INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT

OPEN ACCESS JOURNAL

Vol 14, Issue 4, (2025) E-ISSN: 2226-6348

Challenges Faced by Vocational College Graduates in Pursuing a Bachelor's Degree in Education at a Public University in Johor

Hanis Najwa Binti Roseni*, Mohd Fahmi Bin Adnan

Department of Advanced Technical and Vocational Education and Training Faculty of Educational Sciences and Technology, Universiti Teknologi Malaysia, 81310 Johor Bahru, Malaysia

*Email: hanisnajwa@graduate.utm.my

DOI Link: http://dx.doi.org/10.6007/IJARPED/v14-i4/27051

Published Online: 24 November 2025

Abstract

Graduates from hands-on vocational colleges often face significant difficulties when transitioning to theory-focused university programs, leading to a disconnect that hinders their academic success. This study examined the academic and social challenges experienced by graduates of Malaysian Vocational Colleges (KV) who pursued an education degree at a public university in Johor. Adopting a mixed-methods design, the research collected survey data from 40 students and conducted in-depth interviews to identify challenges, explore coping strategies and determine the types of support required. The findings revealed a clear mismatch between the practical learning style of vocational education and the theoretical demands of university study. Academically, students struggled particularly with calculation-based subjects such as mathematics and engineering, which negatively affected their grades and contributed to significant stress. Socially, they faced difficulties with integration, lacked confidence in academic communication and experienced a sense of inferiority compared to peers from other educational backgrounds. In the absence of formal university initiatives targeted at their needs, students relied heavily on informal peer support and strong family motivation to persevere. The study concludes that these challenges are systemic in nature, rooted in the educational structure. It strongly recommends that universities implement targeted institutional support, including structured mentor-mentee programs and specialized academic workshops.

Keywords: TVET, Vocational College Graduates, Student Transition, Academic Challenges, Institutional Support

Introduction

The strategic importance of Technical and Vocational Education and Training (TVET) in fostering national economic development is globally recognized. In Malaysia, Vocational Colleges (Kolej Vokasional, or KV) are central to this agenda, tasked with producing a skilled workforce adept in practical and technical competencies (Roseni, 2025). To enhance this human capital further, creating seamless pathways for TVET graduates to pursue higher

education is a national priority. This transition, however, is not without significant friction. When students from a hands-on, skills-based learning environment enter the abstract, theory-driven culture of a university, they encounter a profound pedagogical and cultural chasm (Naziz, 2019).

This disconnect forms the central problem investigated in this study. While TVET curricula are designed to be 70% practical and 30% theoretical, university programs, particularly in fields like engineering and education, demand a high level of theoretical understanding, critical analysis and academic literacy (Holzer & Lerman, 2019; Ribeiro et al., 2020). This fundamental difference in educational philosophy places KV graduates at a distinct disadvantage, creating barriers that affect their academic performance, social integration and overall well-being. Previous literature has highlighted this gap, noting that TVET graduates often struggle with theory-based learning, academic writing and the independent study skills required at the tertiary level (Rahman & Samad, 2021; Salleh & Nordin, 2018). Furthermore, a persistent social stigma viewing vocational education as a secondary option can impact students' self-confidence as they enter a competitive university environment (Tariq, 2024).

Despite the growing number of KV graduates entering universities, there remains a limited understanding of the specific, nuanced challenges they face. This study addresses this gap by systematically investigating the academic and social barriers encountered by a cohort of KV graduates pursuing a Bachelor of Education degree at Universiti Teknologi Malaysia (UTM), a prominent public university in Johor. The research aims to achieve four primary objectives:

1. To identify the academic challenges faced by KV graduates in pursuing a Bachelor of Education degree.
2. To identify the social challenges faced by KV graduates in pursuing a Bachelor of Education degree.
3. To identify the strategies of KV graduates in overcoming academic and social challenges.
4. To identify the support needed by KV graduates in overcoming academic and social challenges.

The findings of this research offer critical insights for university administrators, policymakers and educators, providing an evidence-based foundation for designing effective and targeted support systems that can help retain this vital talent pool and strengthen the national workforce.

