International Journal of Women in Technical Education and Employment
ISSN: 2811-1567. Volume 5 – Issue 2. December2024
https://fpiwitedjournal.federalpolyilaro.edu.ng

INTERNATIONAL JOURNAL OF WOMEN IN TECHNICAL EDUCATION AND EMPLOYMENT (IJOWITED)

Digital Competence, Assistive Technology Use and Academic Engagement Outcomes Among Students in Selected TVET Institutions in Ogun State

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Abstract

An important factor that has continued to permeate educational activities is technology, thus giving credence to the pervasiveness of technology in education especially at the tertiary level. This study examines the influence of digital competence and assistive technology use on academic engagement outcomes of students in selected TVET institutions in Ogun state, Nigeria. The study took a cross-sectional survey of 300 students from 3 TVET-based institutions in Ogun State using a 4-point likert type questionnaire as the instrument of data collection. Data obtained were analysed with descriptive statistics involving frequency count and mean while the hypotheses were tested with inferential statistics (regression analysis) at 0.05 significant level. The results indicated high digital competence of the students (mean=3,31) and relatively high technology use for academics (mean=2.68) and high perceive academic engagement outcomes (mean=2.91). It was found that the predictor variables (digital competence and technology use have significant impacts on perceived academic engagement outcomes (P-values=0.000<0.005). The study concludes that students' digital competence, and use of technology for academic purposes are significantly important in achieving desirable academic engagement outcomes among students in Technical and Vocational Education and Training (TVET) institutions. It was recommended, among others, that students' capacity and competence in digital technology should be prioritized while technological tools and platforms should be well explored by TVET students with a view to enhancing their academic engagement outcomes.

ARTICLE HISTORY
Received: July 7, 2024
Revised: October 22, 2024
Accepted: October 25, 2024

Keywords: Digital competence, Assistive technology, Academic engagement outcomes, TVET Institutions

Citation
Iro-Idoro, C. B. & Jimoh, T. A. (2024). Digital Competence, Assistive Technology Use and Academic Engagement Outcomes Among Students in Selected Tvet Institutions in Ogun State. *International Journal of Women in Technical Education and Employment,* 5(2), 49 – 61.

Introduction

Globally, education is considered as the bedrock of development and thus remains a means for achieving desirable combination of knowledge, skills, discipline and ethical orientations necessary shaping attitudes and values towards building the required skills and capacity to think and act productively (Abolarin, 2019).

One of the measures of effectiveness or otherwise of the teaching and learning components of education is the academic performance of the student over a specified period (Rono, 2013). This literarily reflects the extent to which a student has been effectively engaged in academic activities (Rothbart & Jones, 2018) that are necessary to attain specific academic

achievement status and desirable outcomes (Fam & Yaacob 2016, Živčić-bećirević et al., 2017).

In Nigeria, the apparent increasing concerns of government, policy makers, parents and the society on characteristics, academic inclination, abilities, motivation for skill utilisation and career readiness of products of tertiary education are borne out of the need for youth productive engagement and active contribution to socio-economic growth. The purport of educational institution, faculty members and government centers on ensuring impactful teaching and learning, and achieving the desired learning outcomes through adequate academic engagement of the students, thus making academic engagement a critical factor having potential influence on the overall academic inclination and learning outcomes (LeMay, 2017).

A growing facet of education which is attracting the interest and attention of policy makers, economic and development experts as well as researchers is Technical and Vocation Education and Training (Bhurtel, 2015). While several studies have been conducted on academic engagement and learning outcomes (Fredricks et al., 2004; Kuh et al., 2005; Trowler, 2010; Reeve & Lee, 2014), and educational institutions, parents, government and social development organisations have been progressively interested in determining the effectiveness of academic activities and school programmes (Wang & Eccles, 2012; Bae & Han, 2019), academic engagement and learning outcomes in TVET have not been extensively researched and the possible influence of students' prior involvement and exposure to technological skills on their level of academic engagement is yet to be well explored in details (Kuh, et al., 2008; Svanum & Bigatti, 2009).

