## The impacts of the global pandemic on online learning in Vietnam



Dat Bao a,b



- a. Dong Nai Technology University, Nguyen Khuyen Street, Block 5, Trang Dai Ward, Bien Hoa City, Dong Nai Province, Vietnam
- <sup>b</sup> Monash University, Wellington Rd, Clayton VIC 3800, Australia
- ¹ baodat@dntu.edu.vn; ² dat.bao@monash.edu

### ARTICLE INFO

Received 20 June 2023 Revised 25 July 2023 Accepted 22 August 2023

### Keywords

Article history

online learning student engagement digital competence opportunities

### **ABSTRACT**

The global outbreak of COVID-19 has caused tremendous disruptions in the field of education, including in Vietnam. In response to the ongoing pandemic, online learning has emerged as the primary mode of education delivery, transforming the traditional learning landscape. This article reports a study that adopts a combination of reflection and text-based research. The project explores the impacts of the pandemic on online learning in the new normal within the Vietnamese education system. The work focuses mainly on learning motivation, student engagement, and digital competence. While the pandemic has led to increased acceptance and utilization of online learning platforms, it has also presented challenges, including issues of digital inequality and limited social interaction. Findings suggest that the Vietnamese education system needs to adapt to fully harness the potential of online learning in the new normal.



This is an open access article under the CC-BY-SA license.



How to Cite: Bao, D. (2023). The impacts of the global pandemic on online learning in Vietnam. English Language Teaching Educational Journal, 6 (2), 84-94. https://doi.org/10.12928/eltej.v6i2.9217

### 1. Introduction: the Vietnamese educational context at the time of the pandemic

This article examines the impacts of the recent pandemic on Vietnamese students' online learning, which is now known as the new normal. Specifically, this research aims to explore Vietnamese secondary and tertiary students' online learning regarding three aspects, namely learning motivation, student engagement, and digital competence. To achieve the aims mentioned above, this research will seek answers to the following question: What were the impacts of the COVID-19 pandemic on Vietnamese students' online learning nowadays?

In 2020, the COVID-19 outbreak prompted all schools worldwide to shut down to minimise the spread of the virus, which disrupted students' learning. In response to school closures, UNESCO (2020) urged the implication of virtual learning and encouraged teachers to connect with students from remote areas to lower the possibility of educational interruption. To fulfill the request of UNESCO, Vietnamese education has attempted to maintain the learning spirit by claiming that 'although students cannot go to schools, their education will not be disrupted'. Vietnamese Ministry of Education and Training also issued online teaching and learning guidelines to educational institutions nationwide (Nguyen, 2020). Unlike universities, secondary schools are unfamiliar with implementing virtual learning. As a result, the rapid switch from face-to-face to distance learning could affect Vietnamese learners. Therefore, it is crucial to comprehensively understand students' virtual learning experiences as they might struggle in their studies throughout the COVID-19 pandemic. While many researchers have examined the online learning experiences of Vietnamese undergraduates and postgraduates



during the COVID-19 outbreak (Le et al., 2021; Nguyet Minh, 2021; Van et al., 2021), few projects have investigated Vietnamese students' experiences.

### 1.1. The need for a flexible learning mode

Online learning is 'learning that takes place partially or entirely over the Internet' (Means et al., 2009, p.9). It includes a wide range of applications utilizing the Internet to provide access to educational materials and promote teacher-student interaction inside and outside classrooms. The term is also used similarly in several studies, such as online education, virtual learning, remote learning, and computer-based learning (Naveed et al., 2017).

Researchers have discovered the advantages of online learning before and during the COVID-19 outbreak (Sha et al., 2012; Tian et al., 2020). More specifically, online education offers flexible learning (You & Kang, 2014) and fosters learners' self-regulation (Sha et al., 2012). Besides, Tian et al. (2020) argued that utilizing technical information can assist in minimizing educational inequality as well as enhance students' academic achievement. However, this idea is opposed by Rovai et al. (2005) as they claimed that there is no discernible difference in students' academic performances between online and face-to-face learning. Likewise, Crawford-Ferre and Wiest (2012) also pointed out that it is more time-consuming to teach online than in person as teachers need to operate the technological applications and engage with students simultaneously.

