

---

**| RESEARCH ARTICLE**

## **The Status of the Online Learning Model and Determinants of Learning Efficiency: A Case Study at Ho Chi Minh City University of Education**

**Xuan Tran Khai<sup>1</sup> and Hieu Le Ngoc<sup>2</sup>** ✉

<sup>1</sup>*Ho Chi Minh City University of Education, Vietnam*

<sup>2</sup>*Ho Chi Minh City Open University, Vietnam*

**Corresponding Author:** Hieu Le Ngoc, **E-mail:** [hieu.ln@ou.edu.vn](mailto:hieu.ln@ou.edu.vn)

---

**| ABSTRACT**

This study provides an exhaustive overview of the Virtual Learning Environment (VLE) system adopted by Ho Chi Minh City University of Education (HCMUE). The system, which caters to multiple forms of training and education, is detailed with descriptions of its interface, functionalities, and a selection of offered courses. While the VLE system has proven its mettle by enhancing the teacher-student interaction and overall learning experience, certain challenges persist, such as limited real-time interaction. The second part of the study delves into an empirical investigation conducted among Chinese language students. Using a structured questionnaire, the research examines five pivotal dimensions affecting online learning efficiency: student, teacher, curriculum, environment, and equipment factors. Data collected from 196 valid responses was processed to provide insights. The analysis aims to bridge the identified gaps and further bolster the effectiveness of online learning at the university.

**| KEYWORDS**

Virtual Learning Environment (VLE), Online Learning Model, Chinese Language Teaching, Blended Learning, Ho Chi Minh City, University of Education

**| ARTICLE INFORMATION**

**ACCEPTED:** 02 November 2023

**PUBLISHED:** 18 November 2023

**DOI:** 10.32996/jweep.2023.5.3.6

---

**1. Introduction**

The digital revolution has fundamentally transformed various sectors, and education is no exception. With the swift emergence of online platforms and technological tools, traditional classrooms are now evolving into dynamic e-learning environments. These platforms are not merely a consequence of technological advancement but a response to the shifting needs of the global student community. The Ho Chi Minh City University of Education, a leading institution, has become emblematic of this change by adopting and integrating advanced online learning models into its academic framework.

The Ho Chi Minh City University of Education, through its Virtual Learning Environment (VLE) system, offers a structured platform for online education, encompassing various training forms. This system provides a comprehensive ecosystem that includes account management, course participation, and even tools like Office 365 and Google applications, aiming to replicate the nuances of physical learning in a digital space.

While the adoption of online learning has been widespread, it is crucial to evaluate its effectiveness continually. Past studies, such as those by Trần Thị Kim Anh (2018) and Nguyễn Thị Thu Hương (2019), have shed light on the efficacy and application of platforms like Moodle in the university. However, to ensure consistent quality of education, it is essential to understand not just the status of these online models but also the determinants that influence learning efficiency.

This study aims to provide a holistic view of the current status of the online learning model at the Ho Chi Minh City University of Education. Beyond that, it seeks to delve deeper into the critical factors influencing the learning efficiency of students, ranging from technological equipment to personal student factors.

In synthesizing this information, the study hopes to offer insights for educators, administrators, and policymakers to optimize online education's benefits while addressing its challenges. As online education continues its upward trajectory, ensuring its efficacy is paramount for future educational endeavors.

## 2. Literature Review

Online learning has rapidly become a cornerstone of modern education, offering flexibility and a plethora of resources to both educators and learners. The integration of technology into the educational sector, particularly in institutions such as the Ho Chi Minh City University of Education, forms the crux of numerous studies.

*Virtual Learning Environments (VLE):* The Virtual Learning Environment (VLE) system has gained substantial attention in the academic world due to its potential to revolutionize the traditional classroom. VLEs, such as the one employed by Ho Chi Minh City University of Education, provide an organized platform for online teaching and learning, offering various training forms and support tools (Trần Thị Kim Anh, 2018). Such systems have been observed to improve the teaching and learning process and elevate the interaction between educators and students (Trần Thị Kim Anh, 2018). Besides, many other studies have been recently conducted on VLE. Hyejin et al. (2022) ~~suggests~~ [suggest](#) that such experiences enhance teachers' technological readiness and digital citizenship. Stephanie G. Fussell et al. (2021) aim to determine the factors influencing students' intention to use VR in dynamic learning environments. An extended Technology Acceptance Model (TAM) was developed, incorporating factors related to education and VR technology in training environments. Benjy Marks and Jacqueline Thomas (2021) suggest that VAR technology infrastructure is a sound educational investment for the future. The study of Deborah et. al. (2021) explores the impact of pandemic-related shutdowns on adolescent well-being, learning, and social life, providing insights for designing effective online learning experiences.

*Efficacy of Online Learning Platforms:* The success of online platforms like Moodle (VLE), Google Classroom, and Microsoft Teams hinges on their ability to offer comprehensive learning materials, organize online sessions, allocate homework, and assess student performance. In a study by Nguyễn Thị Thu Hương (2019), the application of the Moodle virtual learning system was found to be particularly effective in English courses at Ho Chi Minh City University of Education. Shemsedin Vehapi (2023) suggests that students were significantly more personalized and successful in their online educational lives during the pandemic. A study by R. A. Bhat (2023) evaluates the effectiveness of various online tools and resources in improving students' abilities to locate, evaluate, and synthesize digital information. Zahra Akbarzade Farkhani et al. (2022) reflect that EFL teachers could select appropriate classroom management during online and face-to-face classes and had a positive attitude toward managing the classroom during the pandemic. The findings of Talal Daghri et al. (2022) suggest a 100% accuracy in detecting confused students using online education platforms.

