

Evaluation of Students' Perspectives on Information and Communication Technology (ICT) Practices in Vocational and Technical Education (VTE)

Rasheed, Dauda. O¹; Oluwagbenga A. Ifabiyi²; Ishola M. Bello³

^{1&3}Department of Business Education, School of Vocational and Technical Education,

²Department of Technical Education, School of Vocational and Technical Education, Nigeria.
Kwara State College of Education, Ilorin. Nigeria.

Publication Date: 2025/05/06

Abstract: This study determines the students' perspective on Information, Communication, and Technology (ICT) practices in learning activities at the School of Vocation and Technical Education in Kwara State College of Education, Ilorin. This research adopted a quantitative descriptive research design, using a self-designed questionnaire. The population of this study includes all VTE students from various expertise programs in the College. A sample of 198 students was randomly selected. The results showed that as many as 88.71% of students agreed that the use of ICT was very useful in learning, finding learning material and completing assignments. ICT is also available to students at home and in a hands-on laboratory environment at school, where they can participate in educational activities. The capacity of VTE students to use Microsoft Office applications (such as Word, PowerPoint, and Excel) and the internet for communication and information retrieval demonstrates their high level of proficiency with ICT in the classroom. The research indicated that ICT is highly beneficial to students' learning activities at VTE. Additionally, students believe that to compete in the modern workforce, they must learn how to use ICT.

Keywords: VTE, ICT, and Student Viewpoints.

How to Cite: Rasheed, Dauda. O; Oluwagbenga A. Ifabiyi; Ishola M. Bello. (2025). Evaluation of Students' Perspectives on Information and Communication Technology (ICT) Practices in Vocational and Technical Education (VTE). *International Journal of Innovative Science and Research Technology*, 10(4), 2517-2519.
<https://doi.org/10.38124/ijisrt/25apr447>

I. INTRODUCTION

As the primary beneficiaries of the teaching and learning process, students are crucial to the success of innovative educational practices. Students play a variety of roles in educational innovation, including serving as teachers, mentors, and providers of subject content to their classmates. According to Adeyemi & Olaleye (2013), students must be involved in the process of introducing educational innovations so that they not only embrace and implement them but also bear responsibility for their success.

The success of learning to meet learning objectives and create meaningful learning for students depends heavily on how precisely teachers use ICT (Wankel & Blessinger, 2015). This is because students may receive, share, and develop their information and skills independently, and ICT can be utilised for monitoring, assessment, and presenting activities (Agomuo, 2015). ICT also helps schools automate administrative tasks that are utilised by numerous

stakeholders in the school and can serve as informational resources that connect the theories learnt with real-world scenarios. The advantages of ICT in education have spurred numerous nations to adopt ICT in education to produce ICT-trained human resources capable of addressing global challenges (Adeyemi & Olaleye, 2015), including learning in Vocational, Technical Education (VTE) in Nigeria.

The goal of vocational technology education (VTE), a component of tertiary education, is to produce graduates who are equipped to work in a certain profession based on their talents. As a result, VTE graduates must fulfil graduation requirements to adapt to the demands of the workplace by their specific areas of expertise and develop professional attitudes (Himmah & Triyono, 2014). To succeed in the modern workforce, vocational graduates must possess not only the skills necessary for their specialised professions but also additional abilities, such as the ability to use ICT. Working in the field of knowledge can be supported and made easier by having the capacity to use ICT. Olaleye and

Adeyemi (2013). Consequently, the use of ICT in VTE education serves as a tool to expedite the learning process to prepare students for the global digital workforce Samson and Victor's (2021) study indicated that the majority of Kwara state's vocational technology education (VTE) students have access to gadgets that can be utilised for ICT-based learning, such as laptops and smartphones. However, by the updated Vocational and Technical Education curriculum by the NCCE Minimum Standard 2020 Edition, which requires the integration of ICT in education to meet the expectations of the modern workforce, these tools are not being utilised to their full potential.

Based on the aforementioned observations the researcher pick interest to evaluating Students' Perspectives on Information Communication and Technology (ICT) practice in Vocational Technical Education (VTE).

III. RESULTS AND DISCUSSION

➤ *The Results of the Analysis are Presented as Follows*

- *Students' ICT Accessibility and usage*

Table 1 Students' Perception of ICT Accessibility and Usage

S/N	ICT Accessibility and Usage	VHL	HL	LL	NL	Mean	STD	Decision
01	Browse relevant website	17	21	4	6	3.02	0.98	High
02	Complete assignments	11	12	19	6	2.58	0.99	High
03	Give presentation of class work	12	25	5	6	2.90	0.93	High
04	Search for learning materials in the class	11	25	5	7	2.83	0.95	High
05	In-school (lab computer)	5	2	26	15	1.94	0.89	Low
06	In your home	20	5	12	11	2.71	1.24	High
07	On your mobile phone	12	25	5	6	2.80	0.78	High

Table 1 shows that VTE students already have a variety of media, including computers and cellphones, that they can utilise to access ICT for learning. In practically all of their activities, students use these media. Figure 2 shows that the majority of pupils (70.3%) use ICT at home daily. These findings are expected given that nearly all students are unable to live without their smartphones, and the few students who seldom ever use ICT at home do so due to parental restrictions on their access to media and ICT.

