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Original Research Article

Examining the Influence of Instructors' Competence, Qualifications, and Experience on the Quality of Vocational Training and Skills Acquisition in the Vocational Training Centre in Tana River County- Kenya

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Abstract

Vocational education plays a vital role in equipping young people with the skills and knowledge necessary for success in the workforce, making it an essential aspect of human development. This study aimed to investigate how instructors' competence, qualifications, and experience influence the quality of vocational training and skills acquisition in vocational training centers within Tana River County. A descriptive research methodology was adopted, integrating both quantitative and qualitative approaches. The study focused on nine vocational training institutions in Tana River County, involving 322 participants: 250 trainees, 54 trainers, 9 principals, and 9 deputy principals. Trainees and trainers were selected using random sampling, while principals were chosen through purposive sampling. Data collection involved the use of questionnaires for trainees and trainers and interviews for principals. Reliability was ensured through a pilot study and the test-retest method. Findings indicated a significant shortage of qualified trainers, as reported by 74.9% of trainees, which negatively impacted the quality of training. The study recommended that the County Government of Tana River implement in-service training programs for trainers and prioritize the recruitment and retention of highly qualified instructors. Additionally, further research was suggested to explore community perceptions of vocational education for youth.

Keywords: Trainer Competence, Qualifications, Trainer Experience, Vocational Training, Skills Acquisition, Vocational Training Centers.

INTRODUCTION

Vocational training is formal, non-formal, and informal, providing trainees with the knowledge and skills required for future employment (UNESCO, 2021). Vocational education aims to improve trainees' knowledge, skills, and comprehension to succeed in their chosen careers (Peters, 2023). The ability to operate in the industry for one's well-being has been made possible for individuals and society since self-employment skills may be learned through vocational education. According to Brush (2016), vocational schooling has been present since the dawn of recorded history, with each civilization having its artisans and technocrats. Loyalka *et al.*, (2016) further emphasize that vocational education significantly influences output, economic expansion, and human development. This education includes training in various skills such as shorthand, bookkeeping, and industrial safety. In the United States, several laws have been passed to enhance the workforce in sectors such as vocational and applied technology, leading to a top-notch vocational training system since 1880's. In Dutch schools, vocational education is prioritized for children aged 14 to 16. Achieng (2012) notes that professional training for careers such as builders, architects, and engineers began in Italy in the sixteenth century. In Africa, each community has its vocational education system, providing instruction in both public and private schools. The age at which vocational training begins varies across countries. In Nigeria, students can start training after lower or junior high school, while in Burkina Faso, trainees begin vocational instruction after completing primary school.

In Kenya, vocational training is anchored in the TVET Act of 2013, emphasizing skills transfer to

trainees (GoK, 2013). To implement Vision 2030, the nation's economic strategy, Kenya prioritized vocational education as the only path to socioeconomic and technological development (Motuka & Orodho, 2018). If Kenya is to become a developed nation, specialists should be demanded because an economy or a nation without established concepts and talents cannot survive (Muyia, Wekullo & Nafukho, 2018). According to the Federation of Kenya Employers (FKE), Kenya has a skills gap since firms are spending a lot of money on retraining graduates from TVET sectors who cannot satisfy industrial demands (FKE, 2020).

UNESCO (2021) recognized vocational education as a method of increasing economic competitiveness and positively impacting social inclusion, poverty alleviation, and sustainable development. Tana River County vocational training centres were supposed to provide young people with various skills that would allow them to work for themselves and supply trained human resources to the industry, but this was never the case. Infrastructures, such as modern workshops in a vocational training centre, aid in developing vocational skills, according to Makato (2022). When there is insufficient infrastructure, non-formal training often performs noticeably worse. The value of vocational skills has increased in industrialized countries. For instance, training in Germany has a dual system in which 80% of education occurs in industrial areas, and 20% is taught in classrooms to ensure students have the necessary marketable skills (Anindo, 2016). Dasmani (2011) claims that due to a variety of problems, including a lack of educational resources, negative attitudes towards technical field, inadequate training facilities, and a lack of connections with local industries for hands-on experience, the majority of vocational training centres in Africa struggle to produce employable graduates.