*Challenges in Online Learning:* Despite the advancements and achievements in online learning, there are undeniable challenges. In their study, Nguyễn Thị Thu Hà, Nguyễn Thị Kim Anh, and Lê Thị Mai Hương (2020) discussed the online learning model at Ho Chi Minh City University of Education. They highlighted the successes but also underlined challenges like limited interaction between students and teachers, hurdles in using online support tools and maintaining teaching quality. Such challenges necessitate constant evaluation and evolution of online teaching methodologies. Meletiou-Mavrotheris et al. (2022) highlight the challenges and opportunities associated with ERL (emergency remote learning), emphasizing that knowledge of e-learning tools does not equate to possessing the necessary digital skills for effective online learning. Segbenya M. et al. (2022) reveal significant relationships between factors (availability and functionality of gadgets, teaching methods) and suggest adopting a blended learning approach to address the identified challenges. Another study (Yeung, M. W. L., & Yau, A.; 2021) emphasizes socio-economic, technological, and emotional factors affecting students' online learning experience. Bashir A. et al. (2021) discuss students' experiences, the impact on mental wellbeing, and the need for hybrid course delivery to address the challenges and support students effectively.

*Factors Influencing Online Learning Efficacy:* Several determinants can influence the effectiveness of online learning. While technological and environmental factors are paramount, the roles of students, educators, and curricula cannot be understated. There's an evident need to delve deeper into these influencing factors, especially as they pertain to the specific context of the VLE system in a hybrid learning environment. The findings of Derakhshan, A. (2023) indicate that FLE (foreign language enjoyment) and OLSE (online learning self-efficacy) positively affect online learning engagement, with OLSE mediating the relationship between L2 grit and engagement. The study from China (Zhao, J., & Liu, E.; 2022) found that positive academic emotions and learning self-efficacy play significant roles in enhancing deep learning, influenced by perceived TPACK support, peer support, and

technology usefulness. The authors in Nigeria (Ogbodoakum et al., 2022) found that online learning self-efficacy, management support, online content readiness, and perceived benefit significantly affect readiness to accept online learning, while online learning attitude does not. Azeyan Awee et al. (2022) showed a direct and positive relationship for all variables, with self-efficacy significantly mediating the relationship between self-regulation and students' adaptability.

In a brief view, the trajectory of online learning at institutions like Ho Chi Minh City University of Education is undoubtedly upward. The existing literature sets a foundation, but there remains significant scope for studies focusing on determinants affecting learning efficiency in such environments.

### **3. Methodology**

#### **3.1. Objective:**

The primary objective of this study is to investigate the status of the online learning model at Ho Chi Minh City University of Education and identify the determinants affecting learning efficiency.

#### **3.2. Study Framework:**

Data Source: The study is based on primary data collected through a structured questionnaire.

Population: Chinese Department students from different batches at the Ho Chi Minh City University of Education.

Sampling: A total of 200 participants were selected for the survey, out of which 196 valid responses were collected, making the response rate 98%.

#### **3.3. Tools Used:**

The VLE system, commonly known as the Ho Chi Minh City University of Education Online Training Portal, was utilized to provide insight into the current status of online learning at the university.

#### **3.4. Data Collection:**

Instrumentation: The primary tool for data collection was a questionnaire designed on "Google Forms". The questionnaire was divided into sections capturing information about personal data, student's own factors, teacher factors, curriculum factors, environmental factors, and equipment factors. Each factor is assessed at five levels of impact on online learning effectiveness.

- *Student Factors:* Include interest in online professional courses, attention level and duration of online learning, self-control ability, cognitive style, and completion of final homework.
- *Teacher Factors:* Encompass the teacher's information technology literacy, teaching style, pre-class preparation, severity, and feedback on learned content.
- *Curriculum Factors:* Involve the length of the online course, type of teaching courses, design style, and difficulty of class content.
- *Environmental Factors:* Include family environment interference, parental supervision, severity of parents, parental role models, and peer comparisons.
- *Equipment Factors:* Cover class hardware, network quality, teaching platform, and web interface interference.

Distribution: The questionnaire was disseminated via the messenger platform on February 30, 2023, and responses were collected up till March 20, 2023.

Figures: Various figures were used to illustrate the dashboard interface, main interface, course details, participation details, course activities, and course offerings in the VLE system.

#### **3.5. Data Analysis:**

Descriptive Statistics: The study utilized mean statistics to summarize the data. It helped in describing the central tendency of the data.

Likert Scale Rating: A five-point Likert scale was used to measure the degree to which students agreed or disagreed with a series of statements. The average scores obtained from the Likert scale responses were rated using mathematical rounding rules. The mean score is rounded to the nearest whole number, falling within five defined value segments:

- 4.50-5.00 is rated as "very high"

- 3.50-4.49 as "high."
- 2.50-3.49 as "moderate."
- 1.50-2.49 as "low."
- 1.00-1.49 as "very low"

This method is appreciated for its simplicity and ease of implementation, as it aligns with common mathematical rounding principles. However, a noted limitation is the unequal range of values within the segments, with the "very low" and "very high" categories having a smaller range of values compared to the other categories.

#### 4. Results and Discussion

##### 4.1 Results and Findings

A total of 196 individuals participated in the survey. The distribution of participants across different student groups was varied. Both K44 and K47 student groups were represented by 13% each of the total participants. K45 students made up 17% of the participant pool, while K46 students constituted the majority, representing 57% of the total, as illustrated in Figure 1.

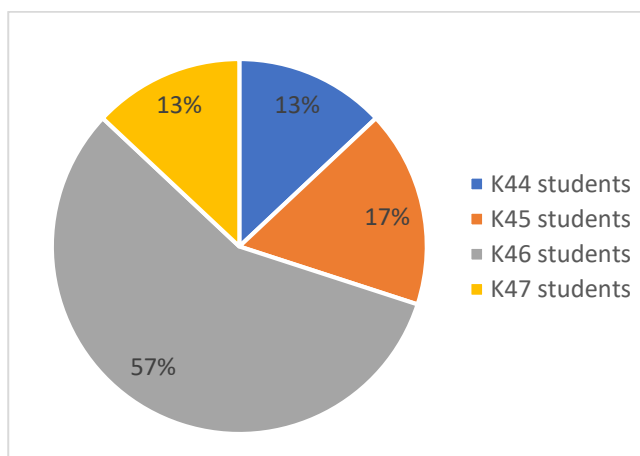


Figure 1. Participants of Chinese Faculty's students, Ho Chi Minh City University of Education

In terms of course, enrollment depicted in Figure 2, 170 students from K44, K45, and K46 were enrolled in the "Curriculum Theory" course via the VLE system. In contrast, the 26 students from K47 were studying the "Introduction to Education" course.

