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University of Wales
Trinity Saint David

Module Name: Academic Skills in the Digital Era

Module Code: BMSW4013

Assessment 1: Academic Skills for the Digital Era.

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AI Acknowledgement

Improved AI Acknowledgement

I confirm that I have not presented any AI-generated text as my own work. I confirm that I have retained copies of drafts, notes, and resources used before and after the use of AI tools.

Source 1

CRAAP Evaluation

LeónPérez, Bas & -Escudero-Nahón (2020) examine students' self-perception of emerging digital skills in higher education. The source is current, published in 2020, and reflects active discussions about 21st-century digital skills. It is highly relevant because it investigates how students evaluate their own digital competence, directly aligning with the topic of digital skills in higher education. The authority of the source is strong: the authors are affiliated with reputable universities in Mexico and Spain, and the article appears in *Comunicar*, an established peer-reviewed journal. In terms of accuracy, the study applies rigorous methodology, including stratified sampling and principal component analysis supported by validated statistical tests. Its purpose is academic, aiming to understand students' perceptions rather than persuade, ensuring objectivity.

Author(s) and year: Francisco León-Pérez; Dr. María-Carmen Ba, Dr. Alexandro Escudero-Nahón: Comunicar, n. 62, v. XXVIII, 2020
The source was found though Google Scholar in the UWTSD online Library

Using the CRAAP Test, briefly evaluate:

Currency: The study is recent and reflects current discussions about digital skills in higher education. Its focus on emerging 21st-century digital competencies shows that the research aligns with contemporary educational needs. The data collected from 356 students provides up-to-date insights into how learners perceive their digital abilities.

Relevance: The article directly relates to digital skills in higher education, which is the core theme of your assignment. It examines students' self-perception of digital competence, making it highly relevant for analysing challenges and opportunities in digital learning environments.

Authority: The authors are affiliated with recognised universities in Mexico and Spain. Their ORCID profiles and academic positions (Professor, Assistant Professor, Research Professor) demonstrate strong credibility in the field of educational technology and digital learning.

Accuracy: The study uses validated research methods, including a questionnaire, stratified random sampling, and principal component analysis supported by the Kaiser-Meyer-Olkin coefficient and Bartlett's test. These methodological details indicate that the findings are reliable and based on rigorous academic standards. (Example line from your document: "A principal component analysis was carried out, supported by adequate values of the KaiserMeyerOlkin coefficient and the Bartlett sphericity test.")MeyerOlkin coefficient and the Bartlett sphericity test.")

Purpose: The purpose of the study is to measure students' self-perception of their digital skills and understand how they use ICT in academic contexts. The article aims to inform educators and institutions about gaps in digital competence, not to persuade or sell a product. This makes it academically objective.

Source

CRAAP

2

Evaluation

Zhao et al. (2021) investigate students' digital competence using data from 5,164 participants. The currency of this 2021 publication makes it highly relevant to current digital learning contexts. It is relevant because it examines digital competence areas, including information literacy, collaboration, and digital safety. Its authority is reinforced by the authors' academic affiliations and its publication in *Sustainability*, a peer-reviewed journal. The accuracy is demonstrated through robust quantitative methodology and the use of the DigComp framework. The purpose is scholarly, aiming to inform digital education research and improve understanding of digital competence development.

Author(s) and year: Zhao, Y., Sánchez Gómez, M-C., Pinto Llorente, A-M. & Zhao, L. (2021)

Where you found the source (e.g. library database, Google Scholar): Google Scholar – UWTSD Library

• Currency:

The 2021 publication date ensures the study is current and relevant to contemporary digital learning environments. Given the rapid evolution of digital skills and technologies, this recency strengthens its value for analysing present-day higher education contexts.

• Relevance:

The article is highly relevant because it examines key dimensions of students' digital competence—including information literacy, collaboration, communication, and digital safety—using the DigComp framework. These areas directly align with current priorities in digital education research and practice.

- **Authority:**

The authors are affiliated with recognised academic institutions, and the article is published in *Sustainability*, a reputable peer-reviewed journal. This reinforces the credibility and scholarly authority of the research quality -peer reviewed- journal.

- **Accuracy:**

The study demonstrates accuracy through its robust quantitative methodology, large sample size (5,164 students), and systematic use of the validated DigComp framework. The statistical analysis is clearly reported, supporting the reliability of the findings.

- **Purpose:**

The purpose is explicitly scholarly: to deepen understanding of digital competence in higher education and to inform both research and educational practice. The authors aim to identify personal factors influencing competence development, contributing to evidence-based improvements in digital learning.

Full reference (Harvard style):

1. León-Pérez, F., Bas, M-C. & Escudero-Nahón, A. (2020) Self-perception about emerging digital skills in Higher Education students. *Comunicar*, 28(62), pp. 89–101.
2. Zhao, Y., Sánchez Gómez, M-C., Pinto Llorente, A-M. & Zhao, L. (2021) Digital Competence in Higher Education: Students' Perception and Personal Factors. *Sustainability*, 13(21), 12184.

