

DIGITAL LEARNING AND STUDENT WELL-BEING: EVIDENCE FROM SECOND-YEAR ACCOUNTING STUDENTS AT THAI NGUYEN UNIVERSITY OF ECONOMICS AND BUSINESS ADMINISTRATION

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ABSTRACT

The integration of digital technologies into higher education has reshaped teaching practices and learning experiences worldwide. While digital learning environments offer flexibility and improved access to educational resources, their influence on students' psychological and academic well-being has become an important area of investigation. This study explores the relationship between digital learning engagement and student well-being among second-year accounting students at Thai Nguyen University of Economics and Business Administration in Vietnam. A quantitative research design was employed involving 65 students enrolled in an accounting program. Data were collected through a structured questionnaire measuring students' engagement with digital learning tools and their perceptions of academic well-being. Descriptive statistics and correlation analysis were used to examine patterns in the data. The findings indicate that digital learning contributes positively to students' access to learning materials and supports flexible learning practices. Nevertheless, excessive digital workloads may increase academic stress among some students. The study highlights the importance of balanced technology integration in higher education to promote both effective learning and student well-being.

Keywords: digital learning, student well-being, higher education, accounting education, educational technology

1. INTRODUCTION

Digital transformation has significantly influenced the landscape of higher education in recent years. Universities increasingly incorporate digital technologies such as learning management systems, online collaboration platforms, and multimedia learning resources to enhance teaching and learning processes. These tools allow students to access course materials beyond traditional classrooms and enable instructors to design more flexible and interactive learning experiences.

Although digital learning offers many advantages, the growing reliance on technology has also raised questions about its broader effects on students' academic experiences and well-being. University students today frequently interact with multiple digital platforms for coursework, communication, and assessment. While such technologies can

facilitate learning, they may also create challenges related to workload management, screen fatigue, and information overload.

Student well-being has therefore become an important topic in higher education research. Scholars increasingly recognize that learning outcomes are closely connected to students' psychological and emotional experiences in academic environments. When students feel motivated, supported, and satisfied with their learning experiences, they are more likely to engage actively with academic tasks and achieve better outcomes.

Within the field of accounting education, digital learning has become particularly relevant. Accounting courses often rely on digital tools for data analysis, online resources, and interactive learning activities. As a result, accounting students

frequently interact with technology in their daily learning routines.

Despite the increasing importance of digital learning in Vietnamese universities, empirical research examining its relationship with student well-being remains limited. Most existing studies focus primarily on technological effectiveness or learning outcomes rather than students' psychological experiences. To address this gap, the present study investigates how digital learning engagement relates to student well-being among second-year accounting students at Thai Nguyen University of Economics and Business Administration.

The study addresses the following research questions:

1. How do accounting students perceive digital learning in their university courses?
2. How does digital learning engagement relate to students' academic well-being?
3. What relationship exists between digital learning engagement and student well-being?

2. LITERATURE REVIEW

2.1 Digital Learning in Higher Education

The rapid development of digital technologies has significantly transformed teaching and learning practices in higher education. Digital learning environments—including learning management systems, virtual classrooms, and online collaboration platforms—have become integral components of contemporary university education. These technologies enable flexible access to learning resources, promote student autonomy, and facilitate interaction beyond the traditional classroom context.

Recent studies highlight that digital learning has expanded educational opportunities by allowing students to access knowledge anytime and anywhere. For example, research on global higher education during the COVID-19 pandemic found that online learning platforms became the primary medium for maintaining academic continuity across universities worldwide [1]. Similarly, Adedoyin and Soykan emphasize that digital learning environments provide new possibilities for collaboration and knowledge construction,

although they also present pedagogical and technological challenges [2].

The adoption of digital technologies in higher education has also stimulated growing scholarly interest in the field of educational technology. Crompton and Burke report that research on artificial intelligence and digital tools in higher education has increased substantially in recent years, reflecting the growing importance of digital transformation in academic environments [12]. In addition, large-scale bibliometric analyses indicate that digital learning research has expanded rapidly since 2020, particularly in areas related to online engagement, learning analytics, and student experiences [25].

