

**POLICY CHANGE IMPLEMENTATION STRATEGIES AND GOAL ACHIEVEMENT IN
TECHNICAL COLLEGES IN SOUTH- WEST, NIGERIA**

BY

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**A THESIS SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL
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PHILOSOPHY (Ph. D) IN EDUCATION MANAGEMENT**

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DECLARATION

I ADEWALE, Sulaimon declare that this study entitled POLICY CHANGE IMPLEMENTATION STRATEGIES AND GOAL ACHIEVEMENT IN TECHNICAL COLLEGES IN SOUTH-WEST, NIGERIA, is as a result of my research efforts carried out in the department of educational management, university of Ilorin under the supervision of Professor N.Y.S Ijaiya.

I further wish to declare that, to the best of my knowledge, it comprised no material formerly published or written by another person nor material which has been accepted for the award of any other degree or diploma of any other university or other institute of higher learning, except where due acknowledgement has been made in the text.

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CERTIFICATION

This is to certify that this study was carried out by ADEWALE, Sulaimon (13/68OG001) and has been read and approved as having met part of the requirements for the award of the degree of Doctor of Philosophy in the Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, Nigeria.

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DEDICATION

Verily my prayer, my sacrifice, my living and my dying are for Allah, the Lord of the entire universe. This work is dedicated to Allah.

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ABSTRACT

Education policy change is intended to improve the education system. The Technical and Vocational Education and Training (TVET) policy as adopted by the federal ministry of education in Nigeria is structured on three major goals believed to ameliorate economic challenges. The accomplishment of these however, depends on the effectiveness of its policy implementation strategies. This study therefore investigated policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria. The objectives were to examine: (i) the level of principals' and teachers' awareness of TVET policy changes; (ii) principals' adoption of TVET policy implementation strategies as stated in policy documents; (iii) the resource availability to develop skills in technical colleges; (iv) the extent of principals' achievement of TVET goals in technical colleges in South-west Nigeria; and (v) the relationship between policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria.

The research was a correlational survey type. It adopted a multi-stage sampling technique. Stratified sampling technique was used to select state-owned technical colleges. Simple random sampling technique was then used to select four out of the six states in South-west, Nigeria. Respondents in the technical colleges were classified as administrative (principals and vice-principals) and instructional (teachers). Adopting census method, all the 21 principals, 47 vice-principals and 626 teachers were sampled. Six researcher-designed instruments were used for data collection. These were two content-validated questionnaires entitled Policy Change Implementation Strategies Questionnaire (PCISQ), Goal Achievement in TVET Questionnaire (GATVETQ) with reliability coefficients of 0.68 and 0.81 respectively; Students' Academic Performance Inventory in NABTEB, Resource Availability Checklist (RAC), Skills Acquisition Observation Checklist (SAOC) and unstructured interview. Percentage, means and rank order were used to answer the research questions, while linear Multiple Regression Analysis and Pearson's Product Moment Correlation statistics were used to test the hypotheses at 0.05 significance level.

The findings of the study were that:

- i) principals (96 %) and teachers (98.8 %) were highly aware of policy changes in TVET;
- ii) principals did not fully adopt TVET policy implementation strategies as stated in the policy document (funding = 1.96; counselling = 2.19; staff capacity building = 2.47);
- iii) resources were available but were inadequate to train students to acquire relevant skills in most colleges (180, 47%).
- iv) TVET goals have not been fully achieved in technical colleges in South-west, Nigeria (manpower production = 52%, entrepreneurial skills development = 33%, practical skills acquisition = 62.3%); and
- v) there was a significant relationship between policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria ($F(6,564) = 25.947$ $p < .005$, .217).

The study concluded that inability to fully adopt TVET policy change implementation strategies was due to poor funding to acquire adequate training resources which was the major reason why TVET goals have not been fully achieved in technical colleges. Based on the findings, it was recommended, that principals should make efforts to reach out to the alumni, public-spirited philanthropists, Government, and Non-governmental organisations to assist in the provision of training resources for students.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Education is acknowledged universally as an essential means for sustainable manpower development for nation building. Education policy change is intended to improve the education system. The Technical and Vocational Education and Training (TVET) policy as adopted by the Federal Ministry of Education (FME) in Nigeria is structured on three major goals through which economic challenges can be ameliorated. The success of this rests on the effectiveness of its policy implementation strategies. Education is described as an unavoidable device for augmenting economic progress and ensuring nation building (Ogungbemi, 2012). TVET is the pillar of all round development, serving as the rudiment for literacy, skills acquisition, technological improvement and the capacity to control the natural resources of the state.

There was a time in the Nigerian education history when importance was attached to volumes of book a student was able to read, with insignificant attention on the competence to engage the hand (vocational education). This may have made Fafunwa (1974) to describe the British education system inherited by its colonies which Nigeria is inclusive as too bookish. It was an arrangement that displaced the pre-colonial indigenous education which made individual to be self-dependent. Since a nation's education sector is the tap root for other spheres of the economy to stem from.

A microscopic glance at the Nigerian environment reveals that some meaningful changes have occurred within the last five decades in all facets of it life, especially education. This is conspicuously available in the National Policy on Education (NPE) document which described education as the instrument per excellence for engendering national development (Federal

Republic of Nigeria, FRN, 2013). Awareness of this informs the necessity to commence reforms targeted at general development of the country, and making the education sector a pillar (Adamu, 2013). These reforms came with policies serving as guidelines to education goals achievement. The NPE being a significant outcome of the reforms according to Imam (2012) has also sailed through colonial and post-colonial stages and its structures have not fully attained uniformity.

TVET being a prominent education sub-sectors spelt out by the education reforms as an economic improver and indicator of change for nation building has also beckoned for a considerable attention in Nigeria. Today, operation of TVET is facing relentless and rapid change worldwide. The belief is that nothing is permanent except change. It is thus being redefined to serve many purposes among which are manpower production and skills development. In another dimension to the justification for this issue of change in the manner in which TVET works in Nigeria, Ajetomobi (Adeagbo & Abiola, 2015) have rightly noted that the world has moved the era of knowledge economy and manpower development which are critical in most developed and developing economies that are currently experiencing germane transformations and period of fast development. Men, being the vibrant wealth accumulator, natural resources users, socio-economic, political and nation builders. TVET is the sector that have been harnessed by the advanced countries in general and the Asian tigers (These are Hong Kong, Singapore, South-Korea and Taiwan) that experienced a season of exceptional growth from 1965 to 1995 in particular.

TVET was incorporated into the Nigeria education system because of the need to produce resourceful and skilled manpower, and the discovery of inalienable roles of manpower in the growing of a country's economy. Osuji (2004) established inadequate technically trained manpower who possessed relevant skills as a hindrance to successful industrial growth of Nigeria. It is an uncontestable fact that TVET is concerned with making of technology compliant

manpower who are creative and skillful to transform the country in all spheres especially in technology within and without formal education settings.

It is thus worthy of honour for TVET fortify its linkage with world of work so as to meet up with changing requirement in as much the global perspectives on education is rapidly changing. Similarly Abubakar (2011) advised that TVET should be made more relevant to other segments of the society to produce technically skilled workers required for socio-economic development. It is indeed an indispensable ingredient needed for national unity, stability and development, for it is not only individual citizen centred by making them to be self-reliant, but also make individual contributes effectively towards the upliftment of his immediate community and generality of the nation.

Furthermore, TVET is a genuine national development strategy in industrialised societies due to its impact on efficiency and economic development (Dike, 2009). When there is persistent economic, social and technological change, skills and knowledge become quickly out-of-date and therefore difficult to compete globally in economic and technological circles. Therefore, those that are yet to gain from a structured training must be provide chance to acquire skills that will guarantee them a second chance in life and at work (Ishaq & Muhammad, 2002). TVET is an educational sub-sector focused on providing individual with learning opportunities throughout their lives to secure a place in the ever changing world of technology adaptable skills. Perhaps, This may be one of the reasons why the International Labour Organisation (ILO) focuses on training for employment, decent work and welfare of workers in the context of global employment agenda. So, TVET is considered a very useful aspect of education system owing to the occupation content it offers the trainees. However, it is quite unfortunate that for years and until very recent time, Nigeria has not given the desired attention to TVET system to make the

sector contribute effectively towards national human capacity building for a productive workforce.

To this end, the Nigeria TVET goals as stated in the NPE still include the provision of trained manpower in the applied sciences, technology and business especially at craft, advanced craft and technical level of the education system would command great attention; provide the technical knowledge and vocational skills necessary for agricultural, commerce and economic development; and give training and impart the necessary skills to individual who shall be self-reliant economically (FRN, 2013). So, TVET remained a purposeful continuous learning task undertaken with the purpose of enhancing knowledge, skills and competence. The Asian tigers got to where they found themselves today is the outcome of their painstaking effort on improving and repositioning TVET system and sincere policy implementation.

As an endeavour towards the realisation of the aforementioned dream and to acquire the requirement of the competitive technology world, it was reported by Biose (Paiko, 2013) that during the 4th national development plan period (1981-1985), both the government at the center and the regions trained teachers of technology abroad. This was later halted and domesticated due to financial imbroglio, which made manpower production to still remain a big challenge to Nigeria. Hence, the investigation into how the policy on manpower production cum upgrading is being implemented. Similarly, ILO recommended that developing core work skills and ensuring lifelong learning skills for all must be prioritised by all countries (Amadu, 2004). As a complimentary effort, the Federal Government of Nigeria (FGN) also states that teacher education will always recognise changes in teaching strategy and curriculum, thus, teachers will be consistently equipped with the new innovations in their profession (FRN, 2013). Hence, more advocacy for teachers' continuous capacity building must be embarked upon. With all these commitments, programmes and NPE stipulation however, Osam (2013) asserted that, success rate

is still very low as the targets for which human capacity building policies were made have not met due to poor employment of the implementation strategies.

Specifically, the FME blue-print and master plan (2001-2010) on TVET in Nigeria noted the following as the pertinent objectives: to produce semi-skilled and technical manpower necessary to restore, revitalise, energise, operate and sustain the national economy and substantially reduce unemployment; provide TVET that is broad based in nature, accommodating all at all periods of life without discriminating or bias on the basis of sex, intellectual tenets and aptitude physical disabilities, culture, religion or ideology, to reform the content of TVET to make it more answering to the socio-economic needs of the country; serve as a means of national defense against poverty brought by lack of job skills; harmonise and inter-relate with industry and the workforce market in terms of the resources for training as well as occupational and production standard; raise and sustain a generation of job creators instead of job seekers; enhance access to TVET programmes at all cadres of the system; ensure equity of access, participation and completion rate.

However, the contributions of TVET have not been felt in Nigeria despite the effort of the successive Nigerian governments. Administrators' misconception of the what of TVET, inadequate political will on of government part, relegation of its graduates in the society, rapid rate of technological changes, poor funding and poor motivation for the teachers are some of adfrgment raised for it ineffectiveness.

Going by the observed anomalies, and the reviewed objectives, many reforms have been introduced to TVET. The NPE which could be regarded as a major landmark of educational development (Imam, 2012; Okolocha, 2012; Olaniyonu & Adekoya, 1998) has been reviewed six different times to make allowance for some policy innovations and changes. The policy made allowance for an integrated secondary education in which more subjects were readily obtainable

to students as against the old system where liberal arts education which produced people who could only read, write, keep records and be willingly to serve the colonial masters in whatever capacity they deemed fit. The document made provision for pre-vocational subjects at the Junior Secondary School (JSS) level to guarantee the laying of a dependable foundation for senior secondary education, while TVET subjects are meant for Senior Secondary School (SSS) level.

The first noticeable policy change in TVET is the curriculum structuring. Generally, it is no controversy that the Nigeria education system right from the independence has been witnessing curricular restructuring. Until 2008 when the country's system was changed to 9-3-4 with 9 years basic education covering from primary school to JSS; 3 years in SSS and; 4 years in the university (Okolocha, 2012), it was a 6-3-3-4 arrangement which was operationally brought into the nation's education system in 1982 (FRN, 1981; 1998; Ibukun & Aboluwodi, 2010) to correct the irrelevant nature of the education policy inherited from the Europeans. The nucleus of the restructuring was to make citizens to be autonomous. This is proven with the inclusion of pre-vocational and vocational education curricular. The arrangement is now 1-9-3-4 (FRN, 2013) introduced to equip students whose academic abilities cannot carry them beyond junior secondary/ basic education level to fit into appropriate trade or technical colleges. The proposals of the document, if well implemented will engender the springing up of small scale industries (Olaniyonu & Adekoya, 1998) and amelioration of unemployment. It must also be stressed here that the document proposal on TVET is to produce entrepreneurial skillful manpower that will self-reliant. This goal has remained the same in all editions of the policy, but its perfect attainment still remain a theme of research to educational researchers which this work will be covering.

Curriculum change is a policy change which evolved due to system restructuring. According Iyengar, Haein, and Balaraba (2014) curriculum content must be learners centered to make learning applicable. Among the changes brought into the county's education system is what

Adeyonu and Carim-Sanni(2015) tagged “vocalization of the curriculum”. The curriculum content now adaptable to demand of labour market. To actualise this continual policy change, Olaniyonu and Adekoya (1998) affirmed that the FGN undertook a massive importation of technical and science equipment for secondary and technical colleges for a meaningful teaching of the new subjects. Also, Umunadi (2013) noted that new knowledge and new technologies are emerging, rendering some out-of-date with great impact on the trainees, the technical education instructors, the society and the entire education industry. TVET curriculum innovation and change pose new demand on the technical colleges’ stakeholders (principals and teachers). The Nigerian government reviewed post-primary education curriculum to include TVET knowledge for students who may choose to end their studies at any time with the mandatory nine years schooling (Paiko, 2013). The new secondary school curriculum also proposed at least a TVET subject compulsory at SSS. The curriculum according to the Nigeria Education Research and Development Council (NERDC) (2008) is planned to make the basic education more strong and solid, and actualise federal government agenda especially in the aspect of human capacity development which is the foremost goal of TVET (Omosewo, Akanmu, & Asebiomo, 2013). However, Adamu (2013) reported that most private TVET providers still operate in an uncontrolled manner with very small or no governmental support or regulation.

The NPE document has now prescribed that each trade curriculum shall comprise of four components; these are general education, theory and related course, workshop practice, and industrial training/ production work, small business management and entrepreneurial training (FRN, 2013). Moreover, to make this curriculum provision effective, the policy prescribed the size of practical class to be 1:20 teacher-student ratio for effective practical work and skills training.

In addition, it was approved among others at the 60th National Council on Education (NCE) assembly in Ogun state between 3rd and 7th November, 2014 that the draft TVET curriculum should be voluntarily taken by the States, Federal Capital Territory (FCT) and other stakeholders. Also, that uniform standards for the non-formal skills acquisition centers to enable them key into the existing examining body for assessment and award of certificate. Furthermore, the conduct of national advocacy to popularise TVET in Nigeria, while education ministries should as well adhere strictly to the admission policy of 30:70 ratio for arts/ science and technical respectively (Onjewu, 2007; FRN, 2014). It can therefore be reiterated that all tiers of Nigeria education systems are undergoing from head to toes changes (Okolocha, 2012).

Similarly, the formation of entrepreneurship education unit in technical colleges has made it compulsory for every learner to be entrepreneurially informed (FRN, 2013). This, if well implemented will serve as manumitting tool from the shackle of unemployment and poverty. Entrepreneurship education as defined by European Commission (Anaele, Adelakun, Dem, & Barfa, 2014) is a training given to awaken sense of initiatives of individual and to pragmatise ideas. This was done due to high unemployment statistics of Nigeria. According to Omosewo, Akanmu, and Asebiomo (2013) unemployment is due to continuous production of graduates by academic institutions mostly regarded as unemployable by the industries because of lack of requisite innovative skills, more so, Anaele, Adelakun, Dem, and Barfa (2014) said that government have categorically stated that it cannot provide employment for all unemployed citizens. Consequently, the youth unemployment statistic has grown from 41 percent in 2009 to 50 percent in 2012-2013 and is growing at rate 16 % per annum in Nigeria and 18.8 % in 2017 (The Ford Foundation, 2014; and NBS, 2017).

Entrepreneurship education helps to provide graduates with skills that equip them to be creatively innovative in spotting business opportunities. It helps to normalise the mismatch in

training and employers requirements caused by outdated curriculum used in training and preparing the needed qualified human resources. The FGN stressed that to pursue excellence in skills acquisition, actualise the desire for job creation, and poverty reduction, National Economic Empowerment and Development Strategy (NEEDS) was introduced (F R N, 2005). Similarly, Oleabhiye, Ugbabor, & Erhirhie (2012) stressed more that the programme is institutionalised to enable graduates acquire sufficient technical skills to be self-employed.

Furthermore, the institutionalisation of educational agencies to see into the affairs of TVET is another policy change area that have occurred and cannot be underestimated. In 1977 the FGN set up National Board for Technical Education (NBTE) with the mandate of handling all TVET programmes happening outside the university education. In addendum to providing minimum standardised curricular, the board manages and regulates, through an accreditation process, the courses offered by technical institutions at secondary and post-secondary levels. The policy also made provision for the method of assessment which is built on continuous assessment and examination handled by the National Business and Technical Examination Board (NABTEB). The board which was enacted by decree no. 11 of January 7th, 1977 was empowered to see into the affairs of conducting examination for TVET institution at post-primary school levels of TVET by federal government. This system provides adequate measurement and evaluation of students which is not limited to one particular test. It was established to organise national examinations for candidates presented by technical colleges and award certificates. This according to Olaniyonu and Adekoya (1998) discouraged the spirit of procrastination and truancy in trainees.

Recently and in pursuit of the international TVET standard, a National Vocational Qualification Framework (NVQF) was also established to provide mechanism for awarding qualifications based on achievement of predetermined objectives. The framework is for the acknowledgement of the skills and nous acquired on the job, structured or unstructured training

organisations, based on nationally approved assessment and certification system (NBTE, 2011). This represents a significant step towards rendering the TVET more coherent and answerable to the demand for competencies as expressed by enterprises and professional organisations. In addendum, the FGN recently approved the Vocational Enterprise Institutions (VEIs) and Innovation Enterprise Institutions (IEIs) which are private certified institutions established to provide a veritable alternative route to tertiary education (Paiko, 2013). NVQF is designed to enable TVET providers, parents, trainees and employers comprehend the competency level and achievement and project for the future (British Council and UKTI, 2012). The first official step to integrate NVQF in Nigeria's skills development system according to Abubakar, Kazaure, and Yusuf (2013) began in 2004 via collaboration formed by NBTE and British council. Thereafter, a workshop was organised and as a follow up to this partnership, a learning tour was embarked upon to United Kingdom, Korea and Malaysia to study how the framework is operated. The similitude of the Nigerian qualification framework is like the UK with a unified regulatory arrangement. It is a working tool embraced by many nation-states to classify competence level from the lowest to the highest echelon of every profession (Abubakar, Kazaure, & Yusuf, 2013) . Some efforts have recently been put forward to lift up this framework by the FGN. Among these endeavours were the inauguration of a steering committee in December, 2010, training of execution team on the procedure of assessment and approval of the intended six-levels NVQF cum incorporation in the public service scheme.

Advocacy is another area where TVET policy is not overemphasized. All government tiers have now taken awareness/ publicity of the usefulness of TVET seriously. This account for organising of formal and informal empowerment skills acquisition programmes by government and non-governmental organisations. According to Philip and Okon (2014) advocacy is a sincere attempt and series of action embarked upon to popularise and back a cause.

Another salient thing in the document is the students' industrial experience to be gained mostly outside the college premises. To motivate the learners, financial incentive is set aside for the participants through Industrial Training Fund (ITF). Furthermore, money is the will of evangelism, as such policies on funding of TVET sub-sector keep changing with the intention of repositioning it to be in tandem with the world operational standard. The FME via department of science and technology education carried out the mandate of appraising equipment and facilities in the Federal TVET colleges and suggesting suitable intervention. The finding therefore revealed insufficiency in equipment and facilities in technical colleges (FME, 2016). This report cum the need for Nigeria to achieve the Millennium Development Goals (MDG) now Sustainable Development Goals (SDG) and vision 20:2020 has also engendered making of policies and reforms in education sector, especially TVET sub-sector in the nation. All the reforms of the successive regimes in Nigeria according to Adamu (2013) are directed at funding the programme and developing the youths because one way to judge a nation's success is how the youths are managed.

In addendum, the FGN in 2005 came up with the Skills Training and Vocational Education project (STVE) which was sponsored with the loan from African Development Fund (ADF) (FME, 2005). This was a poverty reduction effort structured in the NEEDS. The project sought to have created seven million jobs by the year 2007 through empowerment of the citizens after they must acquire entrepreneurial skills. As at year 2010 nothing was available to show for it when the project was evaluated. From the fore going, it could therefore be said that policy changes in education are intended to make the system better, but successful implementation still remain their bane in Nigeria. However, the extent to which these innovations in policy are actually implemented cannot be sustained.

TVET is an expensive social service which requires financial provision especially from government for meaningful programme implementation. Having realised this, the NPE stipulated that relevant sectorial bodies not narrowed to the Education Tax Fund (ETF) should be created to respond to the funding needs of education (FRN, 2013). The school administrators can also device funding model internally, for TVET needs more funding (Iteku, 2015). Also, The FGN, having recognised the important role of enabling environment in facilitating teaching-learning activities especially in technical colleges gave a guideline that training facilities shall continue to be expanded in response to pressing societal needs and made progressively accessible to afford individual a flexible multi-dimensional choice (FRN, 2004). Some of the south-west states in Nigeria have therefore embarked on the repairing of schools and refurbishing of infrastructure. For example, the Fashola administration in Lagos state (2007-2015) ensured that all technical colleges were rebuilt and remodeled to make it attractive and conducive for learning.

TVET in Osun state is of different arrangement. The successive regimes of the state, particularly Bisi Akande's regime made each of the state technical colleges to specialise in one area or the other, such that if a student is to learn agricultural implements as a course, what other departments are doing will not get him distracted.

Despite these adjustments in international and national policies on education, goals of education are yet to be realised, especially TVET sub-sectors which ought to drive the nation's economy will be developed. Complaints still come from all stakeholders (parents, policy makers, instructional teachers and employers of labours worldwide and Nigeria in particulars. The lamentations are unemployment, half-baked graduates, security threat, and accumulated debts on the society cum individuals and in fact, importation based nation that cannot even produce tooth pick for local consumption, let alone for international use.

