deviation was used to answer research questions, while independent sample t-test statistwere was employed to test null hypotheses. Findings from the study revealed: Training resources such as an online library, interactive multimedia, digital textbooks and internet connectivity are essential. No significant difference in the mean responses of human resources managers in private sectors and TVE lecturers regarding the private sector's innovative roles in improving training resources and TVE institution's roles in enhancing effective TVE delivery towards developing employability skills of graduates during and post COVID-19 pandemic. It was thus, recommended that private sectors should be made involved in the training of TVE graduates by identifying demand for skills, feeding into curricula development, monitoring and evaluation activities; TVE lecturers should offer quality and effective teaching and learning that will facilitate and promote the development of employability skills.

**Keywords:** Delivery, Employability, Pandemic, PublicPrivate-Partnership, and Technical Vocational Education

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**INTRODUCTION**

Challenges facing TVET during pandemic demand innovative and flexible approaches, including a reoriented curriculum taking account of new contents and issues such as technology, the environment, cultures, entrepreneurship and the requirements of rapidly growing service industries. Some educational institutions aimed to integrate employability skills within their instruction to provide students with various inter and extra-curricular opportunities alongside work experience that will enhance their employability. Employability skills, according to Lee (2010), are the wheels of our increasingly complex and interconnected workplace. Non-cognitive skills such as teamwork, communication, and assertiveness are some of the attributes required for employment. In some educational institutions in the USA, learning outcomes are incorporated

into a complex programme designed to build employability skills and course content knowledge (Partnership for Twenty-First Skills cited in Lee 2010). Employability skills cover a range of interpersonal skills, teamwork, negotiation skills, communication skills, time management, team management and delegation skills to improve business activities. Aside from the fact that graduates need to be proactive and able to solve problems in a creative means, employers sought-after graduates with communication skills, empathy, motivation, decision-making abilities, planning abilities and improvisation abilities (Bagshaw, 1996). Employability skills must be taught through purposeful real-life or practical activities with emphasis on discussion, explanation, decision making and problem-solving. However, securing and advancing in decent employment is a big challenge for young people, even in the best economic period and now worse during the era of the COVID-19 pandemic. Educational institutions must examine ways to address difficulties to smooth the transition from school to work during and beyond the pandemic. In the workplace, aspirations and competitiveness are rising (Lee, 2010).

Employers are constantly demanding more flexible and adaptable young workers Awofala, Olabiyi, Ogunleye, Udeani, & Fatade, 2017) to cope with the emerging global knowledge economy and changing market situations, especially during the post-Covid-19 era. One way of meeting this expectation in TVET graduates is to equip them with knowledge and learn from their education. These attributes will not only facilitate and enhance employment opportunities (Kagaari, 2007; Maher & Graves, 2008) but help in developing the intellectual, personal and social resources (Lee, 2010) designed to empower graduates to flourish in an everchanging world. The acquisition of knowledge, skills and abilities often makes graduates more likely to be successful in their chosen career (Harvey, 2004). The ability of any country to increase the skills of its workforce is a significant concern to TVET institutions, businesses and government.

The need to increase employment opportunities and enhance the workforce's social mobility through improved employability is particularly pressing in the COVID-19 pandemic. MacDonald, Nink, and Duggan (2010) perceived that market-driven training would require collaboration and coordination with employers to determine the educational and training needs to meet skill demand. An employer must keep pace with changes in technology and the rise of new skill sets; with this, a responsive TVET system will include survey employers to gather labour market information, such will guide in the training of TVET graduates, employees in need of upskilling, and students (MacDonald, Nink, & Duggan, 2010), stressed further that students require access to current technological information and upgrading, knowledge about environmental issues and entrepreneurial skills to succeed in their trades and occupations. To achieve this, MacDonald et al. (2010) emphasised the relevance of the partnership on bringing skilled and trained workforce in their area of specialisation for national development, satisfaction and productivity. In the light of this, there is a need to boost partnership between government TVET and business enterprise, aimed to share the industrial sector perspective, policy and identify gap for improving the employability of graduates, competence-based and demand-driven of the school system (International Labour Organisation, 2020) Thus, the need for partnership between TVET institutions, and private sectors, to develop an appropriate and functional training programme and provide training facilities (Clarke, 1997). Governments recognised the importance of industry, employers and unions in improving employability skills. Solid and lasting partnerships is integral to support the development of employability skill needed in the workplace (Jacquelyn, 2000). Over the next decade, Nigerian governments should form partnerships with industry, employers and unions to maximise the opportunities for workplace skills development. A range of funds will be required to promote innovative and customised training models and explore effectuation for private sectors to cluster together to access tailored, integrated training

