

CURRICULUM RELEVANCE AND YOUTH UNEMPLOYMENT IN POST-CONFLICT YAMBIO SUB-COUNTY, SOUTH SUDAN

BY

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Abstract

The economic contribution of Technical and Vocational Education and Training (TVET) depends, in part, on how well its curriculum responds to the skills required in the labour market. This is particularly important in post-conflict settings such as South Sudan, where opportunities for formal employment are limited. The study examined the relationship between curriculum relevance and youth unemployment among TVET graduates in Yambio Sub-County. It adopted a convergent mixed-methods design and involved 342 graduates from a target population of 365, together with 15 key informants drawn from TVET instructional and administrative staff. Quantitative data were analysed through descriptive statistics and multiple linear regression, while data from the key informant interviews were examined thematically. Respondents gave a composite rating of 3.65 (SD = 0.89) for curriculum relevance. Practical skills required for work received the highest rating (M = 3.82, SD = 0.81), whereas digital skills received the lowest (M = 3.47, SD = 0.98). At the time of the study, 35.7% of graduates reported self-employment, 31.9% were unemployed, 19.3% were permanently employed and 13.2% were in casual employment. The regression analysis showed a statistically significant inverse association between curriculum relevance and youth unemployment ($\beta = -0.194$, $p < .001$). Interview evidence drew attention to the need for periodic curriculum review, stronger entrepreneurship and digital competencies, and closer alignment between training and local economic opportunities. The results suggest that curriculum relevance is an important dimension of the employment context experienced by TVET graduates in Yambio, although the cross-sectional design does not support a causal interpretation. The study provides sub-national evidence for considering curriculum responsiveness alongside the labour-market conditions within which post-conflict TVET graduates seek to establish livelihoods.

Keywords: curriculum relevance, youth unemployment, TVET, skills development, South Sudan, Yambio Sub-County.

Introduction

Youth unemployment remains a persistent socio-economic concern in economies where the number of young people entering the labour market exceeds the availability of suitable work. The challenge is particularly difficult where private-sector growth is limited, productive capacity is weak and opportunities for enterprise development are constrained. Buheji (2019) describes youth unemployment as a complex development challenge that affects individual livelihoods as well as participation in economic activity. Allais (2022) argues that the employment value of skills development depends partly on the economic conditions in which those skills are expected to be used. Boti Phiri (2022) also examines the

relationship between skills development and the structures that shape employment opportunities in sub-Saharan Africa. The connection between vocational training and the work available to young people is therefore central to understanding employment outcomes.

South Sudan presents a challenging setting in which to examine this relationship. About 70% of the country's population is below the age of 30 (World Bank Group, 2023). A predominantly young population increases the demand for education and skills development that can lead to employment or sustainable livelihoods. Yet opportunities for formal employment remain limited, while economic and institutional constraints restrict

the capacity of the labour market to absorb new entrants. For young people completing vocational training, therefore, acquiring a qualification does not necessarily translate into access to suitable work.

The position of the TVET sector adds another dimension to the problem. Apunyo et al. (2022) identify inadequate facilities and equipment as constraints affecting TVET provision in South Sudan. The same study reports weak links between training institutions and employment opportunities. These conditions matter because the usefulness of vocational training depends not only on access to training but also on whether graduates acquire skills that can be applied in workplaces or used to pursue self-employment. The issue is thus one of correspondence: what is taught in training institutions needs to have some connection with the work and economic activities available to graduates after completion.

This study examines the relationship between curriculum relevance and youth unemployment among TVET graduates in Yambio Sub-County. It considers graduates' assessments of whether their training reflects labour-market needs, develops practical and digital skills, supports entrepreneurship, responds to local economic activities and prepares them for changing work requirements. The study addresses a gap in locally grounded evidence on whether perceptions of curriculum relevance are associated with unemployment among TVET graduates in Yambio. Its findings provide evidence for understanding the relationship between vocational training and employment in a local labour market where formal opportunities are limited and self-employment forms an important part of graduates' employment experience.