Therefore, x-raying the implementation strategies of TVET policies as suggested by the NPE document and how far they are being executed in Nigeria's TVET institutions cannot be ruled out. The gap between policies and goal attainment according to Okoroma (2006) are caused by inadequate implementation. This study is not concerned with educational policies implementation strategies in general but an aspect which is the TVET

Successful planning, deployment, utilisation and policy implementation for TVET goals achievement requires dedication, visionary leadership, management and effective collaboration. One of the challenges that Nigerian TVET face is policy somersault and choice of effective institutionalised coping cum implementation strategies by school administrators. The principals' duty in ensuring TVET goals through execution of policy statement cannot be under estimated. Leithwood (Huen, Leithwood, & Jantzi, 2002) transformational leadership model described principals as being directions setting, human capacity developer of the citadel of learning. The principal is the key that opens the doors to policy implementation at secondary schools and can therefore make or mar the efficiency and effectiveness of all educational programmes at this level. Thus, competent, pedagogically, professionally and visionary school administrator is the bedrock upon which policies, reforms and goals of TVET will be laid for attainment.

Principals engage in the implementation of curriculum reforms everyday of their colleges' leadership life as they initiate curriculum changes and implement decisions on educational inventions improvement. However, Olibie (2010) cautioned that principal is not supposed to be referred to as the extraordinarily capable in educational matters or the superior of the teachers. Instead, the curriculum and instructional leadership roles of the principal is more appropriately seen as facilitator of a process of collaborative investigation, problem-solving and school development (Reitzug, 1997). Principals set directions by creating a shared vision, ensuring unanimity about goals and priorities and creating high behavioural objectives. In addition,

transformational leaders redesign organisations by creating and maintaining shared decision-making structures and procedures and building a relationship with parents and wider community (Huen, Leithwood, & Jantzi, 2002). This is built on the principle that the foremost educational management function which involves assurance that sound goals, policies, and objectives are formulated in a given school, and that techniques are determined for the attainment of these goals (Okutu, Chumba, Saina, & Kurgat, 2011). It is the principal's duty to see that policies and college objectives are clearly written and well known to the stakeholders (the teachers, students, parents, and others). In fact, the principal as an administrative leader in according to Momoh and Osagibare (2015) must tirelessly work to be sure that quality is guaranteed for trainees and their future employer in all ramification.

To facilitate policy implementation, a more systematic and concerted efforts are needed to ascertain that TVET policies are communicated to stakeholders for fruitful implementation strategies to be employed as prescribed by policy makers. These implementation strategies are creation of awareness among the teachers, in-service programmes/ capacity building, localisation of the strategies to match the demands of each area, public-private partnership, students' career counselling, and publicity and advocacy.

Creating awareness is an inevitable strategy school administrators must know and employ if goals of TVET must be actualised within a short time. With more and more expectations from TVET institutions, information is a critical first step in consensus generation and engagement. One may even be surprised that most TVET instructional teachers may not even have copies of the NPE and TVET curriculum, let alone reading it to know their responsibilities. Adebowale and Dare (2009) recommended that teachers awareness level of any education reforms and policies need more improvement in Nigeria as this will affect its implementation.

Staff capacity building is a strategy that keeps appearing in the document as government policies on TVET system changes. The NPE recognised that facilitators (the instructional teachers) must be kept updated of latest development which may have impact on education, specifically TVET. Hence, section 8B (74&75) stipulated that teachers shall be consistently informed of innovations in their field and that in-service training shall take care of all inadequacies as part of continuing teacher education (FRN, 2013). Despite the above policy, many technology institutions graduates in Nigeria are still considered unemployable graduates. A teacher gap analysis was carried out as part of education sector status review in 2003, the analyses showed that technical colleges lack adequate numbers of teachers, some do not have vocational teachers at all (FME, 2005). The master plan for TVET recognised this challenge and has indicated an action plan, which is the training of 20,000 teachers (4,000 annually) for TVET by 2010 (FME, 2005). It was pointed out by Abolade and Yusuf (2005) that majority of tutors in all technology institutions in Nigeria lack competence in the incorporation of ICTs in their instruction. This may be the reason why some selected school principals were trained abroad by Lagos state government in 2009, (Lagos State Technical and Vocational Education Board, LASTVEB, 2010) to upgrade their administrative, technological and academic prowess. Stressing more on this, Iteku (2015) commented that the government, having realised the germane roles of technology teacher, therefore, placed high premium on the training of the technology teachers both within and outside through scholarship awards and compulsory acquisition of ICT knowledge.

Furthermore on this staff capacity building as a policy implementation strategy is equipping technical teachers' education programme. Adewuyi (Ogunyinka, Okeke, & Adedoyin, 2015) suggested that what structurally becomes important in achieving the nation's quest for productive society, balance cum citizens who are self-sufficient economically, depends on

establishing a qualitative teacher education programme. Teachers are essential actualisers of government agenda on technical education. For TVET to triumph, Muyiwa (2015) advised that teachers should be well trained and their welfare should be well taken care. Teachers translate educational programme and policies into realities for the making self-reliant citizens that will grow the economy.

The chronicle of teachers training and certification in Nigeria is traceable to the pre-independence period when the teacher grade III programme was brought into practice to certify pupils' teacher to become paraprofessional teachers for elementary schools (Kolo, 2015). Towards the independence, the grade II teachers' certification training was conceived for enhanced academic, pedagogical and moral psychological training for the making of professional elementary school teachers. In due course, grade I teachers certification programme was introduced and started on trial basis in some selected teachers colleges which later transformed in early 1970s into colleges of education (Ogunyinka, Okeke, & Adedoyin, 2015).

To make teachers training more compliant with the dictum of tripartite components of academic knowledge, pedagogical competence and professional grooming for educating well-grounded professional teachers, grade I was reviewed further to become the Nigeria Certificate in Education (NCE) to run in advanced teachers training colleges. Eventually, it became a policy as the minimum teaching job requirement in Nigeria (FRN, 2013). Teacher education institutions are now confronted with the difficulties of training a new set of tutors to effectively use 21st century instructional gadget in their instructional practices (Ololube, 2007). Despite the increasing clamour to government for paradigm shift from meager to bogus funding of the education sector in the nation, the budgetary share to this germane sector is still dwindling. The situation remains disturbing as infrastructure are distant from being acceptable basically.

Furthermore, Public-private partnership is a vibrant policy implementation strategy to combat the excuse given that education cannot be solely provided and financed by the government. It is generally believed that concrete partnership arrangement between governments owned learning centres and private organisations/ industries will bring about a meaningful and prosperous TVET in Nigeria. Seeing this as an important phenomenon in realising goals of TVET and boosting the economy, the nation's leadership made a policy institutionalising PPP (FRN, 2013). PPP initiative began during the regime of President Obasanjo as part of the public agenda driven. The recent visitation to State-owned technical colleges in Lagos state by the researcher indicates the imprints of private organisations/companies in the institutions. They are in collaboration with the government on facilities provision and human capacity building. Samsung electronics is a living witness. Maigida (2014) noted that this partnership lessen the difficulties of providing infrastructure, hand-on skills and other training delivery. The partnership which is targeted at making the performance of public institutions better, through private investment in cash and kind especially where some tasks can be best performed by private bodies (Ijaiya & Jekayinfa, 2008; Maigida, 2014).

Furthermore, the Lagos state government partnered with the Institute of Technology Education (ITE), Singapore; Messrs Automedic limited, Samsung electronics and Skipper Nigeria limited, among others to provide equipment, facilities and also train staff and students in the state (LASTVEB, 2010). Also, the education ministry joined hands with the computer professionals' registration council of Nigeria to launch an ICT programme which centred on the incorporation of technology into the education system (Nnadozie, 2014).

Similarly, the school administrators must ensure localisation of the strategies as dictated by the needs and demands of each area, and this is vital to the success of TVET goals. Therefore, the school- community relation must be cordial and communication should flow freely. This will

also ensure community participation in using curriculum of TVET. Above all, proper monitoring and scheme evaluation must be a routine activity both within and without. The inspectorate department in the education ministry is known for this duty. The incremental nature of these updated and localised TVET policies underscore the crucial role of leadership in maintaining morale, level of excellence, effectiveness and helping staff at all cadres with sound momentous and rapid change. Those in TVET managerial and leadership positions must find it important that they understand shifting demographics/ students' enrolment, new technologies, the commercialisation of TVET, curriculum innovation with a special place for entrepreneurship studies, the changing relationships among TVET institutions, private industries and governments among others. In the world, there is no atom of controversy that perspectives of people on education is changing. To cope with this changing nature, Abubakar (2011) opined that it is good to develop through life-long education, the relevant skills required for performing jobs. For instance, Nigeria policies on TVET keeps changing due to its romance with the United Nations Educational and Scientific Cultural Organisation (UNESCO) and the need to base its operation on the international standards on technical education. This subscribed to the fact that procedures to be followed in the revision, updating and localisation of the strategies of cannot be ridiculed if it must be in tandem with the nation's aspirations (Hashim & Afeti, 2009).

Students' career counselling service (employment support system) is a professional assistance rendered by a trained counsellor to client, for the client to achieve self-actualisation and fulfill his/ her goals in life (Dada, Ali, Salman, & Isiaka, 2015). This implies that counselling is a means to an end which could also help in realising goals of TVET. To help students satisfy their careers and get good jobs and/ or be self-employed, career development services should be rendered. Nana, et al (n.d) opined that students' choices about their career and education must be guided. However, lack of awareness about job options, wages, market conditions, requirements of

professions and necessary education are major issues facing students with career choices. This is the reason why career counsellor must be up to task to put the TVET students on the right track and achieve their aims.

Capacity development of educational institutions is another strategy echoed by the NPE document. This will enable principals to implement policies on TVET and then make the country realise laudable goals of this important sub-sector of education. Ekpo and Onweh (2012) described Nigeria as possessing efficacious individuals who can change the economic status to a wealthy and successful one. There has however been an ironic twist between the available manpower in Nigeria and economic development level because the appropriate manpower that will ensure the attainment of this development are not produced while the available human resources lack the needed skills to be employable by employers, so retraining of trainers as a policy implementation strategy is vital to goal achievement. Undoubtedly, effective school administration is indispensable today for effective realisation of policy statements (Nwaka, 2010) on capacity development.

Encouragement and inauguration of business club where a resource person would be invited to enlighten and sensitise the students on the advantages of TVET programmes, especially individual field is another germane area of policy implementation strategy devised. This initiative was introduced and launched by Lagos state government in 2012 with different names among which is young entrepreneurs' club. However, the level of using it by the principals in their respective colleges is not encouraging.

Publicity and advocacy of TVET policy is a strategy that if well implemented will create more awareness about the available courses indicating their relevance to the economy and making individual to be self-sufficient. Advocacy is important because many in the community have lost hope in TVET due to unavailability of relevant and well packaged programmes. According to

Yakubu and Mumah (2004) some available course of study are mismatch to the employers demand while some are out of date. The connection between TVET and industries is still weak. The education of a country must strive to get a reliable labour market information, demand and employers' needs; particularly in priority trades and occupations to ensure a productive TVET system (Usman & Tyabo, 2013). Thereafter, this should be brought to the hearing of the masses through effective channels (printed, visual, audio and audio-visual media).

Statement of the Problem

The potency of the nation's economy is inextricably connected to the fortitude of her education system, especially at the time of economic challenges. Nigerian employers need skillful workers, multi-dimensional, creative and goal getters in the world market environs. Consequently, both secondary and post-secondary schools are tirelessly working to produce the supposed manpower required by employers to grow the economy. In spite of the above, it is still worrisome that geometric figure of unemployed graduates from the nation's institutions have created more socio-economic, political and security challenges in Nigeria, which presupposes that goals of establishing of these citadels of learning are not yet achieved particularly through TVET institutions. In fact, it is on record that various regimes have been making concerted efforts to drive home lofty goals of TVET by making policies that will guide and tailor institutions towards the shore of achieving noble goals of TVET.

Researchers have attributed inability to achieve TVET goals to several factors which include policy inconsistency and policy implementation problems. For instance, Osam (2013) and Dike (2013) affirmed that underfunding and poor status of TVET schools and programmes add to the low social acceptability for TVET schools/courses, which discourages parents and youths from patronising the schools let alone it courses. These notwithstanding, research findings have revealed that employment would be created for both skilled and semi-skilled manpower if TVET

is synergised with local technologies (Ezeani, 2014; Ibidapo, 2015; Raimi & Akhuemonkhan, 2014).

Thus, the study centered on policy change implementation strategies adopted by principals in technical colleges and how they affected the achievement of goals in technical colleges in South-west, Nigeria. It also undersaw the difficulties facing the educational administrators (principals) in Nigeria technical colleges in identifying and implementing occurring changes to policy in leading and providing TVET at the secondary school level, what types of strategies are employed in implementing all the identified policy changes, which ones are common and which ones are effective among the action plan devised to get those specified objectives and goals achieved.

Purpose of the Study

The main purpose of this study was to examine policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria. Specifically, the objectives of this study were to:

1. determine the level of principals' and teachers' awareness of policy changes as regards TVET South-west Nigeria.
2. examine the principals' adoption of TVET policy implementation strategies as stated in policy change documents.
3. determine the extent of principals' achievement of TVET goals in technical colleges in South-west Nigeria.
4. determine the extent to which students' skills were developed in technical colleges in South-west, Nigeria as a TVET goal.

5. determine the relationship between the awareness of the strategies and the achievement of TVET goals
6. establish the differences between principals' and teachers' perception of TVET policy change implementation strategies in South-west technical colleges.
7. identify the specific policy change implementation strategies adapted by principals in TVET in South-west Nigeria.
8. determine the availability of resources to achieve TVET goal on manpower production in technical colleges in South-west Nigeria.
9. examine the extent to which the principals' implementation of students' career counselling services strategy affects the attainment of TVET goals on technical colleges
10. determine the level of implementation of Public-private partnerships to achieve TVET goals in technical colleges in South-west, Nigeria.
11. determine the extent to which teachers' capacity is developed to aid TVET goals attainment in technical colleges in South-west, Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. Are the institutional stakeholders (principals and teachers) aware of TVET policy changes in South-west Nigeria?
2. Do principals adopt TVET policy implementation strategies as stated in the NPE document?
3. To what extent have the principals achieved in the TVET goals in technical colleges in South-west, Nigeria?
4. To what extent are students' skills developed in technical colleges in South-west, Nigeria to combat poverty?

5. Is there a relationship between the awareness of the strategies and the achievement of TVET goals?
6. Is there any difference between principals' and teachers' perceptions of TVET policy change implementation strategies adoption in technical colleges in South-west, Nigeria?
7. What are the specific areas of the policy change implementation strategies adapted by the principals in TVET institutions for goals achievement in South-west Nigeria?
8. What resources are available to implement TVET policy change to achieve TVET goal on manpower development in South-west Nigeria?
9. To what extent is the students' career counselling service implemented for entrepreneurial skills development in technical colleges in South-west Nigeria?
10. To what extent is public-private partnerships implemented to achieve TVET goal on manpower production in technical colleges in South-west?
11. To what extent are teachers' capacity developed for TVET goals achievement in technical colleges in South-west, Nigeria?

Research hypotheses

The following research hypotheses guided the study

Main hypothesis

There is no significant relationship between policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria.

Operational hypotheses

Ho1: There is no significant relationship between the awareness of TVET policy

implementation strategies and skills acquisition in technical colleges in South-west,

Nigeria.

Ho2: There is no significant relationship between students' career counselling services and entrepreneurial skills in technical colleges in South-west, Nigeria.

Ho 3: There is no significant relationship between PPP and manpower development in technical colleges in South-west, Nigeria.

Significance of the Study

This study may be of gigantic value to TVET stakeholders (teachers, principals of technical colleges, educational planners and policy makers).

Results of this study may provide some insight into strategies employed by the educational managers, educational planners, and policy makers in identifying and managing some basic but apparently changes that have happened in technical colleges and suggest ways of getting rid of detestable policies on technical education.

Findings of this study may help the teachers to transform the curriculum into a practical way of achieving the goals and objectives of TVET in Nigeria.

It is anticipated that the outcomes may help principals to make necessary improvements in their attitude and choice of strategy to be adopted to aid improvement of technical school and achievement of goals of TVET as stated in the NPE. It may also sensitize technical colleges' teachers on the necessity to be informed of policy changes and enhance their activities towards achieving educational goals.

The result may help to sensitise the education ministries and the NBTE in Nigeria to organise more leadership trainings for principals to improve their administrative competence and enhance teachers' performances which will influence the attainment of TVET goals.

It is also believed that findings of this study may be of huge benefits to the operators of TVET colleges by equipping them with efficient and effective strategies suitable for the transformation of TVET, and timing of adoption of each of the strategies to facilitate the attainment of goals of establishing technical colleges.

The findings of this study may also add to the existing knowledge banks and help the educational stakeholders (government, educational planners, principals, teachers, parents and students) to comprehend the importance of efficient management of the limited available human and material resources to ensure a quality instead of a poor quantitative social demand approach to education particularly TVET in Nigeria.

It is also believed that this research may act as a propelling force to raise the status of TVET, call the attention of government to its necessity and for eradication of unemployment and the attainment of other goals of Nigeria on TVET.

Finally, the findings of this study may help the curriculum planners to modify the curriculum to suit the current needs of Nigerians and not to only make entrepreneurship education mandatory but set its ball rolling in TVET institutions, to make individual citizen self-employed and reliant and de-emphasise the search for white collar job.

Scope of the Study

This study was concerned with policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria. There are six states in the South-west geo-political zone in Nigeria which are Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo States as at the time of study. The study covered four out of the six states (representing 66% of the population) to remain the volume of work within manageable proportion. In each of the sampled states, 95% of the state-owned technical colleges were involved in this study. This study concerned only on public technical colleges. Private TVET schools were not included because they were not directly

under the states government control. The scope of the research instruments was limited to the use of the researcher-designed questionnaires, check-list, unstructured interview and a profoma to obtain NABTEB results of students in government technical colleges in South-west, Nigeria. The statistical scope was limited to the use of descriptive (percentage, mean score and rank order) and inferential statistics (Linear Multiple Regression Analysis (LMRA) and Pearson product moment correlation (PPMC).

Operational Definition of Terms

The following are the definition of some terms as used in this study:

- **School administrators:** refers to the principals, the vice-principals and the instructional teachers in technical colleges
- **TVET Policy change:** refers to curriculum structuring, establishment of entrepreneurship unit, incorporation of ICT education, NVQF, establishment of counselling unit, the use of digital facilities, advocacy and establishment of NBTE and NABTEB.
- **Policy change implementation strategies:** Staff awareness of TVET policy change, staff capacity development, funding models, students' career counselling services, Public-Private Partnerships (PPP) and publicity and accessibility of TVET policy.
- **Goal achievement:** the degree at which provision of manpower, skills for agriculture and economic development, making people to be economically self-reliant have been achieved.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The focus of this chapter was to review relevant related literature to serve as a connection between past studies in the relevant areas and the present study. The review centered on the following:

- Theoretical framework
- Concept of TVET
- Concept of policy and policy change
- Curricular change in TVET in Nigeria
- Concept of policy change implementation
- Policy implementation strategies and TVET curricular change
- Policy implementation strategies needed for TVET goal achievement in Nigeria
- Conceptual framework
- Appraisal of reviewed literature.

Theoretical Framework

This research is anchored on general system theory which was developed by a German biologist Ludwig Von Bertalanfy in 1925 when he presented it to a philosophy seminar at the University of Chicago (Adams, 2013). As a reaction to the increasing disintegration of scientific technological research and decision making in the middle of 20th century. A system is a set of components that mingle with one another and serve for a common goal.

System is of two types; closed and opened systems. Closed systems are completely self-supporting and do not interact with the environment (Oyedijo, 2009). An opened system mutually act upon its environment. An education system is described as an open system by Ijaiya (2012) because it is greatly influenced by its environment from which it receives most of its inputs (financial, material and human resources), and it expectedly has to react to changes in the environment. Inputs are things supplied into a process (system) to achieve a result, while outputs are the results produced by a process (system) from a specific inputs. Within the context of system theory, inputs are things of any form (concrete or abstract materials) sent into the system intended to shape its outputs while outputs are the outcomes obtained after running an entire process or just a small aspect of a process. All systems comprises components that have mutually dependent connections in them. Systems are comprised of subsystems which are smaller entities that make up the larger system (Oyedijo, 2009). System theory insinuates that when there is a signs of malfunctioning with one component in the system, a holistic approach should be adopted to view the whole system together to understand what the problem could be. (Madumere, 1999). A system fails when means of getting feedback is not functioning or the adaptation cycle is neglected (Adams, 2013).

Opened system theory is found to be suitable for this study as it gives the detailed account of the instreaming of TVET policies from the government to the college where the college principals and instructional teachers implement the TVET policies to accomplish a goal.

The inputs are the policies and the training resources provided by government for the achievement of the specified goals. Today, the desired goals of TVET have not been achieved. The rapid and geometric population increase of unemployed graduates and the overwhelming poverty in Nigeria are conspicuous indices to account for yet to be attained goals. These are part

of the excuses given by government (federal and state) for frequent adjustment of the policies on TVET.

Another germane system theory component is the process or through-put. The supply of the necessary inputs into a production set the stage for conversion of the different inputs into desired product. When new TVET policies are dispatched to technical colleges, the onus is on the principals to device strategies by which those policies are implemented. These comprised the awareness created for the policies among the teachers and students, human capacity building/ in-service programmes for the teachers in form of seminars, trainings, workshops and conferences, localisation of the strategy based on demand and aspiration of the host community, students career counselling service, publicity and advocacy. These will facilitate the attainment of the goals set for the programme. According to Madumere (1999), significance and reasons for modification in sectors must be meticulously considered for it will affect one another.

Similarly, outputs is essential in the open system theory. This is a stage where the accomplishment of the set goals are checked, such that the potency of inputs and through-put are ascertained. In the case of TVET, the out-put is determined using the ratio of manpower produced for the society, the ratio of employed graduate, the relevance of the acquired skills and the number of entrepreneurs produced. There should be adequate turning of educational programmes or policies into reality, if Nigeria must be transformationally developed (Muyiwa, 2015). The feedback stage is for the appraisal which will reshape what to be sent into the system subsequently.