In addition, several studies have explored digital competence and technology use in relation to academic engagement in general educational contexts, the unique characteristics and requirements of TVET institutions necessitate specific investigation. The specific relationship between digital competence, technology use, and academic engagement outcomes remains relatively unexplored within the TVET context. While several studies have explored the impact of technology use and digital competence on educational outcomes, there is a paucity of empirical insights focused specifically on TVET institutions in Nigeria, particularly in Ogun State. The present study thus fills this gap, specifically to determine the extent to which digital competence and technology utilization contribute to perceived academic engagement outcomes among tertiary institutions' students, with particular focus on final year students in selected TVET-oriented tertiary institutions in Ogun State.

Academic engagement is a term used to describe multidimensional characteristics, motivation, behaviour and cognition and participation of students in relation to learning and other school activities (Sharma & Bhaumik, 2013). It is the amount, extent and qualitative participation and efforts of students in academic works, other school-related activities, as well as the social and physical involvement in them (Oqab et al., 2016). Reeve and Tseng (2011) describe academic engagement in terms of behaviours reflecting involvement of the learner in educational activities, including effort, perseverance, and attentiveness; emotion showing lack of resentment, boredom, or anxiety in the students, as well as their excitement and curiosity; cognition depicting the student's employment of complex learning techniques, active self-regulation, and constructive participation in the instructional process. Fredricks and McColskey (2012) towed similar depiction to portray academic engagement as a dynamic, evolving and multidimensional concept made up of three main dimensions: behavioural, cognitive and emotional which interact with one another and rarely happen independently of others. As Barkley (2009) submits that academic engagement is formed as a result of the interaction of students' motivation for specific academic activities and their and active learning, Reeve and Lee (2014) reported that there is reciprocity of relationship between students' engagement and motivation for learning as any change in student motivation leads to changes in academic engagement level.

The participation and active involvement of students in school and learning activities are not ends in themselves, rather they are means to achieving broader educational goals and outcomes (Kuh, 2001). Academic engagement serves as a pathway to achieving a number of outcomes including knowledge acquisition, transferable skills development, personal growth, career readiness, attaining educational objectives, and other academic engagement outcomes that are required for success in various aspects of life (Trowler, 2010; Hart Research Associates, 2018)

Academic engagement outcomes refer to the observable behaviors, attitudes, and achievements of

students that indicate their active involvement and investment in the learning process within an academic setting. These outcomes are indicators of how well students are motivated to learning, their efforts in academic activities, and use of resources, energy and commitment during their college years (Bae & Han, 2019). Such engagement outcomes include improved learning and achievement, and increased knowledge acquisition, enhanced skills for problem-solving and critical thinking, career readiness, positive attitudes and beliefs, productive lifestyle, etc. (Skinner et al., 2008; Oqab et al., 2016).

Academic engagement outcomes in TVET institutions can be understood as the observable post-training behaviors, attitudes, and achievements that are evidence of their active involvement and investment in their vocational education and training (Cedefop, 2016). Such outcomes are specific to the TVET context and reflect the development of technical skills, employability, and career readiness (Parylo & Mierzejewska, 2019). Academic engagement outcomes in TVET institutions is significant as students competence, mastery and the overall success and relevance of the TVET programmes depend on these results. (European Training Foundation, 2010).

Active engagement in technical training programmes and learning of vocation skills are expected to result in acquisition and utilization of technical skill, employability and career readiness, workplace readiness, industry relevance and fitness, work-based learning, skills transferability, generic skill competence, lifelong learning orientation and production orientation (Rauner & Smith, 2013; Tynjälä et al., 2016; Mulder et al., 2017). Participation in such technical and vocation-oriented training equip individuals with the abilities to apply theoretical knowledge and practical skills in real-world vocational contexts and the alignment of vocational education with industry demands (Rauner et al., 2013; Cedefop, 2020).

TVET institutions work to foster the development of soft skills - communication, teamwork, problem-solving, adaptability and flexibility which are essential for success in both personal and professional endeavors. These abilities include (Rauner et al., 2013; CEDEFOP, 2016). Thus, tertiary institutions in the technical and vocation education and training domains play a crucial role in equipping students with hands-on- skills and competencies that are essential for enhancing students' employability and workplace readiness (Parylo & Mierzejewska, 2019). The engagement outcome from such TVET learning environment can encourage students to view learning as a lifetime process, assisting them in updating their knowledge and adjusting to ever-changing job contexts. (UNESCO-UNEVOC, 2017; Mulder et al., 2017).