Beyond technological infrastructure, digital learning also requires new pedagogical approaches. Rapanta et al. argue that effective online education depends on instructors' ability to design meaningful learning activities that support interaction, collaboration, and reflective thinking [18]. Similarly, Hew et al. note that the transition to digital learning environments requires universities to reconsider traditional teaching practices and develop innovative instructional strategies [17].

Another important aspect of digital learning is student engagement. Bond et al. suggest that digital technologies can enhance student participation by enabling interactive learning experiences and facilitating communication between students and instructors [21]. When used effectively, these technologies can create more dynamic learning environments that support active knowledge construction.

However, despite these potential benefits, digital learning also raises concerns regarding students' academic experiences and well-being. The increasing reliance on digital platforms may influence students' learning motivation, stress levels, and overall academic satisfaction. Consequently, scholars have begun to examine the relationship between digital learning environments and students' psychological well-being in higher education.

2.2 Student Well-Being in Higher Education

Student well-being has emerged as an important topic in educational research, particularly in the context of rapidly changing learning environments. In higher education, well-being is

often understood as a multidimensional concept encompassing psychological health, academic satisfaction, social connectedness, and emotional stability.

The shift toward digital and remote learning has intensified scholarly interest in this issue. A large-scale global survey conducted during the pandemic revealed that many university students experienced increased levels of stress and anxiety while adapting to online learning environments [1]. These findings suggest that while digital technologies enable continuity in education, they may also create new psychological challenges for students.

Recent research emphasizes that students' well-being is closely connected to their learning experiences. Zhao and Hua argue that positive learning environments contribute significantly to students' flourishing and psychological well-being in higher education [4]. Similarly, Fang et al. highlight that effective stress management strategies and supportive learning environments are essential for maintaining students' mental health and academic engagement [7].

Digital engagement may also influence students' well-being in complex ways. Neagu and Vieriu found that students' psychological well-being is associated with how they interact with digital technologies in educational settings [6]. Moderate and purposeful use of digital learning tools can enhance academic productivity and motivation, whereas excessive or poorly structured digital engagement may increase cognitive overload and academic stress.

Furthermore, research suggests that digital environments can affect students' sense of belonging and connectedness. Hehir et al. report that digital learning resources can help maintain social interaction among students during remote learning, which in turn supports emotional well-being and academic persistence [8]. Similarly, Lister et al. emphasize that positive digital practices in higher education can strengthen students' identities as learners and contribute to improved mental well-being [3].

Despite these potential benefits, scholars continue to debate the broader implications of digital technologies for student well-being. Some studies argue that the constant use of digital devices may lead to fatigue, reduced attention, and increased stress among university students [5]. These

concerns highlight the need to better understand how digital learning environments influence students' academic and psychological experiences.

2.3 Digital Learning and Student Well-Being

The relationship between digital learning and student well-being has become a growing area of interest in educational research. While digital technologies can enhance learning opportunities, they may also introduce new pressures related to workload, time management, and technological adaptation.

One key factor influencing this relationship is student engagement with digital learning platforms. Henderson et al. found that students generally perceive digital technologies as valuable when they support meaningful learning activities rather than merely delivering content [9]. When digital tools facilitate interaction, collaboration, and feedback, they tend to improve students' academic satisfaction and motivation.

Another important element is social presence in online learning environments. Research indicates that students' sense of connection with peers and instructors significantly affects their satisfaction with online learning experiences [10]. A supportive digital learning community can therefore play a crucial role in promoting positive academic outcomes and well-being.

Recent studies have also explored the role of emerging technologies such as artificial intelligence in supporting digital learning. Okonkwo and Ade-Ibijola suggest that AI-based tools have the potential to enhance personalized learning experiences and improve academic support for students [13]. Similarly, Kasneci et al. argue that large language models and AI-driven educational tools may provide new opportunities for adaptive learning and academic assistance [14].

Nevertheless, the integration of advanced technologies into education also raises ethical and pedagogical concerns. Cotton et al. emphasize that the use of AI tools in academic settings must be carefully managed to maintain academic integrity and responsible learning practices [19]. Selwyn further notes that universities must critically evaluate the role of digital technologies in shaping students' educational experiences and well-being [20].

Overall, the existing literature suggests that digital learning environments can both support and challenge students' well-being. Positive outcomes are more likely when digital technologies are used to enhance engagement, collaboration, and meaningful learning activities. Conversely, poorly designed digital learning environments may increase academic stress and negatively affect students' mental health.