Concept of Technical and Vocational Education and Training (TVET)

In the opinion of Mclean and Wilson (Dike, 2009), the concept of TVET is concerned with the accession of knowledge and skills for work purpose, to increase opportunity for productive

empowerment cum development of socio-economic spheres in knowledge economics and swiftly changing work environment. Chukwuma (2015) viewed it as an indispensable component of national development strategies in many nations because of its impact on productivity and economic development. Buttressing further, Yusuf and Soyemi (2012) asserted that TVET is recognised worldwide as tools for empowering people to enjoy sustainable life and socio-economic development.

Initially, the attention of TVET was mainly apprenticeship system, and this is still widely in existence in many third world countries. However, there has been an improvement on this with the technological revolution and novelty in the 20th century. At present, attention has been diverted to training of skilled workers to contend the threat posed during the transition from the industrial epoch to the epoch of information. Meanwhile, Onjewu (2007) maintained that TVET could only be relevant to people if they can be trained to be skilled especially in the area of technology in a way that they are self-employed to transform the national economy.

As such, The Nigeria government adopts the UNESCO definition of TVET as components of educational process which is concerned with the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life via the study of science and technologies (FRN, 2013). Thus, TVET is not narrowed to vocational skills, but with a wide range of transferable skills and attitudes that are classified as a necessity for significant involvement in work of life. Through TVET, government eagle eyes of will be on how to transform and develop the three domains of learning, to ensure that all young ones and adult can build the skills needed for work and life. Hence, it is essential that all the youth should be equipped with skills, if the joblessness and poverty are to be wiped out.

The advantages of TVET are limitless because it enhances economic growth. It is meant to produce human capital, particularly for poor and helpless people who may not be privileged to attend tertiary educational institutions. In their own perspectives, Onyemaechi, Nnennaya, and Anyantonwu (2014) conceptualised the Nigeria TVET as an education type that provide trainees with the technical skills that can be applied generally in technical field under science and technology education ministry. It is more than knowing, but also having desire to do and produce an outcome. UNESCO (2009) maintains that TVET is a vital instrument of any public policy aimed at socio-economic development, job creation and poverty alleviation.

Extolling its import, Gebru (2017) wrote that Ethiopia earned the title of African tiger like the Asian tigers, because of its ability to develop manpower in specialised skills areas, which is helping in building its economy. It has been argued that Nigeria economy can also get to a greater height like the Asian tigers if its planning, policies and investment can be youth centered (Babatunde, 2016). It was further suggested that, if government can provide its young citizens access to credit to establish small and medium scale enterprises, joblessness will be a forgone issue. Hence, more investment in TVET that can drive home the success aimed at. In the Asian continent, the policies of governments on TVET have gone a long way in developing their economies significantly (Agrawal, 2013). In the Asia continent, nation now hold the belief that TVET is a prerequisite for gaining an access to better employment.

The TVET is considered an education sub-sector that must be developed for some reasons. First of it is that skills acquired through TVET are productive and profitable for the individuals, nation and wealth creation. Without this, it will be difficult to cope with the world technological advancement and transformation in economic competitiveness (Asia Development Bank, 2008).

In addition, TVET remained an education type that can eliminate the incessant unemployment challenge facing the world. It was said that the world bank announced on 24th

september, 2014 that the world will soon be facing job crisis and the only way to avert this is by creating a new 600 million jobs on or before year 2030 due to the astronomical population growth. As this was not met, the same body reported again on 13th october, 2015 and ILO on 19th january, 2016 that the rate at which unemployment was growing, an urgent and rapid action are indispensable to tame it (Jegede, 2016).

It is Nigeria wish to become a major player in the world economy in line with her vision 20:2020. According to NBTE (2011), the most crucial vehicle for attaining such ambitious goal, apart from stable power supply, is a skilled and competent manpower. For decades, Nigeria has, ridiculously, been described as a country that has failed to give proper attention to its general education system, particularly, TVET programmes (Dike, 2013). In spite of the existence of numerous tertiary institutions, in addition to hundreds of TVET colleges, Nigeria economic need has not been met due to undue emphasis on paper qualifications which is broadening unemployment (NBTE, 2011).

Considering the function of TVET to nation building as argued above by UNESCO, former president of Nigeria, Olusegun Obasanjo was quoted to have stated that the germane practical training component of TVET is the gate way to technological relevance of Nigeria and becoming internationally competitive in the global labour market (Okafor & Nnajofo, 2014). This sector has been christened different names because of the need to letting people embrace it. The names include among others technical education, vocational training, vocational education and training, TVET, occupational education, and apprenticeship training, (Akhue-monkhan, Raimi, & Dada, 2014). The need for TVET as an agent of socio-economic and political transformation has made stakeholders among who is the education ministry to ruminate and emphasise more on it academic and economic usefulness (Uwaifo & Uddin, 2009; Ojimba, 2012; Oweh, 2013). Scholars and professionals have unanimously agreed that if the developing nations must witness

unspeakable success in their economy and technology, TVET is the secret. This means that Nigeria may compete with the developed nations if it invest in TVET in terms of policy and financing (Raimi & Akhuemonkhan, 2014).

Enunciating further on the roles of TVET, Sofoluwe (2013) stated that the 2nd international conference held in Korea in 1999 set the mission for all nations under UNESCO to use TVET to ameliorate unemployment and other socio-economic problems of the 21st century. It was concluded in line with the mission, that TVET shall therefore produce entrepreneurs, through the institution. Obasanjo was reported by Okafor and Nnajofo (2014) to have said that TVET is the most essential means of empowering the citizenry to stimulate sustainable national development, and wipe out social menace due to joblessness and promote.

In addition, apart from the earliest Nigeria formal technology college, located in Yaba, Lagos (Fafunwa, 1974), the drastic increase in demand for skills provided by TVET has paved way to creation of more. This also testifies to it as an important sub-sector of education that Nigerian government must invest in (Maigida, 2014). In view of this, Usman and Tasmin (2014) conceptualised TVET as a programme designed to furnish industries with the technological manpower needed to nurture its socio-economic and technical functionality.

However, the sector is not without challenges, as such Dike (2013) noted that the obstacle obstructing the programme in Nigeria has a long history. Before the country's independence in 1960, the Ashby led commission was inaugurated to see into Nigeria's manpower needs (Fafunwa, 1974). Ashby reported a deficiency of skilled manpower at the lower, middle, and high echelons of institutions and found defect in Nigerian education as having a strong bias toward the traditional literary and academic subjects; this is seen in relegation of manual labour by the public. Dike (2013) added further that the report strongly recommended Nigeria introduce technical subject in secondary education and warned that the nation could ill afford to ignore. The report

also called the government attention to the fact that Nigeria must produce hundreds of engineers and thousands of technicians yearly, for decades, to provide the technical manpower needs of the society. Technical colleges were founded as a way of implementing the recommendation but owing to poor management, story remained the same.

In many third world nations including Nigeria, TVET occupies a relegated status. It is often viewed as a last resort or second choice to general education rather than as a reliable means for acquiring employable skills to better individual's live and the nation at large (Nana, et al. (n.d); The World Economic Forum, 2017). The research carried out by McKinsey (Nana, et al, n.d), 70% of surveyed youth opined TVET is more helpful in finding employment than an academic track, but nearly two-thirds of youth responded that vocational paths were less appreciated by society. This low perception of TVET within society is an obstacle for implementation of a result oriented TVET programme. In recent decades, The World Economic Forum (2017) has also buttressed that TVET has been neglected globally within education systems, except for a few notable countries.

Furthermore, Uwaifo and Uwaifo (2009) observed that bulk of the hindrances of this sector in general are majorly caused by poor application of strategies by the administrators. Management of this sector is often politicised in the developing nations, as many of its administrators are essentially managers who have grown without any technical background or training. Frequent changes in government is negatively influencing policy implementation. This anomie is not restricted to the education but across other spheres in Nigeria. To this end, it is crystal clear that policy somersaults and inconsistency is a fatal problem to TVET (Odukoya, 2013).

The Technical and Vocational Education and Training Institutions in Nigeria

TVET which is referred to as a range of relevant courses offered by schools and useful to the world of work. The learning experiences may occur in a variety of learning settings and work places (NBTE, 2011). According to Igwe (2007), TVET was within the context of apprenticeship system. It has long trained youth in smiting, weaving, pottery, wood-carving, farming, basketry and a lot of other local handicrafts. In order to ponder on the whole nature of training in skills development, TVET is now famous among the international communities, Nigeria inclusive.

Apart from the universities, TVET citadel of learning are of five typologies in Nigeria: the pre-vocational and vocational schools at post- primary level; and the post-secondary level technical colleges; the polytechnics and technical teachers' education colleges (OECD, 2008; Onyemaechi, Nnenaya, Anyantonwu, 2014). Pre-vocational education provides basic vocational skills for primary school pupils, vocational schools focus mainly on the secondary school age group. The technical colleges, which also focus on post-primary children, imparts foundation level vocational skills. The polytechnics and technical teacher education colleges are the main tertiary TVET institutions with the latter centered on training instructors for TVET institutions (OECD, 2008). These institutions were quite popular when the economy was stronger, as their practical-outcome based curricular proved advantageous.

The Nigeria formal TVET institutions are under the supervision and regulation of the NBTE which is the federal agency saddled with the responsibility of coordinating TVET programmes falling outside the universities, while the apprenticeships still maintain an informal status. Polytechnics train graduates of senior secondary schools to the standard of Ordinary National Diploma (ND), Higher National Diploma (HND) and the post-Higher National Diploma (post- HND).

Concept of Policy and Policy Change

One of the greatest challenges schools are battling with is sketching out the best method of getting goals attained. According to Chris and Marumolola (2012), policies are guidelines prepared to achieve the statutory and non-statutory requirements pertaining to schools and for the operation of schools. According to business dictionary (2016), Policy can be defined as the set of fundamental principles and associated guidelines, clearly stated and executed by the organisation's ruling council, to steer its actions in pursuit of long-term goals.

According to Oyedele (2012), Policy is described as the course of action for the attainment of desired goals. In other words, policy is made to shape or reshape reality as we think it ought to be. Policies are found in policy documents such as government white paper, general order, gazette, financial instruction and national education policy. Policies may be written or unwritten. Historically, Nigeria has education policy which was not written until 1977. Policies are normally stated to address an issue or to simplify what must be achieved and give a direction. In another dimension, Okafor and Nnaji (2014) stated that policies are generally formal and written empowerment tools that guide the decision and action of managers and their subordinates in strategy implementation.

Policies are dynamic and so, not static; it keeps changing to meet the yearning of a country. According to Haddad and Demsky (1996), a policy change is normally a response to a problem or set of problems in a sector, and must, therefore, begin with an appreciation of the educational sector and its context. A change in education policy is always preceded by sector analysis which will start with an identification and comprehending of main sectoral issues relevant to the country. These issues may be access to educational opportunities; s just distribution of educational services; constitution of the education system; internal and external efficiencies; and institutional arrangement for the management of the sector.

Educational policies which is considered great on agenda of government across the world as no nation exists without its principles and guidelines on teaching and learning activities. The experience of every learner is therefore predominantly determined by the wider policy arena (Bell & Stevenson, 2006). According to Okumbe (Okutu, Chumba, Saina, & Kurgat, 2011) it is through policies and objectives that the directions and destinations of the schools activities can be patterned. The execution must conform to national policies on education as spelt out by the education ministry. In another dimension, Okoroma (Okafor & Nnajiifo, 2014) saw educational policies as initiatives mostly by governments that determine the direction of an educational system.

The need to provide the requirements of a qualitative education usually bring about policy change. The United Nations International Children's Fund UNICEF (2000) suggested that any education system that ensures a healthy learning atmosphere for learners, gender sensitive, curricular that take care of relevant skills acquisition that is child centered and result that are linked to national goals (Adebule, 2014).

According to Oyedeki (2012), change means making something different but not really the activity of converting to something wholly new. This means that between two periods, some notable alteration have taken place. Educational policy is therefore defined by Ozurumba and Ebuara (2013) as a projected programme of educational activities, which specifies the goals, values and practices of educational system. The NPE is a means devised by government to realise the aspect of the national goals using education as a tool.

Furthermore, TVET as a sub-set of education system is guided by specified policies to facilitate its goal attainment. In view of this, a good TVET policy as enunciated by Bartram (2004) must be comprehensive and not fragmented. The national vision on TVET should have objectives which are to establish an adequate workforce, with appropriate skills, that will support

national economic development which is viable, environmentally sustainable and contributes to socio-cultural development. Education reform is a herculean task that needs, wider consultations, enthusiasm, consistent statistical data, pragmatism, and search for sustainable development that would make the reforms attractive and useful to the society (Gusau, 2008). Above all, process of education reforms and policies setting must match modern technological innovations for it to remain appropriate to the learners and the nation.

In Nigeria, according to Woolman (Imam, 2012), the nations educational policy was not directed at building human capacity at independence to boost the economy but made graduate to depend on the country's economy for a living. To erase this erroneous policy and underdevelopment, TVET policy have to come in with the aim of realising a self-reliant citizens who will fast-track meeting of the country's developmental needs. To actualise this, a new secondary school curriculum was approved by the National Council on Education (NCE) as developed by the Nigerian Educational Research and Development Council (NERDC) (Dagunro, 2010).

The Need for Policy Change in Technical and Vocational Education and Training

The policy on education remained the nucleus through which reasonable analysis and substantial evaluation of the education system could be done. As such education policies must be carefully stated and must work together with national and international needs. This plus other factors have contributed to paradigm shift in Nigeria's education system and which has therefore brought about policy change especially in the area of technical and vocational education and training. The objectives of TVET have now become more diverse in order to make an allowance for labour market's demand for labour. It now encompasses social and political objectives and no longer limited to mere economic reason.

To start with, the NPE stipulated that one of the goals of TVET should be manpower production for the nation to boost productivity. However, African countries lack the required number of well-developed technical human capital for technological advancement (Eze & Okorafor, 2012). Towards the end of the last century and the beginning of this 21st century, there have been some changes to type of available works and the demand for particular kind of occupation across the globe (Billet, 2009). These trends of change have also necessitated the reduction in the number of unskilled and semi-skilled workers employed by industries all over the world. According to Billet (2009), the American manufacturing workforce reduced from 48% to 28% in 2002 while that of Australia reduced from 18.1% to 12.8% in 1999. Even professionals whose field is not demanded for are straggling.

The problem of increasing number of unemployed graduates in Nigeria has also necessitated policy change in the type of education system in operation. This according to African Union (AU) (2015) is due to mismatch between the supply and demand for skills. Skills are the basis for individual employability and national competitiveness. This can only be ameliorated by putting in place policies that can assist in imparting specialised relevant skills in the youths. This in addition to the issue of globalisation has brought about the challenge of developing skills for wiping out poverty and coping with the world economic competitiveness (African Union, 2007). In the contemporary world, the demand for labour force with relevant skills has remained unfulfilled (Agrawal, 2013). If this unfulfilled requirement must be fulfilled, utmost attention must be given to transferable skills acquisition through TVET. Transferable skills “are higher order cognitive and non-cognitive skills that individuals use to be successful across different situations in work and life” (The Africa Institute for Development Policy, 2017 AFIDEP). In Afghanistan for instance, when attention was shifted to TVET, a mandate was given to identify new skill areas where there was unfulfilled demand for labour force and then fill the vacuum (Agrawal, 2013).

This submission is similar to the challenge Nigeria is contending on manpower development which necessitated the restating of goals of TVET (Osam, 2013). The Asian tigers are well known for focusing on developing of specialised skilled area and so the policy of government is on human capital development via access to quality education to improve productivity. The policy on the establishment of technical colleges came due to the country's need to produce sufficient manpower that can make its economy more vibrant. The Nigeria education policy document has always been subjected to review in order to give room for innovations and reforms

Poor patronage of TVET colleges necessitate devising a strategy that can make it more attractive to the public. Odu (2011) reported that enrolment rate for this unique education type is very poor because perceive that its graduates are treated as second class citizens. Also, TVET is globally contending the challenge of producing a sufficient required manpower with relevant skills that will meet the labour market demand (Atchoarena & Andre, 2002) which is partly caused by innovation in the world of technology and occupational expansion.

Curricular Change in Technical and Vocational Education and Training in Nigeria

Curriculum restructuring is another important aspect where change has touched due to the country's quest for a broad based and future-ready curricular that expose students to the practicality of the world of work. The curricular ought to impart skills that have purchase value in the contemporary labour markets (The World Economic Forum, 2017). There have been a lot of cries about the retarding effects of the curriculum type bequeathed to African countries by their erstwhile colonial masters which Nigeria is also a victim. In order to put this anomaly to a halt, the indigenous NPE came into existence in 1977 and put to use right from 1982 (Ibukun & Aboluwodi, 2010). One of the specific objectives of the Nigeria national policy on education is

“the acquisition of relevant skills, abilities and competence as equipment for the individual to live in and contribute to the development of his society” (FRN, 2013). In a bid to achieve this and vision 20:2020, a new curriculum was arranged and realigned to serve as a link with a major focus on vocational and entrepreneurship education in secondary schools. To concretise this, Aderounmu and Abraham (2012) advocated the need to include a vocational diet which is meant “to assist individual to discover vocation and expression at their areas of strengths, by acting exactly at the strong point of their gifts, talents and skills development”. Since TVET curriculum in the opinion of Tutus and Okorafor (2012) is a viable tool for technological advancement and economic transformation.

TVET at pre-basic and basic one through basic nine levels was taught as a part of introductory technology. The essence of it is to make students appreciate technology education and therefore develop interest at senior secondary education level and make them make them make career choice at higher level. As a reason for the elementary nature of TVET at this level, Odu (2011) observed that the age characteristics of the junior secondary school students makes it difficult to manipulate some equipment at that level though, the curriculum prescribed some practical works.

On the other hand, the new post-primary school curriculum have the philosophy that every senior secondary school leaver should have been well groomed for tertiary education, acquired entrepreneurial skills that can make him self-reliant (Adeyonu & Carim-Sanni, 2015). Students are given freewill to choose at least a trade/ entrepreneurship subject in relation with what is obtainable in his locality. Other sub-Saharan Africa countries are now creating awareness and encouraging entrepreneurship education, competitiveness and self-employment. However, findings of the studies carried out in Zimbabwe have suggested that effort should be made to

create access to credit and technical support if the entrepreneurial skills acquired must be functional (Atchoarena & Andre, 2002).

In addition, the TVET curriculum has now been structured to take care of soft skills which is also known as interpersonal skills. It is clear that soft skills are personal qualities that can improve an individual's interactions, job performance and career prospects (Adelakun, Anaele, Dem & Barfa, 2014; Macdonald, Nink & Duggan, 2010). Unlike hard skills which are the ability to perform certain type of tasks, soft skills relate to attitudinal disposition of individual towards co-workers and customers (Isah, 2013).

Furthermore, the need to formalise vocational knowledge acquired outside the four walls of the mundane classrooms and clamour for upgrade and grading of competency level of the citizens has also necessitated change which brought about the introduction of NVQF in technical colleges. National vocational qualification framework as defined by Tanka (2014) is a set of principles and guideline put in place to provide a direction, basis and organisational set up for a country's qualification system. It is strongly believed that the framework should develop the trainees' potentials by bringing to glare his hidden talent and as well provide access to career pathway for the learners. Tuck (Tanka, 2014) have also conceptualise NVQF as "an instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels". NVQF is important because it helps to eliminate uncoordinated skills development endeavour which result in duplication of efforts. Before its introduction in schools, various agencies, non-governmental organisations, local and international donors, industries among others have been organising skills development programmes in fragments without linking it to a national qualification system (Tanka, 2014) . The programme helps to unitise the economy by raising the skills standard and create a coherent, comprehensible, responsive, credible and flexible skills for the youth. Although, the experience from other

countries have shown that the programme is emerging and time-consuming. It requires expertise, continuous consultation and financial materials. A qualification framework is essential because is a working kit that assists various policy goals, especially qualification reforms so as to improve relevance with the eternal objectives.

It is part of the belief that there is need for standardised training which NQVF if well utilised will guarantee. By standardising TVET, the training can be coordinated and all trainees will receive the same training, making trainees more marketable to employers, no matter where they are. Uniform standards also help countries adapt their system to match global standards more closely and making the country and its workforce more globally competitive. This could be achieved in Nigeria through NBTE and securing the International Standards Organisation (ISO) certification.

Importance of School Administrators in TVET Curriculum Change Implementation

The level at which policies are implemented is a delicate stage where plans are executed to see if it can actually achieve the goals earlier stated. In view of the fragility of the stage, Ogbonaya (2010) described it as the stage where preparation made in abstract are carefully concretised through the commission of resources to it. Therefore, the administrative (principals and vice-principals) and the academic staff (teachers/ instructors) as well as other auxiliary staff members must be fully informed and ready for the implementation of the changes in the curriculum.

The principals of various technical colleges are the chief executive officer of their colleges that see into the implementation of the broad and specific government policies on TVET. They departmentalise/ sectionalise the duties and saddle their subordinates (vice-principals, teachers, non-teaching staff and students) the responsibilities of execution.

Teachers are more important to curriculum implementation as they use the curriculum on daily basis, they interact with the students and so, make or mar the attainment of the educational objectives (Omokhodion, 2008). In addition, there is a limit to teachers' effectiveness without adequate teaching and learning resources (Orhodho, Waweru, Ndichu, & Nthinguri, 2013). Despite the principals' endeavour at implementing these TVET policies, citizens still lament unemployment and poverty

Educational policies does not preclude making of some decisions about education, executing it with the aid of some specified strategies and after which its efficacy is appraised after the implementation. The importance of policy formulation and implementation cannot be underestimated as the existence of organisation will be meaningless without it. Policy specifies national goals for the nation's education system. Policy is essential as it specifies programmes curricular, content of instruction, who should own and fund it and how it should be implemented.

Concept of Policy Change Implementation

It is crucial at this juncture to examine policy change implementation because what necessitates stating or restating of policies is change to ensure effectiveness. This might have been the reason for Fagbohunge (2009) to have opined that organisation that survives within the dynamism of the environment is that which changes its men, machines and other requirements imposed by change. Policy change in Nigeria education usually go with reforms in education (Nwangwa & Omotere, 2013). If the recalcitrant worker must switch to a cooperative, disciplined and performing worker, the magical power is in the word change. If the technically incompetent manager must become competent, the word change has role to play. If the operational process is so low and inefficient to the extent that it requires computerisation to salvage the situation, it still bothers on change.