The significance of academic engagement outcomes in TVET institutions suggest that training components and academic activities should be tailored to line with industry needs and expectations to guarantee TVET students have the essential skills and knowledge that match the demands of the labor market, increase their employability, and close skills gaps, (European Training Foundation, 2010; Rauner & Smith, 2013).

As a result of the growing pervasiveness of digital technology, learning process and academic activities are increasingly requiring students' ability to identify and use relevant technology resources and platforms (United Nations, 2015; Al-Rahmi et al., 2018). The increasing widespread use of digital tools has made lack of digital skills, rather than lack of digital access, to become a key competence factor in modern societies (Olaofe, 2018, Brandwagt, 2018) and digital competence gap is one of the things that keeps people from utilizing the new opportunities and benefits offered by digital technologies and technological advancements (Khin & Ho, 2018). Schrerer et al. (2019) reported a favourable link between higher levels of digital proficiency and higher levels of academic engagement, thus giving credence to the integration of digital competence development into the TVET training in order to improve students' academic engagement and employment prospects (Becker et al., 2018).

Digital competence has been described in different context giving rise to synonymous use of terms like digital skills, technology competence, ICT literacy, e-skills, etc. to refer to digital abilities (Adenekan & Jimoh, 2021). Digital competence refers to the capacity to use digital technology for communication, information, and problem-solving effectively and critically is referred to as digital competence. It includes the abilities, skills and attitudes needed to operate and make use of digital instruments in a variety of settings (Adams & Ngware, 2018; Agabi, & Ogbonnaya, 2019). Fraillon et al. (2019) defines digital competence as the capacity to solve information problems using digital technology, communication tools, and/or

networks in order to function in knowledge societies. Kozma (2008) was of the view that digital competence includes knowledge and skills related to technology use, digital media competence, critical thinking, innovative thinking, communication, collaboration, and ethical considerations. It is a reflection of individual IT competence, the ability to communicate and partake and collaborative via online platforms and the confident use of computers source, process, save, retrieve, evaluate, and exchange information to facilitate work flow, information and decisions (Michalos, 2013)

The foregoing suggests that Digital competence goes beyond merely having technological know-how. It comprises being able to utilize digital technologies efficiently, analyze information critically, and connect with others online in a responsible manner. In order to engage fully, learn a skill, utilize the skill, engage in knowledge sharing and transfer and communicate successfully in a technology-driven society, there is need to be digitally competent.

Although students' levels of digital competence vary, it is unclear how well these skills are applied to the usage of instructional technology. The mere availability of digital tools and resources does not ensure that they will be used effectively for learning and academic goals. A major obstacle to maximizing the advantages of digital tools among tertiary education students is the necessity to integrate digital competence into educational technology use (Agabi & Ogbonnaya, 2019).

The use of technology, digital platforms and online resources to promote learning, participation, student engagement, critical thinking and overall academic performance is often referred to as educational technology (Abid et al., 2022). In the context of people with disabilities, the term 'assistive technology' is used to refer to the utilization of specialized tools, devices, or software designed to assist individuals with disabilities in performing tasks, enhancing their independence, and promoting their participation in various activities (Lee & Tsai, 2019) with a view to compensating for limitations or challenges associated with disabilities, enabling them to overcome barriers and achieve autonomy and inclusion (Cook et al., 2017; Reed et al., 2018). However, academic engagement of students in tertiary institutions is related to technology use to assist their learning and academic activities, meet learning needs, stimulate active participation and enhance students' engagement and success (Olin & Bragelman, 2020). The use of assistive technology tools, such as text-to-speech software, digital organizers, and note-taking applications impact on student engagement and motivation and enhance students' abilities to access and interact with course materials, participate actively in class discussions, and stay organized with their coursework (Loh & Blanton, 2019).

While educational technology refers to the integration of technological tools, resources, and strategies, digital devices, software, online platforms, multimedia resources and various technological innovations to enhance teaching, learning, and educational outcomes (Robinson et al., 2015; Mastellos, 2018), the term 'assistive technology' is employed in this study to denote students' utilization of technology to assist, support and enhance their learning experiences, academic engagement and facilitation of ease in academic activities. Johnson (2015) submits that students use technology-enabled resources - social media platforms, mobile devices, online collaboration tools, computers, internet-based resources, cellphones, etc. in a variety of ways to interact with course material, work with classmates, access information and take part in academic activities. The technological tools and digital applications are leveraged at varying extent depending on preferences, learning experiences, exposure, digital skills and lifestyles to improve academic engagement, communication, collaboration and group task, learning and research (Divaharan et al., 2017).

