Vol. 10 No. 2 (December 2024)

Exploring the Cooperation between Management and School Teachers in the Implementation of Technical and Vocational Education Policy in Nigeria

Muhammad Abdullahi, Mustapha Abubakar ^a ^aFederal Polytechnic Kaura Namoda Zamfara State Nigeria

*Corresponding author: Muhammad Abdullahi: saboaudu@gmail.com

Article history: Received: 2 Jan. 2024 | Received in revised form: 8 May 2024 | Accepted: 24 Dec. 2024 | Published online: 26 Dec. 2024

Abstract

This research explores the cooperation between management and schoolteachers in the implementation of technical and vocational education and training policy in Nigeria. Schoolteacher's role in implementing the Technical and Vocational Education and Training program in Nigeria and the cooperation they receive from the top management in TVET institution has received little attention and is largely overlooked. There are excellent and well-formulated policies but ineffectively implemented. As a result, it leads to a broader gap between policy intent and its implementation. TVET was established to nurture and produce job-ready graduates for industries. The study employs a qualitative method in which evidence is sought from schoolteachers' interviews. A purposive sampling technique is used to select participants, The number of participants is based on the data saturation point. The interview is audio-recorded, transcribed, and analyzed using thematic analysis. NVIVO 12 qualitative analysis software is used to organize the data. The paper and pencil coding method are used for the analysis. The study finds out that there is cooperation between TVET top management and international research cooperation. The cooperation identified in the study is availability of funding to buy equipment and consumables, cooperation between TVET institution and other stakeholders and international research cooperation which will lead to implementation of technical and vocational education and training that will nurture job-ready graduates. TVET policy and research collaboration are ineffective if the partnership between management and "TVET Teachers" is ineffective. As the TVET policy's implementation had not been successful in Nigeria, this study will provide evidence for the need for future schoolteachers' cooperation in implementing the TVET policy to prevent TVET graduates' unemployment in Nigeria.

Keywords: cooperation, management, schoolteachers, TVET policy

© 2024 Penerbit UTM Press. All rights reserved

■ 1.0 INTRODUCTION

Research on technical and vocational education and training (TVET) has increasingly become important in the past years. As a result, more stakeholders realize that TVET research is an important requirement for TVET system development. (Birgit Thomann et al., 2024). However, the TVET still faces challenges: Research capacities need to be built up, be it at the TVET institute or research institutes. It is thus even more encouraging to witness the recent establishment of several TVET research institutes (Naron Veung, 2024) for example the National Board for Technical Education in Nigeria (NBTE) established a centre of excellence to enable cooperation in TVET research both local and international.

Cooperation between Management and School Teachers in implementing Technical and Vocational Education and Training policy in Nigeria has received little attention and is largely overlooked. Policy implementation is the next activity after the making of the policy. It is the process in which ideas are translated into actions, but most of the time, no attention has been paid to this crucial stage. There are excellent and well-formulated policies but ineffectively implemented. As a result, it leads to a broader gap between policy intent and its implementation.

TVET in Nigeria was established to nurture and produce job-ready graduates for industries. Indeed, recent empirical studies agree that the employer of labour demands more skill than they do in the past years (Okoye & Arimonu, 2013a Sari et al., 2019a). There are some complaints from employers who are dissatisfied with the skills acquired by TVET graduates and their inability to apply this knowledge and skills to the workplace. The problem is that the TVET training program needs to be more connected with employers and workplaces.

TVET policies have failed to address its establishment's actual purpose, and most programs are of low quality and are theory-based rather than practical and training (Moja T., 2000). Studies have indicated that TVET yields higher returns than general secondary and tertiary education because it focuses on providing work-relevant skills (Herschbach, 2009, Maurer, 2012). Syjuco, (2006) indicated that the employment rates of TVET graduates joining the labor market are 60%. Studies indicated that cooperation between management and schoolteachers lead to implementation of TVET policy (Chuang et al., 2011; Birken et al., 2015; DiMartino et al., 2018). However, what is not clear is how the cooperation between management and schoolteachers influences TVET policy implementation.