According to Theron (Nwangwa & Omotere, 2013), change process usually involves five steps, begin with diagnosis which examines the weaknesses and strengths of existing policy, followed by planning where education planners uses the data obtained during the diagnosis to seek alternatives, then implementation which actually leads to change, stabilization when the new policy becomes a component of the school system after monitoring its implementation and then evaluation to ascertain whether the school achieved the new policy aims.

Educational policy changes must be well managed, if otherwise, it would result into what Ajayi (2002) called an illogical and emotional process. Being a leader of change, one has to concentrate more on human aspects of change as they constitute the basis upon which other change parts are anchored. Change implementation is a multifaceted and long term task which according to Ajmal, Faruq, Sajid, and Awan (nd) is actually a vital plan in designing how the organization is steered from its present position to a desired future state. For policies to be successfully implemented, planning is essential. Although much of the work that must be carried out during this stage can be based on evaluations performed to make the policy decision, planning for implementation involves concreteness absent in the earlier stage of the policy process (Haddad & Demsky, 1996). Prosci (2007) Conceptualised change implementation as “the process, tools and techniques to manage the peoples’ side of change to achieve the required business outcome”. Change management is using the organisational working implements to help every member makes prosperous personal adjustment resulting in the adoption and realisation of change. This allows the member building support, removing resistance and developing the needed knowledge and skills to execute the change.

Policy implementation according to Malik (Iqbal, Muhammad, Imdadullah, & Alam, 2012) as the activities that are embarked upon in the light of the established policies in a country. Policy agenda require an answer as those in institution are confronted with the duty of

implementing policy instructions (Bell & Stevenson, 2006). Those in senior leadership positions are preoccupied with a particular challenge as they often represent the interface between the organisation and the external policy environment. Key decisions must be made relating to the interpretation of external policy agenda which will in turn reflect a complex mix of factors including personal values, available resources and participant power and point of view (Bell & Stevenson, 2006). No doubt national education policies are designed to ensure an all-round national development. Whether change in TVET policies actually serves as blessing that will improve the economy and actually be a means towards achieving goals of TVET or serves as what Huen, Leithwood, and Jantzi (2002) tagged “a fatal remedy” depends on policy implementers. One important aspect that is missing in the NPE document is the guide as to implementation in respect of stakeholders’ responsibilities regarding the policy (Yakubu & Hussaini, 2011). For policy implementation to fulfil the aspiration of the society and individuals, Nwosu (Ozurumba & Ebuara, 2013) suggested that carefulness, commitment administrative knowledge are required.

The rate at which policies on TVET spring up and spread has been pin-pointed as one of the causes of inefficiency in the sector because of poor implementation. The college principal and board members have a challenging responsibilities of steering the teachers, students, parents and non-academic staff to formulate and implement good policies that are school-based (Okutu, Chumba, Saina, & Kurgat, 2011), principal as an effective school administrator is an even greater asset since he deals with young people and adults. Thus, providing an effective link between the school community and individual who ultimately determine the administrator’s success (Momoh & Osagiobare, 2015). Poor policy change implementation has been identified as an impediment to the attainment of the country’s aspiration to be like the Asian tigers and other advanced countries of the world. This may be a reasons that made Professor Ibrahim Njodi, to have concluded that the education sector’s main challenge is not coming up with new policy but implementation. As

successive governments are coming in with new policies and thrashing the existing ones in the bin, colleges are in dilemma of the actual policy to adopt (Ibrahim, 2015, p. 15). So, inconsistency in education policy is really affecting the education sector. This means that the institutionalising of a new policy should always be accompanied with determination for its full implementation.

In line with this, professor Ajayi used his experience as a provost of federal college of education, Osiele between 1991 and 1999 to describe the negative effects of policy inconsistency and how educational policies and practices are at variance on implementation as each level of government has its own policy on education from one regime to another and it is one step forward and two steps backward (Odukoya, 2013). Similarly, Daku and Oyekan (2014) observed that for quite some time now, technology education has been integrated into NPE, but nothing significant appears to have been achieved, in terms producing graduates that are self-employed and who can even employ others. In a related account, Gusau (2008) lamented that the implementers of policies on TVET think more of buying finished technology and goods as basis of pre-vocation education. The resultant effect of this government action was moribund technology education because due to insufficient qualified teachers and workshops for students.

More importantly, in 2006, during the reign of president Olusegun Obasanjo, a pronouncement was made by the FGN that all polytechnics should be scrapped irrespective of their ownership and that Yaba college of technology and Kaduna polytechnic be transformed into autonomous universities of technology while other polytechnics will form part of the existing conventional universities closest to them as campuses (Onjewu, 2007).

In furtherance of TVET policy implementation, it must be stated clearly here that politicisation of educational issues is doing more harm than good to sincere implementation of education policies. Umoru (Umunadi, 2013) buttressed this with an account of how education curricular were subjected to socio-political influence aimed at achieving political or social end of

the government of the time. In addendum, (Gusau, 2008) mentioned that a mere change of government in the Nigeria context can result in educational reforms which in most cases are thoughtless exercise, mindless of future consequences. Abubakar et al (2014) opined that it is a common practice in Nigeria to appoint an officer who is not qualified or who is not a specialist to head an office outside his area of specialisation; and junior officer to head senior officers merely on political reasons. FRN (2011) it was also acknowledged that Nigeria's development efforts have since been characterised by lack of continuity, consistency and commitment (3Cs) and futuristic perspective to approved policies, programmes and projects. The consequence of lack of attention for 3Cs are unemployment, inequality and poverty. An example of lack of continuity, consistency and commitment is what Odukoya (2013) named swapping of 6-3-3-4 education system to 9-3-4. This summarises the country's problem of policy inconsistency that it often picks and drops policies as it wants.

When vision 20:2020 was initiated by the government at the center inaugurated the National Technical Working Group on Education (NTWG). In its report submitted in November 2009 according to Yakubu and Hussaini (2011) recommended that, if Nigeria is to achieve its goals on TVET especially entrepreneurship education, upgrading the educational facilities, technology development, research and technology acquisition and the improvement must be done. Surprisingly, government is yet to start the implementation of these recommendations. The Nigeria case of poor policy implementation is just like that of Pakistan. The pitiable situation of things in Pakistan according to Iqbal, Muhammad, Imdadullah, and Alam (2012) is due to poor policy execution, which has resulted to heavy loss in terms of material and human.

It must be emphasised here that, if TVET goals are to be realised, ICT education policy which is also germane component of technology education must be implemented. However, Nnadozie (2014) found that the government attitude on ICT policy is inadequate to impact

positively on the Nigeria education system. It is quite frightening this important feature of the NPE is the promotion of ICT within the framework of 6-3-3-4 education has been jettisoned. Students have shown no interest in TVET owing to disregard to some of its components by the government, as they all opt for other university programmes (Abubakar, 2011) which is confirmed by poor patronage.

The administrators' misconception of TVET in its entirety, drastic reduction in the government allocation to this education sub-sector, inconsistency of programmes on education, rapid technological changes and poor policy enforcement strategies are indices that TVET is at cross-roads. Omiri (2015) reported that the FGN official statement in 2006 on secondary education situation in Nigeria on operation reach all declared that an average Nigeria secondary school leaver today cannot critically and creatively think due to his lack of saleable skills, and respect for dignity of labour and his sense of responsibility has been wrapped by extreme materialistic societal value.

In the appraisal research carried out by Ozurumba and Ebuara (2013), it was found that training nature of school leadership has a great influence on policy implementation. The means when a non-professional is enthroned, societal may not be met. The professional administrators of educational system are mainly those that possessed competency in their chosen field that can strategically operationalise education policy. Also, Quinn (2002) found that principals' supervisory role is a determinant of effective educational administration in secondary schools. This presupposes that for an effective application of technology to deliver instruction, principal must be up and doing to make the teachers function.

The Need for Policy Change Implementation in Nigeria Technical Colleges

Change and its management are inevitable in the education sector. This is because the prosperity of any system of its programmes is anchored on perfect planning, efficient administration and adequate financing (FRN, 2004). Administration is a function of organisation and structure, coordination, inspection and supervision. Ijaiya (2004) asserted that no system of education is perfect as such reform is inevitable and therefore, they are not strange. In as much the universe changes, education too cannot remain stagnant if must be tuned to match the nation's need.

According to Akinyemi, Ofem, and Adebisi (2012), a number of changes have since happened to the country's education sphere in the areas of curriculum, institution and financing. This is in conformity with adoption of education as the instrument for national development (FRN, 2004) and the utmost need to make technical education relevant and provide answer to the needs of the society. It is not controversial that among the factors that determine the success of school management is leadership, no wonder, TVET programmes are poorly integrated into the economy's demand for skills (OECD, 2008). In addition to this reforms is the Industrial Training Fund (ITF) to enrich trainees with relevant work experience in organisations, but poor fund and weak management have virtually collapsed this arrangement. There is also a mandatory one-year work experience requirement for the Higher National Diploma (HND) in TVET.

In fact, Most TVET participants could not obtain work experience because companies are rejecting them. This has contributed more to unemployment index and collapse of the economy. However, proper integration of TVET into general education will engender nation's industrial development and ameliorate youth unemployment (Ezeani, 2014); Raimi and Akhuemonkhan, 2014). They also recommended regular monitoring and standardisation of teaching and learning in institution.

Like other developing countries, Nigeria is undergoing transformation in all sectors, essentially education sector where the highly placed individuals of yesterday may have no place in the society today. Therefore, as the world moves from the industrialised era into the knowledge age, the shape of the world of work is changing dramatically. When this is witnessed by citadel of learning, strategies for managing it should be fashioned out in order to engender progress. It is on this premise Ijaiya (2014) submitted that all the functions of educational management which include planning, organising, leading, supervising, controlling and motivating ought to be channeled towards achieving educational objectives. Since the ultimate education target is to bring out the best in each individual for his benefit and that of the society.

Similarly, globalisation and the ICT have changed industry. High value knowledge/information and technology based enterprises are emerging which requires special skills from the administrator. The need to be informed of changing patterns in the TVET market, increased participation, addressing the skills gaps, qualification, public attitude among others call for management of changes which will be tailored toward the attainment of goals of TVET.

The effect of globalisation is another reason why policies on TVET keep changing. According to Carnoy (Yusuf & Yusuf, 2009), globalisation is changing both the labour market and the education systems. This is as a result of the increasing demand for skilled labour, demand for additional resources for education in a policy environment that is not receptive to the enlargement of the duty of the public sector in education and privatization which are considered strategic for ensuring quality and flexibility in a global economy, as exemplified in global market and global skills, increase in cross-national measurement of education system, digitisation of education for more access to quality education, transformation of culture and cultural values, thereby resulting in struggle over the essence and value of knowledge.

The Nigeria Policy Implementation Strategies for TVET Goal Achievement

The policy implementation strategies that work well in a country may not be too good in another country due to differences in socio-political and economic situation. This assumption does not exclude Nigeria's TVET sub-sector. It is therefore important to identify some strategies suggested by the NPE document for a result oriented TVET programmes in Nigeria.

Awareness of changes in policies and its implementation strategies is the first and foremost thing to be created among all members of academic and non-academic staff of technical colleges. Adequate, relevant and timely information must be disseminated to institutions in respect of the government's guidelines on TVET. Policy awareness according to form the basis of the utilisation and effectiveness of the programme (Oladosu, 2012). Evidence revealed that, the major problem facing Nigeria is low level of awareness of happenings within and without the country, even on health issues (Atulomah, Olanrewaju, Amosu, & Adedeji, 2010; Yusuf, et al., 2011). Also, there is fear on the part of trainees that their course of studies may not be applicable beyond secondary schools (Dalberg. 2015). The TVET of a country must have a reliable labour market information. This will avail it an opportunity to know the demand and employers' needs especially in priority trades and occupation. This could be realised via partnership between colleges and industries. As a result, the mismatches between the outcome of the TVET programmes and the demands of labour market will be drastically reduced (FME, 2005). Having been fortified with the needed information, the college should therefore provide facilities and other infrastructure for training and education.

The NPE document has also spoken loudly on staff capacity building as a strategy that can enhance TVET to realise its goals. Teachers need to be digitally fluent as the technology is rapidly advancing. The World Economic Forum (2017) noted that people's interaction and work are being greatly influenced by technology. As such, the teaching and non-teaching personnel who are to implement the policies must be technologically alive by undergoing a continuous professional

development. Staff industrial attachment programme is one of the numerous channels that can be followed to get themselves equipped with the required up-to-date cognitive and psychomotor information.

Students' career counselling service is a strategy set aside to guide the young ones rightly on the choice of vocation. It is not a hidden fact that many youths are ignorant about career prospects. In view of this, the government therefore put it as a national education policy that professionally trained guidance counsellors be employed in all secondary schools including technical colleges (FGN, 2013). Career counselling service will help individual student discovers his true potentials, accept himself and roles in the world of work and transform it into a reality (Dada et al, 2015)

Publicity and accessibility are another fundamental areas that must be taken care of. The TVET system should provide a hitch-free access for trainees. Accessibility of technical and vocational education institutions presupposes that enrolment should be free from favoritism and prejudice rather be based on merit. It is essential for trainees to be able to enrol easily in training irrespective of the class, race and economic status he may belong and have adequate transportation to and fro of TVET colleges. MacDonald, Nink and Duggan (2010) explained that access, affordability and closeness of the centres are key consideration for a successful TVET programme. It is also necessary for the training facilities to be nearer to employers, so that staff from key industries can be able to frequently visit the college to ensure that training and equipment are up to date and relevant, thereby addressing the employers' needs. These would reinforce graduate pathways to relevant and quality employment opportunities.

Publicity on the hand implies that adequate advertisement of the institutions and their available courses of study must be done. If achieved, members of the public will be fully informed and aware.

Public-private partnership is a special strategy put in place by the FGN to ease the burden of facilities and equipment provision to get technical and vocational education policies executed. Public-private partnership is an agreement between public and private sectors on developing, ownership and operation of public services and facilities (Bamidele, Adenusi, & Osunsanmi, 2015). The strategy if utilised optimally will facilitate speedy achievement of goals. This is a form of risk bearing on the part of the private sector to procure infrastructure. Nubi (Bamidele, Adenusi, & Osunsanmi, 2015) reiterated that evidence abound that most of the infrastructure proposed to be procured by the government are either, delayed, abandoned or neglected in totality. This partnership according to Isah (2013) should also involve drafting of curricular and courses of study that will also meet the demand of clients. This is a dynamic process as demand and employers' need must keep pace with changes in technology and the rise of new skill sets. Partnership to Ford Foundation (2015) is germane in synergizing capacity and competencies to contend the financial, material and administrative challenges of the education sector.

In addition, there is a strategy called multi-channels funding options for TVET institutions. Atchoarena and Andre (2002) noted that financing TVET programmes is more complex than other sub-sectors of education. This may be one of the reasons while TVET institutions enjoy more financial autonomy than the general education. Apart from budgetary allocation from the government, there are other funding models for financing this education type. This include multinational corporations, alumni association, the informal sector, the schools' production unit, tuition/ development fees paid by the students, donors, the non-governmental organisations, parastatals and other private sectors. Isa (2013) suggested that TVET institutions must establish a virile partnership with industries to provide funds for purchasing essential equipment and other relevant learning materials. Also, the government support in the way of an uninterrupted funding channel is germane. Many TVET programmes in developing nations are

funded by outside bodies (World Bank, 2007). USAID, World Bank, the UN among these philanthropic bodies. Though the funding from these international organisations are typically not available regular, but gives developing nations the start-up investment. Therefore, once the programmes are commenced as a value-added system to employers, policy makers look for means to continue the funding.

In view of the above, the role of TVET in the socio-economic development of Africa and Nigeria especially cannot be swept under the carpet. Unemployment in the continent especially among the youth (usually defined as 15 to 24 years old) is very high and yet, skills level are low (Musobo & Gaga, 2012). The critical role played by this education segment has also been acknowledged in Nigeria (Okafor & Nnajiofor, 2014) to addressing socio-economic problems in Nigeria, as a result, policies keep coming up for it. Although it is sadden leaders of Nigeria are denying it the much deserved attention and financial commitment despite its limitless benefits. This nonchalant attitude has largely contributed to the sector's lack of much needed patronage by the youth. To affirm this, Dike (2009) lamented that bulk of the secondary school leavers and some of those who managed to sail through post-secondary institutions lack the skills to compete effectively in the competitive labour market and thus wander around in the villages and cities from morning to evening looking for unavailable jobs.

Policy Change Implementation Strategies and TVET Curricular Change

Technical colleges teachers are essential in the execution of changes made to TVET curriculum. Teachers therefore need first-hand information to be able to render a high-quality 21st century service to trainees whose mind is tabularaza. This pivotal requirement on the part of the instructors has been demonstrated in some sub-Saharan African countries. Muchemi et.al (Ezenwafor, 2015) noted that teachers industrial attachment programme is taken seriously in Kenya which has helped to synergise training of students to the current technological

development. This presupposes that teachers in Nigerian technical colleges need the same capacity building programme such as retraining and attachment as well to industries.

Technical colleges need to collaborate with industries and business owners in amending the curriculum so as to make allowance for the courses that can cater for the skills that are mostly demanded by employers in the labour market. Atchoarena and Andre (2002) reported that this has been recognised by Ghana Education Service (GES) and Kenya who have therefore stated that industries and commercial interest must be represented in the TVET schools programme advisory committee. More on this, Ojimba (2013); Ezenwafor, (2015) pointed out the need for collaboration between learning institution and industries on the provision of science and technology education for students to be able to acquire relevant skills in this century.

Furthermore, the changes in curricular may not be meaningful and the implementation may be constrained if the required infrastructure is not available. Evidence abound that the 21st century curricular have been digitalised which invariably required that internet and steady electricity supply must be put in place. The implication is the need for more funding and increase in budgetary allocation for technical and vocational education and training. Maigida (2014) has also made clear that the high cost of this infrastructure for TVET cannot be solely born by the government, so the need for effective funding strategies with eyes not closed to public-private partnership.

The Policy Change Implementation Strategies and Goals of Technical and Vocational Education and Training in Nigeria

The Nigeria education system is rapidly changing because of the need to make it 21st century compliant and so, its goals are technically driven towards meeting the Nigeria vision 20:2020. One of the important goals TVET is saddled to deliver in Nigeria is production of manpower for the country to achieve unspeakable rapid socio-political development, growth and

above all take the economy to the zenith. Okafor (2011) while commenting on a significant role TVET plays in manpower production and jobs creation opined that technical education is concerned with the duty of training technologically skillful human resource who are not only good at eating fish, but know how to fish.

The problem of achievement of TVET goals in Nigeria is so complex to the extent that the United Nations Educational Scientific and Cultural Organisation (UNESCO) recently concluded that the aims of various government to combat poverty through the establishment of variety of programmes targeted at job creation and poverty alleviation have failed because graduates of those programmes lack the necessary practical skills (Abubakar, 2011). Pragmatically, the impact of technical and vocational education on Nigeria as a society and on individual citizen has not been felt due to individuals' lack of transferable skills.

Having realised that goals of TVET is a platform prepared for manpower production for guaranteed economic productivity, transferable skills acquisition by the citizens especially the younger ones and a veritable instrument for breeding entrepreneurs who will not constitute a burden to the nation but join the league of employers of labour. These laudable goals of TVET may not be achievable if the strategies for its realisation are not fully and strategically adopted. Hence, there should be a direct link between the objectives and strategies for implementing policies that will lead to goals attainment. A lot of efforts have been made by government at the center and state levels to achieve TVET goals and thereby reduce unemployment rate of the youths drastically if not totally eradicated. However, it is worrisome that in spite of this effort, poverty and unemployment still stand tall in the country because government alone cannot absorb all the job seekers. Funding and relevant skills acquisition and management have been identified as major causes of this (Salami, 2011). As a way out of this policy implementation imbroglio, the Nigeria education policy document has stipulated that staff capacity building, varieties of funding

models, public-private partnership, publicity and advocacy for the available courses and career counselling services among others must be employed as policy implementation strategies.

Staff capacity building in form of teachers' continuous development is also essential because TVET scope is progressively changing, from a field in which students worked in isolation on specific skills that were sometimes out of date before even graduated let alone using it in the labour market to one in which students, under the supervision of fully informed teachers, learn skills that have broad applicability in the marketplace. Embracing this purpose, TVET educators must make efforts to avoid the narrow occupational specificity of earlier time and provide students with opportunities to envision a range of career path in a variety of different industries. To achieve this, the giver of such skills must be fully informed, educated and exposed. This is achievable through professional development programmes.

Public-private partnership is globally recognised as pivotal to solving the challenge of unemployment and lack of required skills. In fact, the private sector is a sector that can provide the 21st century entrepreneurial skills (Maigida, Saba, & Namkere, 2013) and bear part of the financial burden of manpower production. In other words, if public-private partnership is well taken care of, the remaining set of the strategies will voluntarily come in. as such, coordination of the strategies via PPP will therefore produce more efficient manpower who are entrepreneurs.

In addition, the Students' Industrial Work Experience Scheme (SIWES) is another means instituted by federal government to make technology education effective. Specifically, TVET and industries should collaborate to ensure students are rightly guided (Usman & Tasmin, 2014) and to be able acquire the required skill in their areas of specialisation.

Students' career counselling service is an important strategy in bringing home the laudable TVET goals in Nigeria. The level of youth ignorance about career prospects and children maladjustment, government made it a policy to get career officers and counsellors in all secondary

schools (FRN, 1981; 2004; 2013). It must however be stated here that the FGN has also accepted a defeat that since qualified personnel in this category (guidance and counselling) are scarce, government shall continue to make provision for the training of interested teachers in guidance and counselling (FRN, 2004, p.53). The policy provision seems to be good and encouraging but appears to lack the essential processes which will facilitate smooth implementation, hence the incessant problem at the stage of implementation. The guidance counsellors are expected to render services which may include counselling, orientation, information appraisal, placement, and referral among other numerous roles as highlighted by (Afia, 2005). It was found by Oye, Obi, Mohd, and Bernice (2012) that majority of teachers have no regards for guidance and counselling activities in school, and that principals too do not make provisions for it in their schools' time-tables. Some principals have false impression that a school can function effectively without a guidance counsellor.

More importantly to TVET goals achievement is the health issue in technical colleges, TVET is more of practicals than other conventional schools where only general education is taught. Therefore, students and staff have the tendency of involving in workshop/ laboratory accidents. To ameliorate the this danger, the national policy on TVET stipulated that proprietors of schools who could be government, NGOs and private individual shall provide school health services for their institution (FRN, 2013). It is on this note believed that putting this in place will be a safety precaution as first aid box may not be sufficient enough to cater for any form of injury sustained on the field of learning.