Due to the quarantine, the COVID-19 pandemic has pushed students worldwide, including Vietnamese students, to adjust to distance learning (Mark, 2020). At that time, online learning instruments were considered the top priority of every country (Rouadi & Anouti, 2020). Several online learning tools, including Microsoft Teams, Google Classroom, Blackboard, and Canvas, assist teachers in designing classroom activities, learning modules, and training programs (Coman et al., 2020). These online platforms provide chatting, video calling, and file storage functions that help teachers organise their work and communicate with students and co-workers. While it is undeniable that changing to online learning is a practical solution during the COVID-19 pandemic, the rapid shift from traditional learning methods to online learning still creates many challenges for students (Amarneh et al., 2021). The impacts of the COVID-19 pandemic on Vietnamese students in this essay are discussed based on learning motivation, student engagement, and digital competence.

### 1.2. New challenge to student motivation

Learning motivation is 'student intention or desire to participate in and make efforts on learning, which was performed on student choice of specific learning activity and the efforts on such activity' (Lin & Chen, 2017, p.3556). In the classroom setting, learning motivation is developed from classroom experiences or inhered by the students (Hedge, 2001). In a virtual learning setting, learning motivation is mainly influenced by individual characteristics and specific contexts (Hartnett, 2011).

Lim (2004) devised three theories to illustrate ways to motivate students in online learning. The three types of motivation are 'reinforcement,' 'interest,' and 'affect.' The first type of motivation is 'reinforcement,' which remains and enhances the feedback frequency. Some of its motivating factors are marks, teachers' feedback, peer mentoring, and technical assistance. It is stated that students will achieve higher academic performances if they receive instructive rewards, including marks and comments (Rotter, 1990). 'Interest' is another type of motivation promoting learner involvement. It is argued that challenges, fantasy, and curiosity are needed to motivate students profoundly. The last type of motivation is 'affect,' which comprises students' emotions, worries, and interests during studying.

Vietnamese students' learning motivation was negatively affected when they studied online during the COVID-19 pandemic. First, regarding 'interest,' many Vietnamese students said they struggle to maintain interest in online learning (Tran et al., 2021, p. 29) and want to study face-to-face (Van & Thi, 2021). Students needed to become more familiar with virtual learning, and teachers attempted to teach them quickly with inadequate content and resources (Tran et al., 2021). Secondly, regarding 'effect,' most Vietnamese students complained that they were requested to complete many tasks with demanding requirements, which made them feel that their responsibility is a burden rather than joy (Van & Thi, 2021, p.135). This problem negatively impacted students' motivation since they considered learning a mission rather than for their benefit. Finally, regarding reinforcement, Vietnamese students complained about needing more academic support since the teachers spoke rapidly and some teaching resources were beyond the textbooks, making it challenging to comprehend

the lessons (Que, 2021). Therefore, teachers' lack of academic support led to a lack of 'reinforcement,' which affected students' motivation to learn.

Although there has not been any research study on Vietnamese students' learning motivation during the COVID-19 pandemic, the findings above from studies on Vietnamese secondary, undergraduate, and postgraduate students indicate that older students with higher cognitive abilities than secondary students do not experience less difficulty in their learning motivation within the virtual space. Hence, the application of online knowledge in Vietnam is new to all stakeholders (Pham & Ho, 2020). Additionally, these findings align with other research on secondary students' barriers to online learning during COVID-19 in Malaysia (Basar et al., 2021) and Slovakia (Velichová et al., 2020). Therefore, it could be inferred that the effectiveness of three types of motivation, including the efficacy of 'reinforcement,' 'interesting,' and 'affect,' were not maximised in Vietnamese students' learning, which resulted in demotivation in online learning during the COVID-19 pandemic.

A reasonable approach to tackling this issue is that Vietnamese schools should provide comprehensive training programs to encourage teachers' and students' technological competencies and efficient use of virtual teaching and learning. In addition, to maintain students' learning motivation, a clear and concise strategy should be made with systematic and practical teaching materials (subject matter, methods, and objectives) and more appropriate e-learning operating systems utilizing suitable virtual teaching aids (movies, motion graphics, quizzes, and digital games). Furthermore, Vietnamese schools and universities should develop more academic support programs such as peer and cross-age mentoring. These programs can help students become more motivated and enhance their tutoring abilities by allowing them to take on the role of instructional leader (Peterson et al., 2014). Additionally, teachers can use some rewarding strategies besides grades to boost learners' learning motivation in online learning (Lim, 2004). For example, they frequently check students' learning performance and give instant feedback and encouragement throughout the learning process. Another method to promote students' learning motivation is sharing positive examples of students' tasks or achievements.