According to Mosoti (2011), Kenyans were first taught trades such as agriculture, pottery, basket making, and home construction through indigenous educational systems during the pre-colonial era on the theory that skill development increases productivity and competitiveness in the global economy, vocational training had been promoted all over the world, particularly in Sub-Saharan African countries. In Nigeria, vocational centres are responsible for instructing craftsmen at both the craft and advanced levels. According to the Federal Republic of Nigeria's (FRN) National Strategy on Education (FRN, 2013), technical college graduates have three options: find employment at the end of the program or after completing one or more employable skills courses; and third, hire others, start their businesses, and work for themselves. Skill acquisition is the knowledge, abilities, and attitudes necessary to engage in a trade or activity in the labour market (Kenneth & Robert, 2013). A country's education system's quality is considered the key to economic prosperity (Patrinos, 2016). Learning new skills was directed at developing the practical talents, know-how, and attitudes required for employment. A country's economic performance is influenced by how well its educational system works (Radcliffe, 2022).

According to the 2013 Tana River County Integrated Development Plan, residents of Tana River County deal with an arid climate and frequent weather extremes that limit their economic possibilities to small-scale retail trade and herding rather than vocational education. According to the Ominde committee report (TRC, 2013), residential schools were proposed as a quick fix to increase school attendance in dry regions. Hof and Leiser (2014) claimed that trainees from arid regions require a strong and dependable professional mentor who can provide constant love, career choice counselling, and all-around support for them to embrace vocational education and training for their future endeavour rather than attending the cattle at the tender age of schooling.

According to the International Labour Organization (ILO) assessment of quality indicators in 2012, the effectiveness of TVET programs can be measured by how well training quality aligns with classroom activities. The report underscores the significance of evaluating instructors' training, experience, and educational qualifications as measures of training quality. It advocates for the ongoing re-training and updating of instructors' skills, emphasizing their pivotal role in enhancing the quality of graduates in TVET. The professional and pedagogical expertise of technical instructors are instrumental in imparting top-notch vocational skills (ILO, 2012).

Kigwilu and Githinji (2015) underscore the influence of teacher training and professional experience on the effective implementation of the Artisan and Craft curriculum. They observe that insufficient qualifications among instructors in vocational training facilities impede the provision of high-quality instruction and training. This highlights the necessity of recruiting instructors with more advanced training levels to elevate the standard of vocational education. Furthermore, Nieto (2003) stresses the significance of training, readiness for public service, and access to professional development opportunities for teachers.

The Ministry of Education, Science, and Technology (MOEST) study in 2003 suggests that the government should offer attachment programs, in-service training, and skill enhancement to vocational training centre instructors to improve their effectiveness. However, according to Kamau (2013), many instructors in public vocational centers in Kenya lack sufficient training in technical skills and pedagogy. Additionally, vocational training centre instructors often

do not participate in in-service training, which is crucial for keeping up with changes in the field of instruction (Bourgonje & Tramp, 2011; Khatete, 2010).

Furthermore, trainers in vocational training centers frequently lack the necessary industry-based technology capabilities that can be updated through industrial attachment (Nyerere, 2009). This lack of updated skills among instructors can negatively impact the quality of training and skill acquisition in vocational training centres. Additionally, Mbugua *et al*., (2012) point out that most vocational training centres in Kenya have insufficient training staff, leading to challenges in maintaining the quality of training. To address the trainer shortage, centers often resort to hiring instructors on a contract basis, implementing multi-grade training, and engaging trainees in individualized learning activities.

METHODOLOGY

The Study Area

The study was conducted in Tana River County. The study was conducted in 9 selected vocational centers. The selected training centers for the study were situated within different sub-counties: Galole, Bura, and Tana Delta.