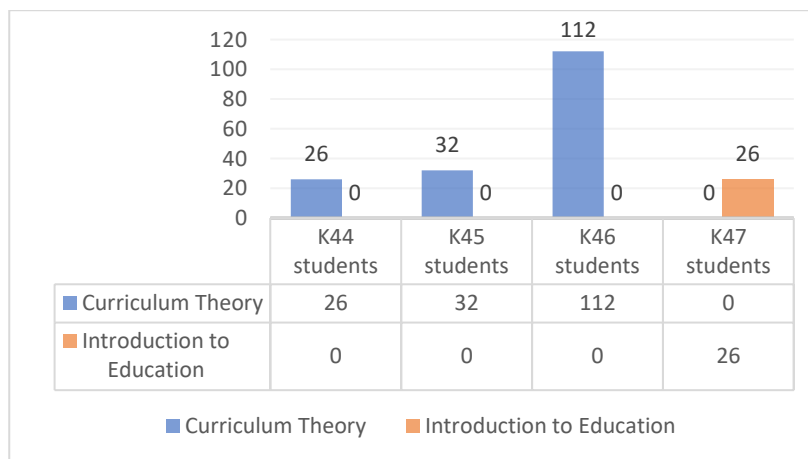
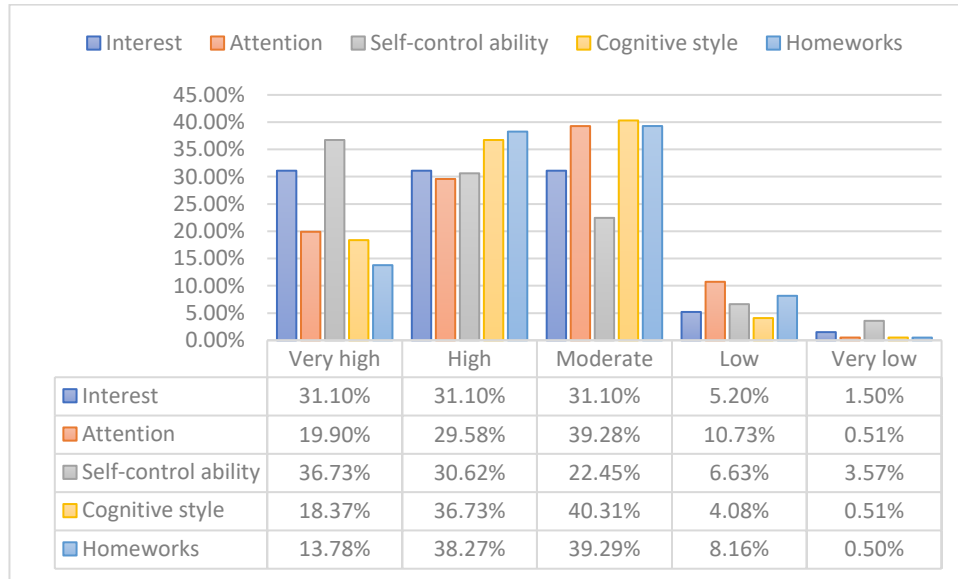


Figure 2. Ho Chi Minh City University of Education students take courses on the VLE system

The survey explored the influence of students' individual factors on the learning outcomes of Chinese language students. The findings, as depicted in Figure 3, revealed that the students' learning self-control ability was the most influential factor, impacting the effectiveness of online professional courses by 36.73%. The interest of Chinese language students in blended learning courses followed closely, accounting for 31.10% of the impact. The remaining three aspects were considered highly impactful by 19.9%, 18.37%, and 13.78% of the respondents, respectively.



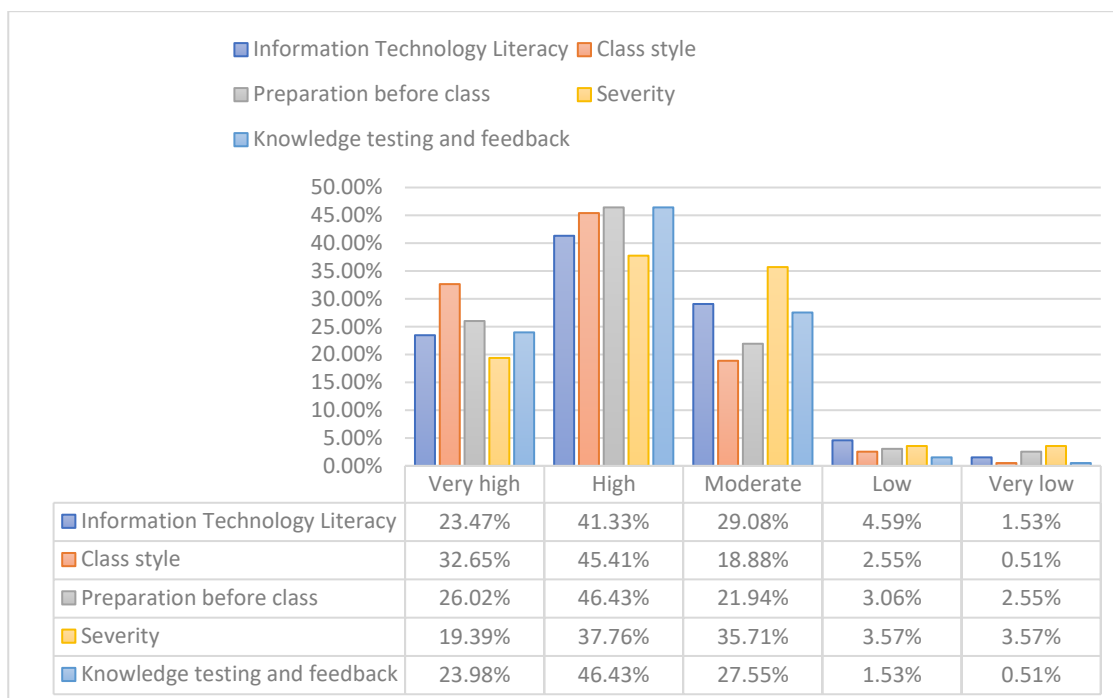
**Figure 3.** The influence of own factors on the learning effect of professional courses for students in the Chinese Faculty under the hybrid learning model of the VLE system