relevant to their industry and worksite requirements. Public-private partnerships (PPPs) can deliver substantial innovation to education infrastructure and service delivery.

The concept of PPPs in TVET recognises the existence of alternative options for providing educational facilities and services besides public finance and public delivery. The conceptuality of Public-Private Partnership (PPP) in TVET recognises the existence of alternative options for providing educational facilities and services besides public finance and public delivery. Public-Private partnership according to Olabiyi, Okarfor and Ebenezer (2014), refers to a contractual agreement between a government agency or authority and a private sector entity that allows for greater private participation in the delivery of public infrastructure projects. Olabiyi et al. (2014) suggest a complementary role between the public and private sector be adopted to bring about the development of employability skills. The fundamental objective of PPP is to encourage the private sector to use its resources to raise capital and the ability to build projects for the welfare of TVET institutions without having to compromise its profit motive. At the same time, TVET would retain its responsibility to provide goods and services to the public at affordable rates (Aimola, 2010). This arrangement, according to Aimola, calls for an approach to the decision, making it underscores the need for a framework that will enable private sector partners to make reasonable returns on investments without lowering the standards and quality of services provided under public-private partnership arrangements.

PublicPrivate Partnerships are an increasingly popular way of fostering development by drawing on investment and expertise from the public and private sectors. Usually, PPP, at a minimum, involves an established contract between a private and public sector actor to provide public goods or services while jointly assuming the risks and responsibilities (World Bank, 2015). The partnership can cut across different but mutually inclusive groups of stakeholders, including International Non-Governmental Organisation, Development Agencies such as the United Nations Educational, Scientific and Culture, United States Agency for International Development, Multinational Corporations such as Shell, Chevron, Texaco, Total Final ELF, Exxon-Mobile, NGOs, Manufacturing Association of Nigeria and Organized Private Sector, Therefore, the need for Public-Private Partnerships in developing employable skills cannot be overemphasised to strengthen the training of learners, especially during COVID-19; with this, there is a need to devise means to evolve of private sectors in empowering students with required technical and business skills and emphasise the modalities of using PublicPrivate Partnership (Olabiyi & Chinedu, 2018). Literature emanating from previous studies (Coulombe, Tremblay, & Marchland, 2004; Ahmed, 2010; Olabiyi, Okarfor & Ebenezer, 2014) revealed that Public-Private Partnership is a component in meeting specific project ideas and other developmental programmes in TVET institutions through project definitions, specifications and provision of facilities that will positively impact education in Nigeria. Training and capacity building involves enhancing the intellectual, administrative, professional and managerial ability of managers in the educational sector. Such activities include staff training and development programs, workshop attendance, provision of experts and assistance in curriculum development. The public sector in developing countries are constantly on the lookout for alternative sources of funds, and one such source is an investment by the private sector through PPP (Okwelle & Wordu, 2014; Olabiyi, Okarfor & Ebenezer, 2014) TVET institutions worldwide should explore ways of using PPPs to prepare TVET graduates for a future career in a workplace that emphasised independence and flexibility, facing the changing future of work, involves embracing new pedagogical approaches and developing new curriculum that goes beyond the basics of what is currently available most at present when deadly and infectious disease COVID-19 has deeply affected the global economy. (Raupp, 2019)

