Journal of Education and Learning Technology (JELT)
ISSN 2720-7730 | Print – 2961-0184
Volume 5 Issue 8 October 2024 pp 257-274
Available online at: https://noyam.org/journals/jelt/
DOI: https://doi.org/10.38159/jelt.2024581

Digital Literacies of Report 191 Programme Pre-entry Level Students at a Technical and Vocational Education and Training College in South Africa

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ABSTRACT

Grounded on connectivism learning theory, the current study concedes that beyond the phases of the digital divide, research has shown that there is still a digital literacy gap among Report 191 programme pre-entry level technical and vocational education and training (TVET) college students that require attention. While TVET college students are expected to possess digital skills, research has indicated that on reaching TVET Colleges, many students do not possess the requisite digital literacies. Using a survey design, this quantitative study explored digital literacies amongst Report 191 programme pre-entry level students at a TVET college in South Africa. Data were analysed using the Statistical Package for the Social Sciences (SPSS, version 22). With a Cronbach Alpha value of 7.6, the instrument was considered valid and reliable. The findings suggested the prevalence of an uneven/diverse digital literacy prowess among Report 191 programme pre-entry level students. Researchers recommended a focused and differentiated programme of digital literacy support for Report 191 programme pre-entry level students at TVET colleges. This study will help all TVET lecturers and policymakers start to acknowledge how ubiquitous digital literacy skills are becoming in educational settings, not just technological ones.

Keywords: *Digital Literacy, Internet Access, Pre-Entry Level Students, Report 191 Programme, Technological Devices, TVET*

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Publication History
Received: 6th May, 2024
Accepted: 20th September, 2024
Published online:
7th October, 2024

INTRODUCTION

Students may find it challenging to adapt to the many academic, interpersonal, and personal demands of the Post-School Education and Training system, as well as to prioritise elements that may have an impact on their academic achievement. In South Africa, Report 191 programmes also known as alternative post-school programmes are offered in Engineering, Business, Performance Arts, Utility and Educational Studies. To complete the qualification, the student must complete the required 2000 working hours in the relevant field of study. Research indicates that even after accounting for the

phases of the digital divide, Report 191 programme pre-entry level Technical and Vocational Education and Training college students still have a digital literacy gap that needs to be addressed.[1] While digital skills are anticipated of TVET college students,[2] research has shown that many students lack the necessary digital literacies when they enrol in TVET colleges.[3] The goal of today's education policy is to promote digital literacy, which is necessary for engaging with modern society and culture.[4] Several experiments have been conducted recently to enhance TVET Colleges' usage of new technology. Digital literacy appears to be a major issue for pre-entry level students at TVET Colleges, nevertheless.

Digital literacy appears to be mainly acquired by TVET college students through their daily experiences. The concept of "digital natives" is currently losing traction,[5] in part because research particularly that of Report 191 programme pre-entry level TVET college students has not been able to corroborate the generality of students' digital skills.[6] Rather, studies have shown that even though TVET college students could seem to be technologically literate, it is possible that they lack the abilities needed in a classroom setting.[7] The digitalisation of Report 191 programme pre-entry level TVET college students will facilitate their active engagement in the community, in their personal lives, and in their education. Digital skills and technology access are essential to gain access to key areas in TVET colleges and social life.[8]

According to recent studies, today's students expect to be able to use digital technology and the Internet for all reasons, including learning, and do not see them as being tied to gender.[9] That being said, students' informal digital literacy is different from that needed for learning.[10] To improve the learning environment, it is crucial to investigate ways to increase the rates of digital literacy among students preparing for admission. The purpose of this study is to examine how Report 191 programme pre-entry level students' digital literacy affects students and offer some tactics for improving comprehension of the significance of digital literacies in the education context. The question that underlies this research is: What are the digital literacies of Report 191 programme pre-entry level students at a TVET college?

LITERATURE REVIEW

Digital Literacies

[1] F. Goldhammer et al., "Test-Taking Engagement in PIAAC," in *OECD Education Working Papers, No. 133* (Paris: OECD Publishing, 2016); Meri-Tuulia Kaarakainen, Osmo Kivinen, and Teija Vainio, "Performance-Based Testing for ICT Skills Assessing: A Case Study of Students and Teachers' ICT Skills in Finnish Schools," *Universal Access in the Information Society* 17, no. 2 (June 19, 2018): 349–60, https://doi.org/10.1007/s10209-017-0553-9; J A Canchola-Gonzalez and L D Glasserman Morales, "Digital Fluency Concept: A Systematic Review of Literature 2010–2020," *Texto Livre-Linguagem E Tecnologia* 13, no. 3 (2020): 25–46.

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[9] Henderson, Selwyn, and Aston, "What Works and Why? Student Perceptions of 'Useful'Digital Technology in University Teaching and Learning."