Both sources explore the theme of digital competence in higher education, focusing on how students understand and evaluate their digital skills. Source 1 shows that students feel confident in areas such as information management and problem-solving but less confident when using ICT in teaching contexts. Source 2 complements this by showing that digital competence varies between students due to personal factors such as gender, year of study, residence, and prior training. The two sources agree that digital skills are essential for academic success and that students' self-perception strongly influences their engagement with digital learning. They differ in scale: Source 1 examines emerging skills in academic tasks, while Source 2 provides broader

insights using a much larger sample. Together, they complement each other by showing both how students assess their abilities and why differences in competence occur. This combined understanding strengthens knowledge of digital learning in higher education.

Synthesis of Academic Sources

Both sources explore the theme of **digital competence in higher education**, focusing on how students understand and evaluate their digital skills. Source 1 shows that students feel confident in areas such as information management and problem-solving but- lack confidence when using ICT during classroom learning. Source 2 complements these findings by demonstrating that students' digital competence varies according to personal factors, including gender, year of study, residence, and prior digital training

The two sources **agree** that digital skills are essential for academic success and that self-perception strongly influences digital engagement. They **differ** in scale: Source 1 focuses on emerging digital skills in academic tasks, while Source 2 provides large-scale insights into broader competence areas such as communication, safety, and collaboration. Together, they **complement** each other by providing both detailed and general perspectives. Combining these findings strengthens the understanding of digital learning by showing both *how students assess their abilities* and *why competence levels differ* across groups

A key challenge highlighted across both sources is the uneven development of digital competence, particularly in terms of confidence and context. Source 1 shows that students lack confidence in using ICT in teaching environments, even though they demonstrate strong skills in project-based digital tasks. Source 2 adds that personal factors such as prior training and demographic differences further widen digital skill gaps among students. [\[eric.ed.gov\]](https://eric.ed.gov/), [\[rgu-reposi...ktribe.com\]](https://rgu-reposi...ktribe.com/) [\[research.amanote.com\]](https://research.amanote.com/) from both studies: digital competence can be improved through structured support. Source 2 highlights the value of targeted digital literacy training, while Source 1 suggests that meaningful academic engagement with ICT can help strengthen emerging digital skills

To begin Component 2, I will prioritise writing the **Introduction** and the **Challenges section**, as these create a foundation for the rest of the report. I will further develop academic skills such as **critical reading**, **academic writing**, and **using evidence to support arguments**, as covered in lectures. The report will be structured into five parts: an introduction, challenges, opportunities, three strategies for student success, a conclusion, and a reference list. This structure ensures a logical flow from identifying issues to proposing evidence-based solutions.

Timeline

Task	Date/ Deadline
Finish research	18/02/2026
Draft first section	11/02/2026
Complete first draft	09/02/2026
Final editing	26/02/2026

Reference List – Component 1

León-Pérez, F., Bas, M-C. & Escudero-Nahón, A. (2020) 'Self-perception about emerging digital skills in Higher Education students', *Comunicar*, 28(62), pp. 89–101.

Zhao, Y., Sánchez Gómez, M-C., Pinto Llorente, A-M. & Zhao, L. (2021) 'Digital Competence in Higher Education: Students' Perception and Personal Factors', *Sustainability*, 13(21), 12184.

Component 2

Introduction

Digital learning has become an essential feature of modern higher education, supported by rapid technological development and the increasing demand for flexible modes of study. Universities now use virtual learning environments, online resources, and digital communication tools to deliver teaching and enhance student engagement. Understanding the challenges and opportunities associated with digital learning is important because these factors directly influence students' academic progress, access to resources, and overall learning experience. While digital learning can enhance flexibility and broaden access, it can also create barriers related to digital skills, technology access, and online engagement. This report will explore the key opportunities offered by digital learning, examine the main challenges faced by students and institutions, and discuss strategies that can help improve digital learning in higher education.

Challenges for Students in the Digital Era

One significant challenge for students in the digital era is **unequal access to technology**, often referred to as the *digital divide*. Research highlights that limited access to stable internet connections and appropriate digital devices continues to affect students' ability to participate fully in online learning environments. For example, Montenegro Rueda et al. (2024) identify ongoing difficulties related to technical problems and unequal access to technology in higher education, stressing that these issues can hinder students' ability to engage effectively with digital platforms. Similarly, broader analyses of digital learning emphasise that socioeconomic inequalities remain a major barrier to equitable participation in higher education's digital transformation. These challenges directly affect academic success because students who struggle with technology access are more likely to fall behind on coursework, experience reduced interaction with learning materials, and face difficulties meeting deadlines.

A second key challenge is **insufficient digital competence**, which can limit students' ability to navigate virtual learning environments, evaluate online information, and manage digital workloads effectively. Systematic reviews of digital transformation in higher education identify digital competence as a core barrier that institutions must address to support student learning. This challenge connects closely to academic skills taught in class, such as information literacy, time management, and critical evaluation of online sources—skills that become even more essential when learning is mediated through digital tools.