As of late June 2020, according to UNICEF (2020), 1,089,749,858 learners are affected worldwide by COVID19, leading to closures of educational institutions. Nigeria is no exception; when schools shut, children risk losing their learning, support system, food, and safety, especially with the most marginalised children who are the most likely to drop out altogether paying the heaviest price (UNICEF, 2020) And, as millions of students are out of classrooms for over nine months, UNICEF fears that many schools are closing. Emphasis is not placed on taking the necessary steps to engage students in effective learning. Again as students return to classrooms, they need support to adjust and recover lost education with meaningful learning engagement through collaboration with the relevant NGOs and agencies. If TVET institutions must perform optimally, their graduates must also perform optimally. TVET institutions in Nigeria continue to struggle to attain their goals and objectives of contributing to Nigeria's skilled workforce development blamed on online platforms not being fully integrated with regular programming; their quality and capacity not monitored, hindering a smooth transition to a mainly remote mode of learning. ILO (2021) suggests that public and private stakeholders in TVET need to promptly forge partnerships to increase the availability of accessible virtual learning solutions, develop new training programmes that fit TVET programmes and allocate additional resources for enhancing employability skills. Full use should be made of contemporary technology tools, particularly the Internet, interactive multimedia materials, audiovisual aids and mass media, to reach cost-effectiveness, quality and richness of programmes, especially promoting self-learning (ILO, 2001). The study finds out the roles of public-private-partnership for improving TVET delivery in the era of the COVID-19 pandemic in southwest Nigeria. Specifically, the study sought to determine the following: (a) Training resources required for delivery of TVET programmes to develop graduate employability skills during and after a post-COVID-19 pandemic, (b) Private sector's innovative roles in improving training resources required for delivery of TVET delivery to develop employability skills during and post COVID-19 pandemic, (c) TVET institution's roles enhance effective TVET delivery towards developing employability skills of graduates during and post COVID-19 pandemic.

## **METHOD**

The study employed a descriptive survey research design. According to Nworgu(2015), it is a design through which a group of people or items are studied by collecting and analysing data from only a few people considered representative of the entire group. The design was necessary because of the wide distribution of the respondents the structured instrument was used for data collection. The study was carried out in southwest Nigeria. The study population was 157, comprised of TVE lecturers in a public institution offering TVE programmes and human resource development managers in 56 organised private sectors southwest. Lagos State (101 respondents from the institution and 56 from the industry). The number was manageable. Hence there was no sampling. A structured questionnaire containing a total of 34 items was the instrument for data collection. The questionnaire was grouped into four sections. Section A identifies the personal data of the respondents, such as status, years of experience and organisation. Section B has 14 items used to determine innovative training resources required for effective delivery of TVET programs to develop the employability skill of graduates. Section C comprises 11 items used to ascertain private sector innovation roles.

Section D consists of 10 items used to find out the TVET institution's innovative for effective TVET delivery towards developing employability skills during the COVID-19 pandemic. The instrument is structured in Likert type of, Strongly Agree(SA), Agree (A),

Undecided (UD ), Disagree (D) and Strongly Disagree (SD) with numerical values of 5, 4, 3, 2, and 1, respectively. Instrument validated by three experts and the reliability determined using the Cronbach Alpha reliability coefficient method yielded .76. Thus, in line with Uzoagulu (2011), who noted that a reliability coefficient above 0.6 indicates that the instrument is reliable. Out of 157 copies of the questionnaire distributed, 139 were returned giving, an 88.54% return rate. Data collected were analysed using mean and standard deviation. A t-test was used to test null hypotheses at .05 level of significance using SPSS version 16. The standard deviation is used to determine the homogeneity or otherwise of the opinions of the respondents. The t-test statistics were compared with the significant value (using SPSS) at .05 level of significance and appropriate degree of freedom. The null hypothesis was not rejected where the value was less than the .05 level at the degree of freedom. Otherwise, the null hypothesis was rejected.