The high level of unemployment and security challenges faced in Nigeria result from the educational system failing to adhere to the provisions of the National Policy on Education (NPE). The TVET education has failed, that is why there is joblessness within abundant skills gaps. TVET education is established to nurture job ready graduates who can be employed or be self-employed after graduation but what is obtainable is skill mismatch leading to unemployed graduates. Research is needed to understand cooperation between management and schoolteacher in implementing TVET policy.

■ 2.0 STATEMENT OF PROBLEM

A gap exists between TVET policy and implementation (Akanbi, 2017; Oviawe et al., 2017; Chigudu, 2015).. The identified gaps are lack of cooperation between management and schoolteachers in the implementation of TVET policy. Management communicates the rationale for implementing the policy to schoolteachers, financial resources made available for implementing the policy and learning environment need to be conducive for effective implementation of the policy. Schoolteacher's commitment to the implementation of the policy, TVET policy will be implemented effectively by cultivating graduates prepared for employment who are employable or self-employed.

TVET policy implementation has been for the past 40 years in Nigeria. The primary purpose of establishing TVET was to developed employment-ready graduates Students on completing shall secure employment, establish a self-employed business, or pursue further education, but studies indicated policy implementation failure (Datzberger, 2018; Idris & Mbudai, 2017; Moja T., 2000; Tripney & Hombrados, 2013). In Nigeria, TVET takes place in vocational schools, where students work on fictional duties that are not related to actual work tasks on a regular basis. According to Pinnow (2019), this causes issues when students graduate since they lack the practical skills and knowledge needed to meet work needs. Concerns regarding the employability of TVET graduates are increasing (Idris and Mbudai, 2017).

There are few or no significant studies about the cooperation between management and schoolteacher in implementing TVET policy. This study adds to the implementation of TVET policies in Nigeria. Therefore, this study explores the cooperation between management and schoolteachers in TVET policy implementation in Nigeria. Most past research on TVET policy implementation focused on policymakers, employers, school leaders, curriculum, and students (Arifin & Rasdi, 2017; Lam & Ng, 2019; Pavlova & Chen, 2019; Pinnow, 2019a; Subekti et al., 2019a) This study proposes the following research objective to better understand the cooperation between management and schoolteacher in cultivating TVET job-ready graduates.

2.1 Cooperation between Management and School Teachers in TVET policy Implementation

The implementation of Technical and Vocational Education and Training (TVET) policies, effective cooperation between management and schoolteachers is crucial. This cooperation ensures that policies are well understood, effectively communicated, and successfully put into practice within educational institutions. When management and teachers work together armoniously, they can align their efforts towards achieving common goals, such as enhancing the quality of education, meeting industry demands, and fostering student success. Technical and Vocational Education and Training (TVET) policy implementation, operation between management and teachers is crucial for successful outcomes. According to a study Ansari & Wu, (2013) effective cooperation between management and teachers in TVET plays a vital role in ensuring the smooth execution of policies aimed at enhancing technical and vocational education.

In Nigeria, cooperation between management and schoolteachers in Technical and Vocational Education and Training (TVET) policy implementation is vital for the effective delivery of vocational education. This cooperation ensures alignment between educational objectives, institutional goals, and the needs of the workforce. By working together, management and teachers can enhance curriculum development, professional development opportunities, student support services, and overall program effectiveness in the TVET sector.

■ 3.0 LITERATURE REVIEW

TVET in Nigeria was established to nurture job ready graduates who can be employed or self-employed after graduation. There are complaints from the employers that the TVET graduate lacks the technical skills to be employed. The TVET institutions only teach the theoretical aspect, this creates a problem for the students to be employed. However, this study highlights international and local studies on the cooperation between management in the implementation of TVET policy in Nigeria. A systematic literature review search was carried out based on the research objective.

The study synthesis addresses the main research question about cooperation between management and schoolteacher in implementing TVET policy by outlining four issues to consider: the challenges of TVET, TVET as a tool for poverty reduction and national development, school workplace collaboration, and Dual TVET. For the challenges of TVET, there were three patterns identified. The first was studies that reflected on the challenges towards youth employment and the way forward (Idris & Mbudai, 2017; Okoye & Arimonu, 2013b). The second pattern is the studies investigating TVET programs' quality, such as the instructional method employed and TVET competency framework (Chinyere Shirley et al., 2015; Lai et al., 2019). The third is studies that highlight the challenges of TVET in the inability to implement policies (Akanbi, 2017; Moses, 2016; Ncube, 2014). These studies offer resources for research by linking TVET challenges to implementation.