Given these mixed findings, further empirical research is needed to better understand how digital learning influences student well-being in specific educational contexts. In particular, limited studies have examined this relationship among accounting students in developing higher education systems. Therefore, the present study investigates the relationship between digital learning engagement and student well-being among second-year accounting students at Thai Nguyen University of Economics and Business Administration.

3. METHODOLOGY

3.1 Research Design

This study employed a quantitative research design to examine students' perceptions of digital learning and its relationship with student well-being.

3.2 Participants

The participants were 65 second-year accounting students studying at Thai Nguyen University of Economics and Business Administration, Vietnam. All participants were enrolled in courses that incorporated digital learning tools such as online learning platforms and digital learning materials.

The students were between 19 and 20 years old, and all had prior experience using digital technologies in their academic learning activities.

Table 1

Participant Demographics

Variable	Category	Frequency	Percentage
Gender	Male	28	43.1%
	Female	37	56.9%

Variable	Category	Frequency	Percentage
Age	19	31	47.7%
	20	34	52.3%
Major	Accounting	65	100%

3.3 Instrument

Data were collected using a structured questionnaire consisting of two main sections.

The first section examined students' digital learning engagement, including their use of online platforms, digital resources, and online learning activities.

The second section focused on student well-being, including learning motivation, academic satisfaction, and perceived academic stress.

All items were measured using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

3.4 Data Analysis

The collected data were analyzed using descriptive statistics and correlation analysis. These analyses were conducted to identify patterns in students' perceptions of digital learning and to examine the relationship between digital learning engagement and student well-being.

4. RESULTS

This section presents the statistical findings of the study regarding students' perceptions of digital learning and its relationship with student well-being. Descriptive statistics were first used to summarize students' responses to the questionnaire items. Subsequently, correlation analysis was conducted to examine the relationship between digital learning engagement and student well-being.

4.1 Students' Perceptions of Digital Learning

Descriptive statistics were calculated to explore students' perceptions of digital learning practices in their academic courses. Table 2 presents the

mean scores and standard deviations for selected questionnaire items.

Table 2
Students' Perceptions of Digital Learning

Item	Mean	SD
Digital learning helps me access course materials easily	4.22	0.65
Digital platforms support my independent learning	4.05	0.72
Online learning resources improve my understanding of accounting concepts	3.97	0.68
Digital learning increases my academic workload	3.54	0.82

Overall, the results indicate that students held generally positive perceptions of digital learning. The highest mean score ($M = 4.22$, $SD = 0.65$) was recorded for the statement that digital learning facilitates access to course materials. This finding suggests that students appreciate the convenience and accessibility provided by digital learning platforms.

Similarly, students reported relatively strong agreement with the statement that digital platforms support independent learning ($M = 4.05$, $SD = 0.72$). This result indicates that digital learning environments may encourage greater learner autonomy, allowing students to review course materials and manage their learning processes more effectively.

However, the item measuring perceived academic workload received a comparatively lower mean score ($M = 3.54$, $SD = 0.82$). Although students acknowledged the benefits of digital learning, this result suggests that some students perceive online learning activities as increasing their academic workload.

4.2 Student Well-being in Digital Learning Environments

Students' perceptions of well-being in digital learning environments were also examined using

descriptive statistics. Table 3 presents the mean scores and standard deviations for the well-being-related items.

Table 3
Student Well-being in Digital Learning Environments

Item	Mean	SD
I feel motivated when using digital learning tools	3.88	0.71
Digital learning makes my study more flexible	4.01	0.67
I sometimes feel stressed due to online learning tasks	3.59	0.84
I am satisfied with my digital learning experience	3.92	0.70

The results suggest that digital learning contributes positively to several aspects of students' academic well-being. In particular, students reported relatively high levels of agreement with the statement that digital learning increases learning flexibility ($M = 4.01$, $SD = 0.67$). This finding indicates that digital platforms allow students to organize their learning activities in ways that better suit their individual schedules.

Students also reported moderate levels of learning motivation when using digital learning tools ($M = 3.88$, $SD = 0.71$). This result suggests that digital learning environments may support engagement and encourage students to participate actively in academic tasks.