The relationship between vocational training and employment cannot be considered separately from the conditions of the labour market. Allais (2022) argues that the employment value of vocational education is shaped by the economic structures within which graduates seek work. Where employment opportunities are scarce, relevant training may not be sufficient to secure work. This consideration is particularly pertinent in South Sudan, where a large young population faces limited formal employment opportunities. Examining curriculum relevance in Yambio therefore requires attention to the extent to

which training prepares graduates for the work that is actually available.

TVET is designed to provide learners with occupational knowledge and practical skills for particular areas of work. The value of such preparation depends partly on whether the curriculum reflects the tasks and competencies required in those occupations. Levin et al. (2023) emphasise the importance of maintaining a connection between vocational education and workplace requirements. As occupations change, training content may also need to change so that graduates are not prepared for work requirements that no longer reflect current practice. UNESCO (2023) highlights this need for education and training systems to respond to technological, economic and occupational change.

For the purposes of this study, curriculum relevance refers to the extent to which the content taught in TVET institutions corresponds with occupational requirements, local economic activities, technological developments and labour-market needs. It includes the practical skills needed for work as well as preparation for entrepreneurship and the development of digital competencies. Muchira et al. (2023) found that concerns about the alignment of TVET curricula with labour-market requirements remain evident in Kenya. Their work demonstrates the importance of examining curriculum content in relation to the actual demands graduates face when seeking to enter the labour market.

Relevance of training does not, however, guarantee employment. Boti Phiri (2022) identifies limited access to finance and weak enterprise support among the factors that can restrict young people's ability to turn skills into livelihoods. Carranza and McKenzie (2024) also examine the conditions that influence the movement from vocational training into employment. These factors matter in interpreting the present study because graduates may possess skills that are appropriate for particular occupations while still remaining unemployed when opportunities to use those skills are limited.

The South Sudanese TVET system faces additional institutional constraints. Apunyo et al. (2022) identify inadequate training facilities and equipment as challenges affecting TVET provision in the country. The study also reports weak connections between training institutions and employment opportunities.

Such conditions can make it difficult for institutions to keep training responsive to workplace requirements and changes in technology. The employment prospects of graduates must therefore be considered in relation to both the training they receive and the environment in which they attempt to use it.

Yambio Sub-County provides a specific setting in which this relationship can be examined. TVET institutions in the area offer courses in tailoring and garment making, carpentry and joinery, masonry, electrical installation, automotive mechanics, ICT and computer applications, and hairdressing and beauty therapy. These fields provide different routes into wage employment and self-employment. The presence of training in these areas does not, however, establish whether the skills acquired correspond with the opportunities available within the local economy. That question requires evidence from the graduates themselves.

Research to date provides limited evidence on this issue in Yambio. Apunyo et al. (2022) examined institutional and system-level challenges within South Sudan's TVET sector, including facilities, equipment and links with employment opportunities. Allais (2022) considered the relationship between vocational education and the economic structures within which skills are used. Muchira et al. (2023) examined curriculum alignment with labour-market requirements in Kenya. While these studies provide useful evidence on different aspects of TVET and employment, their findings do not establish whether curriculum relevance is associated with unemployment among graduates in Yambio Sub-County. The local employment environment, available economic activities and opportunities for self-employment may produce a different relationship between training and employment.

The present article examines the relationship between curriculum relevance and youth unemployment among graduates of selected TVET institutions in Yambio Sub-County, South Sudan. It focuses on curriculum relevance as one dimension of technical training and does not extend the analysis to the other dimensions examined in the wider study. The study addresses the limited local evidence on whether graduates' assessment of their training is related to their employment status and adds empirical evidence from a post-conflict setting to the discussion on TVET and

youth employment.

Literature Review

Curriculum relevance in Technical and Vocational Education and Training (TVET) concerns the extent to which what learners are taught corresponds with the competencies required in the occupations and economic activities for which they are being prepared. The concept goes beyond the inclusion of technical subjects in a programme. It also concerns whether the knowledge and skills provided remain current, applicable and useful in actual work settings. Ruth (2020) associates competency-based curriculum design with preparation for occupational performance, giving importance to competencies that learners can demonstrate in practice rather than to completion of prescribed content alone. Chauke (2023) similarly considers curriculum responsiveness an important feature of TVET, particularly where occupational requirements change over time. Curriculum relevance can thus be considered in relation to the extent to which training prepares graduates for the work they are likely to encounter.