Table 1 provides a detailed breakdown of the average indices for each factor. Interest, attention, self-control ability, cognitive style, and homework completion received average scores of 3.85, 3.58, 3.90, 3.69, and 3.57, respectively. The attention and homework factors averaged around 3.6, cognitive style was approximately 3.7, interest was near 3.9, and self-control ability topped the list with an average score close to 4.0.

**Table 1.** Descriptive statistics on the impact of own factors on the learning effect of professional courses for students in the Chinese Faculty under the blended learning model of the VLE system

	N	Minimum	Maximum	Mean	Std. Deviation
Interest	196	1	5	3.85	.973
Attention	196	1	5	3.58	.949
Self-control ability	196	1	5	3.90	1.084
Cognitive style	196	1	5	3.69	.835
Homeworks	196	1	5	3.57	.848
<b>Students' own factors</b>	<b>196</b>	<b>1.00</b>	<b>5.00</b>	<b>3.7184</b>	<b>.87135</b>
<b>Valid N (listwise)</b>	196				

Upon applying rounding techniques to the assessment results, each factor—interest, attention, self-control, cognitive style, and homework—received an approximate score of 4.0. This rounding indicates that all these individual factors are highly influential in determining the learning effectiveness of Chinese Faculty students engaged in professional courses via the VLE system’s hybrid learning model.



**Figure 4.** The influence of teacher factors on the learning effect of professional courses for students in the Chinese Faculty under the hybrid learning model of the VLE system

Figure 4 reveals that the severity of teachers is perceived to have the least influence on the learning outcomes of Chinese language students. Only 19.39% and 37.76% of respondents believe that this factor has a moderate to high impact, respectively. In contrast, the other four teacher-related factors received higher ratings, with over 23.47% and 41% of participants attributing moderate to high impact to them. Notably, 70.38% of respondents emphasized the significant role of knowledge testing and feedback in online learning outcomes.

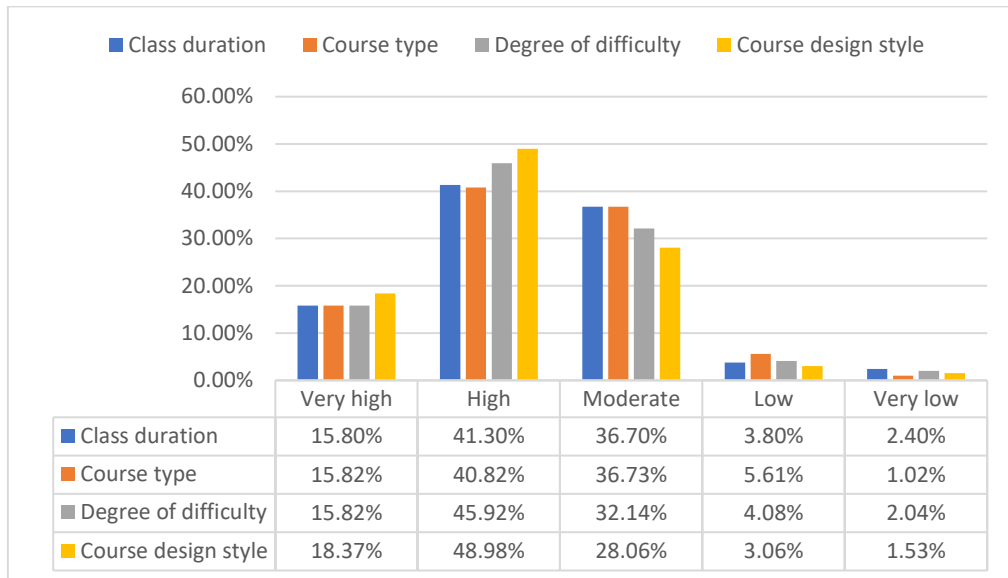
The remote teaching environment, characterized by the screen separation between teachers and students, presents challenges in organizing, managing, and assessing the effectiveness of online teaching. When asked about the most effective teaching style, a substantial 78.06% of participants preferred teachers who incorporate humor, rich facial expressions, and body language, attributing the highest learning outcomes to such interactive teaching methods.

**Table 2.** Descriptive statistics on the impact of teacher factors on the learning effects of professional courses for students in the Chinese Faculty under the blended learning model of the VLE system

	N	Minimum	Maximum	Mean	Std. Deviation
Information Technology Literacy	196	1	5	3.81	.902
Class style	196	1	5	4.07	.813
Preparation before class	196	1	5	3.89	.919
Severity	196	1	5	3.65	.957
Knowledge testing and feedback	196	1	5	3.92	.787
<b>Teacher factors</b>	<b>196</b>	<b>1.00</b>	<b>5.00</b>	<b>3.8559</b>	<b>.84350</b>
Valid N (listwise)	196				

Table 2 presents the average evaluation indices for various teacher factors. Information technology literacy, teaching style, pre-class preparation, severity, and knowledge testing and feedback received scores of 3.81, 4.07, 3.89, 3.65, and 3.92, respectively. The severity factor scored the lowest at approximately 3.7, while teaching style earned the highest score of about 4.1. After rounding the assessment results, all teacher factors received an approximate score of 4.0. This suggests that each of these factors, including the teacher's information technology literacy, teaching style, pre-class preparation, severity, and knowledge testing and feedback,

significantly influences the learning outcomes of professional courses for students in the Chinese Faculty within the context of the VLE system’s hybrid learning model.