Nevertheless, the item measuring academic stress obtained a mean score of 3.59 ($SD = 0.84$), indicating that some students experience stress related to online learning activities. This finding highlights the potential challenges associated with managing digital learning tasks and online assignments.

4.3 Relationship Between Digital Learning Engagement and Student Well-being

To examine the relationship between digital learning engagement and student well-being,

correlation analysis was conducted. The results are presented in Table 4.

Table 4

Correlation Between Digital Learning Engagement and Student Well-being

Variables	r	p
Digital learning engagement Student well-being	0.47	<0.01

The analysis revealed a moderate positive correlation between digital learning engagement and student well-being ($r = 0.47, p < 0.01$). This result indicates that students who reported higher levels of engagement with digital learning tools also tended to report higher levels of academic motivation and satisfaction.

The statistically significant relationship suggests that digital learning engagement may play an important role in shaping students' academic experiences. However, the moderate strength of the correlation also indicates that other factors may influence student well-being in digital learning environments.

4.4 Summary of Findings

Overall, the results of the study reveal three key patterns.

First, students generally reported positive perceptions of digital learning, particularly regarding accessibility and learning flexibility.

Second, digital learning appears to support several aspects of student well-being, including motivation and satisfaction with learning experiences.

Third, a moderate positive relationship was identified between digital learning engagement and student well-being, suggesting that students who engage more actively with digital learning tools may experience more positive academic outcomes.

However, the findings also indicate that digital learning may contribute to moderate levels of academic stress, highlighting the need for balanced integration of digital technologies in higher education.

5. DISCUSSION

The findings suggest that digital learning plays an important role in supporting students' academic experiences. Accounting students reported that digital platforms enabled them to access learning materials easily and study more flexibly.

These findings align with previous research emphasizing the benefits of digital technologies in higher education. Digital learning environments provide students with opportunities to review course materials independently and participate in online learning activities.

However, the results also indicate that some students experience academic stress related to digital learning tasks. This finding highlights the importance of designing digital learning activities carefully to avoid overwhelming students with excessive online workloads.

Overall, the results suggest that digital learning can contribute positively to students' academic well-being when implemented in a balanced and supportive manner.

6. CONCLUSION

This study examined the relationship between digital learning and student well-being among second-year accounting students at Thai Nguyen University of Economics and Business Administration.

The findings indicate that digital learning enhances students' access to educational resources and supports flexible learning practices. At the same time, excessive digital learning tasks may contribute to academic stress.

Universities should therefore consider students' well-being when integrating digital technologies into teaching practices. Balanced digital learning strategies may help create learning environments that support both academic achievement and student well-being.

7. LIMITATIONS

This study has several limitations. The sample size was relatively small and limited to students from a single university. In addition, the study relied on self-reported data, which may not fully reflect students' actual learning experiences.

Future studies may include larger samples and combine quantitative and qualitative methods to

gain deeper insights into students' experiences with digital learning.

8. PEDAGOGICAL IMPLICATIONS

The findings of this study suggest several implications for educators.

First, instructors should design digital learning activities that encourage meaningful engagement rather than excessive online tasks.

Second, universities should provide training to help students develop effective digital learning strategies.

Finally, institutions should consider student well-being when implementing digital learning initiatives.