Maintaining this correspondence becomes more difficult as technology, production processes and workplace practices change. UNESCO (2023) emphasizes the need for continuing curriculum review so that education and training systems remain responsive to changing skills requirements. Yang and Wu (2024) link the digitalization of TVET with the need to adapt curricula while also ensuring that institutions have appropriate learning resources and adequately prepared instructors. Curriculum revision, therefore, cannot be reduced to the addition of new subjects. Its implementation also depends on the capacity of training institutions to provide the staff, equipment and learning resources required for the competencies being taught. These considerations are particularly important where TVET institutions operate with limited resources.

The skills required in contemporary work also extend beyond narrowly defined technical abilities. Habiyaemye et al. (2022) show that young people's employability is associated with combinations of technical and transferable capabilities. Communication, problem-solving and the ability to respond to changing work demands can complement occupation-specific skills. Ngware et al. (2024)

identify digital competence as part of the changing skills requirements facing young people in Kenya. Although evidence from Kenya cannot be assumed to apply directly to every occupation in Yambio, it illustrates the importance of examining curriculum relevance against the competencies required within particular employment settings.

Entrepreneurship is another aspect of curriculum relevance, particularly where wage employment opportunities are limited. Okoro et al. (2022) report an association between entrepreneurship education and graduate self-employment in sub-Saharan Africa. Their findings provide a basis for considering enterprise-related competencies within vocational education where graduates may combine self-employment with attempts to secure wage employment. Boti Phiri (2022) draws attention to the importance of finance, business support and access to markets in determining whether vocational skills can be used in enterprise activities. Training can therefore improve graduates' preparation for self-employment without removing the wider economic constraints that affect their ability to establish or sustain an enterprise.

Human Capital Theory provides one basis for understanding the economic value of education and training. Schultz (1961) conceptualizes expenditure on education as an investment in human capabilities. Becker (1964) develops the economic interpretation of education and skills as forms of human capital. Applied to TVET, the theory draws attention to the competencies acquired through training and their potential value in productive activity. A curriculum that reflects occupational requirements can contribute to the development of skills that have potential value in the labour market. Human Capital Theory does not, however, explain unemployment through skills alone. The possession of relevant competencies does not create employment opportunities where demand for labour is weak or where graduates lack viable avenues through which to use their skills.

Skills Mismatch Theory provides a more direct basis for examining the correspondence between workers' competencies and the requirements of available jobs. Sattinger (1993) describes mismatch in terms of differences between worker characteristics and job requirements. McGuinness (2006) examines how such differences can influence labour-market

outcomes when workers' qualifications or competencies do not adequately correspond with occupational demands. In the present study, this perspective is useful for examining whether the knowledge and skills acquired through TVET training correspond with the requirements of work available to graduates. It also avoids treating unemployment as evidence that graduates lack useful skills. A graduate may possess occupational competencies and still remain unemployed when those competencies do not correspond with available jobs or when suitable opportunities are scarce within the local economy.

The relationship between training and employment is particularly important in African labour markets, where formal employment opportunities often coexist with substantial informal economic activity. Allais (2022) argues that the employment value of skills development must be considered in relation to the structure of the economy in which graduates seek to use those skills. Relevant training may consequently have limited employment value where demand for workers in the corresponding occupations is low. Curriculum relevance is thus one part of the transition from training to employment and should not be treated as a complete explanation of youth unemployment.

Evidence from fragile and post-conflict settings reinforces the importance of considering local economic conditions. Ahmed et al. (2022), in their study of Sudan, found that youth employment initiatives were associated with more favorable employment outcomes where training reflected local livelihood activities and economic recovery priorities. The finding gives support to vocational programmes that take account of the economic activities and opportunities present within a particular setting. Apunyo et al. (2022) identify inadequate facilities and equipment as constraints affecting TVET provision in South Sudan. Their study also reports weak institutional links with employment opportunities. These findings help explain the conditions under which vocational training is delivered, but they do not establish whether graduates' perceptions of curriculum relevance are associated with unemployment.