Students at school only use ICT once a week (42.2%) because the average VTE student subject is held in the school lab once a week. This is because there is an imbalance between the number of available school labs and the number of students, particularly for skills programs that are not heavily reliant on ICT, like business and management programs. It reveals that students who come from ICT specialist programs use school laboratories more frequently, twice a week (24.8%), and some even daily (11.9%). Apart from their homes and schools, students also use ICT in other

➤ *Objectives of the Study*

- Evaluate Students' Perception of ICT Accessibility and Usage in VTE
- Assess Students' Perceptions of ICT Competencies in VTE

II. METHOD

The present study employs a quantitative descriptive research methodology. The population consist of all VTE students from the vocational and technical programs at Kwara State College of Education, Ilorin. Since all VTE students at Kwara State College of Education, Ilorin, were thought to have access to the same ICT for learning, the sample was selected using a straightforward random sampling technique. Two hundred and eighty were used. A self-designed questionnaire was used for the research. a descriptive quantitative analysis was used to examine the collected data.

locations, like cafes with Wi-Fi. However, they use it seldom, only once a week (19.1%), twice a week (14.5%), or never at all (37.3%). When students are given homework tasks that require information or data from the internet, they have access to ICT outside of their homes and schools. Additionally, there are locations these days that provide free Wi-Fi, cosy spaces, and affordable costs that students visit.

Figure 1 illustrates how all students utilise ICT to look up educational resources online. Students claim that learning according to the current curriculum is extremely difficult because they must locate and create educational resources that are in line with their specialised program. Thus, up to 96.4% of students concur that ICT can assist in presenting learning problems that need to be comprehended. Additionally, 95.5% of students agree that ICT may help students' complete assignments and be used to access relevant websites. This is because ICT also aids students' access to relevant websites to complete tasks assigned by the teacher during learning.

- *Students' Perceptions of ICT Competencies:*

Table 2 Students' Perceptions of ICT Competencies (in Percentage)

S/N	ICT Competency	VHL	HL	LL	NL	Mean	STD	Decision
08	Internet for access information	17	21	4	6	3.02	0.98	High
38	Internet for communication	11	12	19	6	2.58	0.99	High
39	Spreadsheet	12	25	5	6	2.90	0.93	High
40	Presentation software	11	25	5	7	2.83	0.95	High
41	Word Processing	5	2	26	15	1.94	0.89	High
42	Use data analysis software	20	5	12	11	2.71	1.24	High

The capacity of pupils to use ICT to aid in their education. Students share their thoughts on how well they can use the characteristics that different ICT media currently offer in the classroom. Figure 3 shows that students believe they are very proficient with word processing software like Microsoft Word (51.4%) and presentation software like PowerPoint (55.9%). Because of the assignments and presentations they complete in class, students are already used to using the program or software, 12.6% and 8% of students, respectively, feel quite competent using Microsoft Word and Microsoft PowerPoint. In contrast, students believe they are moderately competent in using a spreadsheet tool (Ms. Excel) (44.1%). the capacity of students to use ICT to enhance their educational experience. Students share their thoughts on their present proficiency with the features provided by different ICT media in the classroom. Figure 3 illustrates how proficient students believe they are with word processing applications like Microsoft Word (51.4%) and presentation tools like PowerPoint (55.9%). Because of the assignments they complete and the presentations they create in class, students are already used to using the program or software; 12.6% and 8% of students, respectively, feel extremely competent using Office Word and PowerPoint. Meanwhile, pupils perceive themselves to be moderately competent in a spreadsheet application (Ms. Excel) (44.1%).

IV. CONCLUSIONS

According to the findings of the aforementioned study, VTE students believe that using ICT for learning is very beneficial and makes it easier for them to locate course materials and finish tasks. Additionally, VTE students are adept at using a variety of ICT-based media regardless of their location. Because they have additional value that can be utilised as a tool to face the working world, ICT use can help boost pupils' confidence. As a result, it is anticipated that VTE's ICT use will be optimized to improve quality by curriculum requirements and technical advancements.

REFERENCES

- [1]. Adeyemi, A. S. & Olaleye, A. (2013) Availability of information and communication technology for instruction. Retrieved from <http://www.ladb.org.3ds/doc>. *Information technology instruction*.
- [2]. Ademiluyi, L. F., & Okwuanaso, S. I. (2015). Influence national board for technical education in academic quality indices in polytechnic secretariat

studies programme *Business Education Journal*, 7(1) 101-113

- [3]. Agomuo, E. E. (2015). *Modern office technology, issues, procedures & practice* Nsukka: University Press Ltd.
- [4]. Himmah, L. N. & Triyono, M. B (2014). Pengaruh Pembelajaran Berbatuan Media Berbasis Komputer Terhadap Kompetensi Siswa Membuat Pola di SMKN 6 Yogyakarta. *Jurnal Pendidikan Vokasi*, 4 (2), 232-245.
- [5]. Scott, B. & Cong, C. (2010). Evaluating Course Design Principles For Multimedia Learning Material. *Campus-Wide Information Systems*, 27 (5), 280-292.
- [6]. Wankel, L. A. & Blessinger, P. (2015). Inventive Approaches in Higher Education: An Introduction to Using Multimedia Technologies. *Cutting-edge Technologies in Higher Education*, 6F, 3-16.
- [7]. Yachina, N. P., Valeeva, L. A., dan Sirazeeva, A. F. (2016). E-Teaching Materials as the Means to Improve Humanities Teaching Proficiency in the Context of Education Informatization. *International Journal of Environmental & Science Education*, 11 (4), 433-442.
- [8]. Ezeugbor, C. O. (2008). Information and Communication Technology (ICT) competence level of Nigerian tertiary institutions teachers as a challenge to Harnessing the ICT gains in Education (edited by B.G. Nworgu), *Education in the information Age: global challenges and enhancement strategies*, Nsukka: University Trust Publishers.
- [9]. Ezemoyih, C. M., & Okafar, N. A. (2017). Evaluation of information and communication technology skills needed by accounting education lecturers in Nigeria. *Business Education Journal*, 10(4)