The second issue were studies that see TVET as a tool for poverty reduction and national development (Lawal, 2012; Nwachukwu, 2014; Ogbuanya and Izuoba, 2015). The studies emphasize TVET graduates' empowerment, review of TVET policy, and proper implementation of the TVET program. The third was studies that focus on TVET workplace collaboration (Milio et al., 2014; Moses, 2016; Oviawe et al., 2017). These studies' major patterns link TVET to industry, TVET supply and demand base, and workplace school collaboration. Finally, studies focus on dual TVET and IR 4.0. (Blinov, 2019; Sp and Schulte, 2019; Pinnow, 2019b), dual TVET progress problems and perspective (Blinov, 2019), the potential of dual TVET system (Sari et al., 2019b), and TVET apprenticeship (L. Chen, 2019; L. U. I. Chen, 2019)

Most studies on TVET focus on challenges and the prospect of TVET (Okoye and Arimonu, 2013; Chinyere Shirley et al., 2015; Akanbi, 2017; Idris and Mbudai, 2017; Dogara et al., 2018) Some other studies focus on TVET school workplace collaboration and TVET as a tool for poverty reduction and national development (Lai et al., 2019; Lawal, 2012; Nwachukwu, 2014; Ogbuanya & Izuoba, 2015). Recent studies are focusing on Dual TVET and IR 4.0 (Blinov, 2019; Pinnow, 2019b; Sari et al., 2019b) apprenticeship (L. Chen, 2019; L. U. I. Chen, 2019), and workbased learning and employability skills (Gulich et al., 2019; Subekti et al., 2019b). Research on policy implementation studies focuses on the problem of implementation, implementation gap, and formulation of policy (Gaus et al., 2019; Makinde, 2005; Mallay, 2016; Odukoya et al., 2018; Wilson & Epelle, 2018; Chigudu, 2015). Therefore, there are limited resources in the literature on cooperation between management and schoolteacher in implementing TVET policy in Nigeria.

The studies on policy implementation have three key issues to consider. Studies on policy implementation problems and challenges (Asmawi & Jaladin, 2018; Makinde, 2005; Mallay, 2016) The second key issue is studies that focus on policy formulation and implementation (Odukoya et al., 2018; Wilson and Epelle, 2018; Gaus et al., 2019. The third issue were studies that focus on the implementation gap (Chigudu, 2015; Galvani, 2018, Akanbi, 2017), offered resources, and highlighted the problems and challenges of policy implementation and the implementation gab.

■ 4.0 RESEARCH METHODOLOGY

A qualitative research approach accompanies this study. The qualitative method is best suited to address the study research question to understand cooperation between management and schoolteacher in implementing TVET policy. Case study research is a suitable approach for this study because it responds appropriately and adequately to research questions. The study answer questions; how? Why? The researcher also needs no behavioural event control, but the study focuses on the contemporary phenomenon in real-life contexts (Chaiklin, 1991)

The schoolteachers of the TVET institutions serve as the study population. The study participants of this research are selected based on the justification that they are available, convenient, and represent characteristics that the study is interested in. Teachers from TVET institutions are the participants of the study in two states of northwestern Nigeria (Zamfara and Kano State). The institutions are Federal Polytechnic Kaura Namoda and Federal College of Education (Technical) Gusau Zamfara State and Kano state Polytechnic, Federal College of Education (Technical) Bichi. The sampling techniques selected is a purposive approach in which the researcher decides who is to be included in the study based on the participant's capacity to provide the necessary data (Parahoo, 2002).

Sample sizes are small in qualitative research and are not often defined at the beginning of the study (Miles et al., 2014). Interviews with participants were planned in each TVET institution, and there was no specific number of participants selected in the research. The interview continued until the details were saturated. Therefore, as the interview continues the interview reaches maximum capacity at number nine of the interviewee participants. The research focused on different items, and the potential for more in-depth analysis is advantaged with a comparative case approach (Denzin, 2012). This study used two audio recording devices during the interview. NVIVO Version 12 qualitative analysis software is used to organize the data. The manual paper and pencil coding method is also used for the analysis.