Mark (2025) draws attention to institutional and participation challenges within vocational education in South Sudan, including perceptions surrounding vocational training. Such issues are relevant to understanding the environment in which

TVET operates, but participation in vocational education does not necessarily reveal whether the training received corresponds with graduates' employment experiences. Completion of training and entry into employment are separate stages of the transition to work. Evidence about access to or participation in TVET therefore provides only a partial account of the factors shaping graduate employment.

The literature leaves a specific empirical gap in relation to Yambio Sub-County. Research conducted elsewhere in Africa provides evidence on curriculum responsiveness, transferable competencies, entrepreneurship and changing labour-market requirements. South Sudanese studies have mainly drawn attention to institutional conditions, participation and constraints affecting TVET provision. These findings cannot automatically be extended to Yambio because the local economic structure, employment opportunities and conditions associated with post-conflict recovery may shape the transition from training to work in different ways.

Yambio is particularly relevant to this question because TVET provision covers occupational areas including tailoring and garment making, carpentry and joinery, masonry, electrical installation, automotive mechanics, ICT and computer applications, and hairdressing and beauty therapy. These fields offer routes into both wage employment and self-employment. The existence of training in these areas does not, on its own, establish whether the competencies acquired correspond with opportunities available within the local economy. Evidence from graduates is needed to assess that relationship.

The central unresolved issue is therefore not simply whether TVET contributes to employment. It is whether the relevance of the curriculum is associated with graduates' employment experiences within the particular labour-market conditions of Yambio. A graduate may complete a programme that provides useful occupational skills and still remain unemployed where vacancies are limited, markets are weak or opportunities for enterprise are difficult to access. Conversely, shortcomings in curriculum content may limit the ability of graduates to compete for available work even where employment opportunities exist.

This study addresses this gap by examining the relationship between curriculum relevance and youth unemployment among graduates of selected TVET

institutions in Yambio Sub-County, South Sudan. Curriculum relevance is examined through graduates' assessment of alignment with labour-market needs, practical and current industry skills, entrepreneurship preparation, digital skills, responsiveness to local economic needs, and preparation for changing labour-market requirements. The analysis provides locally grounded evidence on the extent to which the training received by TVET graduates corresponds with the employment conditions they face.

Methodology

The study adopted a convergent mixed-methods design to examine the association between curriculum relevance and youth unemployment among graduates of selected Technical and Vocational Education and Training (TVET) institutions in Yambio Sub-County, South Sudan. The design involved collecting quantitative and qualitative data during the same phase, analyzing the two strands separately and comparing their findings at the interpretation stage. This approach was appropriate because the study required quantitative evidence on the relationship between graduates' assessments of curriculum relevance and their employment status, alongside institutional perspectives on curriculum implementation and the skills expected within the local employment environment.

A convergent design was used because the study examined the same phenomenon through quantitative and qualitative evidence, with the two forms of data providing different but related perspectives that were considered together during interpretation (Creswell & Plano Clark, 2018).

The quantitative component targeted 365 TVET graduates from the eligible alumni population. Questionnaires were distributed to all 365 selected graduates, of whom 342 returned completed questionnaires suitable for analysis, giving a response rate of 93.7%. The qualitative component involved 15 key informants comprising 12 TVET instructors and three administrative staff members. All 15 participated in the interviews.

TVET graduates were selected through stratified random sampling. The eligible graduates were grouped according to their technical specializations, after which participants were randomly selected from each specialization. This provided

representation across the technical fields covered by the study. Instructors and administrative staff were selected purposively because of their involvement in curriculum delivery, technical instruction, institutional administration and graduate support. Their roles gave them direct knowledge of training delivery and the support available to graduates. Selection of these participants was therefore based on their relevance to the study and the experience they could contribute. Etikan et al. (2016) describe purposive sampling as a method in which participants are selected because they possess relevant knowledge or experience of the subject being studied.