## **RESULTS AND DISCUSSION**

Table1(a): Innovative Training Resources Required for Effective Delivery of TVET Programmes to Develop Employability Skill of Graduates During and Post COVID19 Pandemic (N= 139)

<b>S/N</b>	<b>Item Statement</b>	<b>Mean</b>	<b>SD</b>	<b>Remarks</b>
1	Provision of internet facilities in educational institutions	4.11	.87	Required
2	Provision of alternative energy to power technology tools	4.31	.62	Required
3	Educational radio and television broadcast for teaching	4.05	.82	Required
4	Computer-based media	4.52	.58	Required
5	Telephone	4.27	.45	Required
6	Interactive multimedia materials	4.37	.56	Required
7	Audiovisual and mass media	4.43	.49	Required
8	Different software	4.33	.69	Required
9	Online library facilities for students and teachers	4.17	.87	Required
10	Provision of projectors for training	4.25	.83	Required
11	Provision of film strips for teaching	4.10	.09	Required
12	Making CCTV available for TVET programmes	4.33	.69	Required
13	Supply of Disc player	4.17	.87	Required
14	Making digital textbooks available for training	4.25	.83	Required
<b>Overall</b>		<b>4.28</b>	<b>.41</b>	<b>Required</b>

Results presented in Table 1(a) revealed that the mean responses of managers in private sectors and lecturers in TVE institutions regarding innovative training resources required for effective delivery of TVET programmes to develop graduates employability skills during and post COVID-19 pandemic. A close look at the mean score of each item shows that respondents agreed that all the identified training resources are required for effective delivery of TVET programmes to develop employability skills of graduates during and post COVID-19 pandemic. The training resources identified include internet facilities in educational institutions; alternative energy to power technology tools, educational radio and television broadcast, computer-based media. Online library; projectors; CCTV; interactive multimedia and digital textbook. With the mean

value ranging from 4.11 to 4.52 above the cut-off point of 3.50. it indicated that the respondents consider the provision of training resources as essential to developing graduates employability skills.

Table1(b): Independent Samples t-test Statistics of Mean Responses of Respondents Concerning Innovative Training Resources Required for Effective Delivery of TVET Programmes to Develop Employability Skill of Graduates During and Post COVID19 Pandemic (N=139)

Variables	N	Mean	SD	t-cal	ρ
Managers in Private Sectors	42	4.36	.56	.333	.741
TVET Lecturers	97	4.51	.58		

As revealed in Table 1(b), TVET lecturers had a relatively higher mean score of 4.51 than managers in private sectors with a mean of 4.36 concerning the innovative training resources required for effective delivery of TVET programmes to develop employability skills during and post COVID-19 pandemic. There was no statistically significant difference between TVET lecturers and managers in private sectors' mean score on innovative training resources required for the development employability skill of graduates ( $t = .333$   $r > .05$ ). Respondents considered the provision of training resources indispensable to the development of employability skills.

Table 2(a): Private sector's Innovative Roles in Improving Training Resources For Effective TVET Delivery Towards Developing Employability Skills During and Post Covid19 Pandemic (N=139)

S/N	Item Statement	Mean	SD	Remarks
1	Private sectors co-joined with TVET institutions to draft curricula and courses of study to meet employers' demand	4.28	.46	Agreed
2	Provision of general physical and institutional TVET infrastructure for the development of employability skills.	4.33	.47	Agreed
3	Public cooperate with institutions for human resource development and talent management through high-technology education	4.48	.50	Agreed
4	Private sectors forums factitive NUC and NBTE provide key expertise, knowledge and skill sets for certification of training and the provision of academic awards to students on graduation	4.59	.49	Agreed
5	Enterprises should be actively involved in the theoretical and practical training of those preparing for occupations in their particular sector	4.33	.47	Agreed
6	Creation of joint facilities for research, development of prototype materials and equipment, and preparation of staff for the training of teachers.	4.64	.47	Agreed

7	Private sectors foster investment in training and increase resources for training through training funds, various incentives for training and learning, e.g. tax rebates, training credits	4.55	.48	Agreed
8	Recognise various responsibilities for investment and enhance employability of TVET graduates, thereby address the economic challenges.	4.46	.50	Agreed
9	Trade unions and employer associations contribute to training by managing their training institutions and provides internships for students.	4.22	.42	Agreed
10	help mobilise resources for programmes to secure basic literacy and numeracy and the development of communication and information infrastructure	4.47	.50	Agreed
11	Private enterprises should be encouraged to make their equipment and facilities available for practical training	4.36	.69	Agreed
<b>Overall mean</b>		<b>4.43</b>	<b>.69</b>	