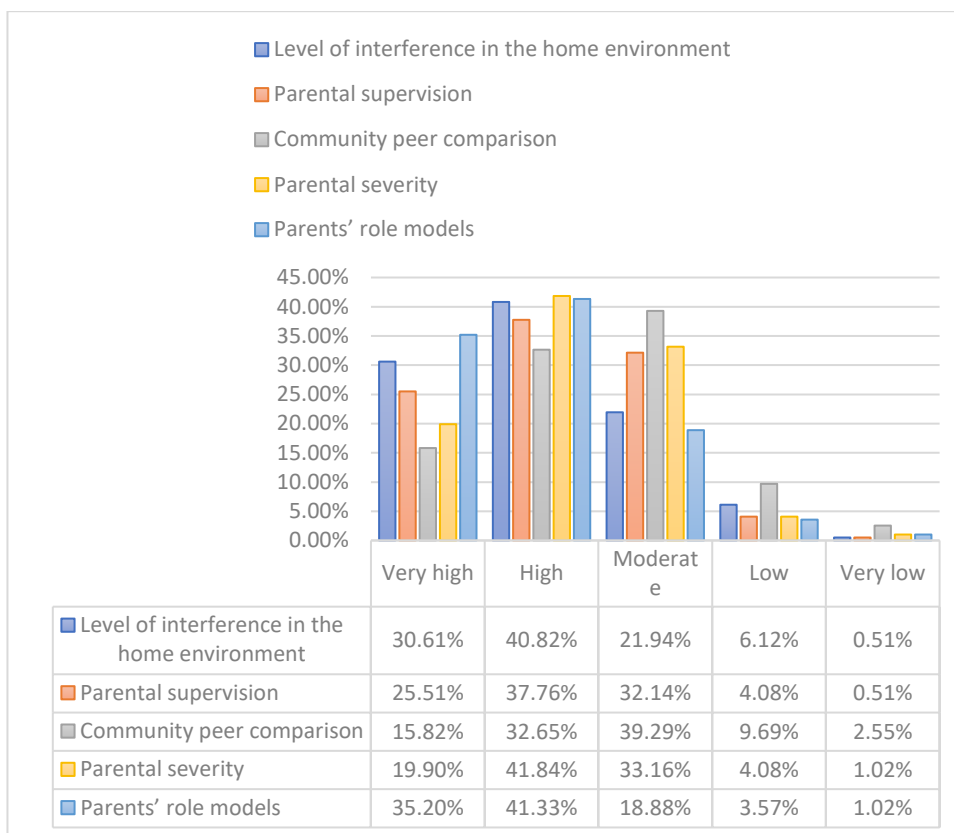
**Figure 5.** The influence of curriculum factors on the learning effect of professional courses for students in the Chinese Faculty under the hybrid learning model of the VLE system

Feedback from student interviews revealed challenges in maintaining concentration during online learning. Students found it difficult to pinpoint key information in electronic teacher training course materials, leading to suboptimal performance in online teacher training course assessments. Figure 5 illustrates that the difficulty of course content and course design style are pivotal factors influencing online learning outcomes, with 61.74% and 67.35% of participants, respectively, rating their impact as significant. In contrast, only 57.1% and 56.64% viewed the remaining two sub-factors as highly influential. To enhance the learning experience, educators should tailor course content to align with students' academic abilities and cognitive capacities. Implementing innovative and effective questioning techniques can foster active thinking and engagement, thereby elevating the overall learning impact.

**Table 3.** Descriptive statistics on the impact of curriculum factors on the learning effects of professional courses for students in the Chinese Faculty under the blended learning model of the VLE system

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Class duration	196	1	5	3.64	.880
Course type	196	1	5	3.65	.849
Degree of difficulty	196	1	5	3.69	.858
Course design style	196	1	5	3.80	.828
<b>Curriculum factors</b>	<b>196</b>	<b>1.00</b>	<b>5.00</b>	<b>3.6952</b>	<b>.81680</b>
Valid N (listwise)	196				

Data in Table 3 indicates average indices of 3.64, 3.65, 3.69, and 3.80 for class length, course type, difficulty level, and course design style, respectively. The composite average score for these factors is around 3.7. Course design style emerged as the most influential factor, with a score exceeding 3.8, while the others hovered around 3.65. When applying rounding rules to the evaluation results, the average score for these course-related factors approximates to 4. This underscores their significant role in shaping the learning outcomes of professional courses for Chinese Faculty students under the VLE system’s hybrid learning model, with particular emphasis on the influence of course design style.



**Figure 6.** The influence of environmental factors on the learning effect of professional courses for students in the Chinese Faculty under the hybrid learning model of the VLE system

Figure 6, derived from survey data, highlights the varying impacts of different environmental factors on the learning outcomes of Chinese language students. Peer comparisons in the community are found to be the least influential, with only 46.40% of respondents attributing a high to very high impact. In contrast, the role of parents as models emerges as the most significant factor, with 76.53% acknowledging its high to very high influence on online learning outcomes. The interference of the family environment and the roles of parental supervision and severity are also notable, accounting for 71.43%, 63.27%, and 61.74%, respectively. These findings underscore the pivotal role parents play as role models. Their actions and words significantly influence their children's learning experiences and outcomes.