Data were collected using a structured questionnaire for TVET graduates and a semi-structured interview guide for key informants. The questionnaire was developed from the study's conceptualization of curriculum relevance and literature on vocational education, occupational requirements and employability. Curriculum relevance was assessed using six indicators: alignment with labour market needs, development of practical work skills, preparation for entrepreneurship, development of digital skills, responsiveness to local economic needs, and preparation for changes in the labour market.

The indicators were selected to assess whether graduates considered their training relevant to the requirements of work and to the economic conditions in which they sought to apply their skills. Ruth (2020) emphasises the importance of curriculum responsiveness in vocational education, particularly in relation to changing requirements within the world of work. Chauke (2023) highlights the role of employability-related competencies in preparing vocational graduates for employment. Ngware et al. (2024) draw attention to changing competency requirements and the need for education and training to respond to developments in the labour market. These perspectives informed the selection of the six indicators used to assess curriculum relevance in the present study.

Curriculum-relevance items were measured on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The items focused on specific aspects of the training received by graduates rather than asking them to make a general judgement about the effectiveness of TVET. This kept the

measurement focused on the six dimensions of curriculum relevance examined in the study. Memon et al. (2020) note that Likert-type scales are commonly used to measure respondents' levels of agreement with statements representing an underlying construct, with attention needed to the consistency of the items used. The reliability of the curriculum relevance scale was assessed during the pilot study using Cronbach's alpha. The scale produced an alpha coefficient of 0.88, indicating good internal consistency among the items. Taber (2018) explains that Cronbach's alpha provides an indication of consistency across items intended to measure the same construct, although the coefficient needs to be considered in relation to the number and characteristics of the items. The pilot study also helped identify unclear wording and guided revisions to the questionnaire before the main data collection.

Quantitative data were coded and analyzed using SPSS Version 28. Descriptive statistics, including means and standard deviations, were used to summarise responses to the curriculum-relevance items and describe the study variables. Pearson's product-moment correlation was used to examine the association between curriculum relevance and youth unemployment. Multiple linear regression was then used to estimate the association between curriculum relevance and youth unemployment after accounting for the other technical training dimensions included in the wider study model. The results were interpreted as statistical associations rather than causal effects because the cross-sectional design did not establish temporal order or demonstrate that curriculum relevance led to changes in employment outcomes.

This article reports findings from the first objective of the wider study and focuses specifically on curriculum relevance. The analysis presented here therefore reports the regression coefficient for curriculum relevance in relation to youth unemployment. Results for the other technical training dimensions are not presented because they fall outside the scope of the article. This approach keeps the analysis and interpretation centred on the relationship examined in the article. Qualitative data were collected through semi-structured interviews with the 15 instructors and administrative staff. The interviews examined curriculum implementation, the extent to which training content reflected workplace requirements, preparation for practical work and

entrepreneurship, digital competencies, responsiveness to local economic activities, and perceptions of changing labour-market requirements. The semi-structured format provided a common set of areas for discussion while giving participants room to describe institutional practices and experiences that could not be fully captured through the structured questionnaire.

The interview data were analyzed thematically following the six-phase approach outlined by Braun and Clarke (2006). The process began with repeated reading of the interview material to develop familiarity with the data, followed by initial coding of relevant sections. Related codes were then examined and developed into potential themes. The emerging themes were reviewed against the coded extracts and the wider set of interviews before being refined, defined and named. The final themes were used to develop the qualitative account presented in the findings.

The analysis sought to identify patterns in participants' accounts rather than to count the frequency of particular responses. Coding remained focused on issues directly related to curriculum relevance, including alignment with labour-market needs, practical preparation, entrepreneurship, digital competence, responsiveness to local economic activities and adaptation of training content to changing requirements. The quantitative and qualitative findings were brought together at the interpretation stage. The statistical results were considered alongside the themes from the interviews to examine where the two strands supported similar conclusions and where they differed. The interview findings were not used to confirm the statistical association or to establish a causal relationship. Rather, they helped explain how curriculum relevance was understood and experienced within the participating TVET institutions, including the conditions surrounding curriculum delivery and graduate preparation. The integrated interpretation therefore kept the article centred on the relationship between curriculum relevance and youth unemployment while taking account of the training and employment conditions in post-conflict Yambio Sub-County.