### 2. Methodology: a reflective and text-based study

Adopting a reflective approach, this study informs the looming challenges that Vietnamese are likely to encounter when they study online during a pandemic. The approach emphasises the role of introspection, reflexivity, and interpretation in the research process. It recognises that researchers' subjective experiences, biases, and preconceptions influence the research outcomes. By intentionally engaging in reflective practices, researchers can gain a deeper understanding of their own perspectives and biases, leading to richer insights and more nuanced findings. The reflective approach is characterised by three features, namely self-reflection, reflexivity, and interpretation:

In performing self-reflection, the researcher consciously reflects on experiences, thoughts, and interpretations throughout the research process. Such introspection helps uncover hidden assumptions and biases, promoting greater transparency and critical awareness.

Reflexivity involves acknowledging and critically examining the researcher's role in shaping the research process and outcomes. The researcher is aware that their own positionality and subjectivity can impact data collection, analysis, and interpretation.

Through interpretation and Meaning-Making, the approach recognises that research findings are not merely facts but interpretations of social phenomena. Researchers engage in sense-making, interpreting data in light of their own experiences and existing knowledge to generate deeper insights.

At the same time, the study also follows a text-based approach. This tradition refers to the collection and analysis of information primarily derived from textual sources such as books, articles, reports, and digital databases. With the exponential growth of digital content, researchers now have access to an unprecedented amount of information. This abundance has necessitated the development of new strategies to manage and process this vast wealth of textual data.

The investigation helps policymakers design deliberate policies on the application of online learning to maximise its effectiveness even when COVID-19 is over. Pedagogically, educational institutions find this study beneficial in creating training programs and workshops to enhance the

effectiveness of online learning. Moreover, this investigation offers teachers and educators insights to support their virtual students and develop effective online teaching and learning strategies. Additionally, it proposes valuable suggestions for learners to make online learning a worthwhile experience. The research findings contribute to a deeper understanding of the subject matter and serve as a foundation for further studies in the future.

The article argues that the COVID-19 pandemic impacted some aspects of Vietnamese students' learning in challenging ways while students' digital competence assisted their learning. I will start my argument by discussing online learning throughout the COVID-19 pandemic and the impacts of the pandemic on Vietnamese students' online learning regarding learning motivation, student engagement, and digital competence. Finally, implications for this issue and the research's summary are mentioned at the end of the essay.

### 3. Data and findings

### 3.1. Finding one: new challenge to student engagement

Sun and Rueda (2012, p. 193) defined student engagement as 'the quality of effort students make to perform well and achieve desired outcomes.' Student engagement is notably crucial in distance learning since learners have fewer chances to connect actively with their teachers and classmates online. Meyer (2014) claimed that a lack of student engagement in virtual classrooms can result in isolated, passive students. Although virtual learning has been proven to promote specific kinds of social interaction, like student-teacher interaction, it takes work to maintain an appealing online study experience (Buelow et al., 2018).

There have been several studies that examined factors that promote student engagement in online learning, namely social support (Nortvig et al., 2018), learning environment (Khlaif et al., 2021), and Internet connections (Cullinan et al., 2021). The first factor is social support from teachers, parents, and classmates, which has been identified as a significant determinant of student engagement (Ansong et al., 2017). It is indicated that good student-teacher, student-student, and student-learning content interactions can boost their engagement in virtual learning (Nortvig et al., 2018). The learning environment is the second factor influencing students' online learning engagement (Tas, 2016). According to Tas (2016), studying in an active learning environment with sufficient academic support could improve learners' engagement. In addition, Khlaif et al. (2021) pointed out that poor access to the Internet could impact students' learning experience, resulting in low engagement in online learning.