REFERENCES

Articles

- [1] S. Aristovnik, D. Keržič, D. Ravšelj, N. Tomaževič, and L. Umek, "Impacts of the COVID-19 pandemic on life of higher education students: A global perspective," *Sustainability*, vol. 12, no. 20, pp. 1–34, 2020.
- [2] M. Adedoyin and E. Soykan, "Covid-19 pandemic and online learning: The challenges and opportunities," *Interactive Learning Environments*, vol. 31, no. 2, pp. 863–875, 2023.
- [3] K. Lister et al., "Positive digital practices: Supporting positive learner identities and student mental wellbeing in technology-enhanced higher education," *Journal of Interactive Media in Education*, vol. 2023, no. 1, pp. 1–15, 2023.
- [4] Y. Zhao and Y. Hua, "The prediction of student wellbeing and flourishing from university learning experiences," *Frontiers in Psychology*, vol. 16, 2025.
- [5] P. M. Weber, R. Kammerl, and M. Schiefner-Rohs, "What does digital well-being mean for school development? A theoretical review with perspectives on digital inequality," *Education Sciences*, vol. 15, no. 8, 2025.
- [6] S. N. Neagu and A. M. Vieriu, "Digital and psychological well-being among technical university students: Exploring the impact of digital engagement in higher education," *Education Sciences*, vol. 15, no. 9, 2025.
- [7] J. Fang, X. Ren, and V. A. Sotardi, "Rethinking student wellbeing in higher education: A multifaceted approach to stress management," *Education Sciences*, vol. 15, no. 7, 2025.
- [8] E. Hehir, M. Zeller, J. Luckhurst, and T. Chandler, "Developing student connectedness under remote learning using digital resources: A systematic review," *Education and Information Technologies*, vol. 26, no. 5, pp. 6531–6548, 2021.
- [9] S. Henderson, N. Selwyn, and R. Aston, "What works and why? Student perceptions of useful digital technology in university teaching and learning," *Studies in Higher Education*, vol. 45, no. 8, pp. 1567–1579, 2020.
- [10] P. Richardson, R. Maeda, Y. Lv, and S. Caskurlu, "Social presence in relation to students' satisfaction and learning in the online environment," *Computers in Human Behavior*, vol. 71, pp. 402–417, 2017.
- [11] R. Means, B. Bakia, and R. Murphy, "Learning online: What research tells us about whether, when and how," *Internet and Higher Education*, vol. 48, 2021.
- [12] H. Crompton and D. Burke, "Artificial intelligence in higher education: The state of the field," *International Journal of Educational Technology in Higher Education*, vol. 20, no. 22, 2023.
- [13] A. O. Okonkwo and A. Ade-Ibijola, "ChatGPT for teaching and learning: Opportunities, challenges and recommendations," *Computers and Education: Artificial Intelligence*, vol. 4, p. 100094, 2023.
- [14] E. Kasneci et al., "ChatGPT for good? On opportunities and challenges of large language models for education," *Learning and Individual Differences*, vol. 103, p. 102274, 2023.
- [15] D. Ranalli, "Automated written corrective feedback: How AI can support language learning," *Language Learning & Technology*, vol. 25, no. 3, pp. 28–46, 2021.
- [16] Y. Lee and J. Briggs, "Using AI tools to support academic writing in ESL contexts," *Journal of Second Language Writing*, vol. 54, p. 100846, 2021.
- [17] K. Hew, C. Jia, and S. Bai, "Transitioning to the 'new normal' of learning in unpredictable times,"

Educational Technology Research and Development, vol. 68, pp. 1–7, 2020.

[18] M. Rapanta, L. Botturi, P. Goodyear, L. Guàrdia, and M. Koole, “Online university teaching during and after the Covid-19 crisis,” *Postdigital Science and Education*, vol. 3, pp. 923–945, 2021.

[19] S. Cotton, P. Cotton, and J. Shipway, “Chatting and cheating: Ensuring academic integrity in the era of ChatGPT,” *Innovations in Education and Teaching International*, vol. 61, no. 1, 2023.

[20] N. Selwyn, “Digital technology and the contemporary university: Degrees of digitization,” *Studies in Higher Education*, vol. 46, no. 1, pp. 1–15, 2021.

[21] A. Bond, K. Buntins, S. Bedenlier, O. Zawacki-Richter, and M. Kerres, “Mapping research in student engagement and educational technology in higher education,” *International Journal of Educational Technology in Higher Education*, vol. 17, no. 2, 2020.

[22] S. Saleng, M. Yaumi, and S. Sukmawati, “Global trends in higher education and learning technology: A bibliometric study,” *PPSDP International Journal of Education*, vol. 4, no. 2, pp. 418–444, 2025.

[23] I. L. Syathroh et al., “Online learning management difficulties: Higher education students’ perspective,” *Journal of Education Technology*, vol. 8, no. 2, pp. 379–390, 2024.

[24] A. J. M. van der Spoel et al., “Students’ self-reported wellbeing under Covid-19 measures,” *Heliyon*, vol. 8, no. 3, 2022.

[25] M. Gao, S. L. Wong, M. N. M. Khambari, N. Noordin, and J. Geng, “Sustaining e-learning studies in higher education: An examination of scientific productions in Scopus,” *Sustainability*, vol. 14, no. 21, 2022.