Results

Participant Profile and Employment Context

The analysis comprised 342 TVET graduates, representing 93.7% of the 365 questionnaires

distributed. The qualitative component comprised 15 key informants, including 12 TVET instructors and three administrative staff. The graduates came from seven technical trades and six completion cohorts, covering those who completed their training between 2019 and 2024. Male graduates accounted for 198 (57.9%) of the respondents, while 142 (41.5%) were female. Two respondents (0.6%) either reported another gender category or did not disclose their gender. In terms of age, 146 (42.7%) respondents were aged 18–24 years, 121 (35.4%) were aged 25–29 years, and 75 (21.9%) were aged 30–35 years. Thus, 267 respondents (78.1%) were below 30 years of age.

Table 1. Questionnaire Response Rate

Category	Questionnaires Distributed	Returned	Not Returned	Response Rate
TVET graduates	365	342	23	93.7%

Source: Field Data (2026)

All 15 key informants completed the scheduled interviews.

Table 2.: Key Informant Interview Response Rate

Category	Targeted	Completed	Response Rate
TVET Instructors	12	12	100%
Administrative Staff	3	3	100%
Total	15	15	100%

Source Data (2026)

Current Employment Status

Among the 342 TVET graduates, 122 (35.7%) reported being self-employed, 66 (19.3%) were in permanent employment, and 45 (13.2%) were engaged in casual employment. A further 109 graduates (31.9%) reported that they were unemployed. Self-employment was therefore the most commonly reported employment status, while nearly one-third of the graduates were unemployed.

Table3: Current Employment Status

Employment Status	Frequency	Percentage
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		(%)
Permanently employed	66	19.3
Self-employed	122	35.7
Casual employment	45	13.2
Unemployed	109	31.9
Total	342	100

Source: Field Data (2026)

The employment distribution shows that 109 graduates (31.9%) were unemployed, while 233 (68.1%) reported some form of employment. Self-employment was the largest single employment category. The findings indicate that employment among TVET graduates in Yambio extends beyond formal wage employment, making it important to consider self-employment and casual work when examining the relationship between curriculum relevance and employment outcomes.

Curriculum Relevance

Curriculum relevance was assessed through six indicators covering labour-market alignment, practical skills, entrepreneurship preparation, digital skills, local economic relevance and adaptability to changing labour-market requirements. Respondents rated each statement on a five-point Likert scale.

Table.4:Descriptive Statistics for Curriculum Relevance

Statement	Mean	SD
The curriculum reflected labour market needs.	3.74	0.86
The training developed practical skills required for work.	3.82	0.81
Entrepreneurship training prepared me for self-employment.	3.61	0.92
The curriculum included relevant digital skills.	3.47	0.98
The training reflected local economic needs.	3.56	0.90

Table 5: Thematic Summary of Curriculum Relevance

Code	Participant	Theme	Sub-theme	Illustrative Response
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The programme prepared me to adapt to changes in the labour market.	3.69	0.84
Total	3.65	0.89

Source: Field Data (2026)

The mean score for curriculum relevance was 3.65 (SD = 0.89). Practical skills required for work received the highest rating among the six indicators (M = 3.82, SD = 0.81), followed by alignment of the curriculum with labour-market needs (M = 3.74, SD = 0.86). The mean for preparation to respond to changes in the labour market was 3.69 (SD = 0.84). The remaining indicators received lower ratings. Entrepreneurship preparation recorded a mean of 3.61 (SD = 0.92), while relevance to local economic needs had a mean of 3.56 (SD = 0.90). Digital skills received the lowest rating, with a mean of 3.47 (SD = 0.98). The responses therefore point to a stronger assessment of the practical and work-related aspects of training than of preparation for entrepreneurship, local economic activity and digital work requirements.

This pattern is notable in a setting where 35.7% of graduates reported self-employment and 31.9% reported unemployment. The relatively lower ratings for entrepreneurship, local economic relevance and digital skills indicate areas in which graduates perceived less strength in the curriculum. These descriptive results do not establish a direct link between particular curriculum weaknesses and unemployment, but they identify specific aspects of training that merit consideration when examining graduates' employment experiences in Yambio.