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Digital literacy, according to Bayrakcı, is the sum of all abilities associated with problem-solving, analysis, efficiently utilising digital technologies in all spheres of life, adjusting to these technologies, and creating and innovating new technologies.[11] Digital literacy was described as a talent by Ursat, Schina, and Esteve-González and was broken down into phases like analysis, synthesis, evaluation, and integration.[12] Furthermore, they identified these phases on a level-by-level basis and categorised them into three divisions: digital transformation, digital use, and digital competence. They further claim that a ladder-like system is used to rank digital literacy. Digital literacy is the set of abilities, know-how, and comprehension that facilitates safe, unique, critical, and creative uses of digital technology.[13] Integration of media, visual, and information literacy is a component of digital literacy.[14] Students' knowledge and abilities to advance professionally and participate fully in technologically advanced societies are referred to as digital literacy.[15] These days, digital literacy is crucial for college applicants at the pre-entry level.[16] When using technologies such as the Web, the Internet, mobile applications, and social networks, digital literacies are linked to critical thinking.[17] Digitally literate TVET college students can easily ascend to a position of influence when they use the appropriate digital information. These digital literacy abilities are crucial for knowledge development in TVET institutions and can teach pre-entry-level college students the fundamentals of managing a digital environment, which is necessary for them to succeed.[18]

Numerous studies on digital literacy demonstrated the beneficial effects on knowledge, comprehension, and proficiency in using media as a source of relevant information. However, various research discovered that digital skills had little effect on TVET college students' ability to improve their academic performance.[19] According to the findings of other studies, students only have the fundamental knowledge and abilities needed to use information and communication technology. As a result, they require instruction in digital literacy to meet learning objectives and enhance their online learning experiences. The ability to use technology in learning-teaching processes and to access, exchange, and produce accurate information are all necessary components of digital literacy.

The South African TVET colleges provide two types of qualification, that is, Report 191 formerly called National Accredited Technical Diploma (NATED), and National Certificate Vocational (NCV). The Report 191 (NATED) N4 to N6 courses, also referred to as "Alternative Post-School Programmes", are offered in the following categories: Engineering Studies, Business Studies, Utility Studies and Educational Studies. Matric (Grade 12) is a minimum entry requirement for the Report 191 Programme. The duration of each course offered is 3 years comprised of 1 year, 6 months studying and another 1 year, 6 months doing inservice training which is the Work Integrated Learning (WIL).[20]

Advantages of digital literacies for Report 191 programme pre-entry level students

[11] S. Bayrakcı, "Dijital Yetkinlikler Bütünü Olarak Dijital Okuryazarlık: Ölçek Geliştirme Çalışması" (Marmara Üniversitesi, 2020).
[12] Despoina Schina, Vanessa Esteve-González, and Mireia Usart, "An Overview of Teacher Training Programs in Educational Robotics: Characteristics, Best Practices and Recommendations," *Education and Information Technologies* 26, no. 3 (2021): 2831–52.
[13] Schina, Esteve-González, and Usart, "An Overview of Teacher Training Programs in Educational Robotics: Characteristics, Best Practices and Recommendations."
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[20] Orbit College, " Report 191 (NATED) Programmes," 2024, https://www.orbitcollege.co.za/Report191.pdf.

Through the internet, digital media, and online platforms, advancements in information and communication technologies (ICTs) have connected people worldwide during the past 20 years.[21] One needs to be able to use these tools and platforms strategically in addition to knowing them to communicate effectively and prosper in this digital age. The methods of communicating and learning of the students are changed by digital literacy. For better learning outcomes, students are using digital literacy in novel and creative ways. Even distant learners agree that using digital and online resources can greatly enhance their educational experience.[22]

Report 191 programme pre-entry level students may read and write emails, read e-books and other online information, take part in online class discussions, access learning management systems, and more with the use of various digital literacy skills.[23] According to Munna and Kalam, [24] a study on college students' digital reliance was conducted in the United States in 2012 (N = 500). According to the survey, 74% of the students used digital content, 70% of the students used tablets to take notes in class, and 73% of the sampled students stated they could not study without digital technologies. Additionally, 91% of the students reported using email as their primary method of communication with their professors.[25] Amin and Mirza discovered that educators and learners in online courses showed greater proficiency in advanced searching and the use of a variety of e-tools for data processing and cooperation.[26] The views, mindsets, and experiences of the students are also being shaped by their regular usage of and exposure to the digital environment.[27] Gruszczynska, Merchant and Pountney also emphasised the significance of technical advancements and their effects on the social, cultural, intellectual, and commercial spheres.[28] These shifts also have a significant impact on academic discourse, research culture, and the teaching-learning process in educational institutions. Therefore, the purpose of this study is to investigate the digital literacy of the students at the pre-entry level of the Report 191 programme at a TVET college in South Africa.

Report 191 programme pre-entry level students` family background and digital literacy competence

The beneficial impact of parents' educational attainment on their children's academic progress has long piqued the curiosity of education scholars. Idris, Hussain and Ahmad investigated the connection between parental education and children's academic achievement by looking at the educational attainment of the mother and father.[29] Using 510 secondary education students from 34 public schools in the Mardan district of Pakistan as a sample, the results showed that academic performance of children was positively impacted by their parents' higher education. In a similar context, Odoh et.al [30] investigated the relationship between the parental educational attainment and the child (n = 150) academic achievement when they were enrolled in the University of Nigeria's last year of accounting.[31]

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The results showed that parents' educational attainment had a substantial impact on their children's academic performance, suggesting, among other things, that the government raised the parents' literacy levels who had less education.