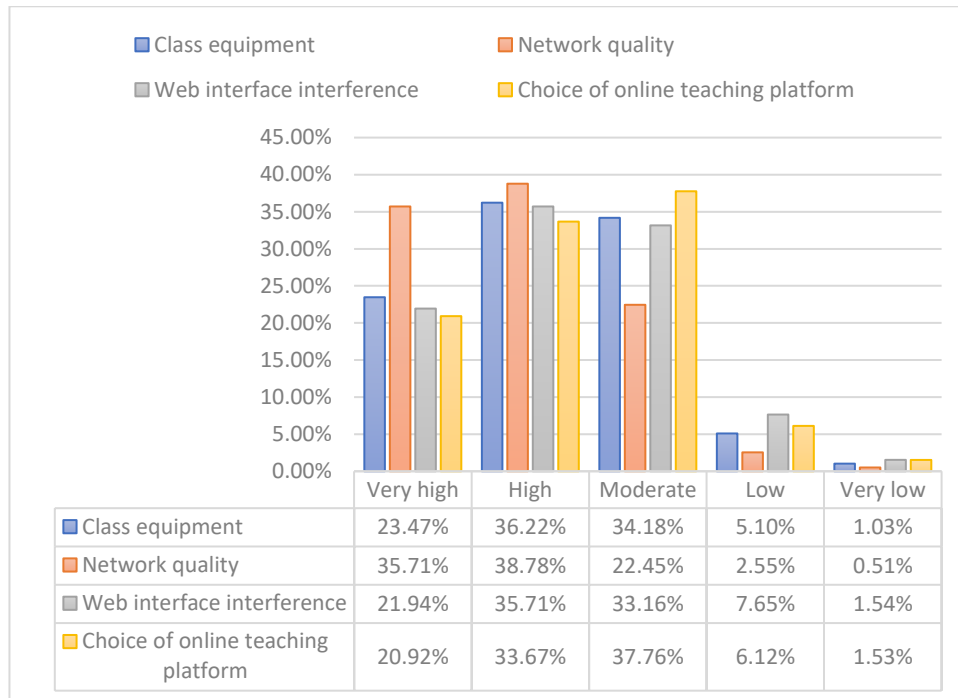
**Table 4.** Descriptive statistics on the impact of *environmental factors* on the learning effects of professional courses for students in the Chinese Faculty under the blended learning model of the VLE system

	N	Minimum	Maximum	Mean	Std. Deviation
Level of interference in the home environment	196	1	5	3.95	.904
Parental supervision	196	1	5	3.84	.873
Community peer comparison	196	1	5	3.49	.958
Parental severity	196	1	5	3.76	.854
Parents' role models	196	1	5	4.06	.881
<b>Environmental factor</b>	<b>196</b>	<b>1.00</b>	<b>5.00</b>	<b>3.8194</b>	<b>.81790</b>
Valid N (listwise)	196				

Table 4 presents the average indices for various environmental factors. Family interference, parental supervision, peer comparison, parental severity, and parental role modeling received scores of 3.95, 3.84, 3.49, 3.76, and 4.06, respectively. The peer comparison factor, with an average score close to 3, indicates a neutral stance among most students, suggesting that parental comparisons of children's academic performances have a limited impact on learning outcomes. Conversely, the other four factors - family interference, parental supervision, parental severity, and parental role modeling - each have an average score approximating 4.



This data underscores their significant influence on the learning outcomes of Chinese Faculty students engaged in the VLE system’s hybrid learning model. The role of the family environment and parental influences are paramount in shaping students' learning experiences and achievements.



**Figure 7.** The influence of equipment factors on the learning effect of professional courses for students in the Chinese Faculty under the hybrid learning model of the VLE system

Figure 7 reveals that network quality is a paramount factor influencing the online learning experiences of Chinese language students. A significant 74.49% of respondents affirmed that network quality exerts a high or very high impact on online learning outcomes. Hardware equipment is the second most influential factor, with 59.69% of participants acknowledging its crucial role. These findings underscore the indispensability of both robust network quality and adequate hardware equipment in facilitating effective online learning. Furthermore, 63.65% and 54.59% of respondents identified web interface interference and the choice of online teaching platforms, respectively, as having a substantial impact on the learning experiences of Chinese language students.

**Table 5.** Descriptive statistics on the impact of *equipment factors* on the learning effects of professional courses for students in the Chinese Faculty under the blended learning model of the VLE system

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Class equipment	196	1	5	3.76	.905
Network quality	196	1	5	4.07	.854
Web interface interference	196	1	5	3.69	.950
Choice of online teaching platform	196	1	5	3.66	.928
<b>Equipment factors</b>	<b>196</b>	<b>1.00</b>	<b>5.00</b>	<b>3.7946</b>	<b>.85910</b>
Valid N (listwise)	196				

Table 5 provides a detailed breakdown of the average scores attributed to each equipment factor. Class equipment, network quality, web interface interference, and online platform selection received average scores of 3.76, 4.07, 3.69, and 3.66, respectively. While the composite average for these factors hovers around 3.7, network quality stands out with a higher score of approximately 4.1, underscoring its pivotal role. When applying rounding to the assessment results, each equipment factor attains an approximate score of 4. This data accentuates the significant influence of these equipment factors on the learning outcomes of professional courses for Chinese Faculty students, particularly within the context of the VLE system’s hybrid learning model. The insights

emphasize the critical need for high-quality network services and appropriate hardware equipment to optimize online learning experiences and outcomes.

#### **4.2 Discussions**

**Equipment Factors:** The equipment necessary for effective online learning is underscored by the critical role of network quality and hardware equipment. A majority of students pinpoint network quality as a cornerstone for a productive online learning environment. Reliable and high-speed internet is not a luxury but a necessity, ensuring that students have seamless access to learning materials, can engage in interactive sessions, and receive real-time feedback. In tandem with network quality, the role of hardware equipment is unequivocal. Students need adequate and functional devices to access a spectrum of multimedia content and partake in diverse learning activities, underscoring the symbiotic relationship between these two equipment factors.

**Environmental Factors:** The learning environment, particularly the influence of parents and peers, plays a pivotal role in shaping students' online learning experiences. Parents emerge as influential figures, with their role as models and their level of involvement directly impacting students' motivation and engagement. A conducive learning atmosphere is fostered by positive parental engagement. On the other hand, peer comparisons, though less impactful, still hold sway over students' self-esteem and motivation. The need to cultivate a supportive and collaborative learning community is evident, where students can thrive without the undue pressure of constant comparison.