It is worthy of note that, TVET goals may not be accomplished if the students' engagement is not fully secured. Securing of the students' commitment to learning in TVET institutions is important if the mandate given to the school administrators is to be delivered. Administrators therefore, provide the critical link to an effective quality centre through the

management of instructors, certification obtainment, and evaluation of curriculum. Nana, et al. (n.d) submitted that without capable administrators, many characteristics that constitute that constitute a quality centre are difficult to achieve. School administrators are often charged with hiring instructors who may be practitioners with much experience in the field or academics with advanced degrees but little work experience in the field and overseeing their effectiveness. For goals of TVET to be realized in Nigeria, a lot of efforts have been put forward federal government (NBTE, 2011).

Another important step which has been taken by the NBTE, being a regulatory body for TVET in Nigeria is the establishment of quality assurance mechanism. This will ensure compliance to best way of adopting the implementation strategies. Emphasising this, Abubakar (2011) reported that there is currently a move in many countries towards having a rigorous internationally recognised TVET quality assurance process.

Constraints to Policy Implementation in Technical and Vocational Education and Training (TVET) Institutions in Nigeria

If not for numerous constraints, TVET being a virile tool to ameliorate joblessness and skyrocketed poverty problems of youth will have attained the greater height it desires. Although the challenges which are surmountable if there is all round commitment.

The first constraint is the administrators' misconception of what TVET is all about. The greatest problem which is shameful is the presence of unfamiliar guest in the familiar home. Some administrators of the programmes, both at the levels of policy making and implementation are not trained in vocational technology education. According to Imam (2012), the aftermath of wrong implementation the nation's education policies by the people at the helms of affair and funding crises is unsatisfactory state of education.

Lack of requisite knowledge by the implementers therefore gave birth to another challenge of underfunding. When the administrators' understanding of the needs of TVET programmes, it will be trivialized and grossly underfunded. So skills acquisition in schools particularly in the area of building technology is cumbersome to implement. The underfunding affects the supply of modern facilities and equipment needed to train technology education students of the 21st century.

It is worthy of note that Hassan and Sadiq (Ogbuanya & Okoye, 2015) said that poverty reduction programmes initiated between 1986 till date which aimed at reducing peoples suffering, provide employment opportunities and access to credit facilities to enable them own businesses of theirs are yet to be attained. These include Better Life Programme (BLP), National Directorate of Employment (NDE), Peoples Bank of Nigeria (PBN), Community Bank (CB), Family Support Programme (FSP), Family Economic Advancement Programme (FEAP), Poverty National Poverty Eradication Programme (NAPEP), National Economic Empowerment Strategy (NEEDS) as well as You-win programme of President Jonathan's administration. However, it is heart disturbing that the aforementioned programmes have not transformed the nation, owing to exclusion of TVET principle in their implementation.

Furthermore, resource is a strategic factor in organisational functioning, without which target may not be met. Akinfolarin, Ajayi, and Oloruntegbe, (2012) stated that managers work with both tangible and intangible resources to attain their goals. Such resources include human, material and financial resources to fund their activities. However, Adeyemi and Akpotu (2004) reported that grossly inadequate of facilities like classrooms, workshops, laboratories, studios, and equipment in technical colleges are parts of the constraints. Therefore, practical acquisition of skills by learners on exist on pages of books. The impact of inadequate educational resources is that training of students becomes retarded and end up not acquiring relevant skills to compete in

the labour market. Nwanchukwu (2014) also argued that graduates lack the requisite skills today due to brain drain caused by inadequate funding of TVET.

Moreover, natural role dichotomy among genders has caused a gap in opportunities between men and women. This has therefore resulted into gender inequality among gender advocates. To them, gender imbalance is that wide separation, the unfilled space between the male and female in various endeavours, essentially TVET sub-sector of education. United Nations International Children's Emergency Fund (UNICEF) for example, observed that while there are three girls for every four boys at primary schools; and at secondary schools, there are only two girls enrolled for every four boys; while at the university, enrolment of girls is one to every five boys (Adeyemi & Akpotu, 2004). According to FME (2005), only 19 percent girls' enrolment rate during the academic year 2001-2002, female participation in Nigerian technical colleges is strikingly low. Most girls found in technical colleges enrolled in vocational programmes that lead to professions traditionally held by women (catering, secretarial, home economics and others).

More importantly, the attitude of the society towards TVET is derogatory. The society does not honour the graduates of TVET institutions. The erroneous view is that, it is the education of under-achievers. Most parents in Nigeria do not encourage nor guide their wards to take a course in its institutions. This is because the society does not place any significant value on the programme which in turn affects the enrolment of candidates into TVET schools in Nigeria.

Another area of challenge to TVET policy implementation in Nigeria is poor maintenance culture for the available infrastructure in most of learning centers. It is heartrending that the few available learning facilities and equipment are not handled with care, lubricated and assemble after use. This nonchalant attitude to procured facilities by the custodians, learners and other users results to the waste of the scarce resources. It is also worrisome that some of the available instructional materials are available but owing to poor maintenance culture have become non-

functional as they need repairs and servicing or replacement while others are now obsolete (Ifejika, 2014).

In addition, technical and vocational education and training educators in Nigeria's various citadels of learning are not often empowered through in-service training, research, conferences and the like to update and improve their pedagogy in teaching vocational and technical education courses to attain the technological transformation in the society. Inadequate and sometime lack of retraining programmes and other professional development activities for TVET instructors deny TVET educators the acquisition of new skills for rapid economic transformation. Igbuzor (Imam, 2012) reported that the poor state of Nigerian education is confirmed by the national literacy rate which is put at 49 percent unqualified teachers in the schools, and acute shortages of infrastructure and facilities at all levels.

Lack of adequate collaboration between technical colleges and industries is a conspicuous challenge to successful policies implementation and then goals realisation. Onjewu (2007) laments that the prevailing situation makes it difficult for citadel of learning to know the manpower needs of the industries, with a view to meeting their manpower requirements. It is disappointing to hear that the potential employers of TVET graduates are not sufficiently involved in planning, formulating and evaluating training programmes, as technical and vocational education system curriculum was developed without adequate attention to labour market requirements (FME, 2005).

Conceptual Framework of Policy Changes Implementation Strategies and Goal

Achievement in Technical Colleges

TVET GOALS

- **Manpower production**
- **Skills acquisition**
- **Entrepreneurship**

Policy change in TVET

- **Curriculum structuring**
- **Entrepreneurship education unit**
- **ICT education components**
- **The use of digital facilities**
- **Counselling unit**

Policy Implementation strategies

- **Awareness creation among staff**
- **Staff capacity building**
- **Students' career counselling**
- **Publicity and accessibility**
- **Public- private Partnership (PPP)**



Source: The Researcher's Design

The above conceptual framework is a model that describes changes that have and are still occurring to TVET. This has therefore necessitated restating of its policies and implementation strategies to be employed by the school administrators. The efficacy of the utilisation of these prescribed strategies to implement the policy change will make or mar the achievement of goals of TVET.

The first box in the diagram indicates the three structured goals of TVET which are manpower production, transferable skills acquisition and entrepreneurial skills development. These goals which are centered on human capital development are the output that flows out of the school system in the society. In this study, the extent to which these transferable and occupational skills have been learnt by the students in technical colleges will be determined to know whether useful manpower is being produced by TVET or not will be put to test. Production of entrepreneurs as a goal of technical and vocational education and training is also an important

goal that needed to be achieved as this will create more opportunities for the citizens and liberate individuals from the shackle of unemployment, poverty, questing for white collar job which is not available and made employees to be dependent.

The second box indicates changes in policies that serve as guidelines to technical and vocational education sub-sector. The changes observable in TVET policies come in the areas of curriculum structuring which is now learner-centered, creation of entrepreneurship education unit in TVET institutions, incorporation of ICT education components, the use of digital facilities in teaching and learning, creation of counselling unit, advocacy and establishment of NBTE and NABTEB. These policies are deliberately stated to give direction to the programmes in all TVET institutions in the country.

In addition, the policy cannot just work in the institutions without strategies to be employed during the stage of implementation. As a result, some implementation strategies have therefore been put in place to ease the task in the institutions with the help of the administrators. After policy formulation, the onus is on the school administrators to domesticate the policies and then identify suitable strategies that will make those TVET policies implementable so as to realise the end which are goals. These implementation strategies include awareness creation among staff, staff capacity building, students' career counselling services, Public- private partnership (PPP), publicity and accessibility and funding models. They are factors that determine the attainment of TVET goals. It could be assumed that the adoption of some or all of the policy change implementation strategies effectively by the school administrators (principals) could revamp TVET in Nigeria and then lead to the attainment of goals.

The last box is tagged feedback which usually come from the community and employers of labour (industries). They determine whether graduates of technical colleges possess relevant employability skills or not as detailed in the stated goals. The implication of this is that, feedback

information is useful in identifying the strengths and weaknesses of the inputs (TVET policies) and process (policy change implementation strategies). The outcome of inputs implementation is to bring about economic growth of the country, drastic reduction of general unemployment rate if total eradication is not realisable and also make citizens self-reliant by becoming entrepreneurs. Meanwhile, the feedback mechanism helps the educational planners to go back to the drawing board

Appraisal of Literature Reviewed

From the literature reviewed so far, evidence abound that the Nigerian education particularly TVET sub-sector has undergone and still undergoing both planned and unplanned changes. Various Scholars have written and conducted researches on policy change management and conceptualised change, policy changes and its management differently but one common thing in their definitions is the roles played by the principals who are the change leaders in planning and mobilizing human and material resources to effect the changes.

The assumption of researcher was that the technical college principal as a leader is crucial to TVET policies implementation and its general improvement, educational performance and goal attainment. It is believed that school leadership has effects on the students' general performance and the economy. It has been proven empirically that TVET is yet to impact on self-employment and nation's technological development. It was thus recommended that standardisation and regular monitoring of TVET in Nigerian institutions should be embarked on. This will happen if regulatory authorities could develop a strong supervision mechanism to regularly supervise the teaching and learning of TVET in Nigeria. Furthermore, challenges facing TVET were also examined which include inadequate facilities, financial and administrative problems among others.

It was also established that technical education is important to the economy of any nation. Evidences have shown from the reviewed literature that standard of technical education has fallen in Nigeria despite the important roles it plays because people see it as a dumping ground for academically poor students; more so, government has relegated this type of education through poor funding. Opinion of scholars on strategies of managing the changes in technical education include public-private partnership, professional development programme, supervision, re-accreditation and quality control strategy among others were thoroughly discussed. Coping strategies suggested by scholars were examined among which were acquisition of relevant management skill through the professional development, curriculum modification and enrolment management.

Conclusively, in spite of all efforts made by researchers on technical and vocational education and training as a means of eradicating unemployment and poverty in the world particularly Nigeria as the giant of Africa, research on policy change implementation strategies and goal achievement in technical and vocational education and training has not been thoroughly considered. Therefore, the intention of this research is to fill this gap.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter describes the procedure and techniques adopted by the researcher in this research work. This chapter presents the research design, study population, sample and sampling techniques, instrumentation, procedure for data collection and data analysis technique.

Research Design

This was a descriptive study of the cross-sectional survey design type. A descriptive cross-sectional survey design is a study in which the condition and potentially related factors are measured at a specific point in time for a defined population (NEDARC, 2010).

Population, Sample and Sampling Technique

The population for this study consisted of all public technical colleges' principals and teachers in the South-west geo-political zone of Nigeria. Principals were targeted because they are the one who facilitate policy implementation in their respective schools. Teachers were also involved because they are the one who help the principals either to succeed or fail in their policy implementation.

This study adopted a multi-stage sampling technique. The public technical colleges in South-west geo-political zone were first stratified into federal and State-owned technical colleges using the stratified sampling technique. A stratum is a subset of the population that share at least one common characteristic. Thereafter, state owned technical colleges were considered for this study. After the identification of the relevant stratum for this studies, a simple random sampling technique was used to select four states (66% of the state population) from the six states that made up South-west geo-political zone in Nigeria. The selected state were Ekiti, Lagos, Ogun, and Oyo.

There are 21 State-owned Government Technical Colleges (GTCs) in the four selected states as at the time of this study (2013-2015). Adopting census which is a type of purposive sampling method that involves examining the entire population that have a particular set of characteristics, all these government technical colleges were selected for the study because of the small number of the school administrators (principals and teachers) in those schools, and in order to make the findings generalisable (see Table 1).

Also, using stratified random sampling technique, the participants in each of the selected government technical colleges were grouped into two strata which were administrative (principals and vice-principals) and academic staff (teachers). From each of the sampled colleges, all the 21

principals and 47 vice-principals were sampled using total sampling method as shown in (Table 3).

So, 95% of the total number of teachers were selected in each state. Therefore, a total of 626 participants were selected out of 659 representing 95% of the total number of the teachers in the selected states in South-west technical colleges (Table 2). The analyses of the sampled schools, principals, vice-principals and teachers are shown in Tables 1, 2 and 3.

Table 1

Schools Sample Size

S/NO	State	No of Govt. Technical	Sample Size	Colleges
1	Ekiti	4		4
2	Lagos	5		5
3.	Ogun	7		7
4	Oyo	5		5
Total		21		21 Schools

Source: Extracted from the data collected from the states' board on TVET

Table 2

		No of Govt. Technical Colleges Teachers	Sample Size
1	Ekiti	64	61
2	Lagos	317	301
3	Ogun	165	157
4	Oyo	113	107

Total Size	659	626 Teachers	Teachers Sample
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Source: Extracted from the data collected from the states' board on TVET.

Table 3

Principal and Vice-Principal Sample Size

S/NO	State	Principal sample size	Vice-Principal Sample size
1	Ekiti	4	8
2	Lagos	5	15
3	Ogun	7	14
4	Oyo	5	10
Total		21	47

Source: Extracted from the data collected from the states' board on TVET

Instrumentation

In this study, six instruments designed by the researcher were used to collect data. The first was the Policy Change Implementation Strategies Questionnaire (PCISQ). The questionnaire had seven sections, A, B, C, D, E, F and G with 43 items. Section A had five items which sought

demographic information of the respondents which included name of the state where the college is, academic qualification, sex and the year of experience while sections B, C, D, E, F and G contained 38 items used to determine policy change implementation strategies (Policy awareness, staff capacity building, funding models, Public-Private Partnerships (PPP), students' career counselling services, and publicity and accessibility) which were devised and implemented by the principals in the schools to cope with and manage the notable internal and external policy changes occurring to TVET. The respondents were made to rate the items, choose and tick freely among the five response options of very high (VH) = 4, high (H) =3, fair (F) =2, low (L) =1, not available (NA) =0.

The second instrument was Inventory on Students' Academic Performance (ISAP) to collect the students' academic results from the National Board of Technical Education and Business (NABTEB) examination for a period of five years (2011 to 2015). The subjects considered were trades and general education (English and Mathematics). NABTEB results was used to determine students' skills acquisition because 40% of the examination is practical of individual student's vocation area and it is a standardised examination.

The third instrument was a questionnaire titled "Goal Achievement in Technical and Vocational Education and Training Questionnaire (GATVETQ)". The questionnaire was divided into three sections, A, B, and C with 16 items. Section A had five items which sought demographic information of the respondents which included name of the state where the college is, academic qualification, sex and the year of experience and membership of Teachers' Registration Council of Nigeria (TRCN) while sections B and C contained 11 items used to determine TVET goal achievement as stipulated in the national policy on education document. The respondents were made to rate the items, choose and tick freely among the five response options of Very High (VH) = 4, High (H) =3, Fair (F) =2, Low (L) =1, Not available (NA) =0.

The fourth instrument was titled “Resource Availability Checklist (RAC)” in technical colleges which comprised of 18 items. The respondents were to choose among three options. They were Adequately Available (AA), Inadequately Available (IA), and Not Available (NA).

The fifth instrument was “Skills Acquisition Observation Checklist (SAOC)” on students’ mastery of the skills. It contained five observable items which the researcher (observer) had to rate among high, average and low. Unstructured interview was the sixth instrument used in this study.

Cronbach alpha reliability method was used to determine the reliability of the two questionnaires. The questionnaires were pilot tested in two state owned skills acquisition centers, Egan and Iba areas of Lagos state with 40 teachers. The scores obtained during the administration of the instruments on the pilot test sample were analysed. The Cronbach alpha coefficient obtained were 0.68 for the policy change implementation strategies questionnaire and 0.81 for goal achievement in technical and vocational education and training questionnaire. The research instruments were therefore adjudged useful and consistent for the purpose for which they were prepared because of their high correlation coefficient. The checklist on resource availability was adapted from the study conducted in Rivers state by Osam (2013) on implementing vocational and technical education programmes in South-south, Nigeria.

Procedure for Data Collection

The researcher, with the assistance of the trained research assistants, visited all the selected technical colleges in the sampled states for data collection. The states visited were Ekiti, Lagos, Ogun, and Oyo.

The two questionnaires, policy change implementation strategies questionnaire and goal achievement in technical and vocational education and training questionnaire were administered

in each of the sampled colleges on the sampled principals, vice-principals and teachers. This method facilitated on-the-spot collection of the completed questionnaire forms.

The inventory on students' academic performance in NABTEB was filled by the vice-principals (academics). The results of the students for five years, 2011-2015 on individual trade subject which are largely practical, English and mathematics were obtained to ascertain the trend of the academic performance of the students particularly in subjects that involved practical. The NABTEB May/June result is important because it was used to determine the level of the skills acquired by the students. It is important to mention here that nothing less than 40% of the examination is practical, particularly the individual's trade subjects.

In addition, observation checklist was also used by the researcher to observe the students during the practical sessions to determine the level at which they have acquired the skills. The researcher and research assistants participated in the practical session of the students which availed them opportunity to observe and rate the students' performances.

Also, the resource availability checklist was completed by the principals. This gave the information on the level of adequacy of facilities and equipment in the colleges.

Lastly, the unstructured interview was done during the researchers interaction with some of the stakeholders (principals, vice-principals, teachers and parents) met.

Issues of ethics need great caution as they may threaten the validity of research more so if compounded by technical and administrative issues. Hence, in this study, ethical frame work was strictly adhered to though time-consuming. In compliance with the ethical issue in research, the researcher sought the consents of the teachers for voluntary participation while parental consents were sought for their children participation since some of the students were still minors as at the time of the gathering of data for this study, more so it involved taking of their pictures for the purpose of the study.

Data Analysis Techniques

The data collected for this study was analysed using frequencies and percentages for demographic information of the participants, research questions one, six, and seven. Mean rating standard deviation and rank ordering were used to analyse research questions two, three, five, eight and nine while research question four was answered in a qualitative way. To arrive at a decision, any policy change implementation strategy item that has the mean score of at least 2.50 and above was adjudged to be highly adopted by the school administrator as stated in the policy document while any item that is lower than 2.50 is adjudged low.

Furthermore, The Linear Multiple Regression Analysis (LMRA) was used to test both main and the first operational hypotheses while the Pearson Product Moment Correlation (PPMC) statistical method was used for operational hypotheses two and three with the aid of version 21 IBM Statistical Package for Social Science (SPSS). The hypotheses were tested at 0.05 level of significance. The NABTEB results of five years were collated and analysed to show the trend of students' performance in the acquired skills within the stipulated period while the unstructured interviews were qualitatively analysed.

CHAPTER FOUR

PRESENTATION, ANALYSIS OF DATA AND DISCUSSION

In this chapter, the data collected were analysed and presented in tabular form. Descriptive analysis was used to analyse and answer the research questions raised in the study, while inferential statistical techniques were used to test the main and operational hypotheses formulated to guide the study at 0.05 level of significance.

Presentation of Results

Tables 4-21 provided the demographic data of the participants and answers to the research questions and research hypotheses earlier stated one after the other.

Demographic Information

Table 4

TVET Institutional Stakeholders' (principals and teachers) Qualifications

Academic Qualification	Frequency	Percentage (%)	Cumulative Percentage
Ph.d	2	0.4	0.4
M.Ed	29	5.1	5.4
MA/ M.Sc	63	11.1	16.5
PGDE	75	13.2	29.6
B.ED/BA/B.Sc	275	48.2	77.9
Btech/ HND	90	15.8	93.7
NCE/ OND	25	4.4	98.1
OTHERS	11	1.9	100

TOTAL	570	100
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Table 4 above indicated the typologies of academic qualifications possessed by the administrative and teaching personnel in the sampled technical colleges in South-west, Nigeria. Only 2(0.4) teachers have doctorate degree which was the highest academic qualification among the participants. This was not astonishing, because it is not a basic requirement to teach in secondary schools, more so it is not tertiary institution. Although, it is a plus to the bank of experienced personnel that will educate the children.

It was also found that 29(5.1%) of the respondents were master degree (M.ed) holders in education while another 63(11.1%) had master degrees in arts and sciences (MA/M.Sc) which are not specialisations in teaching profession. Also, teachers without teaching qualification but had obtained postgraduate degrees in education (PGDE) were 75 (13.2%). This was good for them to know the rudiment of education and will make them to be well equipped with teaching methodologies.

Furthermore, table 4 above shows that most of the teachers were bachelor of education, art and sciences (B.ED/BA/B.Sc) degrees holders with the highest frequency of 275 (48.2%) while those with bachelor degree in technology (Btech) and HND certificates where more of TVET courses are learnt at tertiary level were 90 (15.8%). In addition, NCE/ OND holders were 25 (4.4%) while (Others), that is secondary school leavers and Trade Test Certificate (TTC) are 11 (1. 9%). Although, the academic qualifications of teachers in technical colleges in South-west, Nigeria was encouraging, more still need to be done on those with no higher qualifications to upgrade. Imagine, in this 21st century, a secondary school leaver teaching in secondary school,

this calls for emergent action on the part of government.

Table 5:**TVET Principals' and Teachers' Years of Experience**

Years of experience	Principals		Teachers	
	Frequency	Percentage%	Frequency	percentage %
8 years and above	54	79.4	352	70.1
Below 8 years	14	20.6	150	29.9
Total	68	100	502	100

Table 5 showed the years of experience of principals and teachers. Out of the 68 sampled principals and vice-principals in the technical colleges, 54(79.4%)of them had eight years and above experience, while only 14(20.6%) principals and vice-principals of the total sampled have below eight years in the positions of the director of education (principal) and deputy directors of education (vice-principals). Hopefully, the more experienced the principals, the better the policies are implemented. Furthermore, the number of years a principal had spent as a classroom teacher may also shape his administrative experience.