Theoretical Framework: Student Integration and Pedagogical Dissonance

The difficulties experienced by transitioning students can be understood through two key theoretical lenses: student integration theory and the concept of pedagogical dissonance. The most influential framework in this area is Tinto's (1993) Student Integration Model, which posits that a student's decision to persist in or depart from an institution is strongly influenced by their degree of academic and social integration. Academic integration involves performance, intellectual development and a sense of fit with the institution's academic norms. Social integration refers to the quality of interactions with peers, faculty and the broader campus community. For TVET graduates, both forms of integration are challenged by the shift from a vocational to an academic environment.

This challenge is further explained by the concept of pedagogical dissonance, which describes the tension that arises when a learner's established beliefs and approaches to learning conflict with the teaching methods and expectations of a new educational environment (Postareff & Lindblom-Ylänne, 2008). TVET is fundamentally grounded in a pedagogy of "how to do," emphasizing applied skills and practical competency (Ribeiro et al., 2020). In contrast, traditional higher education is built on a pedagogy of "how to think," prioritizing abstract theory, critical analysis and research (Holzer & Lerman, 2019). This fundamental clash in educational philosophies creates a dissonant experience for TVET graduates, who must navigate a system for which their prior training has not fully prepared them (Vu & Doyle, 2014).

Academic Integration Challenges for TVET Graduates

The academic barriers faced by TVET graduates are well-documented and are a direct consequence of pedagogical dissonance. The most frequently cited challenge is the theory-practice gap (Roseni, 2025). Having been immersed in a hands-on learning environment, these students often find the abstract, lecture-based format of university teaching to be disengaging and difficult to follow (Van der Westhuizen & Mpanza, 2024). This is particularly acute in foundational subjects that are heavily theoretical, such as advanced mathematics, physics and engineering sciences. The Ministry of Education Malaysia (2020) has itself identified a lack of theoretical grounding as a primary factor for the difficulties KV graduates face in higher education.

This gap manifests in several specific skill deficits. Research consistently shows that vocational graduates struggle with the demands of academic writing and research, which require a different set of competencies than the practical reports common in TVET programs (Rahman & Samad, 2021; Salleh & Nordin, 2018). They often lack experience in literature synthesis, critical analysis and formal citation practices, which are core skills for university-level success (Siregar et al., 2022). Furthermore, the increased academic workload and the need for self-directed learning in higher education can be overwhelming for students accustomed to the more structured, instructor-led environment of a vocational college (Davids, 2022; Holzer & Lerman, 2019).

Social Integration Challenges for TVET Graduates

The social challenges are equally significant and are deeply intertwined with academic struggles. A persistent social stigma often frames vocational education as a "second choice" or less prestigious pathway compared to traditional academic streams (UNESCO, 2016). This perception can lead to feelings of inferiority and "imposter syndrome" among TVET graduates, affecting their self-confidence and willingness to participate in class discussions or seek help from faculty (Samuel Centre for Social Connectedness, 2018; Tariq, 2024).

This lack of confidence can, in turn, hinder their ability to form diverse social networks. Studies have shown that students from non-traditional backgrounds often have difficulty integrating with peers from different academic streams and may form social enclaves with those from similar backgrounds (Corredor et al., 2022; Gidley et al., 2010). While these peer groups provide crucial support, they can also limit the student's broader integration into the campus community, which is a key component of Tinto's (1993) model of student persistence.

The lack of social integration is a significant factor in student attrition, as it can lead to feelings of isolation and a diminished sense of belonging to the institution (Tinto, 1993).

The Need for Institutional Support

The combination of these academic and social challenges underscores the critical need for tailored institutional support. However, research indicates that most universities employ a one-size-fits-all approach to student services that fails to address the unique needs of non-traditional student populations like TVET graduates (Merriam & Baumgartner, 2020). The absence of targeted support systems, such as bridging programs, specialized academic workshops, or dedicated mentoring, forces these students to navigate a challenging transition with limited formal guidance (Naziz, 2019). This literature highlights a clear gap between the documented needs of TVET graduates and the support structures currently in place at many higher education institutions, a gap which this study aims to further investigate and address.

Methodology

This study employed a Mixed-Method Explanatory Sequential Design to provide a comprehensive and nuanced understanding of the student experience. This approach was selected for its suitability in addressing the research objectives, as it allows for an initial quantitative phase to identify the scope of the challenges, followed by a qualitative phase to explain those findings in greater depth (Creswell & Plano Clark, 2018). The methodology was structured to ensure that each research objective was systematically addressed through a combination of quantitative and qualitative data.