Numerous other studies suggest that the family background of pre-entry level students may account for their differences in their ability to use technology in learning at TVET colleges.[32] Report 191 programme pre-entry level students' family backgrounds have been identified using a variety of indicators, including parental background (education, occupation, and salary); immigrant background (language spoken at home); and cultural goods (number of books in the home).[33] Additionally, Hietajärvi, et.al and Greenwood have all been used.[34] The "number of books at home" was used as a family and socioeconomic background indicator in the 2009 and 2012 studies.[35] According to Bourdieu's thesis, the "number of books at home" is a stand-in for cultural capital.[36] Numerous studies have discovered a relationship between success in TVET colleges and socioeconomic background or cultural capital. The exam and national test scores in Norway are analysed, and the results show that "most of the variance is explained by indicators of a student's socio-economic background."[37] A positive association (r =.09) was found between Norwegian students' digital reading performance and cultural capital, or the quantity of books they own at home, based on their PISA 2009 results.[38] Students' cultural capital and digital competence were found to positively correlate when digital competence was examined.[39] The International Computer and Information Literacy Study (ICILS) defines a student's linguistic background as a component of their home environment.[40] Research indicates a correlation between pupils' digital competency and language integration, as determined by language used at home.[41] According to an analysis of the national assessments and final exams administered in Norway, children from immigrant backgrounds do worse in the eighth and tenth grades than children from non-immigrant backgrounds.[42] The language used at home may be one reason for these variations. Lastly, research from Norway suggests that pupils who receive higher overall marks/grades also show greater proficiency with digital tools.[43] First of all, this demonstrates how academic achievement and digital competency are not mutually exclusive. Secondly, data illustrate how children who excel academically also frequently excel in transversal competencies.

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Strategies in for Advocating Digital Literacies

It takes time and effort to convince Report 191 programme pre-entry level students of the value of digital literacy. To create a community with a high level of digital literacy, more is needed than just government initiatives and policies. Report 191 programme pre-entry level students are forced by the Fourth Industrial Revolution (4IR) to consider the kinds of institution they need in their post-educational system, particularly the kinds of TVET colleges. The most important skills needed are those that allow people to be analytical and adapt quickly to rapid technological progress. The core of the South African reform strategy is to improve the skills of the general public, particularly TVET workers and students.[44] The adoption of digital learning (DL) to enhance teaching and learning in the nation's educational institutions has been welcomed by the South African government. Many academics and education stakeholders have argued that there is a need to abandon the traditional lecture hall setting, in which students are seen as passive recipients of informative instruction, and instead prioritise student interaction, cooperation, and collaboration.[45] To facilitate this unavoidable transition, designers of programming and equipment have brought in cutting-edge, modern tools, such as tablets and laptops, which are effective tools for enhancing instruction in educational settings. Since mobile phones are owned by two-thirds of the world's population, lecturers are being forced to incorporate digital learning into their curricula. The South African government has encoraged educators and lecturers across the country to use contemporary technology to deliver courses and learning materials online. The government has given schools cutting-edge tools over time and trained teachers on how to use them most effectively.[46] Du Toit et.al lists the Khanya Project, which was implemented in the Western Cape province in 2001 to improve learning and enhance educators' capacity to use appropriate, manageable, and accessible technology when delivering educational programmes, as one of the initiatives that have responded to this digitalization of education in the nation.[47] According to, Sherman and Howard computer laboratories were installed in 76% of Western Cape schools in 2007.[48] Similarly, Gauteng implemented the "one laptop per child" programme, which gave some schools access to tablets, laptops, and smart boards to help with instruction.[49]

Digital literacy competencies of TVET lecturers

Many conceptualizations have been used to describe teachers' ICT competencies and competence development.[50] A collection of ICT-related abilities, know-how, and attitudes make up these ICT competences.[51] The competences considered encompass both technological and pedagogical elements and are linked to a changing society and the educational setting and content.[52] The ability to use computers, mobile devices, and applications is part of the technological component of the multidisciplinary competency model for vocational teachers of ICT abilities.[53] In a similar vein, Guzman and Nussbaum emphasise a technological/instrumental component of teachers' ICT

[44] Ntombifuthi Precious Nzimande, "Conceptual Model for Measuring and Predicting Residential Satisfaction in Housing-Led Urban Regeneration in Post-Socialist Cities," *Гласник Српског Географског Друштва* 102, no. 2 (2022): 133–40.
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capabilities and contend that educators need to acquire ICT-handling skills, including the usage of hardware and software.[54] According to Lindsay, Hartman and Fellin, given that learning-teaching processes increasingly take place in informal contexts that is, outside of schools, classrooms, workplaces, and working hours teachers must also become proficient in mobile ICT devices.[55] Knowledge of the technology tools required for effective ICT teaching methods and digital collaboration is another aspect of the technological component.[56] Further highlighting the need for digital problem-solving abilities in addition to information literacy, the ability to appropriately acquire, analyse, and evaluate information.Additionally, self-reflection on the digital environment is necessary, keeping in mind that understanding and reflecting on one's behaviours within digital settings is a prerequisite for digital development. The technological component of teachers' ICT competencies includes the self-efficacy related to these skills.[57] planning of teaching-learning processes, the integration of technology into curriculum designs, and professional development for teachers are all included in the pedagogical component of teachers' ICT competencies.[58] According to Koehler and Mishra, ICT can assist teachers demonstrate phenomena and processes, foster a supportive learning environment, expand the scope of learning opportunities, and meet the requirements of a diverse student body.[59] The abilities required to develop and utilise digital learning resources, build technologically advanced learning environments, and integrate mobile and other technologies into instruction are also included in the pedagogical component.[60]

THEORETICAL FRAMEWORK

The connectivism learning theory was used in this study. George Siemens and Stephen Downes created the connectivism learning theory in 2005.[61] It highlights how crucial social media and technology are to education.[62] According to Alam,[63] connectivism is a learning theory that posits that knowledge is dispersed across networks and that learning entails the capacity to identify and traverse those networks.[64] According to connectivism, information can be found online, on social media, and on other digital platforms in addition to more conventional channels like textbooks and lectures.[65] The four digital literacy constructs proposed by Bawden served as the theoretical framework for this study.[66] These include first, underpinnings, which refers to the ability to read, write, and use computers as well as software. Second is background knowledge, which is an understanding of how digital and non-digital information is created from various forms of resources and communicated. Third is central