In addition, the teachers who have spent more than eight years on the job were 350 (70.1%) while only 150(29.9%) have spent below eight years on the job. This indicated that since the number of experienced teachers was high, those who had less than eight years can learn from them.

Research Question 1: Are the principals and teachers aware of TVET policy changes in technical colleges in South-west Nigeria?

Table 6: The Principals and Teachers' Awareness Level of TVET Policy Changes in Technical Colleges in South-west, Nigeria.

Awareness Level	Principals/ vice-principals		Teachers	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Completely ignorant	0	0	0	0
Low level of awareness	0.6	1	06	1.2
Moderate level of awareness	4.4	6	42.4	8.4
High level of awareness	63	93	454	90.4
Total	68	100	502	100

Table 6 indicated that majority of the principals and the teachers of technical colleges in South-west, Nigeria were aware of changes that have occurred in government policies on TVET. It can be seen from the table that none of the respondents was completely ignorant of policy change in TVET. It can also be seen from the table that only 0.6 (1%) of the principals and vice-principals have low level of awareness while only 6 (1.2%) have low level of the policy change awareness. In fact, a significant and considerable proportion were moderately aware on the side of the principals/ vice- principals and teachers with 4.4 (6%) and 42.4 (8.4) respectively, while most of the principals/ vice-principals and teachers had high level of awareness 63(93%) and 454 (90.4%) of TVET policy change respectively. The addition of the two ratings (high and moderate

awareness) resulted to 67.4 (99 %) for the principals and vice-principals while teachers resulted to 496.4(98.8%). This implies that an approximate of 99 percent of the participants were aware of the new development in the policy on TVET. The reason for this awareness may be attributed to the effort of the principals and good organisational climate, and the fast spreading of the use of information and communication technology; essentially, social media.

Evidence emanated from the unstructured interview carried out by the researcher on the principals and teachers also revealed that the need to get promoted to a higher level by the teachers is also a propelling force for the teachers' high level of policy awareness as the knowledge can either make or mar their promotion interview. However, there was a complaint that no adequate synergy between the ministry of education and technical colleges to the extent that many of the teachers complained that copies of the new national policy on education and curriculum as they are changing are not adequately available in the schools. There were no teachers' copies. This therefore created laxity among teachers. Teachers lamented that their principals do not even wish to release the limited available copies because they will not want it to get lost or mutilated. There was also a report that some were just joining the service, which might have also contributed to their poor level of awareness of some of the policy changes.

Research Question 2: Do principals adopt TVET policy implementation strategies as stated in the policy change documents?

Table 7

Principals' Adoption of TVET Implementation Strategies as Stipulated in the National Policy on Education

S/N	Items	N	Mean	SD	Remark
1	Staff capacity building	570	2.47	0.81	Low
2	Funding models	570	1.96	0.95	Low
3	Public -Private Partnerships	570	2.51	1.38	High
4	Students' career counselling service	570	2.19	1.37	Low
5	Publicity and accessibility	570	2.79	0.82	High

Table 7 showed the means scores of the responses of respondents on the adoption of the TVET implementation strategies in the various colleges in South-west, Nigeria as stipulated in the NPE document. To arrive at a decision, any item that has the mean score of at least 2.50 and above was adjudged to be highly adopted as stated in the policy document while any item that is lower than 2.50 is adjudged low. Therefore, publicity and accessibility has the highest mean score 2.79 and Public-Private Partnerships with 2.51. In the area of staff capacity development, funding and students' career counselling service, there was low adoption of the strategies by the principal.

This implied that further training to be able to implement the policies to the letter has not been given to teachers which is also dependent on the available fund.

Research Question 3: to what extent have the principals achieved TVET goals in technical colleges in South-west, Nigeria.

Table 8

Extent of TVET Goals Achievement in Technical Colleges in South-west, Nigeria.

Rating	Manpower prod.		Entrepreneurial Skills dev		Skills acquisition	
	Freq	%	Freq	%	Freq	%
Highly achieved	134	23.5	66	11.5	77.6	0.36
Moderately achieved	163	28.5	123	21.5	130.4	62.0
Lowly achieved	184	32.2	243	42.6	40.8	19.4
Poorly achieved	89	15.6	138	27.2	3.2	0.01
Total	570	100	570	100	210	100

Table 8 above indicated the levels of goal achievement in technical colleges in South-west, Nigeria. From the information in the table, only 23.5% of manpower production have been highly achieved, 28.5 % was moderately achieved, 32 % and 15.6 % were lowly and poorly achieved.

Furthermore, on entrepreneurial skills development, it have 11.5% for highly achieved rating, 21.5 % moderately achieved while 42.6 % of it was lowly achieved and 27.2 % was poorly achieved. This implies that, even with the addition of highly achieved and moderately achieved ratings which was 33% ,the entrepreneurial skills development goal had not been fully achieved as many graduates were still not self-reliant dues of lack of innovative skill.

In addition, the goal on practical and transferable skills acquisition had been moderately achieved as 62% of the observed students were able to perform well on the field in their areas of specialisation. They could handle tools and used it very well, while only 19.4% were yet to acquire the skills as expected.

Research Question 4: To what extent are students' skills developed in technical colleges in South-west, Nigeria?

Table 9

Extent of Skills Acquisition in Technical Colleges in South-west, Nigeria.

SKILLS AREA	N	MEAN	Rank Order
Mastery of trade	210	3.01	2nd
Safety consciousness	210	2.64	3rd
Communication	210	2.38	5th
Team-working	210	3.12	1st
Multi-tasking	210	2.57	4th

Table 9 showed the result of the skills acquisition observation schedule carried out by the researcher among the students during their practical sessions. The outcome revealed that many of the students had acquired the skills in their various field / course of studies.

The observation was based on five core areas required skills. They were mastery of the individuals' trade skills, the extent at which safety precaution was ensured, students' level of communication with their trainers / instructors, team working and the students' ability to cope

with the pressure of many tasks at a time. Decision was taken using any mean score that was 2.50 and above as high while below 2.50 was adjudged low. The result of the observation schedule indicated the mean score of each of the areas observed. It was found that team working had the highest mean (3.12) score, which presupposes that there was a cordial relationship among the students. This is a skill needed to make everyone attain the organisational goals in general and individual goals in particular.

Also, most of the students communicated well with their instructors. Their relationships were cordial such that strangers may not be able to tell who is who, let alone differentiating between the instructors and the trainees. Some of the students were grown adults while others were very young. One common thing among the observed was the use of local dialect to communicate which made explanations to be well understood. However, most of the students could not use English as a means of communication. English is an official language and therefore, their customers' strength after graduation may be limited. This is shown in the mean score of 2.38

For the mastery of trade level, the mean score was 3.01. From the handling of tools and training facilities in the workshop, it could be said that their trade areas, which is the major reason why many of them enrolled, they all performed brilliantly, though still need perfection. The reason for this above average skillful display from the students may not be far from their year of study as most of the students observed were in their year three (final year). In the area of safety consciousness, the mean score was 2.64, in spite of the score, few of them did not observe safety ethics. For instance, only few of the students learning block laying and concrete were seen with their crash helmets, boots among others, some electrical students were also without insulating hand gloves as they could easily be electrocuted.

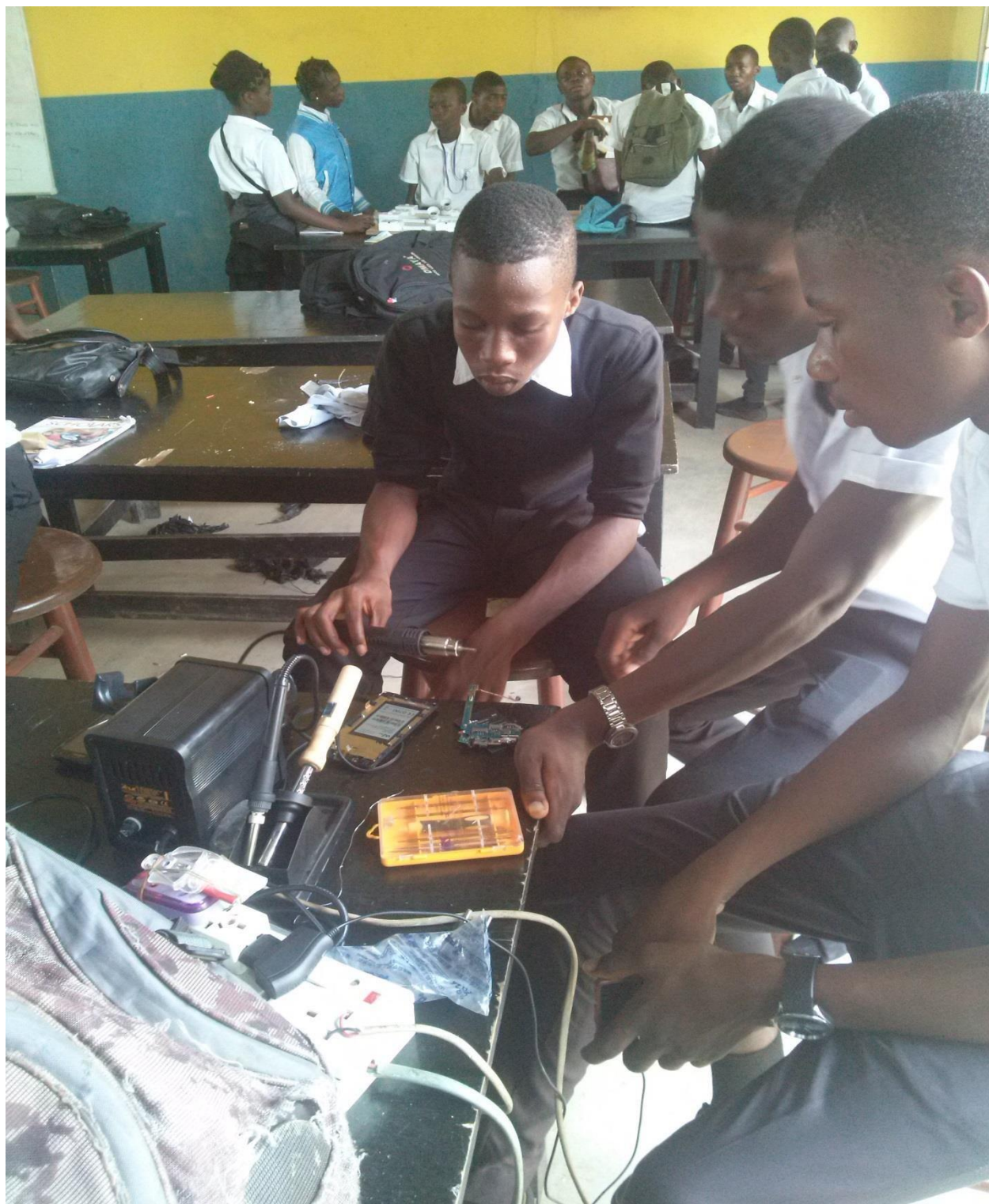
Pictures show some of the students displaying their skills in some technical colleges in South-west, Nigeria.

Picture 1



Carpentry and wood craft skills at GTC Ikorodu, Lagos.

Picture 2



Electrical and installation trade at ijebu-ode GTC

Picture 3



Students and their instructor in bricklaying and concrete skills session at GTC Ikotun

Table 10**Students' Academic Performance in NABTEB for 2011 to 2015 in the States**

STATE	Performance	2011	2012	2013	2014	2015
Ekiti	Passed	341 (40)	392 (38)	515 (49)	676 (61)	517 (84)
	Failed	514 (60)	632 (62)	541 (51)	429 (39)	94 (06)
Lagos	passed	554 (60)	720 (46)	616.4 (36)	849 (50)	1129 (68)
	Failed	376 (40)	848 (54)	1079 (64)	863(50)	591(34)
Ogun	passed	591 (62)	453(42)	51 (11)	183 (29)	160 (29)
	Failed	361(38)	619(58)	433 (89)	440 (71)	392 (71)
Oyo	passed	464(84)	766(72)	671 (52)	830 (57)	552 (94)
	Failed	86 (16)	295 (28)	620 (48)	637 (43)	34 (6)

Note: percentages (%) of the number of students that passes and failed are in the brackets

The NABTEB results above in table 10 indicated the average of students' performances in general education and trade /skills subjects for the years spanned 2011-2015. From the result, success rates were relatively on average for all the states in 2011 and 2012, while 2013 recorded poor performance, in 2014 and 2015 only Ogun State had below 50 percent success rate. This implies that more effort is still needed to develop the students not only in practical but also in theories

Research Question 6: Is there any difference between principals’ and teachers’ perceptions of TVET policy change implementation strategies in South-west technical colleges?

Table 11

The Difference between the Principals and Teachers’ Perceptions of TVET Policy Change Implementation Strategies in Technical Colleges

Strategies	Principals/ Vice-principals				Teachers			
	N	Mean	SD	Rank	N	Mean	SD	Rank
Staff capacity building	68	19.68	3.09	2nd	502	19.84	3.33	1st
Funding models	68	20.88	4.41	1st	502	19.36	4.40	2nd
PPP	68	13.94	5.38	3rd	502	12.47	4.94	3rd
Student counselling	68	12.31	4.69	4th	502	10.93	5.44	5 th
Publicity and accessibility	68	11.19	1.69	5 th	502	11.25	2.11	4th

Table 11 showed the result of the perceptions of both the principals and teachers on TVET policy implementation strategies in technical colleges in South-west, Nigeria. There were 68 school managers (principals/ vice-principals) and 502 teachers that gave their perceptions. So, the mean score of the principals’/ vice-principals’ perceptions on staff capacity building and publicity were lower than the mean score of the teachers. Both the principals and the teachers rated PPPs as the third most effective strategy on TVET policy change implementation. Also, the table indicated that the principals’/ vice-principals’ mean scores on funding model, and PPPs were higher than the mean scores of teachers. Counselling of students on career was the fifth for the teachers in

terms of mean score, but to the principals/ vice-principals, it was the fourth. The type of training every one of them had undergone and the positions each held might have influenced their perceptions. In addition, principals are closer to the ministries than teachers, as a result, explanation might have been made on each of the TVET policies to them which has therefore changed their attitude and perception of things in their colleges.

Research Question 7: What are the specific areas of the policy change adapted in technical colleges in South-west Nigeria?

Specific Areas of TVET Policy Change Implementation Strategies Adapted in Technical Colleges in South-west, Nigeria

The outcome of the researcher's unstructured interview with the principals of technical colleges on the policy change implementation strategies revealed that not all the strategies were adopted fully as they are stipulated in the NPE document. Some areas have been adapted by the principals.

It was gathered by the researcher that business club named the young entrepreneurs' club had been created in colleges particularly in Lagos state by the government and principals to sensitise the students and develop in them, spirit of job creation and thinking of being one's boss. It was gathered that, at their meetings resource persons are usually invited to deliver motivational speeches. In fact, students usually seize the opportunity to ask career related questions that makes the students to be positive in thinking and shun inferiority complex. This strategy was officially launched by Lagos state government in the year 2012.

Publicity is another strategy technical colleges principals adapted to suit need. Principals in Lagos and Ogun states technical colleges confirmed the use of mobile phone Short Message Service (SMS) to get the public notified of their colleges' admission commencement and other

programmes. Also was the use of banners and sign posts carrying information about the colleges' available programmes and already enrolled students also served as a major link between the colleges and the public. In Oyo state, technical colleges' principals take advantage of parents and teachers' forum to advertise the available programmes of their colleges. They even took the advertisement beyond the shore of the host communities.

Localisation of the implementation strategies is common among the technical colleges in the rural areas. By localisation, the research meant restructuring the strategies and programmes to suit the need of the host communities and its neighbouring communities. This localisation gave room for individual differences' consideration. For instance, Community self-help where well-to-do members of the communities contributed to provide some of the unavailable resources for schools as the school administrators complained of financial insufficiency. Furthermore, discretion on which course to be offered and flexibility of admission policy were common in all the states' colleges. This is mostly dictated by the needs of the host communities as affirmed by the principals and teachers. Though, there is a required number of qualification an applicant must have had as a pre-condition for admission, but when an admission seeker does not have it all, waiver will be given, so as to ensure the enrolment quota is reached. Sometimes, female admission seekers are considered first and their requirements for admission are lesser than their male counterpart to ensure gender balance in admission.

Moreover, the choice of available courses in the colleges were determined by patronage, the school staff capacity, facilities and equipment. It was reported that a technical college reduced the number of available courses to five from ten. This was due to the conversion of the college permanent site to a polytechnic by the state government. Consequently, the new place allocated to the technical college is smaller than the former and lacked facilities to be able to host all the

TVET programmes. Also, electrical department of all the technical colleges sampled in the South-west, Nigeria usually have more enrolment while another department may not even receive any application. The way out therefore depends on the dynamism of the leadership of the colleges.

Research Question 8: What resources are available to implement TVET policy change to achieve TVET goal on manpower production in South-west Nigeria?

Table 12

Availability of Resources for Manpower Production in Technical Colleges in South-west, Nigeria

State	Adequately available	Inadequately available	Not available	TOTAL
Ekiti	09 (12.5%)	36 (50%)	27 (37.5%)	72(19.0%)
Lagos	24 (26.6%)	55 (61.1%)	11 (12.2%)	90 23.8%)
Ogun	25 (19.8%)	58 (46.0%)	43(34.1%)	26(33.3%)
Oyo	31(34.4%)	31(34.4%)	28(31.1%)	90(23.3%)
TOTAL	89(23.5%)	180 (47.6%)	109 (28.8%)	378(100%)

Table 12 showed the availability and the level of adequacy of the available resources to implement TVET policy on manpower production in technical colleges in the sampled states. In Ekiti state, only 9 (12.5%) of the resources were adequately available, while 36 (50%) were available but not adequate to teach the students and 27 (37.5%) were not even available, let alone being adequate. This implies that many of the skills students are supposed to learn in the technical colleges in Ekiti state will be devoid of practical session which is the bedrock of TVET. Also in Lagos state, 24 (26.6%) of the needed resources were adequately available, 55 (61.1%) were available but not sufficient enough to implement TVET policies in the state, while 11 (12.2%)

were not available. The number of this unavailable resources was comparatively small due to a special way of financing education in the state tagged “Eko Project” which has helped many of the technical colleges to procure the needed facilities and equipment.

Furthermore, the situation in Ogun state technical colleges was not different as 25 (19.8%) of resources available there were adequate, 58 (46.0%) resource was available but not adequate enough to cater for the teaming population of the students in the state technical colleges, while the needed training resources that were unavailable was 43 (34.1%). This is unspeakable because it showed that the emphasis that the federal government placed on the provision of adequate and relevant educational resources was not adequately implemented by state governments in all the technical colleges, more so education falls in the concurrent legislative /duties list in the constitution.

As for Oyo resources were in between adequately available and inadequately available as both had equal percentages 31(34.4%) and 31(34.4%) respectively, while the unavailability of the resources was 28(31.1%). One common thing to all the sampled schools was that they lacked school clinic except for a school in Ogun state. Health facilities and staff are essential in TVET institution, because the students do more of practicals which involve the use of tools and equipment. Hence, government at all levels should look this area urgently so as to save both the teachers’ and the trainees’ lives from workshops’ accident or danger. The TVET administrators should improvise some of the resources. The school in totality can serve as workshops for some departments like electrical, bricklaying, plumbing, carpentry and painting and decoration. Students should do practicals with the school building and stop lamenting.

Table 13

Extent of the Use of the Funding Model to Finance TVET Programmes in Technical Colleges in South-west, Nigeria

Item	N	Mean	Rank Ordering	Std. deviation
Students	570	1.73	7th	1.047
Donors	570	2.24	4th	0.951
Private sector	570	2.41	2nd	1.488
NGO's	570	2.28	3rd	0.928
Government	570	2.03	6th	0.837
Production units	570	2.57	1st	0.811
Parastatals	570	1.11	10th	0.572
Informal sectors	570	1.48	9th	0.658
Alumni	570	1.63	8th	0.617
Multinational corporation	570	2.10	5th	1.599

Table 13 showed the channels principals followed to fund TVET programmes in their colleges. Ranking the mean scores of these funding channels, it was revealed that the production unit of the colleges had the highest mean rating 2.57, which was followed by the private sector 2.41, the Non-Government Organisations (NGO) had 2.28, Donors 2.24, multinational corporations 2.10, Government 2.03, Students 1.73, Alumni 1.63, Informal sectors 1.48 and the parastatals was ranked 10th with 1.11. This means that only the school production unit scored above the standard set for considering what is high while other funding models were still below the expected mean score level which was 2.50. This presupposes that financial resource was not

sufficient for TVET to realise its goals. Hence, the need for collective funding solution to reposition TVET in South-west Nigeria in particular and the whole nation in general.

Research Question 9: To what extent has the students' career counselling service affected TVET goals attainment in south-west Nigeria?

Table 14

Extent of the Implementation of Students' Career Counselling Service in Technical Colleges in South-west, Nigeria.

Implementation Extent	N	Frequency	Percentage (%)	Rank Ordering
No implementation	570	44	8	4th
Poor implementation	570	110	19	2nd
Fair implementation	570	72	13	3rd
High implementation	570	108	19	2nd
Full implementation	570	236	41	1st
Total		570	100	

Table 14 showed the extent of implementation of students' career counselling services in technical colleges to achieve TVET goals in South-west, Nigeria. The highest frequency of the rating among the participants favoured full implementation 236 (41%), high implementation rating 108 (19%) and fair implementation rating of students' career counselling services 72 (13%). The addition of the above reported three ratings is 416 (73%).

Also, the ratings for poor implementation and no implementation of the students' career counselling service strategy was 110 (19%) and 44 (8%) respectively. This therefore suggests that

students' career counselling service was taken seriously in technical colleges. That notwithstanding, more still need to be done by school administrators on using this potent strategy (students' career counselling service) if technical and vocational education and training goals are to be fully realised and not a mirage. Students' career counselling service is essential because it makes every student to discover himself and choose relevant course of study after being guided by a trained counsellor.

Research Question 10: To what extent is Public-Private Partnerships (PPPs) implemented to TVET achieve goals in South-west, Nigeria?

Table 15

Extent of the Implementation of Public-Private Partnerships (PPPs) to Achieve TVET Goals in Technical Colleges in South-west, Nigeria.