■ 5.0 FINDINGS AND RESULTS

The Research Question establishes the schoolteacher cooperation with top managers, in implementing TVET policy and participants' views on managers' cooperation in the implementation of TVET policy. The schoolteachers

interviewed discussed that management cooperation enables them to implement TVET policy. They indicated that top managers' cooperation directly influences their commitment, and the lack of cooperation from top managers has a direct adverse effect on their role in implementing TVET policy. The key themes of schoolteachers' cooperation from top managers are support and cooperation.

5.1 Support

Participants reported receiving varying levels of support from managers in the implementation of the TVET policy. For example, ENG highlighted the manager's support:

"Yes, there is support. Managers provide support for staff going for supervision, and there is also support for the students."

Similarly, KAU affirmed managerial support in sustaining the entrepreneurship program within their institution: "There is support, but the only help I can confidently mention is that the school leaders or management have been able to sustain the entrepreneurship program in my institution. They ensure the program is functional and consistently maintained."

In contrast, KAN and HAD expressed a lack of support or only limited assistance:

"There is no support from the management, or the support is very limited. Apart from the salary, we do not receive any other form of support from the management."

The categories under the theme of support include the following:

- Access to incentives
- ii. Access to training
- iii. Conducive environment
- iv. Funding

5.1.1 Access to incentives

Schoolteachers interviewed stated that they did not receive any incentives for their involvement in the implementation of the TVET policy, as explained by HAD and KAN:

"Apart from our salary, we did not receive any incentives from the management."

However, some participants reported having access to incentives, as noted by WUD:

"Yes, we have access to incentives because there are stipulated allowances outlined in our guidelines. For example, during industrial supervision, we receive transport allowances as well as general allowances for supervisors."

5.1.2 Access training

Four schoolteachers interviewed indicated that access to training enhances their performance in implementing the TVET policy. One of the teachers mentioned participating in a "train the trainer" program facilitated by the World Bank.

Another teacher, KAD, explained:

"Currently, most of the training we receive comes from TetFUND-sponsored conferences."

KAN added:

"If you are attending a conference, the management provides sponsorship for the event."

However, one participant, ENG, noted a lack of support for training:

"There is no formal training, but there is a briefing on how to carry out our duties."

5.1.3 Conducive environment

Only one participant reported that the environment in TVET institutions in Nigeria is conducive for teaching and learning. This participant stated:

"The environment in my institution is conducive for teaching and learning."

In contrast, the majority of participants indicated that the environment is not conducive. For example, participant ZAM explained:

"Well, the limited capacity is evident. For instance, we need a good working environment, which is not a reality. Some of my staff are still sharing offices because they do not have spaces of their own. How can you effectively conduct teaching activities without a proper place to sit, conduct research, analyze plans, or even rest? The provision of a good environment in Nigeria is minimal, and this is part of the core problem. It has significantly hindered the implementation of the TVET policy."

5.1.4 Funding

Participating schoolteachers reported that access to funding would significantly enhance their implementation of the TVET policy, enabling them to acquire lab equipment and consumables to improve their performance. They emphasized that the lack of funds poses a major challenge to TVET policy implementation. As BDW explained: "There is a problem with funding. This is not encouraging, and the resulting performance is discouraging. If we had sufficient funds, we could collaborate with international researchers to conduct meaningful research."

Participants further highlighted the limited access to financial resources in TVET institutions. BDW and YAN elaborated:

"As previously mentioned, funding is a significant issue in technical education. Stakeholders have no financial access, which is a major obstacle. Even as teaching staff or lecturers, when we require teaching materials, teaching aids, or consumables, the supply process is slow and difficult. Accessing financial resources is not easy, which hampers our efficiency."