**Curriculum Factors:** The curriculum is at the heart of the learning experience. The data underscores the importance of the complexity and design of course content in engaging students. There's a clarion call for content that is tailored to students' cognitive levels enriched with interactive elements to bolster comprehension and retention. Moreover, the emergence of adaptive learning paths highlights a trend towards personalized learning experiences. The curriculum should be adaptable, catering to the diverse learning paces and styles of students to optimize engagement and learning outcomes.

**Teacher Factors:** The role of teachers is magnified in the online learning landscape. An engaging teaching style characterized by interactive methods, humor, and visual expressions, is highly favored by students. This preference underscores the imperative for ongoing professional development to equip teachers with the nuanced skills required for effective online pedagogy. Concurrently, the mechanism of knowledge testing and feedback is spotlighted. Timely and constructive feedback is instrumental in guiding students' learning trajectories, enhancing comprehension, and fostering a dynamic learning environment.

**Student's Own Factors:** The students' intrinsic factors, including self-control and interest in courses, are integral determinants of their engagement and performance. Courses need to transcend the informational threshold to become engaging and interactive, sustaining students' interest and promoting active participation. Additionally, the diversity in students' cognitive styles necessitates a varied approach in teaching methods and learning materials, aiming for an optimized, individualized learning experience for each student.

A holistic examination of these factors illuminates the complex interplay between technological, environmental, instructional, and individual elements in determining online learning efficacy. The narrative underscores a paradigm anchored on robust technological integration, ensuring accessibility, reliability, and quality of online learning experiences. Beyond the technological scaffold, holistic support emerges as a theme, with teachers, parents, and peers playing integral roles in providing the support, motivation, and guidance essential in the online learning odyssey.

The diversity in students' cognitive styles, interests, and self-control abilities accentuates the imperative for personalized, adaptive learning paths. This is envisioned as a landscape where data analytics and AI are leveraged to tailor learning experiences, ensuring they are responsive and adaptive to each student's unique needs and potential. These insights are not just reflective but should be prescriptive, informing the formulation of policies, allocation of resources, and design of practices that are attuned to the multifaceted needs and challenges of online learning.

The phenomenon of online learning has undeniably surged in recent years, largely facilitated by advancements in technology and a shifting educational paradigm. The benefits are clear – accessibility, flexibility, and adaptability to individual learners' needs. Yet, its effectiveness remains an area of active inquiry, as we've seen from the results obtained from Ho Chi Minh City University of Education's VLE system. Our analysis underscores the fact that both teacher and equipment factors critically influence online learning efficacy. This aligns with traditional pedagogical principles, emphasizing the role of instructors as pivotal to the educational process. Even in a digital environment, their planning, responsiveness, and engagement strategies directly correlate with student outcomes. This suggests that technology, while a vital tool, cannot replace the human touch in education. As the study noted, teachers need to actively refine their strategies and remain engaged to ensure optimal online learning outcomes. On the equipment side, the focus is not just on availing resources but ensuring their reliability and efficiency. Poor network

connectivity, for instance, can greatly hinder the learning process, causing interruptions, decreased engagement, and potentially affecting retention of material. This underscores the necessity for educational institutions to prioritize infrastructural investments.

Interestingly, community peer comparison, which often plays a pivotal role in traditional classroom environments, seems to exert less influence in online settings. This finding calls into question assumptions about peer-driven motivations in online learning environments, and more research would be beneficial. The proposed evaluation form, with its multidimensional approach to gauging online learning effectiveness, promises to be a powerful tool. By assessing multiple facets of the online learning environment it offers a comprehensive view, potentially allowing educators to tailor their methods more effectively. In conclusion, the optimization of online learning outcomes is envisioned as a synergistic endeavor. It calls for a cohesive, responsive approach that addresses the technological, instructional, environmental, and individual factors in unison. Each factor is a cog in the intricate machinery of online learning efficacy. A collective, integrative approach promises a pathway to an enriched, equitable, and effective online education landscape, where learning is not just accessible but is also engaging, responsive, and transformative.

## **5. Conclusion**

In conclusion, the study conducted at Ho Chi Minh City University of Education primarily aimed to explore the status of the online learning model and find out the various determinants impacting learning efficiency. The research was particularly centered on Chinese language students, delving into their experiences in online professional courses. The findings of the study are multifaceted, shedding light on numerous factors that influence the learning outcomes of students. Individual factors such as learning self-control, an interest in blended learning, attention span, cognitive style, and diligence in completing homework have been identified as significant contributors to learning efficacy, each holding a substantial influence score of 4.0. Teaching styles that intertwine humor and expressive communication have also been shown to be highly preferred by 78.06% of the participants. However, challenges such as maintaining concentration and distinguishing key information have been highlighted, indicating areas that require attention and improvement. Environmental aspects play a non-negligible role as well, with parental influence and family environment being crucial, as indicated by 76.53% of the participants. Interestingly, the study unearthed that peer comparison has a noticeably lesser impact in online settings, recorded at 46.40%. The quality of the network and the availability of adequate hardware equipment have been underlined as vital components for a successful online learning experience, emphasizing the necessity for a robust technical infrastructure.

These revelations are instrumental in understanding the dynamics of online learning, particularly in the context of the University of Education in Ho Chi Minh City. The study provides valuable insights that could guide policy-making, resource allocation, and the implementation of effective educational practices. It advocates for a learning environment that is not just technologically supported but is also adaptive, inclusive, and conducive to student engagement and success. Despite its contributions, the study acknowledges its limitations. The exclusive focus on the Chinese Language Faculty may limit the generalizability of the findings across different academic disciplines. The survey's one-year timeframe could have constrained the understanding of long-term trends and seasonal variations in online learning efficacy. Additionally, the possibility of the questionnaire not capturing the full spectrum of student experiences suggests a potential skewness in the results.