Methodology

This study employed the survey approach with the use of questionnaire for data collection. A cross-sectional survey of 300 students from 3 TVET-oriented tertiary institutions in Ogun was taken. The institutions were selected from the three geo-political divides of the State - The Federal Polytechnic, Ilaro in Ogun West, Abraham Adesanya Polytechnic, Ago-iwoye in Ogun East and Moshood Abiola Polytechnic, Abeokuta in Ogun Central.

Multi-stage method was used for sample selection. The first step was equal allocation of subjects to each of the three tertiary institutions, followed by purposive sampling in the selection of only the final year students as they were presumed to be in a better position to express opinions on the variables being examined. Convenient and random distribution were then used in the selection of the sample.

A questionnaire designed along 4-point likert rating scale was used as instrument of data collection. Input items for students' digital competence were adapted from Çoklar and Odabaşı (2009) and Adenekan and Jimoh (2021); items on students' technology use were modified from Edmunds et al., 2012) Study Use of ICT Scale while factor inputs for academic engagement outcomes were adopted from Bae and Han (2019) Academic Engagement Outcomes as portrayed in a number of extant literature (Rauner & Smith, 2013 Tynjälä et al., 2016; Mulder et al., 2017; Cedefop, 2020).

In tandem with the objectives and research questions, the following postulation were made on the relative contributions of the predictor variables on perceived engagement outcomes:

H_{01}: There will be no significance contribution of digital competence to perceived academic engagement outcomes of final year students in the selected TVET-oriented tertiary institutions.

H_{02}: There will be no significant contribution of technology use to perceived academic engagement outcomes of final year students in the selected TVET-oriented tertiary institutions.

Results and Discussions

Table 1: KMO and Bartlett's Tests

Variable	Items	Cronbach's Alpha	KMO	Bartlett's Sphericity (sig.)	AVE	Composite Reliability
Digital competence	11	0.811	0.727	534.3111 (0.000)	0.888	0.829
Technology use	10	0.791	0.778	413.241 (0.000)	0.763	0.878
Perceived Academic Engagement Outcomes	8	0.714	0.716	532.417 (0.000)	0.867	0.822

Source: Field Survey Results, 2023

The Kaiser–Meyer–Olkin KMO test above shows the statistical suitability of the inputs for factor analysis. Average variance extracts were specified at ≥ 0.5 of the items in each factor. The test indicates KMO values greater than 0.5 for each of the constructs under consideration which implies acceptability. The Bartlett's test of sphericity (sig.) has p-values less than 0.05 significance level indicating that the factors were valid and there is significant correlation between the variables. The Cronbach's alpha values were high for the independent variables (digital competence and technology usage) and the dependent variable (academic engagement outcomes).

Table 2: Summary of Cumulative Mean of Responses

Variables	Input	Cumm. Mean
Digital Competence	Add comments to blogs, forums or web pages	
	Observing appropriate conventions for online communications	
	Determine the credibility of online resource/items	
	Using the right application to find and use information	
	Collaborating safely with others online	3.31
	Creating online content	
	Sharing documents or presentation online	
	Integrating and connect mobile devices and applications	
	Using multi-media devices for podcast or video	
	Using other people's work without committing plagiarism	

Technology Use for Academic purposes	Establish contact details online Keeping digital information secure Viewing simulation video Participation in online academic discussions Watching YouTube for practical steps/procedure Using technology to complete assignment Using note taking softwares Use of voice to text application Employing multimedia resource to	2.68
Perceived Academic Engagement Outcomes	Using technology to learn from any location at any time Use of ICT resource to learn and cover material Using ICT to have information for my studies Use of ICT to make my study activities more personal Use of technology resource to meet deadlines on academic activities Core technical skills acquired Readiness to utilize technical skill Career readiness Confidence on fitness for industry Ability to transfer knowledge to real situation Adeptness in applying practical knowledge Readiness to learn more Certainty of independent problem solving Dexterity for automated processes Communication skills Tendency for adaptability to changing situations Disposition to team work	2.91

Criteria: *mean ≤ 1.49 = Very Low; 1.5 to 2.49 = Low; 2.5 to 3.49 = High; 3.5 to 4.0 = Very High.*