5.2 Cooperation

Valk and Kratovitš (2021) suggest that cooperation with stakeholders is based on shared interests and personal relationships, both on formal and hierarchical levels. However, the majority of participants indicated that they were either unaware of or did not experience any cooperation with other institutions in conducting research or implementing the TVET policy. This is reflected in the following responses:

- i. "I am not aware of any cooperation between institutions." (ENG)
- ii. "There was no such cooperation as far as I am concerned." (KAU)
- iii. "I am not aware." (KAD)

Conversely, participants ZAM and YAN shared that their institutions engage in cooperation with other TVET institutions by seeking information and collaborating on various activities. ZAM explained: "For instance, in my institution, we recently had an academic board meeting where we planned to establish new programs. To do so, we consulted older institutions to learn how they had implemented similar programs. This is a form of cooperation. Additionally, unions within TVET institutions facilitate their functions by collaborating with unions in other institutions. Institutional leaders, such as rectors, also liaise with their counterparts to present the federal government with an accurate picture of their challenges. They collectively propose solutions to address these issues. So, there are various levels of cooperation between institutions."

One participant had described collaboration with local government: "Yes, I recall one instance where we cooperated with the local government to provide training for their workers, equipping them with the skills needed for their daily jobs."

Furthermore, cooperation with foreign institutions, researchers, and agencies was highlighted. BDW stated: "We collaborate with foreign institutions and researchers to conduct research on an international level."

6.0 DISCUSSION

Cooperation from top managers in implementing TVET policy; Participants identified support and cooperation as availability of fund, which will enable schoolteachers to buy valuable equipment and consumables. They also identify access to incentives, funding, and favorable environment to implement TVET policy. Participants identify cooperation with other TVET institutions, governments, industries, foreign institutions and international researchers to implement TVET policy.

TVET policy implementation success depends on the cooperation between TVET managers, schoolteachers, international TVET researchers, access to incentives, and conducive environment. Some of these were recognized and provided, while others were given less attention. If they are addressed, they act as facilitators, such as the cooperation

between management and schoolteachers, cooperation between TVET researchers, availability of funding, incentives, and conducive environments. However, where they are not available or limited and overlooked, they become inhibitors to TVET policy implementation. The study revealed that most implementation activities cooperate between TVET institutions and industries. The interview indicates that cooperation between TVET institutions and enterprises promotes the TVET policy implementation in Nigeria. Participation and agreement with industry also encourage the implementation of the policy. Prioritizing cooperation through international TVET research, industrial engagement and understanding between TVET and industries is significant within the current TVET policy (Moses, 2016).

Nigerian Educational Research and Development Council (NERDC) (2013) allows the industries' engagement in education, policymaking, and implementation. The National Policy on Education engages the enterprises to have a lived experience in the workplace, a powerful tool for integrating new ways of nurturing job-ready graduates. Industries had a central role as both policymaker and implementers. The interview data suggests that policy implementers become policymakers, and the simplification of the message in the policy documents encourages the schoolteachers to learn and implement the policy. According to the literature, policy implementers present information to policymakers at the top and determine whether the policy can be implemented with the resources available. Abdullahi & Othman (2020) advocate for a link between policymakers and implementers, as well as community participation in policy development and implementation.

■ 7.0 IMPLICATIONS AND CONCLUSIONS

These recommendations address all the themes discussed in the paper and are specifically aligned with the research question. They aim to resolve the issues raised by the participants.

It is recommended that TVET top managers support schoolteachers by providing the following:

- i. Incentives
- ii. Training
- iii. A conducive environment
- iv. Adequate funding

Additionally, the study recommends fostering cooperation between TVET managers, schoolteachers, industries, government entities, and international TVET researchers.

In Nigeria, schoolteachers are critical to the implementation of TVET policy since they teach, conduct research and supervise students doing internships at their job. With little or no teaching obligations, schoolteachers lead and are accountable for managing their school (Lipscombe et al., 2020). School teachers are also regarded as learning specialists who spend most of their time in the classroom but also have other commitments to help students learn. To control the operation of school activities, this study advised that schoolteachers mix classroom activities and research with leadership positions. School teachers should participate in both classroom and extracurricular activities. The study also suggests that policy documents standardize the terminology, roles, titles, and policies used to refer to school administrators. School teachers are now referred to by a variety of terms, titles, and policies, including middle leader, principal vice principal, rector, teacher, head of a unit and department, and so on.