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[65] Alam, "Connectivism Learning Theory and Connectivist Approach in Teaching and Learning: A Review of Literature."
[66] David Bawden, "Origins and Concepts of Digital Literacy," *Digital Literacies: Concepts, Policies and Practices* 30, no. 2008 (2008): 17–32.

competencies, which are the ability to assemble knowledge from multiple sources; and fourth being attitudes and perspectives, which are the capacity to learn independently and to behave well in a digital environment. According to Bawden, the term "digital literacy" refers to a wide range of abilities, from general awareness and viewpoints to highly specialised skills and competencies.[67] Proficiency in digital literacy, which allows one to comprehend information in diverse patterns is crucial for efficient learning and achievement in postsecondary education.[68] Additionally, Abas et.al found that when members possess a high level of proficiency with digital media and technology, organisational achievement and performance rise.[69] Academic achievement in TVET colleges is accelerated by digital literacy combined with operational, critical thinking, and dependent learning skills.[70] Moreover, TVET colleges have been recognised as important players in the growth of innovation and creativity.[71] Given that TVET College students are required to be literate in reading, writing, and computer usage, this theoretical framework is appropriate for this study. The only digital literacy considered in this study was Bawden's. Figure 1 below shows the summary of Bawden`s theory.

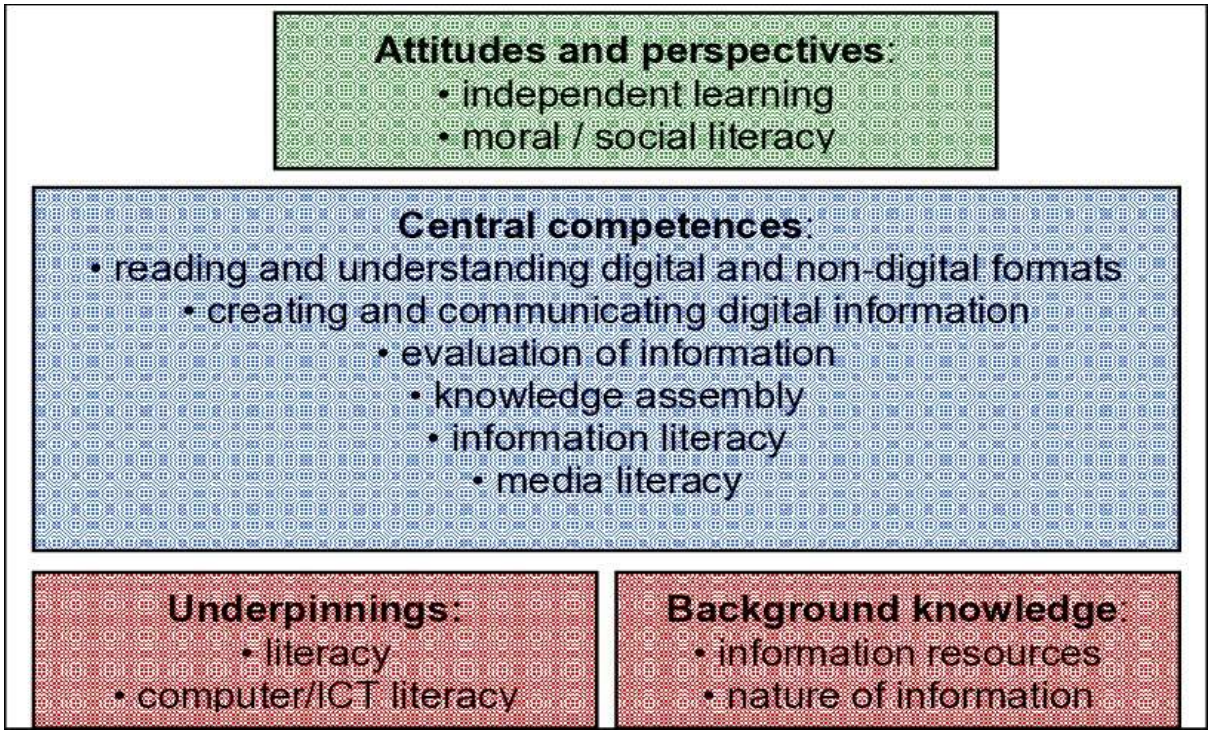

Figure 1: Bawden`s research model

Even though digital literacy is a crucial part of the curriculum, TVET colleges take a while to adjust to changes in pedagogy and technology. From an educational perspective, the pedagogical strategy is ingrained in the design of digital learning materials.