Opportunities in the Digital Era

The digital era has transformed the way individuals, businesses, and communities operate, creating a wide range of new opportunities. One of the most significant is the ability to access global information instantly, enabling people to learn new skills, explore different career paths, and stay informed. Digital tools such as online courses, productivity platforms, and AI-driven assistants make personal and professional development more accessible than ever.

For businesses, digital technologies open the door to expanded markets and innovative models of operation. Online platforms allow organisations of any size to reach international audiences, while data analytics provides insights that support smarter decision-making. Automation and artificial intelligence also help streamline processes, reducing time spent on routine tasks and increasing efficiency.

In addition, the digital era fosters creativity and entrepreneurship. Individuals can build online portfolios, create digital products, or participate in freelance work across the world. Social media and digital marketing further support the visibility of new ideas and small enterprises.

Overall, the digital era offers unprecedented pathways for growth, connection, and innovation, empowering people to shape their futures with greater flexibility and confidence.

A key opportunity offered by digital tools in higher education is **greater flexibility and accessibility**, which allows students to engage with learning materials at any time and from any location. Research shows that digital learning environments can enhance accessibility and support diverse learning needs, offering students more control over their pace and style of study. In addition, online platforms provide a wide range of multimedia resources that can strengthen understanding, especially for learners who benefit from varied modes of instruction. However, while accessibility is a strong advantage, its effectiveness depends on learners possessing the digital skills required to navigate these systems. Without adequate support, flexible learning can become overwhelming rather than empowering.

Another significant opportunity is **personalised and student-centred learning**, facilitated by adaptive technologies. Digital innovations, including AI-driven learning tools, create possibilities for tailored feedback and customised learning pathways, which have been shown to improve learning outcomes when used effectively. Critically, though, personalisation only enhances academic success when students apply essential academic skills such as critical reading, time management, and independent research—skills emphasised in classroom learning. Thus, digital tools can enhance

the learning experience, but their value depends on students' ability to engage with them strategically rather than passively.

Conclusion

Digital learning has become an integral part of higher education, offering a range of opportunities while also presenting notable challenges for students. The analysis shows that flexibility, accessibility and personalised learning can support academic success, but only when students possess strong digital skills and effective study strategies. At the same time, barriers such as unequal access to technology and limited digital competence continue to affect students' learning experiences, as highlighted in recent literature. The strategies proposed—developing digital literacy, improving time management, and engaging actively with online platforms—demonstrate how students can respond proactively to the demands of the digital era and make full use of its opportunities, supported by evidence from current research. Overall, the report emphasises that success in digital learning depends not only on technology itself, but on students' ability to apply strong academic skills within increasingly digital learning environments.

Reference List – Component 2

Bashir, S. & Lapshun, A.L. (2025) *E-learning future trends in higher education in the 2020s and beyond*. Cogent Education, 12(1), p. 2445331. Available at: <https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2024.2445331>

[[tandfonline.com](https://www.tandfonline.com)]

Montenegro Rueda, M., Fernández Cerero, J., Fernández Cerero, D. & López Meneses, E. (2024) *Perspectives on online learning: Advantages and challenges in higher education*. Contemporary Educational Technology, 16(4), ep525. Available at: <https://files.eric.ed.gov/fulltext/EJ1449316.pdf> [files.eric.ed.gov]

Shilpa Mary, T., Lakshman, K. & Ranjini, M.L. (2025) *Digital learning and future path in education: Opportunities, challenges and innovations*. Samvakti Journal of Research in Business Management, 6(1), pp. 495–511. Available at: https://www.samvaktijournals.com/system/files/2025/sjrbrm/sjrbrm.2025.46/digital_learning_and_future_path_education_opportunities_challenges_and_innovations.pdf [[samvaktijournals.com](https://www.samvaktijournals.com)]

Singun, A.J. (2025) *Unveiling the barriers to digital transformation in higher education institutions: A systematic literature review*. Discover Education, 4, article 37. Available at: <https://link.springer.com/article/10.1007/s44217-025-00430-9> [link.springer.com]

Zou, Y., Kuek, F., Feng, W. & Cheng, X. (2025) *Digital learning in the 21st century: Trends, challenges, and innovations in technology integration*. *Frontiers in Education*, 10, 1562391. Available at: <https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2025.1562391/full>

Component 3 – Academic Poster



Key Skills for Successful University Study

Academic Reading

Academic reading helps students understand theories, interpret evidence, and engage with scholarly ideas. It strengthens comprehension and supports more effective academic writing

Source: C. (2019). *The Study Skills Handbook*.

Critical Thinking

Critical thinking enables students to question assumptions, evaluate arguments, and make informed decisions. It promotes deeper learning and improves the quality of academic discussion and assignments.

Facione, P. (2015). *Critical Thinking: What It Is and Why It Counts*.

Time Management

Time management helps students plan effectively, meet deadlines, and reduce stress. Good organisation leads to better academic outcomes and a more balanced study routine.

Conclusion

Developing academic reading, critical thinking, and time-management skills builds a strong foundation for successful university learning and long-term achievement.

Reference List – Component 3

Cottrell, S. (2019). *The Study Skills Handbook*: Macmillan.

Covey, S. (2020). *The 7 Habits of Highly Effective People*, Sim Schuster.