The recommendations made would provide the purpose of TVET and enhance schoolteachers' cooperation in TVET policy implementation. In Nigeria, TVET focuses on developing graduates who are job-ready and have the necessary knowledge and skills. However, the lack of clarity and shared understanding of TVET policy, schoolteachers' cooperation with top managers, financial resource availability, conducive environment, and dual TVET are some of the areas identified for change. Following the formulation of a policy, the next step is to put it into action. It is the process by which ideas are transformed into actions, although most times this critical stage is overlooked. At the same time, the policy formation stage receives the most attention. There are good policies that are well-formulated but ineffectively implemented, resulting in a large gap between policy intent and execution. The findings revealed a need for cooperation of TVET stakeholders in conducting research, which will lead to schoolteachers implementing TVET policy, which may contribute to effective implementation and, in turn, increase the employability of TVET graduates' and teachers' commitment and effective implementation of TVET policy of nurturing job-ready graduates who can be employed.

REFERENCES

Abdullahi, M., & Othman, N. (2020). Bridging the gap between policy intend and implementation. Journal of Science, Technology and Innovation Policy, 6(1), 1–10.

Akanbi, G. O. (2017). Prospects for technical and vocational education and training (TVET) in Nigeria: Bridging the gap between policy document and implementation. International Education Journal, 16(2), 1–15.

Ansari, B., & Wu, X. (2013). Development Of Pakistan's Technical and Vocational Education and Training (TVET): An Analysis Of Skilling Pakistan Reforms. In Journal of Technical Education and Training (Vol. 5, Issue 2). JTET.