Research Design and Procedure

The study was conducted in two sequential phases, as:

i. Phase 1 (Quantitative): This phase focused on identifying the prevalence and severity of academic and social challenges, directly addressing Research Objectives 1 and 2. Data was collected through a survey questionnaire administered to a sample of KV graduates.
ii. Phase 2 (Qualitative): This phase was designed to explain the quantitative findings and explore the student experience in greater detail. Through semi-structured interviews, this phase provided explanatory data for Objectives 1 and 2, while primarily addressing Research Objectives 3 and 4 by identifying student coping strategies and necessary support systems.

Population and Sample

The study's population consisted of graduates from Malaysian Vocational Colleges enrolled in a Bachelor of Education program at Universiti Teknologi Malaysia (UTM). A sample of 40 students from years 2, 3 and 4 participated in the quantitative phase. From this group, five students were purposefully selected for the qualitative phase to provide rich, detailed narratives of their experiences.

Instrumentation

Two primary instruments were used to collect data aligned with the research objectives:

1. Survey Questionnaire (Quantitative): To address Objectives 1 and 2, a structured questionnaire was developed to measure the perceived intensity of academic and social challenges. The instrument used a four-point Likert scale and was validated for content by

experts. A pilot study with 10 students was conducted and the instrument's reliability was confirmed with a Cronbach's Alpha of 0.89, indicating high internal consistency.

2. Semi-Structured Interview Protocol (Qualitative): To address Objectives 3 and 4 and to provide explanatory depth for Objectives 1 and 2, a semi-structured interview protocol was created. The open-ended questions were designed to elicit detailed accounts of the challenges identified in the survey, the personal coping strategies employed by students and the specific institutional support they felt was necessary.

Data Collection and Analysis

The data analysis was conducted in two stages, corresponding to the mixed-method design and the research objectives:

1. Quantitative Data Analysis: To analyze the data related to Objectives 1 and 2, descriptive statistics (mean and standard deviation) were calculated using SPSS version 29.0. This allowed for the identification and ranking of the most significant academic and social challenges based on their perceived severity.
2. Qualitative Data Analysis: To analyze the data for Objectives 3 and 4, the interview transcripts were subjected to thematic analysis, following the approach proposed by Braun and Clarke (2006). This process involved systematically identifying, coding and categorizing patterns to develop overarching themes related to coping strategies and support needs. These themes were also used to provide a deeper, contextual explanation for the quantitative findings related to academic and social challenges

Results and Analysis

This section presents the research outcomes, structured to directly address the four objectives of the study. The findings integrate quantitative data from the survey and qualitative data from the interviews to provide a comprehensive analysis of the student experience.

Academic Challenges Faced by KV Graduates

The quantitative data indicated an overall moderate level of academic challenge (Mean=2.92); however, specific areas emerged as highly problematic for students. Table 1 provides a detailed analysis of the mean scores for key academic challenges.

Table 1
Analysis of Academic Challenges Faced by Vocational College Graduates

No.	Item	Mean	Std. Dev.	Level
Calculation & Analysis				
1	I need more additional practice in Engineering and Mathematics subjects.	3.67	0.530	Very High
2	Difficult Mathematics subjects cause my CGPA to drop.	3.57	0.680	Very High
3	I experience stress during Mathematics and Engineering subject examinations.	3.50	0.640	Very High
Workload & Time Management				
4	The workload at IPT is higher than at Vocational College.	3.57	0.712	Very High
5	The assignments given for each subject are too many every semester.	3.20	0.687	High

Adaptation to Theory				
6	I have difficulty adapting to the lecture-based teaching method.	2.50	0.851	Moderate
7	I have difficulty taking notes during lectures.	2.18	0.844	Moderate
Digital & Academic Skills				
8	I have difficulty finding online academic materials (journals, theses, e-books).	2.30	0.853	Moderate
9	I am not proficient in using writing software like Microsoft Word for academic writing.	1.65	0.700	Low
10	I am not proficient in using presentation software like PowerPoint or Canva.	1.63	0.667	Low

The most acute academic challenge was in Calculation and Analysis, which registered a high overall mean of 3.13. Students overwhelmingly reported needing more practice in mathematics and engineering (Mean=3.67) and confirmed that difficulty in these subjects directly lowered their CGPA (Mean=3.57) and caused significant exam-related stress (Mean=3.50).