METHODOLOGY

This study used a quantitative approach, as well as an exploration and description method. The primary objective of the research aligned well with the exploratory aspect's overall aim, which was to explore

[67] Bawden, "Origins and Concepts of Digital Literacy."
[68] Ukwoma, S. C., Iwundu, N. E., & Iwundu, I. E. Digital literacy skills possessed by students of UNN, implications for effective learning and performance: A study of the MTN Universities Connect Library. *New Library World* 117, no.11 (2016): 702–720. https://doi.org/10.1108/NLW-08-2016-0061.
[69] M. K. M. Abas, R. A. Yahaya, and M. S. F. Din, "Digital Literacy and Its Relationship with Employee Performance in the 4IR," *Journal of International Business, Economics and Entrepreneurship*, December 25, 2019, https://doi.org/10.24191/jibe.v4i2.14312.
[70] Khan et al., "Connecting Digital Literacy in Higher Education to the 21st Century Workforce."
[71] Vicente, P. N., Lucas, M., Carlos, V., & Bem-Haja, P. "Higher education in a material world: Constraints to digital innovation in Portuguese universities and polytechnic institutes." *Education and Information Technologies* 25 (2020): 5815–5833. https://doi.org/10.1007/s10639-020-10258-5

the digital literacy of this college's Report 191 programme pre-entry level students. The quantitative research methodology used in this study produced accurate and reliable outcome data that could typically be extrapolated to larger groups. The sample of this study was drawn from the population, which included TVET College students, who were, therefore, better able to comprehend the research challenge. The researchers used probability sampling of 330 Report 191 programme pre-entry level students for questionnaire-based study. However, 319 out of 330 questionnaire surveys returned by respondents. The response rate is an important measure to assess the credibility of a survey-based study.[72] According to Mellahi, and Harris, the response rate is often used as the primary measure of quality and validity for data collected through surveys and questionnaires.[73] The survey response rate for this study was 97%. This high response rate means that the results will provide a comprehensive, accurate overview of the audience.

Data for this study were collected at a TVET college, in KwaZulu-Natal Province, South Africa. Information Technology and Business, Newtech, Central People Development, Dundee, and Majuba Technology Centre are the five campuses that make up this college. Information was gathered using survey questionnaires that included the following four sections: biographical data (gender, age group, highest education, and place of residence); internet and technological access; learned information technology and digital literacy skills; and self-rating of these topics. In research, ethical considerations are important. The public's support and trust in research, in higher education institutions in particular, as well as the research enterprise in general, can be increased by taking ethical considerations into account when planning, carrying out, and reporting research studies. To protect the respondents in this study, the researchers established and maintained trust with them, improved the research's comprehensiveness, guarded against improper behaviour and inappropriateness that might have had an impact on organisations, and addressed novel, difficult problems.[74] To protect the rights of the respondents, an ethical clearance certificate was obtained from Turfloop Research Ethics Committee (TREC) with project number: TREC/574/2022:IR, and gatekeeper permission was sought from Majuba TVET College in South Africa. Respondents were informed that their participation in the study was entirely voluntary and that they could leave at any time, without incurring any penalties.

Respondents' anonymity was preserved in this study by not using their identities, and their identities were kept private. Moreover, the researchers ensured that all the information gathered through the surveys was stored in a safe place. According to Schumacher and McMillan, respondents may suffer mental or physical injury. The respondents to the study were shielded from danger and injury.[75] The respondents in the study were reassured by the researchers that they would not experience any physical discomfort, embarrassment, or emotional strain as a result of their participation. The Statistical Package for the Social Sciences (SPSS, version 22) was used to analyse the data. Data analysis involved the use of statistical techniques. As soon as each interview was over, the researchers reviewed the completed survey questionnaires to ensure that there were no mistakes or omissions. Each survey questionnaire was examined to assess participants and identify interviewing issues; ascertain whether there were several responses to a single item, ambiguous responses, or inconsistent responses; for example, confirm that a survey questionnaire was comprehensive and that all items, particularly those lacking a response, had coded values.[76] The procedure of coding involved giving each potential answer to each questionnaire question a number (numerical code).[77] Therefore, data coding was also

[72] Yehuda Baruch and Brooks C Holtom, "Survey Response Rate Levels and Trends in Organizational Research," *Human Relations* 61, no. 8 (2008): 1139–60.
[73] Kamel Mellahi and Lloyd C Harris, "Response Rates in Business and Management Research: An Overview of Current Practice and Suggestions for Future Direction," *British Journal of Management* 27, no. 2 (2016): 426–37.
[74] Collinson, W. "*The Public Interest, Ethical Journalism Network."* Accessed April 14, 2024. https://ethicaljournalismnetwork.org/the-public-interest.
[75] S. Schumacher and J.H. McMillan, *Research in Education: Evidence-Based Inquiry* , 7th ed. (New York: Longman, 2010).
[76] J. C. Dixon, R. Singleton, and B. C. Straits, *The Process of Social Research* (USA: Oxford University Press, 2016).
[77] John W Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (pearson, 2015).

used in this study to convert the data to numerical values. In terms of data entry, transfer sheets were used to enter the data into the computer once they had been coded and prepared for entry.[78]

Reliability and validity

The Cronbach's Alpha value was used to determine the questionnaires' reliability. The general guideline for determining the Cronbach's Alpha value of a dichotomous or Likert scale instrument was published by.[79] Table 1 displays this. With SPSS version 22, the Cronbach's Alpha value of 7.6 was analysed.