- Arifin, M. A., & Rasdi, R. M. (2017). The competent vocational college teacher: a proposed model for effective job performance. International Journal of Academic Research in Business and Social Sciences, 7(2), 829–837. https://doi.org/10.6007/IJARBSS/v7-i2/2719
- Asmawi, A., & Jaladin, R. A. M. (2018). Higher education system in Malaysia: Exploring strategic trends and challenges in policy implementation for new Malaysia. Malaysian Online Journal of Educational Management, 6(4), 56–77. https://doi.org/10.22452/mojem.vol6no4.4
- Birgit Thomann, Friedrich Hübler, Songheang Ai, & Thomas Schröder. (2024). TVET@Asia, issue 23, The Online Journal for Technical and Vocational and Training in Asia https://tvet-online.asia. TVET@Asia, Issue 23, The Online Journal for Technical and Vocational and Training in Asia Https://Tvet-Online.Asia.
- Birken, S. A., Lee, S. Y. D., Weiner, B. J., Chin, M. H., Chiu, M., & Schaefer, C. T. (2015). From strategy to action: How top managers' support increases middle managers' commitment to innovation implementation in health care organizations. Health Care Management Review, 40(2), 159–168. https://doi.org/10.1097/HMR.0000000000000018
- Blinov, V. (2019). Dual VET in Russia: progress, problems and perspectives. Tvet Online Asia, 13, 1–15.
- Chaiklin, H. (1991). Case Study Research: Design and Methods. The Journal of Nervous and Mental Disease, 179(2), 115. https://doi.org/10.1097/00005053-199102000-00025
- Chen, L. (2019). Skill Development of Modern Apprenticeship with Chinese Characteristics A Case Study an Overview of Apprenticeship Pilot Projects in China. TVET@Asia, 13, 1–14.
- Chen, L. U. I. (2019). Editorial TVET @ Asia Issue 13: Dual TVET systems, Employer Engagement and Modern Apprenticeship Schemes. Tvet Online Asia, 13, 1–3.
- Chigudu, D. (2015). Navigating policy implementation Gaps in Africa: The case of Zimbabwe. Risk Governance and Control: Financial Markets and Institutions, 5(3), 7–14. https://doi.org/10.22495/rgcv5i3art1
- Chinyere Shirley, A., Chijioke, O. P., & Benjamin Chukwumaijem, O. (2015). Towards Quality Technical Vocational Education and Training (TVET) Programmes in Nigeria: Challenges and Improvement Strategies. Journal of Education and Learning, 4(1), 25–34. https://doi.org/10.5539/jel.v4n1p25
- Chuang, E., Jason, K., & Morgan, J. C. (2011). Implementing complex innovations: Factors influencing middle manager support. Health Care Management Review, 36(4), 369–379. https://doi.org/10.1097/HMR.0b013e3182100cc2
- Datzberger, S. (2018). Why education is not helping the poor. Findings from Uganda. World Development, 110(2018), 124–139. https://doi.org/10.1016/j.worlddev.2018.05.022
- DiMartino, L. D., Birken, S. A., Hanson, L. C., Trogdon, J. G., Clary, A. S., Weinberger, M., Reeder-Hayes, K., & Weiner, B. J. (2018). The influence of formal and informal policies and practices on health care innovation implementation: A mixed-methods analysis. Health Care Management Review, 43(3), 249–260. https://doi.org/10.1097/HMR.0000000000000193
- Dogara, G., Saud, M. S., Kamin, Y., & Kassam Jwasshaka, S. (2018). Meta-analysis on Instructional Methods Employed and Challenges at Technical Colleges in Nigeria. Journal of Advanced Research in Social and Behavioural Sciences, 12(1), 45–53.
- Galvani, F. (2018). Bridging the Implementation Gap in Poor Areas: A Study of How Municipal Socio-economic Characteristics Impact Intergovernmental Policy Implementation. Social Policy and Administration, 52(1), 408–433. https://doi.org/10.1111/spol.12346
- Gaus, N., Yunus, M., Karim, A., & Sadia, H. (2019). The analysis of policy implementation models in higher education: the case study of Indonesia. Policy Studies, 40(1), 92–109. https://doi.org/10.1080/01442872.2018.1539224
- Gulich, J., Dortmund, T. U., & Tu, P. B. (2019). Approaches and Structures of Work-related Learning in TVET in Thailand. Tvet-Online. Asia, 13, 1–19.
- Herschbach, D. R. (2009). Planning for Education and Work: Alternatives and Issues. In R. Maclean & D. Wilson (Eds.), International Handbook of Education for the Changing World of Work. Springer Netherlands. https://doi.org/10.1007/978-1-4020-5281-1
- Idris, A., & Mbudai, Y. (2017). Technical and vocational education: Challenges towards youths' empowerment in Kano state-Nigeria. Journal of Technical Education and Training, 9(1), 1–12.
- Lai, C. S., Hamisu, M. A., & Mohd Salleh, K. (2019). Development of Competency Framework for Nigerian TVET Teachers in Tertiary TVET Institutions. Journal of Technical Education and Training, 11(1), 11–18. https://doi.org/10.30880/jtet.2019.11.01.002
- Lam, R. Y. S., & Ng, Y. K. (2019). Applying the Concept of 'Unlearn to Learn' for Sustainability in Vocational and Professional Education and Training (VPET): Implications for Teacher Training. TVET Online Asia, 14, 1–13.
- Lawal, A. W. (2012). Technical and Vocational Education, a Tool for National Development in Nigeria. International Letters of Social and Humanistic Sciences, 14(1993), 53–59. https://doi.org/10.18052/www.scipress.com/ilshs.14.53
- Makinde, T. (2005). Problems of Policy Implementation in Developing Nations: The Nigerian Experience. Journal of