Qualitative data provided depth to these figures. Students consistently expressed that their foundational knowledge from KV was insufficient for the university's advanced theoretical and computational demands. One respondent explained, *"Subjects like Engineering Mathematics and Building Material Estimation require deep technical understanding that I have not fully mastered"* (Respondent 4).

The pedagogical shift from practical to theoretical learning was another major hurdle. Students struggled to adapt to long, passive lectures, which contrasted sharply with the hands-on learning they were accustomed to. One interviewee noted, *"In the beginning of my studies, I had difficulty focusing because too much theory was delivered continuously"* (Respondent 3). This highlights a clear dissonance between the students' established learning style and the university's dominant teaching methodology.

Finally, the study identified a surprising deficiency in academic digital skills. While technically competent in a workshop environment, students reported low proficiency in using essential academic software for writing (Mean=1.65) and presentations (Mean=1.63), indicating a specific digital literacy gap that could impede their academic work.

Social Challenges Faced by KV Graduates

Social challenges were rated as moderate overall, but the data revealed specific points of friction related to integration, confidence and institutional support. Table 2 summarizes these findings.

Table 2
Analysis of Social Challenges Faced by Vocational College Graduates

No.	Item	Mean	Std. Dev.	Level
Peer & Social Integration				
11	I feel more confident with support from my peers.	3.43	0.636	High
12	I often get academic advice from more experienced friends.	3.40	0.632	High
13	I prefer to interact with friends from a vocational background.	2.43	0.958	Moderate
14	I face difficulty building social relationships with friends from different study programs.	2.23	0.974	Moderate
Communication & Confidence				
15	I have difficulty speaking in front of the class or during presentations.	2.68	0.917	Moderate
16	I lack confidence in giving opinions during group discussions.	2.60	0.955	Moderate
Institutional Support & Environment				
17	I am not aware of any special academic support programs for KV students.	2.72	0.932	Moderate
18	I feel awkward interacting with students from different academic backgrounds.	2.05	0.986	Moderate
19	I take a long time to adjust to life on campus.	1.83	0.675	Low

A key finding is the dual role of peer relationships. While students relied heavily on peers for support (Mean=3.43), they also tended to form social enclaves, preferring to interact with fellow KV graduates (Mean=2.43) and finding it difficult to build relationships with students from other academic streams (Mean=2.23). This was often linked to a lack of confidence in academic communication (Mean=2.60) and a perceived stigma about their vocational background.

Critically, the study revealed a significant institutional support gap. The theme of "Support" had the highest mean score among social challenges (2.72) and four out of five interviewees were unaware of any specific support programs for KV graduates. This was poignantly captured by one student who stated, *"I don't even know if there are special programs for KV students... so far, everything has been self-effort"* (Respondent 2). This absence of formal, targeted support forces students to navigate their challenges independently or through informal networks.

Strategies of KV graduates in Overcoming Academic and Social Challenges

In response to these challenges, students developed their own resilient coping mechanisms, which were almost entirely informal and self-initiated. The qualitative analysis identified two primary strategies:

1. Peer Support and Group Learning: This was the most significant and universally adopted strategy. All interviewees emphasized the importance of forming study groups with other KV graduates to discuss difficult subjects, share notes and provide mutual emotional support. This peer network created a safe space where they could ask

questions without feeling embarrassed or judged. One student noted, *"We study in a group... if we don't understand, we ask friends. Friends will teach us"* (Respondent 2).

2. Family Motivation: Family, especially parents, served as the primary source of motivation for all interviewees. The desire to make their families proud and to serve as role models for siblings was a powerful driver of their determination. One student shared a motivating message from their mother: *"My mother said, show them that TVET students can also enter university"* (Respondent 5). This emotional and motivational support enabled students to persevere despite academic and social pressures.

The Support Needed by KV Graduates In Overcoming Academic and Social Challenges

A critical finding of the study was the perceived absence of formal, structured support programs specifically designed for TVET graduates. Four out of five interviewees were unaware of any specific academic support programs for KV students. One student stated, *"I don't even know if there are special programs for KV students... so far, everything has been self-effort"* (Respondent 2). This forces students to rely on their own informal networks. However, when asked what support they needed, the students themselves provided clear, actionable solutions:

1. A TVET Mentor-Mentee Program: Students strongly suggested the implementation of a mentoring program that would pair them with senior students from a similar TVET background. They believed this would provide invaluable guidance on navigating academic expectations and social integration. One student proposed, *"Maybe the faculty could create a mentor-mentee program... so the seniors can guide the juniors"* (Respondent 2).
2. Specialized Academic Workshops: To address the acute difficulties with calculation-based subjects, students requested targeted academic seminars or workshops. They felt these sessions would be more effective than lectures by providing step-by-step problem-solving guidance. A student suggested, *"Maybe the faculty could hold a seminar... for engineering subjects, because those are the ones we are weakest in"* (Respondent 4).