Table 1: Selected vocational centers and number of trainees. Trainers, principals and Deputies

No	Name of Institutions	Trainees	Trainers	Principals Dep
1	Tarasaa	67	07	1 1
2	Odha	71	06	1 1
3	Wenje	92	08	1 1
4	Garsen	77	10	1 1
5	Maziwa	70	11	1 1
6	Kipini	73	13	1 1
7	Hurara	67	12	1 1
8	Hola	81	13	1 1
9	Tumaini	72	11	1 1
	TOTAL	**670**	**91**	**9 9**

Research Design

A descriptive research design was used for the research assessment. This design was deemed the most convenient as the study aimed at the assessment of trainees' perceptions and satisfaction with vocational training and skills acquisition in vocational training centres in Tana River County. According to McCombes (2019), a descriptive research study aims to identify the who, what, where, when, and how much of an issue is present. A descriptive survey was deemed appropriate since it enabled the study to collect significant data required for generalization.

Sample Size and Sampling Techniques

The research sample was chosen using purposive, simple random and proportional sampling techniques. The target population included 9 institutions in Tana River County, with 322 respondents: 250 trainees, 54 trainers, 9 heads and 9 deputies of the vocational training centres. Trainees and trainers were selected randomly, while principals were purposively selected.

Table 2: Sampling Framework

No	Name of Institutions	Expected sample of Trainees	Expected Sample of Trainers	Expected Sample of Principal Dep
1	Tarasaa	21	5	1 1
2	Odha	13	3	1 1
3	Hurara	17	8	1 1
4	Garsen	12	6	1 1
5	Maziwa	59	3	1 1
6	Kipini	48	7	1 1
7	Wenje	10	3	1 1
8	Hola	25	3	1 1
9	Tumaini	45	6	1 1
	TOTAL	**250**	**54**	**9 9**

Proportions of representation was used in computing the values from each vocational training center.

Data Collection Instruments

Questionnaires were distributed to the intended respondents in order to seek and collect primary data. The questionnaire included open- and closed-ended items and utilized a Likert scale to collect respondents' perceptions and satisfaction. The questionnaires were physically distributed. This approach was chosen as it was less time-consuming, less expensive, and

encouraged a high percentage of individual responses, enabling detailed data collection (Palinkas *et al.*, 2015).

Data Processing and Analysis

In order to establish behaviour patterns and particular outcomes seen during the research process, the obtained data was analyzed. Depending on whether the data was quantitative or qualitative, the raw data was coded, categorized, and organized. The Statistical Package for the Social Sciences (SPSS version 26) was used to analyze the data. While Pearson correlation was used for inferential statistics, percentages, and frequencies were used for descriptive statistics.

RESULTS

The Impact of Instructor's Qualifications on the Quality of Vocational Training and Skill Acquisition

The study examined the influence of instructors' competence, qualifications, and experience on the quality of vocational training and skills acquisition in Tana River County. The findings indicated a disparity in the qualifications of trainers in the vocational training centers. Specifically, 50% of trainers held craft-level qualifications, 14.6% held diploma qualifications, 12.5% held degree qualifications, 10.4% held City & Guilds Diplomas, and 6.25% held Government Trade Test I & Navcet Level I&II qualifications.

Table 3.0: Demographic Information of Trainers

	Trainers	**Frequency**	**Percent**
Gender	Male	28	58.3
	Female	20	41.7
	Total	**48**	**100**
Age Bracket	20-30 years	12	25
	31-40years	18	37.5
	41-50 years	10	20.8
	Above 50 Years	06	16.7
	Total	**48**	**100**
Qualifications	Gov. Trade Test I	03	06
	City&Guild Diploma	15	31
	Navcet level I&II	03	06
	Craft certificate	09	19
	KNEC Diploma	12	25
	Bachelor's Degree	06	13
	Total	**48**	**100**

The data shows that out of 48 respondents, 58% were male and 42% were female. This indicates a slightly lower representation of females in the study sample.

In terms of age distribution, the majority of respondents were between 31-40 years old, accounting for 37.5 % of the sample. Those between 20-30 years old represented 25.0%, while 20.7% fell into the bracket of 41-50years and only 8 respondents were above 50 years old (16.7%). The data indicates that trainers had varying qualifications that is City & Guild - Diploma (31%), this was followed by Ordinary KNEC-Diploma (25%), Craft certificate (19%), Bachelor degree (13%), Navcet level I&II (6%) and Government trade test I (6%). Findings showed that 62% did not have diploma certificates, they lacked pedagogical skills and industrial exposure. These findings concurred with Ferej, kitainge *et al*., 2012.