- Social Sciences, 11(1), 63-69. https://doi.org/10.1080/09718923.2005.11892495
- Mallay, N. (2016). Book Review: Policy Studies For Educational Leaders: An Introduction. Journal of Contemporary Issues in Education, 10(1). https://doi.org/10.20355/c5688z
- Maurer, M. (2012). Structural elaboration of technical and vocational education and training systems in developing countries: the cases of Sri Lanka and Bangladesh. Comparative Education, 48(4), 487–503. https://doi.org/10.1080/03050068.2012.702011
- Milio, S., Garnizova, E., & Shkreli, A. (2014). Assessment study of technical and vocational education and training (TVET) in Myanmar (Issue ILO Asia-Pacific Working Paper Series).
- Moja T. (2000). Nigeria education sector analysis: An analytical synthesis of performance a main issue. World Bank Report. In Department of Administration, Leadership and Technology New York, NY. (Issue January).
- Moses, K. M. (2016). Improving the quality and competence of technical vocational education and training output through vocational school cooperation with industry: A case study of Uganda. AIP Conference Proceedings, 1778(2016). https://doi.org/10.1063/1.4965794
- Naron Veung. (2024). Collaboration in the Cambodian TVET sector: Why does it matter? www.tvet-online.asia
- Ncube, T. T. and A. C. (2014). Teachers' perceptions on challenges faced by rural technical and vocational education and training policy in Nkayi district. International Research Journal of Teacher Education, 1(2), 10–15.
- Nwachukwu, O. P. (2014). Poverty reduction through technical and vocational education and training (TVET) in Nigeria. Developing Country Studies, 4(14), 10–14.
- Odukoya, J., Bowale, E., & Okunlola, S. (2018). Formulation and implementation of educational policies in Nigeria. African Educational Research Journal, 6(1), 1–4. https://doi.org/10.30918/aerj.61.17.059
- Ogbuanya, T. C., & Izuoba, O. P. (2015). Repositioning Technology and Vocational Education and Training (TVET) For Poverty Reduction in Nigeria. International Journal of African Society Cultures and Traditions, 2(3), 1–12.
- Okoye, R., & Arimonu, M. O. (2013a). Vocational and Technical Education in Nigeria: Issues, Challenges and the Way Forward. Journal of Education and Vocational Research, 4(8), 219–224. https://doi.org/10.22610/jevr.v4i8.123
- Okoye, R., & Arimonu, M. O. (2013b). Vocational and Technical Education in Nigeria: Issues, Challenges and the Way Forward. Journal of Education and Vocational Research, 4(8), 219–224. https://doi.org/10.22610/jevr.v4i8.123
- Oviawe, J. I., Uwameiye, R., & Uddin, P. S. O. (2017). Bridging Skill Gap to Meet Technical, Vocational Education and Training School-Workplace Collaboration in the 21st Century. International Journal of Vocational Education and Training Research, 3(1), 7–14. https://doi.org/10.11648/j.ijvetr.20170301.12
- Pavlova, M., & Chen, C. S. (2019). Enhancing TVET teachers' capacity to develop students' generic green skills: a work-based learning model for professional development of teachers. TVET Online Asia, 2005(14), 1–23.
- Pinnow, S. (2019a). The German Dual VET System and Approaches to enhance Employer Engagement. Tvet-Online. Asia, 13, 1–18.
- Pinnow, S. (2019b). The German Dual VET System and Approaches to enhance Employer Engagement. Tvet-Online. Asia, 13, 1–18.
- Sari, N. M., Idris, S., Latifah, &, & Ariffin, M. (2019a). The Potential of Dual TVET System Players in Co-curricular Activities-an Approach from Malaysia. Tvet-Online. Asia, 13, 1–14. www.tvet-online.asia
- Sari, N. M., Idris, S., Latifah, &, & Ariffin, M. (2019b). The Potential of Dual TVET System Players in Co-curricular Activities-an Approach from Malaysia. Tvet-Online. Asia, 13, 1–14.
- Sp, G., & Schulte, S. (2019). The Dual System in Germany Is it prepared for Digitalization. Www.Tvet-Online.Asia, 13, 1–16.
- Subekti, S., Ana, A., Barliana, M. S., & Khoerunnisa, I. (2019a). Work-Based Learning-Teaching Factory in Indonesia as a Model to Increase Employability Skills. In: TVET@Asia, 13, 1–17. http://www.tvet-asia.info/issue13/Ana_et_al.pdf
- Subekti, S., Ana, A., Barliana, M. S., & Khoerunnisa, I. (2019b). Work-Based Learning-Teaching Factory in Indonesia as a Model to Increase Employability Skills. In: TVET@Asia, 13, 1–17.
- Syjuco, A. (2006). The Philippine Technical Vocational Education and Training (TVET) System.
- Tripney, J. S., & Hombrados, J. G. (2013). Technical and vocational education and training (TVET) for young people in low- and middleincome countries: A systematic review and meta-analysis. Empirical Research in Vocational Education and Training, 5(1), 1–14. https://doi.org/10.1186/1877-6345-5-3
- Wilson, G., & Epelle, A. (2018). Public Policy Formulation and Implementation In Contemporary Nigeria. International Journal of Research in Social Sciences, 8(6), 175–185.