To move on with future research, there is a need for an interdisciplinary approach, extending the investigation across various academic faculties and spanning multiple academic years. Future studies could also benefit from employing a more inclusive and flexible questionnaire complemented by in-depth interviews to gain richer qualitative insights. Examining the interplay between teacher and equipment factors, as well as the role of community and peer influences in online learning environments, could also offer novel perspectives and strategies for enhancing digital learning spaces. By addressing these considerations, future research stands to build upon the current study's findings, striving towards a more holistic, nuanced, and universally applicable understanding of online learning efficacy. The journey towards optimizing online learning is complex and multifaceted, but with continued exploration and adaptation, the potential for transformative educational experiences is within reach.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

## References

- [1] Awee, A., Mohsin, F. H., & Kuek, T.-Y. (2022). Students' Adaptability on Unexpected Transition to Online Learning during COVID-19 Pandemic: The Role of Self Regulation Learning and Self Efficacy. *Asia-Pacific Journal of Educators and Education*, 37(1). <https://dx.doi.org/10.21315/apjee2022.37.1.2>
- [2] Bashir, A., Bashir, S., Rana, K., Lambert, P., & Vernallis, A. (2021). Post-COVID-19 Adaptations; the Shifts Towards Online Learning, Hybrid Course Delivery and the Implications for Biosciences Courses in the Higher Education Setting. *Frontiers in Education*, 6, 711619. <https://dx.doi.org/10.3389/feduc.2021.711619>
- [3] Bhat, R. A. (2023). DIGITAL LITERACY DEVELOPMENT: ASSESSING THE EFFICACY OF ONLINE LEARNING PLATFORMS IN ENHANCING STUDENTS' INFORMATION FLUENCY. *International Journal of Science and Engineering Technology*, 2(9). <https://dx.doi.org/10.54443/ijset.v2i9.221>
- [4] Cockerham, D., Lin, L., Ndolo, S., & Schwartz, M. S. (2021). Voices of the students: Adolescent well-being and social interactions during the emergent shift to online learning environments. *Education and Information Technologies*. <https://dx.doi.org/10.1007/s10639-021-10601-4>
- [5] Daghri, T., Rustam, F., Aljedaani, W., Bashiri, A. H., & Ashraf, I. (2022). Electroencephalogram signals for detecting confused students in online education platforms with probability-based features. *Electronics*, 11(18), 2855. <https://doi.org/10.3390/electronics11182855>
- [6] Derakhshan, A., & Fathi, J. (2023). Grit and Foreign Language Enjoyment as Predictors of EFL Learners' Online Engagement: The Mediating Role of Online Learning Self-efficacy. *Iranian Journal of Language Teaching Research*, 11(2). <https://dx.doi.org/10.1007/s40299-023-00745-x>
- [7] Farkhani, Z. A., Badiei, G., & Rostami, F. (2022). Investigating the teacher's perceptions of classroom management and teaching self-efficacy during Covid-19 pandemic in the online EFL courses. *Asian-Pacific Journal of Second and Foreign Language Education*, 7(1). <https://dx.doi.org/10.1186/s40862-022-00152-7>
- [8] Fussell, S. G., & Truong, D. (2021). Using virtual reality for dynamic learning: An extended technology acceptance model. *Virtual Reality*. <https://dx.doi.org/10.1007/s10055-021-00554-x>
- [9] Lee, H., & Hwang, Y. (2022). Technology-Enhanced Education through VR-Making and Metaverse-Linking to Foster Teacher Readiness and Sustainable Learning. *Sustainability*, 14(8), 4786. <https://dx.doi.org/10.3390/su14084786>
- [10] Marks, B., & Thomas, J. (2021). Adoption of virtual reality technology in higher education: An evaluation of five teaching semesters in a purpose-designed laboratory. *Education and Information Technologies*. <https://dx.doi.org/10.1007/s10639-021-10653-6>
- [11] Meletioui-Mavrotheris, M., Eteokleous, N., & Stylianou-Georgiou, A. (2022). Emergency Remote Learning in Higher Education in Cyprus during COVID-19 Lockdown: A Zoom-Out View of Challenges and Opportunities for Quality Online Learning. *Education Sciences*, 12(7), 477. <https://dx.doi.org/10.3390/educsci12070477>
- [12] Nguyễn T T H (2019). Application of Moodle virtual learning environment system in English courses at Ho Chi Minh City University of Education. Master Thesis
- [13] Nguyễn T T H, Nguyễn T K A, & Lê T M H. (2020). Current Status of Online Learning Model of Ho Chi Minh City University of Education., *Journal of Education Science, HCMCUE*
- [14] Ogbodoakum, N., Fauzi, A., Ayub, M., & Abiddin, N. Z. (2022). The influence of individual and organizational factors on readiness to accept online learning among higher education lecturers in Nigeria. *Knowledge Management & E-Learning*, 14(3), 341-362. <https://dx.doi.org/10.34105/j.kmel.2022.14.017>
- [15] Trần T K A (2018). Evaluating the effectiveness of applying the VLE system for teaching and learning at Ho Chi Minh City University of Education. Master Thesis
- [16] Vehapi, S., & Bajrami, R. (2023). Kosovo Students' Readiness for Online Learning during the Covid-19 Pandemic. *International Journal of Emerging Technologies in Learning*, 18(18). <https://dx.doi.org/10.3991/ijet.v18i18.43263>
- [17] Yeung, M. W. L., & Yau, A. (2021). A thematic analysis of higher education students' perceptions of online learning in Hong Kong under COVID-19: Challenges, strategies, and support. *Education and Information Technologies*. <https://dx.doi.org/10.1007/s10639-021-10656-3>
- [18] Zhao, J., & Liu, E. (2022). What factors can support students' deep learning in the online environment: The mediating role of learning self-efficacy and positive academic emotions? *Frontiers in Psychology*. <https://dx.doi.org/10.3389/fpsyg.2022.1031615>