Table 1. Cronbach's Alpha

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.90$	Excellent
$0.80 \leq \alpha < 0.90$	Good
$0.70 \leq \alpha < 0.80$	Acceptable
$0.60 \leq \alpha < 0.70$	Questionable
$0.50 \leq \alpha < 0.60$	Poor
$\alpha < 0.50$	Unacceptable

Source: George and Mallery (2019)

The range of values for the Cronbach's Alpha is 0 to 1. The better the internal consistency of an item inside the scale, the closer its Cronbach's Alpha value is to 1. Cronbach's Alpha values range from 0.90 for outstanding internal consistency, 0.80 for good, 0.70 for acceptable, 0.60 for dubious, 0.50 for bad, and less than 0.50 for unacceptable, according to George and Mallery.[80]

Significance of this study

In TVET colleges, digital literacy abilities and competencies are essential for students to succeed. In TVET universities, the ability to read, comprehend, and navigate information online has become crucial. A certain set of digital literacy abilities is required for the first TVET college application, financial assistance applications, and course registration. Programmes that explicitly teach digital literacy to TVET college students can be beneficial in helping them understand financial aid guidelines, policies, and the college admissions process. The results of this study may also help TVET college employees meet the needs of pre-entry level students in the Report 191 programme by providing them with information on digital literacy during orientation and induction, academic support programmes, and job placement. Additionally, all TVET college students may benefit from this study in terms of internet access, entrepreneurship initiatives, individual support, fundamental computer skills, safe online practices, ethical use of online information, and copyright concerns. Lastly, this study can help policymakers start to acknowledge how ubiquitous the Internet is becoming in educational settings, not just technological ones.

PRESENTATION OF FINDINGS

Demographics of Respondents

Respondents in this survey research were 319 Report 191 programme pre-entry students at one TVET college in KwaZulu-Natal. This college usually registers about 15,000 students on average per year. An overwhelming majority (81%) of the respondents are female. This means that of every five students that enroll in the programme, four are women (female). In addition, an overwhelming majority (88%) of these respondents are aged between 18 and 25 years of age. Almost all (98%) respondents possess a grade 12 qualification.

[78] N. Walliman, *Your Research Project: Designing and Planning Your Work* (London: Sage, 2011).
[79] Darren George and Paul Mallery, *IBM SPSS Statistics 26 Step by Step* (Routledge, 2019), https://doi.org/10.4324/9780429056765.
[80] George and Mallery, *IBM SPSS Statistics 26 Step by Step*.

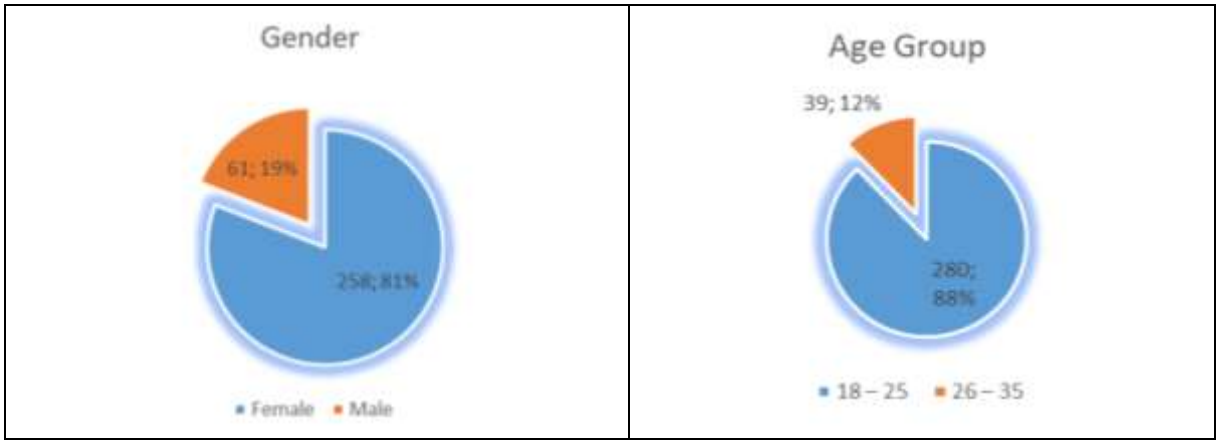

Figure 2: Distribution according to gender and age

DISCUSSION OF FINDINGS

a. Women show the most interest in registering for Report 191 programme at TVET College.

This study found that four out of every aspiring Report 191 programme TVET college students are female/women (figure 2). The trend established in this study may be indicative of the 'turn' in the plight of girls/women/females. Therefore, the TVET route can provide an alternative vehicle to increase women's participation in education and employment.[81] The ILO maintains that girls'/women's access to education and employment remains low.[82] In addition, UNICEF claims that "A generation of girls risks being left outside the labour force or trapped in vulnerable or low-quality employment, due to a lack of skills, lack of quality jobs, and gendered expectations of their role as caregivers."[83] South Africa has a 61% share of NEET females who are economically active.[84] As indicated by the findings of this study, an improvement may be seen that will need to be strengthened through targeted programmes.

b. Young people/youth show the most interest in registering for Report 191 programmes at TVET college

The study also found that young people (figure 2) aspire to enroll in Report 191 programmes that are primarily aimed at empowering students with respect to theoretical knowledge, practical knowledge, and workplace knowledge and skills required in their chosen vocational area.[85] In this way, there is an expectation that these students would have the propensity to excel or easily acclimatise to the work environment as their work-readiness is emboldened.[86] It may be concluded that the trend may contribute to reducing the impact on youth not in employment, education, or training (NEET). According to Mudiriza and De Lannoy, there are approximately 3 million NEEDs in South Africa currently.[87] Through the successful completion of Report 191 programmes, the devastating impact confronting NEETs may be circumvented.

c. Access to the internet and technological devices amongst Report 191 pre-entry level students is very high

[81] International Labour Office (ILO), " Differences in the Effects of Vocational Training on Men and Women: Constraints on Women and Drop-out Behaviour," . . Working Paper 189 (Geneva, 2015); UNICEF, *GirlForce Skills, Education and Training for Girls Now* (Geneva: World Bank, 2018).
[82] International Labour Office (ILO), " Differences in the Effects of Vocational Training on Men and Women: Constraints on Women and Drop-out Behaviour."
[83] UNICEF, *Girl Force Skills, Education and Training for Girls Now* (Geneva: World Bank, 2018).
[84] UNICEF, *Girl Force Skills, Education and Training for Girls Now*.
[85] Hermans et al., "Empowering Vocational Students: A Research-Based Framework for Computational Thinking Integration."
[86] Potgieter, Coetzee, and Ferreira, "University Students' Digital World of Work Readiness in Relation to Their Employability Competency."
[87] Mudiriza and De Lannoy, "Profile of Young People Not in Employment, Education or Training (NEET) Aged 15-24 Years in South Africa: An Annual Update."