Vietnamese students' engagement in online learning was affected during the COVID-19 pandemic. First of all, while it is undeniable that students need to freely decorate and control their private study rooms in online learning (Amarneh et al., 2021), Van & Thi (2021) argued that Vietnamese students' learning environment were interrupted by their family members and loud noises from the neighborhoods during the COVID-19 pandemic. This problem is further explained as personal study spaces are rare in Vietnamese families, and they are required to do the housework even during their online classes (Van & Thi, 2021). I also witnessed this problem as many students from university in Vietnam were always told to perform small tasks during their online lessons when we were quarantined during COVID-19. The same problem also happened in other classes, as I learned when talking to other teachers about my students' issues. As a result, students need to be more capable of focusing on their studies without positive study spaces, resulting in decreased learning efficiency (Chang & Fang, 2020). For this reason, Vietnamese students' engagement was negatively affected since they were experiencing unforeseen obstacles during their study.

Secondly, there needs to be more interaction in online learning for Vietnamese students. Although studying online can encourage shy and inactive students to connect with other classmates and teachers through the online chatting function, sitting for an extended period teaching and learning behind the computer screens can limit teacher-student and student-student interactions (Pham & Van Nghiem, 2022). Hence, in contrast with students studying in traditional classrooms, online students receive restricted, inadequate, and ineffective feedback, negatively impacting their academic achievement (Martínez-Argüelles et al., 2013). This understanding implies that online learning prevents physical and genuine interaction between the teacher and the learner. Thirdly, Vietnamese students faced the weakness of the Internet during COVID-19, which can hinder their engagement in their studies (Pham

& Van Nghiem, 2022). This finding also aligns with the study of Indonesian secondary students (Hermanto & Srimulyani, 2021). Further evidence shows that poor Internet connection results in their failure to attend online classes and poor sound quality (Dinh & Nguyen, 2020).

The above insights collected from Vietnamese high school, undergraduate, and postgraduate students pointed out that students with older ages and higher cognitive abilities than Vietnamese secondary students encountered some difficulties in online learning during the COVID-19 pandemic. Furthermore, all stakeholders must familiarise themselves with implementing online learning in Vietnam (Pham & Ho, 2020). In addition, the above findings are consistent with other research examining Asian secondary students, such as Indonesian (Agustina & Cheng, 2020) and Indian students. Additionally, it has been proved that there is a connection between student engagement and learning motivation (Nayir, 2017). Lacking motivation in online learning during the COVID-19 pandemic could also affect Vietnamese students' engagement. Overall, it is clearly stated that Vietnamese students' engagement in online education was affected during COVID-19 as they had to face the interrupting learning environment, the lack of teacher-student and student-student interactions, and the weakness of Internet connection.

There are several pedagogical implications for solving this problem. First, to ensure the quality of teaching and learning over the long term, schools must implement advanced technologies, upgraded teaching tools in their core curriculum, and a blended learning approach (Hermanto & Srimulyani, 2021). Second, teachers should offer explicit guidance and seek student feedback to foster a supportive virtual network and promote student engagement. Besides, teachers should be aware of students' online learning difficulties to encourage and engage them in studying. Providing appropriate and consistent feedback is another strategy to engage learners in active learning and maintain their learning motivation. In addition, to compensate for the lack of teacher-student and student-student interactions, teachers should enable interactive communication channels such as chat, debate, and group discussions among students and teachers (Lim, 2004). These kinds of activities have been proven to replace the physical interaction between students and their classmates and teachers (Coman et al., 2020). Finally, parents must communicate more with their children and participate in several parenting programs to understand their problems and know how to support their learning.

### 3.2. Finding two: the pandemic as an opportunity to develop digital competence

Digital competence 'involves the confident and critical use of Information Society Technology (IST) for work, leisure, and communication. It is underpinned by basic skills in information and communications technology (ICT): using computers to retrieve, assess, store, produce, present, and exchange information and to communicate and participate in collaborative networks via the Internet (Ferrari, 2012, p.12). It is stated that Vietnamese students' digital competence in online learning assisted them during the COVID-19 outbreak. First, all Vietnamese students have direct access to knowledge via online platforms. While Kanmani (2018) declared that there is a big gap between students' digital skills because of the different locations of living areas, Tran et al. (2020) opposed this idea by proving that Vietnamese students from both cities and the countryside receive an equal distribution of internet technology education. Secondly, Vietnamese students have had Information Technology as a compulsory subject since 2018, so they have practiced digital skills since grade 3 and find it easy to use digital devices (Tran et al., 2020).