Implementation Extent	N	Frequency	Percentage (%)
No implementation	570	94	17
Poor implementation	570	65	11
Fair implementation	570	78	14
High implementation	570	121	21
Full implementation	570	211	37
Total		570	100

Table 15 showed the responses of the participants to the extent of implementation of Public-Private Partnerships (PPPs) in technical colleges as the highest frequency of the rating among the participants favoured full implementation of the public-private partnership with 211 (37%), this was followed by responses on high implementation which was 121 representing 21%

of the total participants' responses. The addition of the above stated rating amounted to 332 (58%) of the total rating which implies that public-private partnership as a strategy to actualise TVET goals was implemented averagely.

Also, the ratings for fair implementation and poor implementation of the Public -Private Partnerships (PPPs) strategy are 78 (14%) and 65 (11%) respectively. The addition of the two ratings resulted to 143 (25%) while no implementation rating was 94.4 (17%). This therefore suggests that more still need to be done by school administrators on using the potent strategy if technical and vocational education and training goals are to be realised. The summation of poor implementation and no implementation rate is therefore 42 %. The message this is also sending is that non-governmental organisations, individuals and multi-national organisation still need to be encouraged by government and the principals to contribute their corporate social responsibilities to develop the youths' skills. The reason for none active participation may also be due to unpalatable business operating environment to all these private establishments which might be making them feel reluctant to fund government project and the risk of losing the capital invested in the partnerships.

Research question 11: To what extent are teachers' capacity developed for TVET goals achievement in technical colleges in South-west, Nigeria?

Table 16

Extent of Teachers' Capacity Building for the Achievement TVET Goals in Technical Colleges in South-west, Nigeria.

Implementation Extent	Frequency	Percentage (%)	Cumulative Percentage
No implementation	43	8	8
Poor implementation	96	17	25
Average implementation	120	21	46
High Implementation	173	30	76
Very high implementation	138	24	100
Total	570	100	

Table 16 revealed that staff capacity development was well implemented. Poor implementation and no implementation had 139(25%) while very high implementation, high implementation and average implementation had 431(75%). This might have been achieved through the combination of institutional and individual efforts.

Hypotheses Testing

The main and three operational hypotheses were tested using multiple regression analysis, and Pearson product moment correlation statistical tools at 0.05 level of significance to determine

whether there existed significant relationship and significant difference in the choice of school administrators' TVET policy change implementation strategies and TVET goals achievement in technical colleges in South-west, Nigeria.

Main hypothesis

Ho: There is no significant relationship between technical and vocational education policy implementation strategies and goal achievement in technical colleges in South-west, Nigeria.

Table 17

Adjusted R Square Value for the Model summary of TVET Policy Change Implementation Strategies on Goal Achievement in Technical Colleges in South-west, Nigeria

Model	R	R²	Adjusted R²	Std. Error of the Estimate
1	.465	.217	.208	3.04952

- a. Predictors: (Constant), Staff awareness, Staff capacity building, Funding models, Public-private partnership, Students career counselling service, publicity and accessibility

From the result in table 17, the adjusted R² (0.217) has poor fit. This reveals that the constructed multiple regression model of the independent variables (awareness, staff capacity building, funding models, Public-private partnership, students counselling services and publicity and accessibility) account for 22% variance in the dependent variable (TVET goal achievement). The results on the Analysis of Variance (ANOVA) for the model are as shown in table 18.

Table 18

Adjusted R Square Value for the Model summary of TVET Policy Change Implementation Strategies on Goal Achievement in Technical Colleges in South-west, Nigeria

Model		Sum of squares	df	Mean square f	sig
1	Regression	1447.784	6	241.297	25.947 .000 ^b
	Residual	5235.648	563	9.300	
	Total	6683.432	569		

a. Dependent variable: TVET goal achievement

b. Predictors: (Constant), Staff awareness, Staff capacity building, Funding models, Public-private partnership Students career counselling service, publicity and accessibility

The results of the Analysis of Variance (ANOVA), $F(df\ 6, 563) = 25.947, p < 0.000$, indicated a statistically significant relationship (stronger than 0.05) in the independent variables (awareness, staff capacity building, funding models, Public-private partnership, students counselling services and publicity and accessibility) and dependent variable (TVET goals). Based on this significant relationship, the coefficient for the Beta weight for the amount of standard deviation unit of change in the dependent variable for each standard deviation unit of change in the dependent variable was calculated. The results are as shown in table 18.

Table 19

**Coefficients for TVET Policy Change Implementation Strategies and Goal Achievement
in Technical Colleges in South-west, Nigeria.**

Model		Unstandardized Coefficients		standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.103	2.138			
	Staff awareness	-.150	.107	-.053	.396	.163
	Staff Capacity Building	.121	.043	.117	2.843	.005
	Funding models	.137	.137	.177	3.686	.000
	PPP	.031	.036	-.085	-2.575	.395
	Student career Counselling	.131	2.138	.205	4.401	.000
	Publicity and Accessibility	.209	.072	.024	2.879	.004

The standardised coefficients in Table 18 revealed that:

- a. The independent variable, students career counselling service value has the strongest positive effect on the TVET goal achievement because the Beta ($\beta = .205, .000$) shows statistically significant relationship because the alpha value is less than 0.05.
- b. The independent variable, funding models has the next stronger positive effect on the TVET goal achievement because the Beta ($\beta = .117, .000$) shows statistically significant relationship because the alpha value is less than 0.05.
- c. The independent variable, staff capacity building has the next stronger positive effect on the TVET goal achievement because the Beta ($\beta = .177, .000$) shows statistically significant relationship because the alpha value is less than 0.05.

- d. The independent variable, public-private partnership has the next stronger negative effect on the TVET goal achievement because the Beta ($\beta = -.085 .395$) shows no statistically significant relationship because the alpha value is higher than 0.05.
- e. The independent variable, staff awareness has the next stronger negative effect on the TVET goal achievement because the Beta ($\beta = -.053 .163$) shows no statistically significant relationship because the alpha value is higher than 0.05.
- f. The independent variable, staff capacity building has the next stronger positive effect on the TVET goal achievement because the Beta ($\beta = .024, .004$) shows statistically significant relationship because the alpha value is less than 0.05.

Ho1: There is no significant relationship between the awareness of TVET policy implementation strategies and skills acquisition in technical colleges in South-west, Nigeria.

Table 20

Awareness of TVET of Policy Change Implementation Strategies and Skills Acquisition in Technical Colleges in South-west, Nigeria

Variable	N	X	SD	Cal r	P-value	Remark
Policy Change Awareness	570	74.414.4		.019	.785	Ho accepted
Skills Acquisition	210	13.71.16				

Significant level $p < 0.05$

The above table 20 showed the result of Pearson product moment correlation statistics on awareness of the strategies and skills acquisition in technical colleges in South-west. The Cal r was 0.019 while the level of significance was .785. Since the level of significance was higher than 0.05, the null hypothesis that there is no significant relationship between awareness of the strategies and skills acquisition in technical colleges in South-west Nigeria was therefore upheld. This implies that a weak negative relationship existed between the two variables.

Ho 2: There is no significant relationship between students' career counselling services and entrepreneurial skills in technical colleges in South-west, Nigeria.

Table 21

Students' Career Counselling Services and Entrepreneurial skills Development in Technical Colleges in South-west Nigeria

Variable	N	X	SD	Cal r	P-value	Remark
Counselling Services	570	11.15.37				
				.226	.000	Ho Rejected
Entrepreneurial Skills	570	16.82.38				

Significant level $p < 0.05$

The above table 21 showed the result of Pearson product moment correlation statistics on students' career counselling services and TVET goal achievement in technical colleges in South-west, Nigeria. The Cal r was 0.226 while the level of significance was .000. Since the level of significance was less than 0.05, the null hypothesis that there is no significant relationship

between students' career counselling service and TVET goal achievement in technical colleges in South-west Nigeria is therefore rejected. This implies that a weak positive significant relationship existed between the two variables.

Ho 3: There is no significant relationship between Public -Private Partnership (PPP) and manpower development in technical colleges in South-west, Nigeria.

Table 22

Relationship between Public-Private Partnership and Manpower Production in Technical Colleges in South-west, Nigeria.

Variable	N	X	SD	Cal r	P-value	Decision
Manpower Production	570	12.00	2.04			
				.191	.000	Ho rejected
Public-Private Partnership	570	12.64	5.01			
Significant level $P < 0.05$						

Table 22 showed that correlation coefficient between Public-private partnership and goal achievement was .191 while P-value was .000. Since the level of significance was less than 0.05, the null hypothesis was therefore rejected. This presupposes that there was a weak positive significant relationship between manpower production and government owned institutions' partnership with the private industries. This also implies that the partnership between government and private bodies was yet to get a strong significant relationship in the achievement of the tripod goals of technical and vocational education and training.

Discussion of Findings

The study examined the policy change implementation strategies in technical and vocational education and goal achievement in technical colleges in South-west, Nigeria. The research questions were stated to find out the extent to which the policy change implementation strategies in TVET have been put into action to determine the achievement of TVET goals in State-owned technical colleges. The results showed that principals are implementing the identified implementation strategies but at different levels.

The outcome indicated that most of the institutional stakeholders were highly aware of TVET policy change while the number of those who were poorly informed was very low. This aligned with findings of the study carried out by Adebowale and Dare (2012) on teachers' awareness of Nigeria educational policy on information and communication technology and the use of ICT in Oyo state secondary schools that most of the teachers in secondary schools were moderately aware of educational policy on ICT. The implication is that the school administrators should have been reporting improvement in TVET policy change implementation in technical colleges in South-west, Nigeria. But due to the inadequacies of other factors for a successful policy implementation like financial and material resources, this has not been achieved. This may be one of the reasons why unemployment and poverty are still lingering and spreading like cancer in Nigeria especially among the youths. The few that were still not completely aware need urgent turnaround action from the educational stakeholders, because everybody should be informed of what is expected of him in TVET institutions, if not, wrong things will be done in the classrooms, and therefore, the achievement of TVET goals maybe a mirage.

Furthermore, it was found that not all the TVET policy implementation strategies have been adopted by the principals in technical colleges in South-west, Nigeria as specified by the nation's education policy document, particularly in the area of staff capacity development.

Principals need further training to be able to implement the policies to the letter let alone teachers who directly impart the knowledge in the trainees. This was in line with the opinion of Oyesiku (2013) who asserted that many tutors were tutoring their students with methods they learned at least 15 years ago in their various teachers' training institutions. This implies that the knowledge, skills and methodology teachers gained during their period of university training may have been obsolete and not conform to the new trend in knowledge in all fields of endeavour. It has also been empirically proven by Hallinger and Heck (Ogungbemi, 2012) that schools that make an impact in students' learning are usually managed by principals who make a meaningful contributions to the effectiveness of teachers as this contributes immensely to the learning of students. Also, in the area of financing and resource provision and public-private partnership much have not been done as principals in the sampled colleges relied mainly on the money and other physical resources coming from the government. Buttressing the above, Ogunmade (2005) found that most schools in Lagos state were poorly funded by government as many were not well equipped, and many classrooms did not have enough seats for all the students. Hence, extra effort is demanded of the principal for a better adoption. School administrators should not rely solely on the money and other physical resources coming from the government, other funding models channels should be tried.

It was found that part of the goals had been attained on an average while others were still below average level.

It was found that students were progressively acquiring skills in their respective areas of specialisation. Evidence abound in the ranking of the five thematic areas of skills acquisition. They worked in team, interacted well with their trainer and fully participated in sessions. However, there was less emphasis on safety as most the trainees lack safety kits let alone using it. The inadequacy of the trainee materials available in the school might have contributed to this.

This aligned with Osam (2013) who found that equipment and other facilities needed for successful vocational skills acquisition training were grossly inadequate in technical colleges. It is also worrisome to have found that some of the available facilities were not functional and some were in deplorable conditions.

It was also found that perception of the management and teachers were differ in the areas of staff capacity building, publicity and students' career counselling. The type of training every one of them have received and the positions each held might have influenced their perceptions. In addition, principals are closer to the ministries than teachers, as a result explanation might have been made on each of the technical and vocational education and training policies to them, this might have therefore changed their attitude and perception of things in their colleges. Therefore, principals should review their relationship with their teachers. Ogungbemi (2012) found that the interpersonal relationship of the principals with the teachers had a significant relationship with school effectiveness. By implication, the success of whatever strategy is introduced to implement government policies and then achieve set goal will be determined by the school climate and the perceptions of the policy executors. Salau (Ogungbemi, 2012) also maintained the same position that the success and failure of a school is greatly dependent on the administrative style of the school head. In view of this, principals in south-west should learn how to work harmoniously with both the teaching and non-teaching staff and make them to work with the principle of collective responsibility and to be able to drive home the goals of TVET in Nigeria.

This study also found that adaptation of the TVET policy change and its implementation strategies in the technical colleges varied and depended on the location of the schools, rural or urban. From the information gathered on the field from the principals, localisation of the implementation strategies was common among them. Students were taxed to provide some

equipment for the schools, Lagos state principals set up business clubs such as the young entrepreneurs clubs to be an avenue to sensitise the students and re-orientate them on why they are in the college and what they stand to gain in terms of being their own boss, self-reliant and becoming employers of labours. Also, publicity strategy was an area principals have devised various methods like the use of SMS, pasting of posters and banners to communicate with members of the public, especially parents, community self-help, discretion on which course to be offered which was determined mostly by the available resources and patronage, flexibility of admission policy and staff capacity building.

The availability and the level of adequacy of the available resources to implement TVET policies in government technical colleges in the sampled states in South-west, Nigeria were also considered. It was found that the resources to train and produce sufficient manpower for the nation in technical colleges were largely inadequately available, while some were not even available, let alone being adequate. This implies that many of the skills students are supposed to learn in the technical colleges were devoid of full practical session which is the mainframe of technical and vocational education and training. This is unspeakable because it showed that the importance that the United Nations and the federal government placed on the provision of adequate and relevant educational resources was yet to be adequately implemented by state governments in all the technical colleges, more so education falls in the concurrent legislative /duties list in the constitution.

Moreover, the number of the unavailable resources in Lagos state was smaller than other sampled states due to a special way of financing education in the state tagged “Eko Project” which has helped many of the technical colleges to procure some of the needed facilities and equipment.

As for Oyo resources are in between adequately available and inadequately available as both have equal percentage 31(34.4%) and 31(34.4%) respectively, while the unavailable resources was 28(31.1%).

Generally, it was found that there was a high percentage of inadequacy in the available resources for training to acquire relevant skills in all the sampled technical colleges in South-west, Nigeria. In spite of the government borrowing from the World Bank to finance the “eko project”, some departments also have population explosion due to high patronage. Some colleges lacked relevant facilities as some training equipment are abandoned because they are obsolete while some classrooms and workshops are dilapidated.

One common thing to all the sampled schools is that they lack school clinic except for a school in Ogun state which is essential in TVET institution as they do more of practical where tools and equipment are used and accident may occur. Hence, government at all levels should look this area urgently so as to save both the teachers’ and the children lives from workshop accident or danger. The present findings aligned with findings by Osam (2013) that the needed training equipment and facilities in Rivers state technical colleges are not adequate. Bello and Babawuro (2013) also found that some of the needed facilities were not only unavailable, the few available ones were not functioning.

This study also found that students’ career counselling service was in operation in most of the technical colleges in South-west, Nigeria. However, this department in most of the colleges visited lacked the professional counsellors who are qualified to do this job.

It was found that there was an average implementation of the Public-private partnership programmed. This therefore suggests that more still need to be done by school administrators to maximise this potent strategy if TVET goals are to be realised.

The typologies of academic qualification possessed by teaching personnel in technical colleges in South-west, Nigeria. It was found that very few teachers had doctorate degree which was the highest academic qualification among the participants. This was not astonishing because it is not a basic requirement to teach in secondary schools, more so it is not tertiary institution. Although, it is a plus to the bank of experienced personnel that will educate the children. It was also found that some of the teachers had master degrees while most of the teachers were bachelor of education, art and sciences (B. ed/BA/B.Sc) degrees holders. In addition, NCE/ OND holders, secondary school leavers and TTC were also among. Although, the academic qualifications of teachers in technical colleges in South-west, Nigeria was quite encouraging, more still needed to be done on those with no higher qualifications to upgrade. Imagine, in this 21st century, a secondary school leaver teaching in secondary school, this calls for urgent action on the part of government.

It was also found that staff awareness had a high negative relationship with TVET goal achievement which indicates that increase in the level of awareness of staff, as a policy change implementation strategy, did not lead to improvement in the TVET goal achievement. This was because the use of internet and social media such as Facebook, WhatsApp, and LinkedIn among others today by the teachers, keep the teachers updated about new development in TVET. However, it had a negative relationship with goal achievement due to lack and inadequacies of other policy implementation strategies made. Furthermore, staff capacity building in the model indicated that there was positive relationship between it and TVET goal achievements. This presupposes that increase in staff capacity building brought about improve in the achievement of goal in technical colleges. This was so because in most cases the training undergone by the teachers made them understand the subject they teach better and exposed them to the new innovations in their areas of specialisation. This aligned with Fennema and Franke (Ishikwen &

Benjamin, 2014) who found that understanding of the subject matter is a prerequisite to effective teaching. Ukanupong (Ishikwen & Benjamin, 2014) also affirmed that training received by the teachers make them not to implement the curriculum in a wrong way.

Funding models had a strong positive relationship with TVET goal achievement based. This implies that increase in funding, as a policy change implementation strategy led to improvement in the TVET goal achievement. This was so, because adequate funding helped the principals to get some training materials for the schools which will therefore aid the acquisition of relevant skills.

Public-private partnership had a negative relationship with TVET goal achievement which implies that increase in Public-private partnership as a policy change implementation strategy did not lead to improvement in the TVET goal achievement in technical colleges in South-west, Nigeria. This was so because many of the colleges were not utilising this strategy maximally and because of the cumbersome procedures to be followed before going into partnership.

Students' career counselling service also had a positive relationship with TVET goal achievement. This implies that increase in students' career counselling service as a policy change implementation strategy led to improvement in the TVET goal achievement as students' career counselling service made a significant contribution to goal achievement. The finding revealed that professional career counsellors though, were not adequately available in the sampled technical colleges in south-west, Nigeria but some teachers were saddled with that responsibility by the colleges after they have been trained internally. This agreed with the national policy on education (FGN, 2013) which suggested that in the absence of the professional counselor, lay man could be trained for that purpose.

Publicity and accessibility had a positive relationship with TVET goal achievement. This implies that increase in the level of publicity and accessibility as a policy change implementation

strategy led to improvement in the TVET goal achievement. This presupposes that there was a relationship between TVET policy implementation strategies and goal achievement. Since the regression analysis result has revealed that each of the strategies contributed to skills acquisition, manpower development and entrepreneurship skill in South-west. This has also brought to the fore that a problem in any of the strategies will incapacitate TVET goal achievement in technical colleges.

It was also found that there was no significant relationship between the institutional stakeholders' awareness of policy change and skills acquisition in technical colleges. The result of the correlation revealed that the awareness of the policy changes and implementation strategies did not have a direct relationship with skills acquisition by the trainees. By implication, if the awareness is not accompanied and aided by relevant resources for training, the hand-on skills may not be easily learnt.

The study also found that, there existed significant relationship between students' career counselling services and entrepreneurial skills development in technical colleges in South-west, Nigeria. The relationship was a weak positive relationship which implies that students' vocational orientation and guidance determined the achievement of entrepreneurial skills. Many students were facing the difficulty of choosing the right type of course, while those who were opportuned were doing better. To boost the relationship, a trained counsellor should be employed to avail them the opportunity to know and be able to select courses that suit their capabilities and interests. This conformed to Okorie, et.al (Ishola, 2003) report that many of the trainees concerned themselves with studying of courses in the institutions without due regard to marketability and employability of the graduates in the field. Furthermore, Ishola (2003) said that the development of an individual's knowledge, skills and attitude for a vocational purpose should be the area of concern in citadels of learning today. This will help the trainees to unlock the abundant talents

endowed them by God. As a result, their innovative ideas will make them to be job creators and poverty alleviators in Nigeria and other parts of the world. If effort is made at making career education a more effective instrument in providing work standards of the people, TVET goals will not be far from being achieved in Nigeria and South-west in particular.

The study also revealed that there was a significant weak relationship between Public-private partnership and manpower production in technical colleges in South-west, Nigeria .This was because the impact of private bodies' participation in partnership with the government has not been fully felt by TVET programmes because most of the private organisations are after profit making. Therefore, when this target is not met, they will opt out. Furthermore, the policy of government seems not to be pleasant to the private industries that opt for partnership with government as the burden of the taxation ought to be reduced. However, the reverse was the case. For instance, industries in Lagos state during the administration of Mr. Babatunde Raji Fashola has complained of multiple taxation. Another factor was the law of demand and supply as the number of trainees in those technical colleges was more than the facilities and equipment provided by PPP. This implies the principals of various technical colleges must do more in the areas of TVET policy change implementation by collaborating with the private participants. This agreed with Odeleye, Oyelami, and Odeleye (2012) who noted that Nigeria government's vision of getting it nation-state ranked among the global 20 strongest economies is realisable if the Public-private partnerships are optimised. That may be one of the reasons some states government in recent years in Nigeria, have continually provided the enabling atmosphere for entrepreneurial initiatives in virtually all sectors of the economy.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presented the summary of findings and conclusions drawn from the findings of this study. It also contained the necessary recommendations for improving school administrators' (principals and teachers) policy change implementation strategies and goal achievement in technical colleges in South-west, Nigeria. Beside these, suggestions were also made for further studies.

Summary

The study was designed to investigate policy change implementation strategies. A cross-sectional descriptive survey research design was used to obtain information from a representative sample of the targeted population of the study. Policy change implementation strategies in technical and vocational education were the predictors while goal achievement was the dependent variable.

The population for this research consisted 21 principals, 47 vice principals and 659 teachers in all state owned technical colleges in South-west, Nigeria. The sample was drawn from four states in the zone namely Ekiti, Lagos, Ogun and Oyo states.

A detailed review of related literature facilitated the identification of relevant procedures and strategies as well as the construction of the instruments used in this study. From the nature of the problem and the basis of information gathered in the literature review, a conceptual framework was developed. Nine research questions were raised and answered. Four hypotheses were formulated and statistically tested. Two sets of questionnaires were developed and validated by experts in educational management, technical and vocational education and measurements and evaluation, a checklist on resource availability in technical colleges, an inventory on students' academic performance and an observation schedule checklist were also developed to determine skills acquisition extent of the students plus an unstructured interview.