Table 2 (a) presents the mean and standard deviation of TVET lecturers and managers in private sectors vis-a-vis the private sector's innovative roles in improving training resources for effective TVET delivery towards developing employability skills during and post Covid-19 pandemic. The mean score for each item regarding innovation ranges from 4.22 and 4.59 indicated that private sectors roles are essential in improving training resources for effective delivery of TVET towards developing employability skills among graduates. Among which include: Private sectors co-joined with TVET institutions to draft curricula and courses of study to meet employers' demand; provision of general physical and institutional TVET infrastructure for the development of employability skills; creation of joint facilities for research, development of prototype materials and equipment, and preparation of staff for the training of teachers; help mobilise resources for programmes to secure literacy, numeracy, development of communication and information infrastructure and private sectors foster investment in training and increase resources for training through training funds, various incentives for training and learning, e.g. tax rebates, training credits.

Table2(b): Independent Samples t-test Statistics of Mean Responses of Respondents Vis-a-Vis Private sector's Innovative Roles In Improving Training Resources For Effective TVET Delivery Towards Developing Employability Skills During and Post Covid-19 Pandemic (N=139)

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>t-cal</b>	<b>ρ</b>
Managers in Private Sectors	56	4.45	.47	.683	.503
TVET Lecturers	101	4.56	.69		

An independent sample t-test was employed to compare the mean score of managers in private sectors and lecturers in TVET institutions regarding innovative roles in improving training resources for effective delivery of TVET programmes towards developing graduates

employability skills during and post COVID-19 pandemic. As shown in Table 2(b), respondents in private sectors had a mean score of 4.45 lower than TVET lecturers, with a mean score of 4.56. However, no statistically significant difference exists between lecturers in TVET institutions and managers in private sectors mean score on private sector's innovative roles in improving training resources for effective delivery of TVET programs towards developing employability skills of graduates ( $t=.683, > r.05$ ). with this result, the hypothesis of no significance was accepted.

Table 3(a): TVET Institution's Roles Enhance Effective Tvet Delivery Towards Developing Employability Skills of Graduates During and Post COVID-19 Pandemic (N=139)

S/N	Item Statement	Mean	SD	Remarks
1	Training institutions responsible for the pedagogical aspect of teacher preparation employ experienced teachers in TVET and possess qualifications in the occupational area.	4.34	.63	Agreed
2	Improve workshops and laboratories activities in educational institutions to instil the culture of maintenance and respect for safety standards	4.51	.50	Agreed
3	TVET emphasised instruction in safe and environmentally sound procedures relative to the materials and equipment used in different occupational areas	4.59	.49	Agreed
4	Personnel involved in the preparation of TVE teachers should be actively engaged in technical research and analyses of work opportunities in various occupational areas.	4.34	.47	Agreed
5	TVET institutions offer possibilities for personal development and professional advancement through flexibility in administration and curriculum design to facilitate smooth lifelong learning.	4.39	.63	Agreed
6	TVET institutions make greater efforts to invest in ICT and develop ICT - capacity for teaching rather than simply adding computers to existing ones.	4.53	.49	Agreed
7	Encourage updating and renewal of knowledge and practical abilities in the chosen occupational field.	4.46	.50	Agreed
8	TVET ensure that all necessary information concerning workplace and career opportunities is available, and actively disseminated using all forms of communication	4.28	.45	Agreed
9	Machines and equipment used in workshops in TVET institutions be geared to the needs of the workplace, and should model it as closely as possible.	4.43	.49	Agreed



10	Classroom management, teaching and evaluating methods appropriate to the subjects/fields of students' work be adopted.	4.35	.48	Agreed
<b>Overall mean</b>		<b>4.13</b>	<b>1.05</b>	