This finding disagrees with previous research studies that portrayed that TVET instructors possess a Diploma qualification as a minimum requirement for them to be employed as trainers. Results indicate there was low qualification of trainers, no trainers' motivations, inadequate trainers, irrelevant qualifications, brain drain, poor staff training, and lack of clear training policies for trainer's skill development. Research findings agreed with Ogolla *et al.*, (2014), revealing that the vocational training centers had irrelevant, inadequate, and unqualified instructors. The research findings also disagree from those of Ferej *et al.*, (2012), who reported that most trainers held diploma qualifications.

Table 3.1: Trainers' professional or Academic Qualifications

Qualifications	**Frequency**	**Percentage**
Government trade test I	3	6.25%
Navcet Level I&II	3	6.25%
City and guilds	5	10.4%
Craft certificate	24	50%
Diploma	7	14.6%
Degree	6	12.5 %
Total	**48**	**100.00%**

Furthermore, Mbichu (2019) noted that many trainers in the vocational training centers of Tana River County lack the required professional qualifications. As highlighted by (Karemu and George 2014), this lack of instructional competence adversely affects trainees' acquisition of relevant vocational skills aligned with market requirements. Addressing the issue of trainers' qualifications and providing them with appropriate pedagogical training can enhance the quality of vocational training and align it with the skill requirements of the market. Future efforts should focus on ensuring that trainers possess the necessary qualifications and competencies to effectively deliver vocational training and equip trainees with the relevant skills demanded by the industry.

Table 4: Trainees' response regarding Trainers Qualification on skills Acquisitions

Availability of Trainers	Frequency	Percentage
Yes	155	74.9%
No	52	25.1%
Total	**207**	**100.0%**

Most trainees, 155 (74.9%), expressed concerns about the insufficiency of trainers, particularly in technical courses, which significantly compromised the quality of training and hindered skill acquisition. 52(25.1%) of the trainees felt there was no trainer shortage. Sang *et al.*, (2012) highlighted the inadequacy of trainers as a primary reason for trainees' limited acquisition of practical skills and interpersonal abilities in vocational training facilities.

The high dropout rates among trainees further underscore the negative impact of this issue, as young people become dissatisfied with the training centers and spread negative perceptions about the quality of training provided. The research findings concurred with the study carried out by (Kiplagat, 2020) that poor completion rates in the vocational training centres were a result of a lack of adequate, trained and qualified staff, lack of trained and qualified staff to handle Guidance and Counselling matters, too much work for the trainees, especially theory and support subjects. Poor remuneration of Board of Management (BOM) instructors negatively affected trainees.

According to the vocational training center principals, there was a shortage of trainers in each specialized field designated by the county government. As a result, the centers had to hire instructors who lacked official certification as trainers but possessed technical expertise in specific fields. This indicates a deficiency in the training program's quality, leading to inadequate acquisition of vocational skills. These findings were consistent with the observation made by Kirui (2022) that the majority of TVET facilities or centers operate with insufficient training personnel. Addressing the issue of inadequate trainers in vocational training centers is crucial for improving the quality of training and enhancing skill acquisition among trainees. Principals and relevant authorities must recognize the importance of adequately qualified trainers in each specialized field.

Table 5: Trainees' response regarding Trainers Qualification on skills Acquisitions

Availability of Trainers	Frequency	Percentage
Yes	155	74.9%
No	52	25.1%
Total	**207**	**100.0%**

Most trainees, 155 (74.9%), expressed concerns about the insufficiency of trainers, particularly in technical courses, which significantly compromised the quality of training and hindered skill acquisition. 52(25.1%) of the trainees felt there was no trainer shortage. According to Sang *et al*., (2012), inadequate trainers are the leading cause of trainees' limited development of practical skills and interpersonal abilities in vocational training facilities; inadequate trainer coverage leads to inadequate syllabus coverage; this is a serious issue that needs to be addressed right away.