Discussion

The findings of this study indicate that the challenges faced by KV graduates are not the result of individual shortcomings but are symptoms of a systemic misalignment between the vocational and higher education systems. This pedagogical dissonance, where a practical, "how-to-do" educational philosophy meets a theoretical, "how-to-think" one, creates predictable barriers for transitioning students (Holzer & Lerman, 2019; Postareff & Lindblom-Ylänne, 2008). The university environment, with its emphasis on theoretical knowledge and self-directed learning, is not inherently structured to accommodate the learning styles and academic backgrounds of students from a practice-oriented TVET pathway (Vu & Doyle, 2014). This creates a significant "equity gap" where these students, despite their valuable technical skills, are placed at a structural disadvantage (Merriam & Baumgartner, 2020).

The students' difficulties align with established models of student retention, such as Tinto's (1993) Student Integration Model, which posits that successful persistence depends on both academic and social integration. The data from this study shows that KV graduates struggle on both fronts: academically with the curriculum and pedagogies and socially with forming broad networks and feeling a sense of belonging (Roseni, 2025). The acute struggle with "Calculation and Analysis" is a clear manifestation of the well-documented "theory-

practice gap" that often occurs in educational transitions (Van der Westhuizen & Mpanza, 2024). This gap is not merely a pedagogical issue but has tangible consequences on student performance and well-being, as evidenced by the data on CGPA decline and stress, which are known predictors of student persistence (Hagedorn, 2012).

Furthermore, the students' heavy reliance on informal, self-created peer support networks is highly revealing. While this demonstrates their resourcefulness, it also underscores a critical institutional failure to provide structured, targeted support (Naziz, 2019). The students are, in effect, building the support systems that the institution has not provided. Their own suggestions for mentor-mentee programs and specialized academic workshops (Roseni, 2025) are a direct and articulate call to action for the university to formalize and scale these organic, peer-driven solutions, a strategy well-supported by research on the effectiveness of peer mentoring for non-traditional students (Crisp et al., 2017; Jacobi, 1991).

From a policy perspective, these findings have significant implications for the national TVET agenda. The transition from KV to university is a critical juncture in the national talent pipeline. If this pathway is fraught with barriers that lead to underperformance or attrition, it represents a substantial loss of skilled human capital (Tadesse et al., 2024). Therefore, addressing these challenges is not merely a matter of student welfare but is an economic imperative. Ensuring that TVET graduates can succeed in higher education is essential for producing the highly skilled, degree-qualified technical professionals required to drive the nation's economy forward (UNESCO, 2016).

Conclusion and Recommendations

This study provides clear empirical evidence of the significant and multifaceted challenges that Vocational College graduates encounter when transitioning to a Bachelor of Education program at a public university. The core issues identified stem from a deep-seated pedagogical disconnect, a resulting lack of academic and social confidence and a clear absence of tailored institutional support.

Based on these findings, this paper puts forth the following recommendations for higher education institutions, policymakers and vocational colleges:

1. Establish a Structured TVET Mentor-Mentee Program: Universities should create a formal mentoring program that pairs new KV graduates with senior students from a similar TVET background. Research shows that peer mentoring is highly effective in promoting social integration and academic success, particularly for non-traditional or underrepresented student groups (Crisp et al., 2017; Jacobi, 1991). Such a program would formalize the powerful peer support that students already seek and provide invaluable guidance on navigating academic expectations, accessing resources and integrating into the campus community.
2. Organize Targeted Academic Support Workshops: To address the acute difficulties with calculation-based subjects, faculties should offer specialized workshops focusing on foundational concepts in engineering and mathematics. These workshops should be designed to complement lectures by providing step-by-step problem-solving guidance and extensive practice exercises, catering to the learning needs of TVET students who are accustomed to more applied learning methods.