Table 3(a) present the mean and standard deviation of managers in private sectors and TVET lecturers regarding TVET Institution's roles to enhance effective TVET delivery towards developing employability skills of graduates during and post COVID-19 Pandemic. A close look at the mean score of each item shows that respondents agreed with all the TVET institutions roles in developing graduates employability skills. Among which includes: workshops and laboratories in educational institutions to instil the culture of maintenance and respect for safety standards; personnel involved in the preparation of TVE teachers should actively engage in technical research and analyses of work opportunities in various occupational areas; machines and equipment used in workshops in TVET institutions be geared to the needs of the workplace and should stimulate it as closely as possible, and TVET institutions make efforts to invest in ICT and develop ICT capacity for teaching rather than simply adding computers to existing ones. The items on the scale had mean values ranging from 4.28 to 4.69, above the cut-off point of 3.50.

Table 3(b): Independent Samples t-test Statistics of Mean Responses of Respondents Regarding TVET Institution's Roles Enhance Effective Developing Employability Skills of Graduates During and Post COVID-19 Pandemic (N=97)

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>t-cal</b>	<b>ρ</b>
Female Lecturers	22	4.12	.49	.596	.401
Male Lecturers	75	4.45	.50		

Determine gender differences regarding TVET institutions' role in developing graduates employability skills during and after the post-COVID-19 pandemic, an independent sample t-test was conducted to compare the mean score of female and male TVET lecturers. The independent sample t-test scores are presented in Table 3b. As seen in Table 3b, male lecturers had relatively mean scores than female lecturers. However, this difference in their mean score was not statistically significant between the female and male lecturers on TVET institution's role towards enhancing developing graduates employability skills during and post COVID-19 pandemic ( $t=.596, r>.05$ ). The result shows that gender does not influence female and male lecturers in TVET institutions.

The proposing training resources required for effective delivery of TVET programs towards developing employability skills of graduates during and post COVID19 pandemic should be made available with the collaborative support of private sectors includes the provision of internet facilities in educational institutions; alternative energy to power technology tools; educational radio and television broadcast; computer-based media. Online library; projectors; CCTV; interactive multimedia and digital textbook.

The private sector's innovative roles in improving training resources for effective TVET delivery towards developing employability skills during and post COVID-19 pandemic will involve partnership with TVET institutions to collectively draft curricula and courses of study, designed to meet skill demand from graduates will lessen the mismatches between the outcomes of the technology education programmes and labour market.

The proposed TVET institution's roles in enhancing effective TVET delivery towards developing graduates employability skills during and post COVID19 pandemic include collectively drafting curricula and courses of study to meet the demand of clients to lessen the mismatches between the outcomes of the technical education programmes and labour market.

The first research question and null hypothesis sought to find out if significant differences exist between responses of managers in the private sector and TVET lecturers regarding innovative training resources required for effective delivery of TVET programs to develop employability skills of graduates during and post COVID19 pandemic. Consequently, the null hypothesis was accepted ( $t=.333$   $r > .05$ ). No significant difference exists between the mean responses of managers in the private sector and TVET lecturers regarding innovative training resources required. The findings in respect of hypothesis support previous studies UNESCO & ILO (2020); UNICEF (2020); IIEP-UNESCO (2020) who emphasised that training resources such as broadcasting radio and television, online learning resources, digital infrastructures, data accessibility for institutions, a multimedia library and suitable learning environments are essential to support quality TVET programmes that prepare young people with the employability skills they need to succeed at work. Furthermore, Virginia (2020) stressed that TVET institutions require support for low-tech, offline resources facilitated by teachers and institutions that offer students the opportunity to develop the skills, knowledge and experiences they need for employment.

The second research hypothesis sought if a difference exists between the mean responses of managers in the private sector and TVET lecturers vis-a-vis the private sector's innovative roles in improving effective TVET delivery towards developing graduates employability skills during and post COVID-19 pandemic was accepted ( $t=.683$ ,  $r > .05$ ). The findings in respect to hypothesis two agreed with the previous studies of Virginia (2020) and IIEP-UNESCO (2020) declare that TVET institutions need to create roles for private sectors (employers) in supporting skills development through improving the connectivity of teachers and students. Furthermore, the findings are in agreement with UNEVOC-UNESCO (2016) that stressed that the private sector could help identify skills demand, drafts the curriculum, deliver monitoring and evaluation activities, as well as manage public training institutions.