In accordance to Figure 3 below, this study found that an overwhelming majority (90%) of students have access to the internet and technological devices either on campus or at home, or both. The majority (70%) indicated that their internet connectivity and speed are very good and good, and that their access to the internet is for one to twelve hours daily (80%). Access to technology and the internet for teaching and learning purposes "enriches educational experiences by providing limitless learning options that can guide students on their quests to learn."[88] Owing to the extensive internet and technological access coverage, it may be expected that teaching and learning capabilities at the research site will be enhanced. In addition, migration between the campus and home as learning spaces becomes established as both teaching and learning can take place within, between, and across these contexts that may be regarded as contrasting each other. Borderless/extended learning spaces become an entrenched reality.

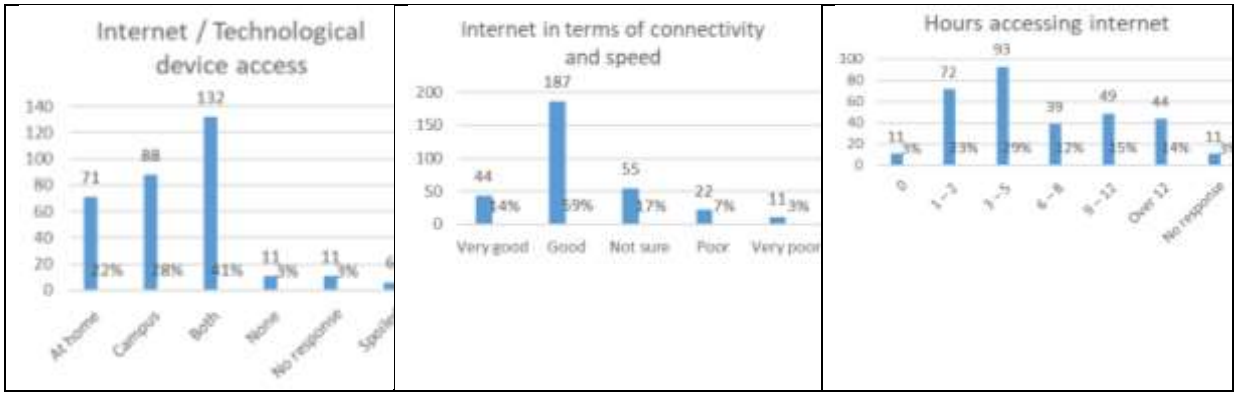

Figure 3: Distribution according to technological devices, connectivity and speed as well as the length of access to internet

d. The frequency of use in respect of office suite applications amongst Report 191 pre-entry students is relatively higher

The office suite is a set of commonly used programmes in an office for productivity purposes. Most Report 191 programme pre-entry students use word processing (90%), data organisation spreadsheets (77%), PowerPoint (69%), graphics software (67%), blogs (61%), wiki (52%), as well as texting (93%) and voice notes (77%) for chatting (Figure 3). Students' frequent use and familiarity with these applications augur well for improved teaching and learning and sustained outcomes, offering innovative curriculum delivery/reception solutions.[89]

[88] Zamira Gashı Shatrı, "Advantages and Disadvantages of Using Information Technology in Learning Process of Students," *Journal of Turkish Science Education* 17, no. 3 (2020): 420–28.
[89] Afzal Sayed Munna and Md Abul Kalam, "Teaching and Learning Process to Enhance Teaching Effectiveness: A Literature Review," *International Journal of Humanities and Innovation (IJHI)* 4, no. 1 (2021): 1–4; Y. Haddad, " Utilizing Microsoft Office Extensibility within the Classroom Environment" (California State University, 2018).