The high dropout rates among trainees further underscore the negative impact of this issue, as young people become dissatisfied with the training centres and spread negative perceptions about the quality of training provided. The research findings corroborated those of another study (Kiplagat, 2020), which discovered that excessive workloads for trainees, particularly in theory and support subjects, as well as a lack of adequate, qualified, and trained staff to handle guidance and counselling matters, were the leading causes of low completion rates in VTCs. Trainees were negatively impacted by Board of Management (BOM) instructors' inadequate pay.

According to the VTC managers, there was a shortage of trainers in each specialized field designated by the county government. As a result, the centres had to hire instructors who lacked official certification as trainers but possessed technical expertise in specific

fields. This indicates a deficiency in the training program's quality, leading to inadequate acquisition of vocational skills. These findings were consistent with the observation made by Kirui (2022) that the majority of TVET facilities or centres operate with insufficient training personnel. Addressing the issue of inadequate trainers in vocational training centres is crucial for improving the quality of training and enhancing skill acquisition among trainees. These, in essence, affect the trainees' level of satisfaction with these institutes.

Correlation Analysis of the Study Variables

The Pearson Correlation Coefficient assessed the relationship among the study variables. The task assesses both the strength of the link and the direction of the variables. This implies that as these variables change, the development of vocational skills follows a similar trend. According to Mhadavi (2013), a connection is considered very weak if it is less than 0.3, weak if it is between 0.3 and 0.5, and moderate if it is between 0.5 and 0.7. A relationship is considered vital when the correlation coefficient is more significant than 0.7. The trainee perspective showed a strong correlation (r = 0.859) with the learning of vocational skills. With r = 0.800, there was a significant correlation between trainees' satisfaction levels and their learning of occupational skills. The study showed a strong correlation between trainees' perceptions on the competency level of trainers and their acquisition of skills. Vocational training institutions should endeavour to establish a good learning environment that stimulates motivation and involvement in order to improve the trainee perspective. Encouraging students to expand their knowledge and skill sets will improve their attitude towards training.

Table 7: Correlation Analysis

Variables	Pearson Correlation	Acquisition of Vocational Skills
Trainees' perception on trainer's adequacy, qualifications, availability	Pearson Correlation	.859**
	Sig. (2-tailed)	.000
	N	207
Trainees Satisfaction Level regarding trainer's competency	Pearson Correlation	.800**
	Sig. (2-tailed)	.000
	N	207
Acquisition of Vocational Skills	Pearson Correlation	1
	Sig. (2-tailed)	
	N	207
**. Correlation is significant at the 0.01 level (2-tailed).		

CONCLUSION

The Study revealed that trainers held certificate, City and Guilds-diploma, the Navcet level I & II, the Ordinary KNEC diploma certificate, a Bachelor degree and the Government trade test I. This demonstrated that the vocational training centers trainers in Tana River County had varying levels of certification from various examination agencies.

Odhiambo (2021) noted that most instructors lacked the essential pedagogical skills, technological know-how, and professional certifications for one to be a technically trained teacher. His findings, however, varied from those of Ferej *et al*., (2012), who discovered that TVET instructors had diplomas, which was the prerequisite qualification for anyone to be a trainer. Some Trainers admitted that they had not received any training on how to deliver and carry out practical lessons, which hampered their delivery of the content required, particularly in technical courses, which concurred with Karemu and George (2014) report that TVET trainers lacked the instructional ability and competencies and that had a negative influence on trainees' capacity to acquire vocational skills that are relevant to the market's skill demand.

The inadequacy of the trainers affected the acquisition of vocational skills within and among the trainees; a lack of trainers had a negatively impacted on the quality of practical skills offered because one instructor was unable to manage more than one subject or class and help trainees understand the course and provide content to students effectively.

RECOMMENDATION

The shortage of qualified trainers, noted by 74.9% of trainees, affected training quality. Recommendations included in-service training programs and hiring highly qualified trainers, with further studies suggested on community perspectives on vocational education for youth. The study recommended that the County Government of Tana River should implement in-service training programs for trainers. Furthermore, the County Government needed to emphasize recruiting and retaining highly qualified trainers.

REFERENCES

- Hanni, M. (2019). Financing of Education and Vocational Education and Training (TVET) in Latin America and the Caribbean. Caribbean: United Nations.