Qualitative Evidence on Curriculum Relevance

The interview data provided further evidence on how curriculum relevance was experienced within the participating TVET institutions. Three areas were prominent in the accounts: responsiveness to changing occupational requirements, entrepreneurship and digital competence, and alignment with the local economy.

KII-03	TVET Instructor	Curriculum Responsiveness	Alignment with employer skill requirements	“The curriculum gives learners practical skills, but some modules need regular review because employers now expect additional competencies.”
KII-08	TVET Instructor	Entrepreneurship and Digital Competence	Preparation for self-employment	“Many graduates have technical skills, but entrepreneurship and digital training should receive greater attention because formal jobs are limited.”
KII-AS-13	Administrative Staff	Local Economic Alignment	Training for local livelihood opportunities	“Training should reflect the skills required within the local economy so that graduates can secure employment or establish their own businesses.”

Source: Field Interview Data (2026)

KII-03 linked curriculum relevance to changing employer expectations and identified regular curriculum review as necessary. The observation corresponds with the relatively high rating for practical skills ($M = 3.82$, $SD = 0.81$) and labour-market alignment ($M = 3.74$, $SD = 0.86$), while indicating that the possession of practical skills does not remove the need for curriculum content to respond to changing occupational requirements. KII-08 identified entrepreneurship and digital competence as areas requiring greater attention because formal employment opportunities were limited. This account is consistent with the quantitative results. Entrepreneurship preparation recorded a mean of 3.61 ($SD = 0.92$), while digital skills recorded the lowest mean of 3.47 ($SD = 0.98$). The finding is particularly relevant to the employment profile because 122 respondents (35.7%) reported self-employment.

KII-AS-13 connected curriculum relevance to the economic opportunities available within Yambio. The respondent emphasised training that enables graduates either to obtain employment or establish their own businesses. This perspective corresponds with the lower mean recorded for local economic relevance ($M = 3.56$, $SD = 0.90$).

Relationship Between Curriculum Relevance and Youth Unemployment

The regression analysis showed a negative and

statistically significant association between curriculum relevance and reported youth unemployment ($\beta = -0.194$, $p < .001$). Higher curriculum-relevance scores were associated with lower levels of reported unemployment among the graduates. The coefficient establishes a statistical relationship between the two variables in the study sample, but it does not show that curriculum relevance caused graduates to become employed. The cross-sectional design does not provide evidence of temporal order and therefore does not support a causal interpretation. The descriptive results show some differences in how graduates assessed the six aspects of curriculum relevance. Practical skills required for work received the highest rating, followed by alignment with labour-market needs, whereas digital skills, entrepreneurship preparation and relevance to local economic needs received lower ratings. These results describe graduates' assessments of their training and should not be taken as evidence that any particular curriculum dimension was responsible for their employment status.

Employment conditions in Yambio provide a further part of the explanation. Of the 342 graduates, 233 (68.1%) reported some form of employment, while 109 (31.9%) were unemployed. Self-employment accounted for the largest employment category. The interview accounts point to constraints that extend beyond the content of training. KII-03 referred to changing requirements among employers. KII-08 described the limited availability of formal employment and the need for stronger

entrepreneurship and digital skills. KII-AS-13 stressed the importance of linking training to opportunities within the local economy.

The results present a mixed picture of the transition from training to work. Graduates generally rated the practical content of their training positively, and curriculum relevance had a significant negative association with reported unemployment. At the same time, almost one-third of the graduates were unemployed, and the interviews drew attention to limited formal employment, changing workplace requirements and gaps in entrepreneurship and digital preparation. In Yambio, therefore, the employment value of vocational training appears to depend not only on what graduates learn but also on whether the local economy offers opportunities in which those skills can be used.

Discussion

The study found a negative and statistically significant association between curriculum relevance and youth unemployment among TVET graduates in Yambio Sub-County ($\beta = -0.194$, $p < .001$). Graduates who rated their training as more relevant were less likely to report unemployment. The result points to a relationship between the usefulness graduates attach to their training and their position in the labour market. It does not, however, establish that curriculum relevance alone determines whether a graduate obtains employment, given the cross-sectional nature of the study.