Also, IIEP-UNESCO (2020) and Mohamed (2021) observed that guest workshops (online, radio channels, or sharing short videos through WhatsApp), visiting industries (when it becomes possible), mentoring and curriculum support will bring alignment between the young people emerging from TVET institutions and types of skills and experiences sought for in recruits. IIEPUNESCO stressed the need for joint and proactive effort from the government, international education and NGO community to ensure graduates are adequately trained. UNESCO & ILO (2012) stressed that workers' employability is sustained in an economic environment where job growth thrive and rewards individual and collective investments in human resources and development. TVET institutions in Nigeria will require leadership, new partnerships and investment to continue supporting effective learning. The t-test analysis between mean responses of managers in the private sector and TVET lecturers concerning TVET institution's innovative roles in enhancing effective TVET delivery towards developing employability skills of graduates during and post COVID-19 pandemic did not differ significantly. Hence the third hypothesis was accepted ( $t=.596$ ,  $r > .05$ ).

The findings in respect to hypothesis three agreed with Thompson (2016); Virginia (2020) ILO-UNESCO (2020) that observed that TVET lecturers would need support and training to adapt and offer quality and effective teaching and learning, and this will facilitate and encourage self-directed learning and peer-to-peer learning that produce a better learning experience, learning outcomes and promote more independence, reflection and self-evaluation. Furthermore, the

findings are in agreement with Robert (2021) and Stephen (2012). They encourage lecturers and instructors to find and adopt new learning environments where students have the confidence to take ownership of their education and learn wherever they are. Students can use their enterprise skills to develop new business ideas. This resourceful approach to learning, according to Robert, also has benefits in terms of developing applied personal skills, including problem-solving, teamwork, taking the initiative and critical thinking, all of which are critical to developing their employability skills.

## **CONCLUSION**

Based on the findings, the subsequent discussion; the conclusion made that innovative training resources are essential for effective delivery of TVET programmes to develop employability skills of graduates during and post COVID19 pandemic among others are the provision of internet facilities in educational institutions; alternative energy to power technology tools; educational radio and television broadcast; computer-based media. Online library; projectors; CCTV; interactive multimedia and digital textbook. TVET institutions require partnership with private sectors (employers) to assist in employability skills development through improving the connectivity of teachers and students; support teachers and instructors to adapt pedagogies and develop new teaching and learning tools, identify skills demand, drafts into curricula development, deliver monitoring and evaluation activities, managing public training institutions. TVET lecturers should adopt new pedagogies learning environments, where students are given the confidence to take ownership of their education and learn wherever they are, and TVET lecturers actively engage in technical research and analyses of work opportunities in occupational areas.

Employers all over the world seek to employ graduates with employability skills; it is attained through effective public-private partnerships in the provision of resources that facilitate the development of a workforce with employability skills. Study results are helpful for the private sectors, policymakers/curriculum planners, TVET institutions, students, and employers of labour. The findings imply private sectors as it revealed those areas that required their involvement in developing employability skills such as offering guest mentoring, provision of online resources, supportive curriculum, among others; the supportive and motivating learning resources is a factor in promoting graduate employability. The finding also has implications for curriculum planners as it revealed skill needed areas by industries and integrated those contents into the training of graduates towards developing employability; training will have an effect when the curriculum contents include meaningful topics/contents that reflect industries' skill needs, students' personal goals and interests. The implication for TVET institutions is that they specifically and make provision of facilities that will positively impact employability skills; institutions must use relevant training resources and more suitable learning strategies to make training helpful to students and motivate them to develop the right skills and knowledge. The implication for TVET graduates is that it assists them in acquiring skills required in securing and advancing in their chosen career; the employers of labour also will have graduates that fit for work that will contribute to the growth of the organisation. The implication for TVET teachers is to embrace new pedagogical approaches and develop a new curriculum that goes beyond the basics of what is currently available most, at present when deadly and infectious disease COVID-19 has deeply affected the global economy.

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