The table summarizes the cumulative mean of responses for three variables: digital competence, technology use for academic purposes, and perceived academic engagement outcomes. Digital competence measured students' ability to engage with digital tools and platforms such as adding comments to blogs or forums, using appropriate online communication conventions, assessing the credibility of online resources, collaborating safely online, creating and sharing content, and ensuring digital security, etc. The mean score for digital competence is 3.31, which, based on the criteria, falls in the high category (2.5 to 3.49). This indicates that students feel highly competent in using digital tools and platforms for various online activities. Technology use for academic purposes examined how students use technology for academic tasks, including viewing simulation videos, participating in online academic discussions, using YouTube for learning practical steps, completing assignments using technology, and utilizing note-taking software, voice-to-text applications, and multimedia resources, etc. With a mean score of 2.68 classified as high, the it suggests that students portrayed themselves as actively using technology for academic purposes, with room for improvement in some areas.

Perceived academic engagement outcomes assessed students' perception of their specific academic engagement outcomes, such as core technical skills acquired, career readiness, ability to apply practical knowledge, communication skills, and teamwork abilities, dexterity for automated processes, communication skills, etc. The mean score here is

2.91, also categorized as high, suggests that students perceived positive academic engagement outcomes, such as increased technical skills and career readiness and adaptability. All three variables have mean scores within the high range (2.5 to 3.49), indicating that students perceive themselves as competent in using digital tools, are effectively using technology for academic purposes, and were perceiving positive academic engagement outcomes. None of the variables fall into the "very low" or "low" categories, which points to a generally positive experience in the areas assessed.

***H*$_{01}$**: Digital competence has no significant contribution to perceived academic engagement outcomes of final year students in the selected TVET-oriented tertiary institutions.

Table 3: Model Summary for digital competence and perceived engagement outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.821[a]	.675	.671	.16354

a. Predictor: (Constant), DC

b. Dependent variable: PAEOs

Source: Field Survey Results, 2023

Table 3 shows the model summary of the statistical relationship between digital competence and perceived engagement outcomes of the students. It indicates a strong positive relationship between the variables (R=0.821). The result also shows that about 67% of the total variation in the perceived engagement outcomes could be attributed to digital competence.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.830	1	4.830	180.571	.000[b]
	Residual	2.327	87	.027		
	Total	7.157	88			

a. Dependent Variable: PAEOs

b. Predictors: (Constant), DC

Source: Field Survey Results, 2023

As shown in Table 4, P-value of 0.000 is significantly less than 0.05 threshold of significance. This indicates that the model used to relate the independent variable with the dependent variable is statistically adequate for the test.

Table 5: Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	Constant)	.392	.220		2.829	.006
	DC	.819	.061	.821	13.438	.000

a. Dependent Variable: PAEOs

Source: Field Survey Results, 2023

Table 5 shows the co-efficient of the influence of the independent variable (digital competence) on the dependent variable (perceived academic engagement outcomes). The result shows a p-value of 0.000 < 0.05 indicating that digital competence lends significant influence on perceived academic engagement outcomes of the final year students. As depicted in the result, a unit change in digital competence will yield about 81.9-unit change (B=0.819) in the perceived academic engagement outcomes of the respondents. At t-value of 2.829 and significant value of 0.000<0.05 threshold of significance, we reject the null hypotheses and accept the alternative hypotheses. Thus, we uphold that digital competence has significant influence on the perceived academic engagement outcomes among the final year students in the TVET-oriented institutions surveyed.

H_{02}: Technology use have no significant contribution to perceived academic engagement outcomes of final year students in the selected TVET-oriented tertiary institutions.

Table 6: Model Summary Technology use and perceived academic engagement outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770[a]	.593	.588	.18299

a. Predictors: (Constant), TU

b. Dependent variable: PAEOs

Source: Field Survey Results, 2023

Table 6 shows the model summary of the statistical relationship between technology use and perceived academic engagement outcomes with coefficient of R=.770. which implies a positive relationship between the variables. The value of Adjusted R^2 is 58.8 indicating that technology use for academic activities could account for almost 59% of the total variation in the perceived academic engagement outcomes among the students surveyed.