Practical skills required for work received the highest rating among the six curriculum-relevance indicators ($M = 3.82$, $SD = 0.81$). This assessment is consistent with the occupational purpose of TVET, where the ability to perform practical tasks is an important part of preparation for work. Graduates' relatively favourable assessment of this aspect indicates that they considered the practical content of their training useful for occupational application. Ruth (2020) similarly places emphasis on competency-oriented training and its connection with occupational practice. In Yambio, the importance of practical preparation needs to be considered alongside the opportunities available to graduates to use those skills after completing training.

Alignment with labour-market needs received the second-highest rating ($M = 3.74$, $SD = 0.86$).

Graduates therefore viewed the connection between their training and work requirements relatively favourably, although the rating was not uniformly high across all areas of curriculum relevance. Chauke (2023) argues that vocational curricula need to respond to changing workplace expectations rather than remain tied to established content. This concern was also evident in the interview with KII-03, who noted that some modules require regular review because employers expect competencies that are not always adequately covered. The issue is particularly relevant in Yambio, where the usefulness of training may change as the requirements of available occupations change. Curriculum relevance therefore depends not only on the content of a programme but also on whether that content continues to match the work graduates encounter after training.

Conclusion

Curriculum relevance was significantly associated with youth unemployment among TVET graduates in Yambio Sub-County ($\beta = -0.194$, $p < .001$). Graduates who rated their training as more relevant were less likely to report unemployment. Practical skills required for work received the highest rating ($M = 3.82$, $SD = 0.81$), while digital skills received the lowest ($M = 3.47$, $SD = 0.98$). Labour-market alignment was also rated relatively highly ($M = 3.74$, $SD = 0.86$), whereas local economic relevance received a lower rating ($M = 3.56$, $SD = 0.90$).

The employment profile provides important context to the result. Self-employment accounted for 35.7% of respondents, while 31.9% were unemployed. The findings therefore suggest that curriculum relevance has employment significance, but relevant training does not operate independently of the availability of jobs and livelihood opportunities. Interview evidence further indicates that changing employer requirements, digital competence, entrepreneurship preparation and responsiveness to the local economy are specific areas that merit attention within TVET provision in Yambio.

Recommendations

TVET institutions in Yambio Sub-County should review curriculum content against the skills currently required in the occupations represented in the training programmes. The concern raised by KII-03 about changing employer expectations provides a direct basis

for giving greater attention to curriculum review.

Digital skills should receive closer attention in curriculum delivery. Their mean rating of 3.47 was the lowest among the six curriculum-relevance indicators, while KII-08 independently identified digital competence as an area requiring greater emphasis.

Entrepreneurship training should be examined in relation to the substantial proportion of graduates engaged in self-employment. The 35.7% self-employment rate, alongside the entrepreneurship-preparation mean of 3.61, provides a basis for strengthening the practical connection between entrepreneurship training and the realities faced by graduates seeking to establish livelihoods.

Curriculum planning should also incorporate the economic activities available within Yambio. The mean of 3.56 for local economic relevance and the concern raised by KII-AS-13 indicate that graduates and institutional personnel see a need for stronger alignment between training and opportunities available in the local economy.

Curriculum improvement should be accompanied by attention to the wider employment environment. The 31.9% unemployment rate among the graduates shows that curriculum relevance alone cannot account for employment outcomes. Measures that improve opportunities for graduates to use their technical skills, particularly through self-employment and locally available economic activities, are therefore relevant alongside curriculum responsiveness.

Curriculum planning needs to reflect the economic activities available in Yambio. Local economic relevance recorded a mean of 3.56, while KII-AS-13 emphasised the need to connect training with opportunities in the local economy. Graduates may therefore receive training that is relevant to particular occupations without finding sufficient opportunities to apply those skills locally.

The employment profile illustrates this challenge. Although 68.1% of graduates reported some form of employment, 31.9% remained unemployed. Curriculum relevance alone cannot account for these outcomes. For those entering self-employment, access to viable local economic activities also matters. Improvements to training should therefore be accompanied by measures that create more opportunities for graduates to apply their technical skills.

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