Therefore, their remarkable digital skills help to improve their online learning experiences (Tran et al., 2020). Although many Vietnamese students did not encounter any difficulties regarding digital competence during the COVID-19 pandemic, Dincer (2012) noticed that students tend to spend more time on the Internet and have more advanced digital skills than their parents. This situation could be challenging for parents to manage their children's activities on the Internet and protect them from online risks. To solve this problem, parents should join several practical parenting programs on digital skills to safeguard their children from exposure to toxic online information and promote a positive attitude toward Internet usag. In addition, teachers need to put more effort into training and supervising students' exposure to the Internet (Reynolds & Parker, 2018). Moreover, teachers should have more discussions with students on topics related to Internet usage to decrease their possible access to online threats. Overall, even though Vietnamese students' digital competence helped improve their online learning during the COVID-19 outbreak, several actions are needed for both parents and teachers to guide and protect students from Internet risks.

# **4.** Discussion and implications from findings: proposed strategies for improving online learning

This section offers suggestions for improving the Vietnamese educational online learning system, especially at the secondary level. Based on the research findings and implications mentioned above, several additional suggestions are made for the Vietnamese government, the Ministry of Education, schools, universities, teachers, and students. Recommendations for further research are mentioned at the end of this section.

### 4.1. The need for a more accommodating policy

First of all, the government should adopt deliberate policies on online learning to ensure that digital education can continue and its effectiveness can be maximised even when COVID-19 is over. Hence, the government should guarantee that every necessary facility and infrastructure is available. Regarding the weak connection to the Internet, the government should develop better solutions to bring equal Internet access to all Vietnamese students. Another way to cope with the absence of the Internet is that the Vietnamese Ministry of Education can provide hardcopy pedagogical resources to students from remote areas and deliver lessons through TV channels and radios to reach out to as many students as possible. This solution has been well carried out by France and New Zealand (Cerna, 2020). Finally, the Vietnamese Ministry of Education might need to approve schools' requests to maintain some face-to-face classrooms available for students with severely poor learning environments and those whose parents worked in essential services during the pandemic's peak.

### 4.2. The need for academic support programs

First, to ensure the quality of teaching and learning over the long term, Vietnamese schools and universities must utilise innovative technologies and modernised teaching aids in their core curriculum and promote a blended learning approach (Hermanto & Srimulyani, 2021). More importantly, Vietnamese teacher education programs should focus on comprehensive teacher training programs and develop further academic and technical assistance with up-to-date practical upgrades to create high-quality teaching and learning content. Educational support programs and digital course training workshops should be established to motivate their online studies and educate them on avoiding online risks.

### 4.3. Enhanced pedagogy

Concerning the degree of excitement in online learning, Vietnamese teachers should cut down the teaching content to make it simple and incorporate exciting ideas into the lessons to engage students. Moreover, supplementing the classes with more interactive projects and games or communication channels (chatting, debates, group discussions) could boost teacher-student and student-student interactions and improve the lessons' quality (Lim, 2004). Additionally, Vietnamese teachers should frequently check on students' learning performance, give instant feedback and encouragement throughout the learning process, and share positive examples of students' achievements. Finally, concerning the online risks on the Internet, teachers should focus more on training students' exposure to the Internet to decrease their possible access to online threats (Reynolds & Parker, 2018).

### 4.4. More communication between schools and parents

Regarding the interrupted learning environment of students, it is suggested that parents should communicate better with their children to understand their problems and give appropriate assistance to improve their online learning experiences. An excellent way to enhance parenting skills is to join several parenting programs so that they can understand their children better and adopt practical parenting strategies. Moreover, participating in parenting programs also helps parents prevent their children from online risks and create a positive attitude toward Internet usage.

### 4.5. The need to assist students' new mindsets

The findings suggest that Vietnamese students should prepare for a positive mindset as they need to quickly adapt to the rapid changes in educational systems and find the stimulation in learning to overcome upcoming challenges in their studies. Besides, it is crucial for students to actively solve their problems in online learning by searching for help from parents, teachers, and peers. In addition, improving time management skills and avoiding distractions would be helpful for students to keep track of their tasks and effectively study online.