Table 7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.243	1	4.243	126.722	.000[b]
	Residual	2.913	87	.033		
	Total	7.157	88			

a. Dependent Variable: PAEOs

b. Predictors: (Constant), TU

Source: Field Survey Results, 2023

As shown in Table 7, the ANOVA shows a P-value of 0.000 < 0.05. which indicates the model used to relate the dependent and independent variables is statistically adequate. Table 8 below gives the co-efficient of the influence of the independent variable (technology use) on the dependent variable (perceived academic engagement outcomes).

Table 8: Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.336	.226		4.585	.000
	TU	.689	.061	.770	11.257	.000

a. Dependent Variable: PAEOs

Source: Field Survey Results, 2023

The result shows a p-value of 0.000<0.05 indicating that the predictor variable has significant influence on the perceived academic engagement outcomes. As depicted in the result, a unit change in technology change in technology use is capable of yielding about 69 unit change (B=0.689) in perceived academic engagement outcomes. At t-value of 4.585 and significant value of 0.000 which is less than 0.05 threshold of accepting the hypothesis, we reject the null hypotheses and accept that technology use has significant influence perceived academic engagement outcomes of final year students of the selected TVET-oriented tertiary institutions in Ogun State.

The analysis revealed a considerable level of digital competence among the students which suggests that the students rated themselves has having capacity to effectively and efficiently utilize digital resources and applications for remarkable number of activities such as social media use, communication, online content creation, finding and using information, sharing materials, collaborating, etc. without necessarily depending on assistance from anyone. The students also rated their capacity to determine the credibility of persons and online resources as high. The result also revealed the extent of the students' abilities in using multimedia devices, creating link between devices and application, maintaining security of digital information and safely collaborating in a virtual environment.

Despite the high digital competence rating depicted in the students' attitude on the scale, it was found the technology use for academic activities and learning is relatively low when compared with their self-reported digital competence. The implication of this is that the students channel their digital technology use for mostly interaction and social connections with minimal focus and deliberate use of such technology to assist them in their academic activities and learning engagements. On the overall, it was revealed that digital competence and technology use lend considerably high influence on academic engagement outcomes of students in the TVET-oriented programmes of study. This supports Olin and Bragelman (2020) that technology use assists in meeting learning needs, enhance active participation, students' engagement and success. Such capacity for digital skills and technology utilization are deemed helpful in core practical skill acquisition, Core technical skills acquired, adaptability to changing situation triggered by technology, readiness for skill utilization, knowledge transfer, proficient use of practical skills (Tynjälä et al., 2016; Mulder et al.,

2017), career readiness, fitness for industry, problem solving abilities, dexterity for automation, communication (Rauner et al., 2013; Cedefop, 2020) and which are essential attributes that are expected to result from academic engagement of students in TVET-related programmes.

Conclusion

This study assessed the digital competence and technology use as assistive tool in academic activities and their relative influence on academic engagement outcomes of students with particular focus of students in selected TVET-oriented tertiary institutions in Ogun State, Nigeria. It is concluded that the possession and utilization of digital competence are essential need to meet TVET training needs and general academic activities in modern times. Students with good level of digital competence will manifest confidence in the use of technology and will show high adaptability to changing education processes that are constantly triggered by technology and emerging digital application use.

Digital competence is needed by students in TVET-related training to take advantage of technological offerings and leverage of numerous digital resources, applications and processes for learning, research, communication, collaboration, other academic engagement and for building networks of relationships of academic and social mutuality. Possessing skills in the use of smart devices, computers, internet will not translate to academic productivity among students until such competence is directed and channeled towards exploring technology use as companion and aid in academic activities.

Deliberate and conscious use of digital technology by TVET students to assist in academic and educational needs and activities will result in desirable academic engagement outcomes in terms of skill acquisition, adaptability, confident use of machines and tools, proficiency in practical skill utilization, career and industry readiness, job fit and communication competence that are essential generic and innovative attributes for employability and self-sustaining employment.

Based on the findings, it is recommended that students in TVET-based institutions and programmes should make personal development efforts on sharpen their digital competence to foster their usage of digital technologies. In addition to their core training, competence in the use of technology should be given priority and should be geared towards academic and learning purposes.

Efforts should be made constantly by the students to relate simulation experience and skills acquired via online resources, platforms and video into their practical academic situations. Management of TVET institutions should intensify digital-related training of students and efforts should be geared towards academic and productive engagement of the students. Government and management of TVET institutions should ensure the availability of relevant and up-to-date digital tools as well as adequate and appropriate use of digital technology for academic engagement and learning activities.

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