The questionnaires included policy change management strategies questionnaire and goal achievement in technical and vocational education and training questionnaire. Also, the research inventory prepared collected National Business and Technical Examination Board (NABTEB) results of students for a period of five years (2011-2015). The skills observation checklist was also made to observe the students on the field while the unstructured interview of some of the participants was to dig deep into the areas which questionnaires might have not covered.

The data generated was weighted on a five point Likert scale using Statistical Package for Social Science (SPSS). The research questions were analysed using percentages, means, rank ordering and were presented in tables. The main hypothesis was tested with the use of multiple regression analysis while the operational hypotheses were tested using Pearson product moment correlation statistics. All the two inferential statistical tools were tested at 0.05 level of significance as confidence level for acceptance or rejection of the hypotheses.

The summary of the findings revealed that:

1. Teachers in technical colleges were highly aware of TVET policy change as many of them were found to be well informed about changes in curriculum structure, the newly

introduced assessment procedure for technical education, and even changing policies on staff development programme. This implies that the respective school principals were doing well on information dissemination among the staff. It was found that individual teacher's effort also aided the level of awareness attained among them as some of them still complained that copies of curriculum and national policy on education were not made in abundance to be able to circulate among teachers.

2. It was found that not all the TVET policy change implementation strategies were adopted by principals. Most of the principals depended only on government financing of the school programmes. They did not maximally access other means of generating funds. It was found that though publicity was taken seriously by principals, more still need to be done in conveying TVET information to the members of the public. Some parents the researcher had informal interaction with lamented they did not know when admission process commences, so they did not meet up with the deadline. This means that principals should look for other means/ channels of communicating with the public.
3. The results from the analysis of the relationship between school administrators' TVET policy implementation strategies and of goal achievement in technical colleges showed that staff awareness, funding models and publicity and accessibility contributed more as strategies adopted by the principals to the attainment of goals of TVET in South-west. It was also revealed by the findings that record keeping was poor among some college administrators. Some of the NABTEB results were difficult to obtain from the colleges as some ministries and vice-principals laid claim to non-availability while some gave an excuse of just taking over of the leadership role due to transfer.
4. It was found that the students' skills acquisition level was high as it was confirmed on the field during their practical sessions through observation. In fact, some of the students do

get contracts from clients which were executed in the schools. It was also evident by school projects carried out by the students such as erecting of the colleges' fences of the schools, wiring of offices, construction of tables and chairs among others. However, the results of NABTEB proved otherwise that students' performances in general education subjects was poor but did better in the trade/ skills subjects. This was due to their English language deficiency. This presupposes that much clinical efforts still needed to be employed by the principals and teachers on the use of English language so as to make the graduates from these technical colleges fit into the labour market where the official mode of communication is English language. It was also found that safety of the students and teachers was not prioritised by some of the colleges. This was evident in lack of safety equipment like fire extinguishers, insulating gloves and even crash helmets to avert dangers.

5. It was also found that there were differences in perceptions of the administrative and academic members of the staff of the colleges on the ranking of the efficacy of the policy change implementation strategies adopted.
6. Adaption of the policy implementation strategies was also common in the areas of publicity (means of disseminating information) of the available programmes to the members of the public, entrepreneurial skills sensitisation and development as well as the localisation of the strategies.
7. It was established that facilities and equipment to train students to acquire relevant skills were largely inadequate in most schools while some did not even have some. In fact, only one college has clinic facilities. Furthermore, it was established that despite that entrepreneurship education and Information and Communication Technology (ICT) are

made compulsory for all students, lack of enough computers, internet access and teachers have made its implementation difficult for principals.

8. It was established that students' career counselling services helped in guiding trainees on the choice of course. However, lackadaisical attitude of teachers who were assigned the role of counsellors but have not undergone any professional training in career counselling as they do not take it seriously like their primary assignment (teaching) made it not to be efficient. The unwilling attitude of the students to career counselling was also a setback to it.
9. In spite of a significant relationship between Public-private partnership strategy and TVET goal achievement, it was still not thoroughly used. This was due to inadequate information on the part of school administrators on how to get partners. The attitude of government on providing an incentive such as tax break for the industries involved in the commercial development of new ideas. Frequent change in government and policy also prevented private industries from engaging in long term investment in technical colleges.
10. Staff capacity building was better. Many of the colleges teaching staff now go for retraining programmes particularly in their areas of specialisation. The findings revealed that the reasons given were due to promotion. However, the knowledge acquired was not mostly used due to lack of enough training resources.
11. In spite of the significant roles played by agricultural science in the society in eradicating unemployment and poverty, none of the sampled colleges had it available for students to take it as their course of study.

Conclusion

This study was undertaken to examine technical and vocational education and training policy change implementation strategies and goal achievement in technical colleges in South-

west, Nigeria. The research findings have given empirical evidence to determine the relationship that existed among various TVET policy change implementation strategies in terms of creating awareness of the policy among the teachers, staff capacity building, publicity of the programme, resource availability, funding, Public-private partnership and students' career counselling services and goal achievement in technical colleges in South-west, Nigeria in terms of manpower production, skills acquisition and entrepreneurial skills development to make students to be self-reliant.

It was concluded that that goals of technical and vocational education and training have not been fully realised in South-west technical colleges because TVET policies keep changing as technology and economy change but the implementation strategies were not adequately used by the principals of the colleges. The principals were found to have concentrated more on few strategies (awareness creation among the staff, publicity of TVET programmes among the members of the community and partial implementation of Public-Private Partnerships (PPPs) cum students' career counselling services). Also, principals were not found to be dynamic on funding models as many rely on the fund coming from the government while internally generated revenue rarely existed in most of the colleges. In fact, production units of colleges were just waking from it slumbers, hence resources to train the students to acquire the skills were inadequate. Although, some of the implementation strategies were localised by the principals, but not enough as teachers' capacities were not regularly developed due to finance. It was therefore concluded that the adoption and adaption of the TVET policy change implementation strategies determined the achievement of the goals of TVET.

It was also found that none of the technical colleges was fully operating and implementing the provisions of TVET curriculum. For instance, Agriculture science and extension programme is not existing, no record of advertisement for the programme let alone having students enrolled

for it. What they were found operating was agricultural implements and equipment mechanic's work. Therefore, they can only provide farm implements but no body to operate those equipment to create food for the masses and then realise money from the sale of the farm produce. It was observed during the course of data gathering that facilities and equipment were not only insufficient, some of the available ones were not usable because they were either obsolete or not working due to poor maintenance culture of the users of those facilities and equipment. In fact, departments like electrical and carpentry had population explosion due to inadequate training materials which therefore made the little available resources to be overused by students. Not only that, students were also asked to contribute money to buy some equipment and materials to be used for their practical.

It was also observed that truancy cum exodus of teaching staff was rampant in most of the sampled schools. This was evident in the discrepancies in the data obtained from the states board for technical and vocational education and the actual figures of teachers available in the colleges. Some of those that have not even left the job for other lucrative jobs were not available in the school to teach. Also, some of the teaching staff did not have the required certificate to be able to teach, yet they did not enrol for in-service programmes.

The level of TVET goal achievement was revealed to be average due to lack of full implementation of TVET policies by the school administrators. For instance, students were adjudged to be skillful in the practical area of their studies as observed by the researcher on the field during the course of data gathering, but students' performances in the NABTEB results showed that they were lagging behind in the general education, theory and other related courses. Some of the students observed cannot even communicate in English but performed better in the area of hand-on skills. If one is to base judgement only on NABTEB results without observing them during the practical sessions, erroneous conclusion would have cropped up. In addition, in

the area of manpower production, the goal was being achieved as more students were enrolling but it was one sided because not all the available courses had patronage, for example, there were more students for electrical than other departments.

Summarily, it is concluded that school administrators' TVET policy change implementation strategies played significant roles in goal achievement in technical education in South-west, Nigeria. However, there was a concentration on some strategies like awareness creation among staff, publicity and accessibility of the colleges by members of the public, Public-Private Partnership (PPP) were commonly used by school administrators (Principals) than other strategies like funding, resource provision, students' career counselling service and staff capacity building. Whereas all needed to be adopted to achieve TVET goals in South-west.

Recommendations

On the basis of findings of this study, the following recommendations were made:

1. A standing committee on awareness and publicity should be created, so as to be updating the staff on the occurring changes in government policies on technical and vocational education and training. Copies of changed curriculum and policies should be made in abundance by the boards of technical and vocational education. Efforts should also be made to ensure it gets to schools in excess.
2. The principals should make a painstaking efforts to reach out to the old students of their colleges, public-spirited philanthropists, Government, Non-governmental organisations either hold meetings with them, paying them a courtesy visits and/ or write them letters of assistance to make donations of training equipment and facilities like workshops and books to the libraries. This will bridge the gaps created by lack of fund for adequate resources in TVET institutions. Production unit should be made more functional and every department should be tasked to

contribute to it. This will be a strong means of generating funds internally to carry out some administrative works in the colleges instead of having to rely on government fund every time.

3. Improvisation of training materials should be seen as a virile alternative means of getting students trained. For instance, workshop activities should be taken beyond the specified buildings, all the school compound should be used by taking the students around to fix faulty facilities and equipment. This service could be extended to other schools in the community as a corporate social responsibility.

4. Principals should not wait for state government sponsored and institutionalized training and retraining programmes before developing the colleges' pool of human resources. This could be achieved by inviting resource persons from other industries, either government or private owned, to facilitate staff of their schools in the areas vacuum of idea and experience have been created. Also, teachers' attendance of training programmes and utilisation of the new skills and ideas learned at various retraining programmes should be made a prerequisite for teachers' promotion.

5. Principals should localise their policy implementation strategies in such a way that the community where the college is located will understand and benefit from.

6. Principals should do more in the area of stimulating the participation of multinational companies, religious organisations, other non-governmental organisations, and private individuals in providing certain services and skills in technical colleges. Principals should employ the principle of participative management in decision making on the choice of policy implementation strategies so as to enhance cordial relationship. Teachers' input should be gotten before making certain decisions on techniques to deploy in executing government policies on TVET as they change.

7. Agriculture as a course of study should be returned and principals should make effort to let the members of the public see reason why they must register for it. Also, Politicisation of education should be got rid of. It was found that a technical college premises with its facilities and equipment in a college was converted to another school without a better alternative for the college. This has brought a drastic decrease in the quality of what is now learnt in the school, lamented the vice-principal.

8. Principals should let the parents and their children who wish to enrol for TVET programmes know that the programmes involve general education subjects like mathematics, English, physics and chemistry. This will help to guide against mass failure and eliminate the erroneous belief that technical college is a school for mentally retarded children.

9. Local language should be employed more to train artisans and others who do not understand English language and strengthen communication.

10 Students should be encouraged to write business proposals before they graduate and be guided on its implementation. This will help them to use the skills acquired in entrepreneurship education and will ultimately ameliorate unemployment among the youth.

11 Since ICT education is compulsory in the new curriculum but internet is not always available, principals should write letters to network providers in the countries to assist on the provision of Wi-Fi to connect the schools to internet. This is a form of corporate social responsibilities.

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QUESTIONNAIRE FOR PRINCIPALS/TEACHERS

University of Ilorin,
Faculty of Education,
Department of Educational Management.

Dear Principal/Teacher,

Policy Change Implementation Strategies Questionnaire (PCISQ)

The researcher is a postgraduate student of the above mentioned department. This questionnaire is mainly for Ph. D research purpose. All information given will therefore be treated with strict confidentiality. You are hereby required to give your honest and candid opinion.

Thank you for your co-operation.

Adewale, S

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Kindly rate and tick appropriate places

Very high (VH) = 4, high (H) =3, fair (F) =2, low (L) =1, not available (NA) =0

SECTION A:Policy awareness		0	1	2	3	
1 2 3 4 5	Rate your awareness of these new TVET policy change					
	National Vocational Qualification Framework (NVQF)					
	NVQF assessment procedures					
	Counselling unit					
	The incorporation of ICT in the new TVET curriculum					
	Advocacy strategies for the new TVET curriculum					
Staff Capacity Building		0	1	2	3	4
6	I visit teachers' resource centre in my area to update my knowledge of TVET					

7	Resource persons are brought to train teachers on TVET in my college					
8	I am provided with necessary mentoring on TVET by the school management and senior teachers whenever needed.					
9	My school encourages me to avail training opportunities through attendance of conferences, seminars and workshops on TVET					
10	My school management motivates me for good performance in TVET teaching.					
11	I feel sufficiently skilled for the job TVET teacher					
12	The capacity building programmes I have attended have helped me better help my students in the classroom.					

13	Generally, the extent of my school's involvement in TVTE capacity building can rated as					
	Funding Models					
	The mechanisms for funding TVET in my college are:					
14	Students					
15	Donors					
16	Private Sector					
17	NGO's					
18	Government					
19	Production Units					
20	Parastatals					
21	Informal Sector					
22	Alumni					
23	Multinational corporations and organisations					
24	Any Other (specify) _____					
	Public and Private Partnerships					
25	My college collaboration with business and industries in areas of curriculum implementation					
26	Experts from industries are used as a part-time trainers in my college					
27	Partnership with private skill acquisition centers to improve hands-on experiences of teachers and students in my college.					

28	Industries provide my college advice on occupation and skills in demand in labour market					
29	Collaboration with industries to ease Industrial attachment programme (SIWES) for my college students.					
	Students Career Counselling Services					
30	My college has a TVET counselling unit					
31	There is a trained career counsellor in my college					
32	Students are mandated to visit the TVET counsellor regularly					
33	Vocational/career counselling is made compulsory for all students					
34	Counselling unit partners with industries to create employment for students in my college					
	Publicity and Accessibility					
35	My college liaises with other educational sub-sectors to promote greater access to TVET					
36	My college adopt short-term use of local language for training artisans					
37	My college enhances access through media publicity					
38	My college provides artisans with theoretical knowledge and certification after evaluation					

QUESTIONNAIRE FOR PRINCIPALS/TEACHERS

University of Ilorin,
Faculty of Education,
Department of Educational Management.

Dear Principal/Teacher,

Goal Achievement in Technical and Vocational Education and Training Questionnaire (GATVETQ)

The researcher is a postgraduate student of the above mentioned department. This questionnaire is mainly for Ph. D research purpose. All information given will therefore be treated with strict confidentiality. You are hereby required to give your honest and candid opinion.

Thank you for your co-operation.

Adewale, S

.....

Kindly fill or tick appropriate places

Section A: Personal Data

1) State_____

2) Academic Qualification: Ph.D { } M.Ed { } M.A/ M.Sc { } PGDE { } B.Ed, B.A/Ed BSc,
{ } B.tech /HND { } NCE/OND { } OTHERS SPECIFY_____

3) Sex: Male { } Female { }

4) Years of Experience as a Principal: 8 years and above { } below 5 years { }

5) Years of Experience as a Teacher: 8 years and above { } below 5 years { }

Section B

NOTE:

Very high (VH) = 4, high (H) =3, fair (F) =2, low (L) =1, not available (NA) =0 TVET means: technical and vocational education and training

Kindly tick based on what is obtainable in your technical college

	PROVISION OF MANPOWER	0	1	2	3	4
1	Agricultural extension programme is not available					
2	Female artisans enrolled with their apprenticeship certificates from previous training centers than male artisan					
3	Artisans come for retraining and certification					
4	Not all courses have female student as does male counterpart					
5	Industries always ask for graduates to be employed from my college					
	ENTREPRENEURSHIP EDUCATION					
16	Students are taught how to manage innovative projects					
17	Entrepreneurship is taught as a separate subject in my college					
18	Students' major course of study affects their performance in entrepreneurship education					
19	Teachers' entrepreneurship self-efficacy affects the teaching/learning of entrepreneurship education					
20	Students business project plan is a requirement for graduation					
21	Entrepreneurs are employed to teach entrepreneurship education in my college					

INVENTORY TO THE VICE- PRINCIPAL

UNIVERSITY OF ILORIN,
FACULTY OF EDUCATION, DEPARTMENT OF
EDUCATIONAL MANAGEMENT.

Dear Sir/ Madam,

Inventory on Students' Academic Performance (ISAP)

The researcher is a postgraduate student of the above mentioned department. This inventory is mainly for Ph. D research purpose. All information given will therefore be treated with strict confidentiality. Kindly fill in what is obtainable in your school.

Thank you for your co-operation

Adewale, S

Session	Total Students' Enrolled for the exam	Number of teachers	Academic Performance	
			Passed	Failed
2011				
2012				
2013				
2014				
2015				

Note: Passed: Students that scored between grades A and C in the NABTEB examination which includes their skills area subjects

Failed: Students that scored D, E and F in the NABTEB examination

CHECKLIST TO THE PRINCIPAL

UNIVERSITY OF ILORIN,
FACULTY OF EDUCATION,
DEPARTMENT OF EDUCATIONAL
MANAGEMENT.

Dear Sir/ Madam,

Resource Availability Checklist (RAC)

The researcher is a postgraduate student of the above mentioned department. This inventory is mainly for Ph.D research purpose. All information given will therefore be treated with strict confidentiality. You are hereby required to give your honest and candid opinion.

Thank you for your co-operation

Adewale, S

.....

S/N	ITEM	Available and adequate	Available but inadequate	Not available
1	Workshops			
2	Well-equipped computer laboratory			

3	Lecture hall			
4	Electricity supply			
5	Alternative power generating machine			
6	Fire extinguisher			
7	Tables and chairs			
8	Agricultural tools			
9	Plumbing equipment			
10	Well stocked library			
11	Internet facilities			
12	Offices for staff			
13	Functional borehole			
14	Machines and tools for training			
15	Toilet facility			
16	Warehouses			
17	Health center/ school clinic			
18	Farm for agricultural programmes			

Thank you.

Skills Acquisition Observation Checklist (SAOC)

UNIVERSITY OF ILORIN,
FACULTY OF EDUCATION,
DEPARTMENT OF EDUCATIONAL MANAGEMENT.

S/n	Item	Not skilful (0)	Low Skill (1)	Averagely Skilled (2)	Highly Skilled (3)
1	Safety consciousness				
2	Mastery of the trade				
3	Communication with the instructor				
4	Team-working				
5	Multi-tasking				

APPROVED STATE OWNED TECHNICAL COLLEGES IN SOUTH WEST, NIGERIA

S/NO	STATE	LOCATION
	Ekiti	
1	GOVERNMENT TECHNICAL COLLEGE	ADO-Ekiti
2	GOVERNMENT TECHNICAL COLLEGE	IJERO-Ekiti
3	GOVERNMENT TECHNICAL COLLEGE	IKOLE-Ekiti
4	GOVERNMENT TECHNICAL COLLEGE	OTUN-Ekiti
	LAGOS	
1	GOVERNMENT TECHNICAL COLLEGE	ADOSOBA
2	GOVERNMENT TECHNICAL COLLEGE	AGIDINGBI-IKEJA
3	GOVERNMENT TECHNICAL COLLEGE	IKORODU
4	GOVERNMENT TECHNICAL COLLEGE	IKOTUN
5	GOVERNMENT TECHNICAL COLLEGE	ODOMOLA-EPE
	OGUN	
1	GOVERNMENT TECHNICAL COLLEGE	AYETORO
2	GOVERNMENT TECHNICAL COLLEGE	AJEGUNLE
3	GOVERNMENT TECHNICAL COLLEGE	IDI-ABA, ABEOKUTA
4	GOVERNMENT TECHNICAL COLLEGE	IGBESA
5	GOVERNMENT TECHNICAL COLLEGE	IJEBU-IGBO
6	GOVERNMENT TECHNICAL COLLEGE	IJEBU-ODE

7	GOVERNMENT TECHNICAL COLLEGE	ILARA-REMO
	ONDO	
1	GOVERNMENT TECHNICAL COLLEGE	IDANRE
2	GOVERNMENT TECHNICAL COLLEGE	IWARO-OKA-AKOKO
3	GOVERNMENT TECHNICAL COLLEGE	OKEIGBO
4	GOVERNMENT TECHNICAL COLLEGE	OKITIPUPA
5	GOVERNMENT TECHNICAL COLLEGE	OWO
	OSUN	
1	GOVERNMENT TECHNICAL COLLEGE	ARA
2	GOVERNMENT TECHNICAL COLLEGE	GBONGAN
3	GOVERNMENT TECHNICAL COLLEGE	IJEBU-JESA
4	GOVERNMENT TECHNICAL COLLEGE	ILE-IFE
5	GOVERNMENT TECHNICAL COLLEGE	INISA
6	GOVERNMENT TECHNICAL COLLEGE	IWO
7	GOVERNMENT TECHNICAL COLLEGE	OSOGBO
8	GOVERNMENT TECHNICAL COLLEGE	OSU
9	GOVERNMENT TECHNICAL COLLEGE	OTUN-AYEGBAJU
	OYO	
1	GOVERNMENT TECHNICAL COLLEGE	IBADAN
2	GOVERNMENT TECHNICAL COLLEGE	IGBOORA
3	GOVERNMENT TECHNICAL COLLEGE	OGBOMOSHO
4	GOVERNMENT TECHNICAL COLLEGE	OYO
5	GOVERNMENT TECHNICAL COLLEGE	SAKI

Source: National Board for Technical Education, 2016.

www.nbte.gov.ng/techcollege

UNIVERSITY OF ILORIN, ILORIN, NIGERIA.

POSTGRADUATE SCHOOL

Vice-Chancellor:

Prof. S. A. AbdulKareem

B.ChE (Detroit); Ph.D. (Louisville);
MNAICH; MNSE; MACS; R.Eng (COREN)

Dean:

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UIL/PGS/91/27

9th July, 2018

ADEWALE, Sulaiman

Matric No.: 13/68OG001

Department of Educational Management,
University of Ilorin,
Ilorin.

Dear **Adewale**,

Approval of Doctoral Research Protocol

I am pleased to inform you that the Board of Postgraduate School at the 268th meeting held on Wednesday 20th June, 2018 considered and approved your Doctoral Research Protocol titled:

Policy Change Implementation Strategies in Technical and Vocational Education and Goal Achievement in Technical Colleges in South-west, Nigeria

You are to proceed with your Ph.D. programme accordingly.

Thank you.

Yours sincerely,

Olu Olajugba

Deputy Registrar/Secretary