### 4.6. Recommendations for further research

Several recommendations for future study are suggested. First, a survey of the impact of online learning throughout and after the COVID-19 pandemic on Vietnamese students' mental health, learning habits, and academic performances would be beneficial. Second, the researcher recommends examining how Vietnamese students' online learning experiences shift over time. This choice would allow the researcher to investigate changes within students from the beginning to the end of the COVID-19 pandemic. Finally, a significant next step is to examine how Vietnamese students cope with their difficulties in online learning during the COVID-19 pandemic to develop several student support programs for better distance education in the future.

### 5. Conclusion

The COVID-19 pandemic has forced all Vietnamese schools to shut down for one year and a half. As a result, all Vietnamese schools shifted from face-to-face to online learning. Apart from universities, Vietnamese schools and universities need to familiarise themselves with implementing virtual learning. It is argued in this research that the rapid switch to online learning during COVID-19 could negatively affect Vietnamese students' learning motivation and engagement. At the same time, their remarkable digital competence assisted their knowledge.

As mentioned in this work, some barriers are challenges in adjusting to online learning, overload of online tasks, inadequate teaching and learning resources, interrupting learning environment, lack of teacher-student and student-student interactions, and weakness of the Internet connection. While the researcher discovered that Vietnamese students improve their online learning experiences, they could easily be exposed to online risks on the Internet. Therefore, several implications for the Vietnamese government, the Ministry of Education, schools, universities, teachers, parents, and students were made to maximise the effectiveness of online learning even when the pandemic is over. The researcher also made some recommendations for further research in the future. Finally, the researcher was aware of the underlying limitation as additional research and statistics are needed to confirm these findings.

### Acknowledgment

This project relies on existing published works and do not employ empirical data. Being grateful to the academics whose works are cited, the author of this article does not have research participants to say thank you to.

### **Declarations**

**Author contribution** : Dat Bao is the sole author and hence responsible for all the writing process

of this manuscript.

Funding statement : This reflective study was self-supported and did not rely on any

institutional funding.

**Conflict of interest**: The author declares no conflicts of interest.

**Ethics declaration**: This research did not require ethics approval as it did not involve any

participants other than the author and the work was about a pleasant

journey of self-reflection without any disturbing experience.

We support English Language Teaching Educational Journal (*ELTEJ*) in maintaining high standards of personal conduct, practicing honesty in all

our professional practices and endeavors.

Additional information

: No additional information is available for this paper.

### REFERENCES

- Agustina, P. Z. R., & Cheng, T. H. (2020). How are students' perspectives on online learning amid the COVID-19 pandemic? *Studies in Learning and Teaching*, *1*(3), 133-139. https://doi.org/10.46627/silet
- Amarneh, B. M., Alshurideh, M. T., Al Kurdi, B. H., & Obeidat, Z. (2021, June). The impact of COVID-19 on E-learning: Advantages and challenges. *The International Conference on Artificial Intelligence and Computer Vision*, 1377,75-89. https://doi.org/10.1007/978-3-030-76346-6\_8
- Ansong, D., Okumu, M., Bowen, G. L., Walker, A. M., & Eisensmith, S. R. (2017). The role of parent, classmate, and teacher support in student engagement: Evidence from Ghana. *International Journal of Educational Development*, 54, 51–58. http://dx.doi.org/10.1016/j.ijedudev.2017.03.010
- Basar, Z. M., Mansor, A. N., Jamaludin, K. A., & Alias, B. S. (2021). The effectiveness and challenges of online learning for secondary school students—a case study. *Asian Journal of University Education*, 17(3), 119-129. https://doi.org/10.24191/ajue.v17i3.14514
- Buelow, J. R., Barry, T., & Rich, L. E. (2018). Supporting learning engagement with online students. *Online Learning*, 22(4), 313-340. https://doi.org/10.24059/olj.v22i4.1384
- Cerna, L., Rutigliano, A., & Mezzanotte, C. (2020). The impact of COVID-19 on student equity and inclusion: Supporting vulnerable students during school closures and school reopenings. *Organization for Economic Co-operation and Development*. https://read. OECD-library.org/view.
- Chang, C.L., & Fang, M. (2020). E-Learning and online instructions of higher education during the 2019 novel coronavirus disease (COVID-19) epidemic. *Journal of Physics: Conference Series*, 1574(1), 012166. https://doi.org/10.1088/1742-6596/1574/1/012166
- Coman, C., Ţîru, L. G., Meseşan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, *12*(24), 10367. https://doi.org/10.3390/su122410367
- Crawford-Ferre, H. G., & Wiest, L. R. (2012). Effective online instruction in higher education. *The Quarterly Review of Distance Education*, 13(1), 11–14.
- Cullinan, J., Flannery, D., Harold, J., Lyons, S., & Palcic, D. (2021). The disconnected: COVID-19 and disparities in access to quality broadband for higher education students. *International Journal of Educational Technology in Higher Education*, 18(1). https://doi.org/10.1186/s41239-021-00262-1
- Dincer, S. (2012). A study of the relationship between pupils and parents' computer literacy level and use. *Procedia-Social and Behavioral Sciences*, pp. 46, 484–489. https://doi.org/10.1016/j.sbspro.2012.05.146
- Dinh, L. P., & Nguyen, T. T. (2020). Pandemic, social distancing, and social work education: Students' satisfaction with online education in Vietnam. *Social Work Education*, *39*(8), 1074-1083. https://doi.org/10.1080/02615479. 2020.1823365
- Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks. *Sevilla: JRC IPTS*, p. 10, 82116. http://is.jrc.ec.europa.eu/pages/EAP/DIGCOMP.html