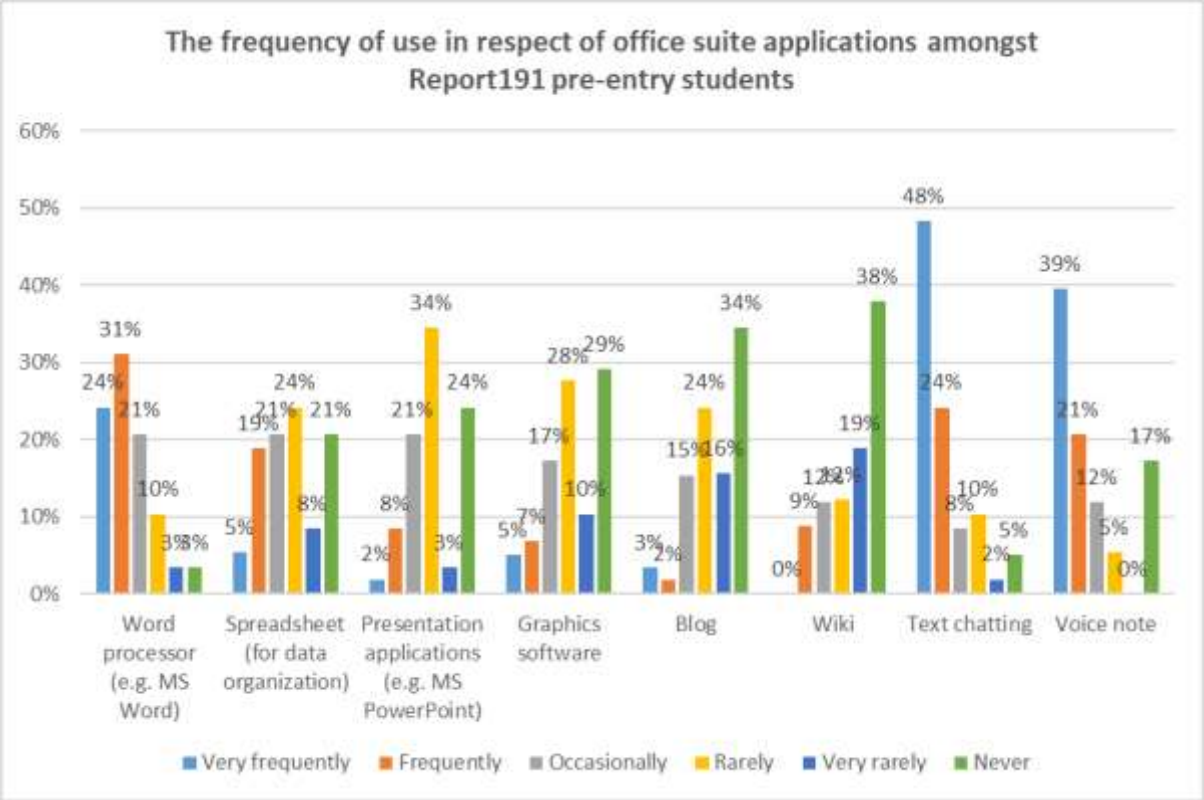

Figure 4: Distribution according to the frequency with which Office suite applications are used

Summary of Findings

- An overwhelming majority (81%) of the respondents are female. This means that of every five students who enroll in the programme, four are women (females).
- Young people (figure 2) aspire to enroll in Report 191 programmes which are primarily aimed at empowering themselves with respect to theoretical knowledge, practical knowledge, and workplace knowledge and skills required in their chosen vocational area.
- The majority (90%) of the students have access to the internet and technological devices either on campus or at home, or both (Figure 4). A majority (70%) indicated that their internet connectivity and speed are very good and good and that their access to the internet is for one to twelve hours daily (80%). This situation is conducive to the creation of a digitally literate community of students.
- Most Report 191 programme pre-entry students use word processing (90%), data organisation spreadsheets (77%), PowerPoint (69%), graphics software (67%), blogs (61%), wiki (52%) as well as texting (93%) and voice notes (77%) for chatting (Figure 3).

RECOMMENDATIONS

This study aimed to explore the digital literacies for Report 191 programme pre-entry-level students at a TVET college. Male students should be encouraged to enrol in TVET colleges. There should be improved infrastructure to ensure reliable access to ICT tools, and to create a conducive environment for effective teaching and learning. This will help overcome the limitations caused by inadequate resources, thus fostering equitable access and participation among students. Local government, education institutions, corporate organisations and members of local communities must take part in this effort to promote digital literacy skills and awareness of their importance. TVET colleges should have continuous training programmes for lecturers that will provide lecturers with the necessary skills, knowledge, and confidence to effectively assist students with digital literacy skills. This, in turn, will improve the quality of teaching and foster an interactive learning experience. Furthermore, these programmes may be beneficial in helping students understand financial aid guidelines, policies, and the college admissions process.

CONCLUSION

From this study, the researchers intended to explore the digital literacies for Report 191 programme pre-entry level students at a TVET college. The study highlighted the digital literacies of Report 191 programme pre-entry level students, advantages of digital literacies for pre-entry level students, pre-entry level students` family background and digital competence, strategies in advocating digital literacies, and digital literacy competencies of TVET lecturers. Therefore, digital literacy is becoming one of the most important elements in the education sector, especially in the post-pandemic context. Without mastering digital skills, Report 191 programme pre-entry level students would face challenges in keeping up with their studies. Many underprivileged students are among the most affected and left behind in their learning experience due to limited sources and a lack of digital literacy skills. It is also difficult to only depend on TVET lecturers to make an effort to bridge this gap in students' literacy skills. On that note, local government, educational institutions, corporate organisations as well as members of the local communities must take part in this effort to promote digital literacy skills and the awareness of their importance. With the positive contribution of these stakeholders, a major improvement in the learning experience among Report 191 programme pre-entry-level students can be achieved. Further qualitative research can be conducted to understand the phenomenon in which very few male students aspire to enrol in Report 191 programmes. Research can also consider the lack of interest among older citizens. In addition, the relationship between the contribution of these programmes to the NEETs can be pursued.

ACKNOWLEDGEMENT

The authors would like to thank all the participants in this research for their voluntary participation and for sharing their experiences. Also, the researchers acknowledge the assistance provided by the anonymous peer reviewers.

FUNDING

This research was not funded by any organisation or individual.

AUTHORS' CONTRIBUTIONS

Collectively, the authors through meetings, contributed to the study design, collection of data, and data analysis interpretation and the shared write-up. The authors critically reviewed the paper and contributed to the revision of the manuscript. They read and approved the final manuscript.

AVAILABILITY OF DATA AND MATERIALS

The datasets during and/or analysed during the current study are available from the corresponding authors upon reasonable request.

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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