3. Strengthen Institutional Support Systems and Communication: Universities must move beyond a one-size-fits-all approach to student support (Merriam & Baumgartner, 2020). This includes providing targeted orientation sessions that address the specific needs of TVET graduates, including training on essential academic software and digital literacy skills where proficiency was found to be low.
4. Promote Curricular Alignment and Collaboration: There is a pressing need for greater collaboration between universities and vocational colleges to better align curricula (Naziz, 2019). By enhancing the theoretical and academic components within KV programs, TVET institutions can help bridge the pedagogical gap and better prepare students for the rigors of degree-level study.

By implementing these recommendations, institutions can transform a challenging transition into a supportive and empowering pathway. This will not only improve student success and retention but will also strengthen the vital link between vocational training and higher education, ultimately ensuring a more robust, skilled and capable workforce for Malaysia's future.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Corredor, J. (2022). Social integration of low-SES students in an elite university: The role of middle-class students. *Higher Education, 83*(1), 1–19.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.

Crisp, G. (2017). Mentoring undergraduate students. *ASHE Higher Education Report, 43*(1), 7–103.

Davids, M. R. (2022). Students' experience stories as lenses for sense-making of the transition to higher education. *Perspectives in Education, 40*(2), 1–16.

Gidley, J. M., Hampson, G. P., Wheeler, L., & Bereded-Samuel, E. (2010). From access to success: An integrated approach to quality higher education informed by social inclusion theory and practice. *Higher Education Policy, 23*(1), 123–147.

Hagedorn, L. S. (2012). *Student success, retention and graduation: Definitions, theories, practices, patterns and trends*. Stetson University College of Law.

Holzer, H. J., & Lerman, R. I. (2019). The false dichotomy between academic learning & occupational skills. *Daedalus, 148*(4), 12–21.

Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research, 61*(4), 505–532.

Merriam, S. B., & Baumgartner, L. M. (2020). *Learning in adulthood: A comprehensive guide* (4th ed.). Jossey-Bass.

Naziz, A. (2019). Collaboration for transition between TVET and university: A proposal. *Higher Education, Skills and Work-Based Learning, 10*(1), 186–197.

Postareff, L., & Lindblom-Ylänne, S. (2008). Dissonance in experience of teaching and its relation to the quality of student learning. *Studies in Higher Education, 33*(2), 139–154.

Rahman, A., & Samad, A. (2021). Challenges of TVET graduates in Malaysian higher education. *Journal of Technical Education and Training, 13*(1), 45–58.

Ribeiro, F. M., Quintal, C., & Veloso, A. L. (2020). Vocational education and training vs. general education: The influence of socioeconomic context on students' choices. In *Proceedings*

of the 12th International Conference on Education and New Learning Technologies (pp. xx–xx). IATED.

Roseni, H. N. B. (2025). *Cabaran pelajar lepasan kolej vokasional dalam melanjutkan pengajian ke peringkat ijazah sarjana muda pendidikan di sebuah universiti negeri Johor.* Universiti Teknologi Malaysia.

Salleh, K. M., & Nordin, M. S. (2018). Transitioning from vocational to academic learning: A case study of Malaysian polytechnic students. *International Journal of Academic Research in Business and Social Sciences, 8*(9), 112–125.

Samuel Centre for Social Connectedness. (2018). De-stigmatizing career and technical education. Retrieved from https://www.socialconnectedness.org

Siregar, F. R. (2022). Dealing with English writing skills: Through the eyes of vocational students. *Eureka: Journal of Educational Research, 1*(3), 18–25.

Tadesse, T., Wube, M., & Endalew, B. (2024). Transition from vocational schooling to world of work: Challenges of graduates working in Ethiopia's polytechnic colleges. *Ethiopian Journal of Business and Social Science, 5*(1), 1–18.

Tariq, S. (2024, October 22). The stigma surrounding vocational training: Why society promotes university degrees and ignores skilled trades. *Medium*. Retrieved from https://medium.com

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*(2nd ed.). University of Chicago Press.

UNESCO. (2016). *Strategy for technical and vocational education and training (TVET) (2016-2021).*UNESCO.

Van der Westhuizen, C., & Mpanza, D. (2024). From vocational training to postgraduate education: Navigating the transition. *Cureus, 16*(5), e59838.

Vu, T. T., & Doyle, E. (2014). Pedagogical dissonance in international academics' teaching transitions. In *SRHE Annual Research Conference*. Newport, Wales.