- Huang, Q. (2009). The relationship between service quality and student satisfaction in higher education sector: A case study on the undergraduate sector of Xiamen University of China. An unpublished thesis report submitted in partial fulfillment of the requirement for the degree of masters of business administration, Assumption University, Thailand, 16-21, 30, 38-60.
- KIplangat, T. M. (2020). Determinants of enrolment in public vocational training centers in Elgeyo-Marakwet County, Kenya (Doctoral dissertation, Kenyatta University).
- Kirui, A. (2022). Addressing the Challenges Facing Vocational Training Centers in Kenyan Counties. Retrieved from https://www.alphoncekirui.com/addressing-the-challenges-facing-vocational-training-centers-in-Kenyan-counties/
- Koirala, A., Shrestha, B. R. P., Gurung, B., & Bajracharya, R. (2016). A mixed method study on trainees' satisfaction towards training services. *Journal of Training and Development*, *2*, 1-8.
- Mcleod, C. (2007). Visual Perceptions. London. Oxford Press.
- Metto, W. K. (2016). Youth Polytechnic Students' Perception of Vocational Training in Nandi County, Kenya. International Journal of Scientific Research in Education, 9(4), 264-310. Retrieved [DATE] from http://www.ijsre.com
- Milana, M., Holford, J., Hodge, S., Waller, R. and Webb, S. (2017), "Adult education and learning: endorsing its contribution to the 2030 Agenda", International Journal of Lifelong Education, Vol. 36 No. 6, pp. 625-628, doi: 10.1080/02601370.2017.1405869.
- Ministry of Youth Affairs (2010). Skill Gap Analysis for Graduates of Youth Polytechnics, Vocational Training Centres and Out of School Youth. Nairobi. Government of Kenya.
- Mokoro, D. K. (2023). Attitudes of Youth-Trainees towards Technical, Vocational Education and Training in VETA Institutions in Arusha City, Tanzania. *International Journal of Vocational and Technical Education Research*, *9*(4), 1-20.
- Moore, W. (1987). Training and development: an international perspective. Ontario: McGill. Mayombe, C. (2023). Promoting youths' skills acquisition through experiential learning theory in vocational education and training in South Africa. *Higher Education, Skills and Work-Based Learning*, (ahead-of-print).
- Nasir, M., Alvi, A.S., & Tarar, M.G. (2021). Role of Technical Education and Vocational Training in Promoting Youth Employment: A Case Study of TEVT Institutes in District Gujranwala. Pakistan Social Sciences Review, 5(1), 402- 413.
- Opoko, .P., Badmus, F.O., Abioloa, I. T., Odizia, C. I., Oluwole, O.O., Pamilerin, D.E., Rotimi, D.O., Chima, N.O., Mabadeje, J., & Otusemade, T.O. (2018). The Role of Technical and Vocational Education and Training (TVET) in Nation Building: a Review of the Nigerian Case. International Journal of Mechanical Engineering and Technology, 9(13), 2018, 1564–1571.
- Setiyawami, Sugiyo, Sugiyono, & Rahardjo, T. J. (2019). The Role of Vocational Education on the Advancement of Human Development in Indonesia. Semaranga: Atlantis Press.
- Seymour, D. (1993). Total Quality Management in Higher Education: Clearing the Hurdles. A Survey on Strategies for Implementing Quality Management Practices in Higher Education. A GOAL/QPC Application Report. GOAL/QPC, 13 Branch St.
- Tum, P.C. (1996). Education Trends in Kenya: A Vocational Perspective, Nairobi Jomo Kenyatta Foundation.
- UNESCO (2021). Sub-Education Policy Review Report: Technical and Vocational Education and Training(TVET). Jakarta: UNESCO. United Nations (2015). Transforming our World: The 2030 Agenda for Sustainable Development. New York: U.N.
- United Nations (2015), Resolution Adopted by the General Assembly on 25 September 2015. Transforming Our World: The 2030 Agenda for Sustainable Development, United Nations, New York
- Van Ark B (1992). "Vocational Education and Productivity in Netherlands and Britain": National Institute Economic Review
- Wilcoxson, L., & Wynder, M. (2010). The relationship between choice of major and career, the experience of university, and attrition. Australian Journal of Education, 54, 175-189.