- Hartnett, M. (2011). Examining motivation in online distance learning environments: Complex, multifaceted, and situation-dependent. *International Review of Research in Open and Distributed Learning*, 12(6), 20–38. https://doi.org/10.19173/irrodl.v12i6.1030
- Hedge, T. (2001). Teaching and learning in the language classroom. Oxford University Press, 5(3).
- Hermanto, Y. B., & Srimulyani, V. A. (2021). The challenges of online learning during the COVID-19 pandemic. *Jurnal Pendidikan Dan Pengajaran*, *54*(1), 46-57.
- Kanmani, M. (2018). Awareness of ICT literacy among graduate students in Tamil subject. *International Journal of Recent Scientific Research*, p. 9, 27055–27057.
- Khlaif, Z. N., Salha, S., & Kouraichi, B. (2021). Emergency remote learning during COVID-19 crisis: Students' engagement. *Education and information technologies*, 26(6), 7033-7055. https://doi.org/10.1007/s10639-021-10566-4
- Le, D. L., Giang, T. V., & Ho, D. K. (2021). The impact of the COVID-19 pandemic on online learning in higher education: A Vietnamese case. *European Journal of Educational Research*, 10(4), 1683–1695. https://doi.org/10.12973/eu-jer.10.4.1683
- Lim, D. H. (2004). Cross-cultural differences in online learning motivation. *Educational Media International*, 41(2), 163–175. https://doi.org/10.1080/09523980410001685784
- Lin, M. H., & Chen, H. G. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, *13*(7), 3553-3564. https://doi.org/10.12973/eurasia.2017.00744a
- Mark, A. A. (2020). *Vietnam: An outlier in the coronavirus epidemic and HE?* University World News. https://www.universityworldnews.com/post.php?story=20200313063615630
- Martínez-Argüelles, M. J., Plana-Erta, D., Hintzmann-Colominas, C., Badia-Miró, M., & Batalla-Busquets, J. M. (2013). Usefulness of feedback in e-learning from the students' perspective. *European Conference on e-Learning (ECEL)*, 11(4), 283-292.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. *U.S. Department of Education, Office of Planning, Evaluation, and Policy Development*. http://repository.alt.ac.uk/id/eprint/629
- Meyer, K. A. (2014). Student engagement in online learning: What works and why. *ASHE Higher Education Report*, 40(6), 1–114. https://doi.org/10.1002/aehe.20018
- Naveed, Q. N., Muhammed, A., Sanober, S., Qureshi, M. R. N., & Shah, A. (2017). Barriers affecting successful implementation of e-learning in Saudi Arabian universities. *International Journal of Emerging Technologies in Learning (iJET)*, 12(06), 94–107. https://doi.org/10.3991/ijet.v12i06.7003
- Nayir, F. (2017). The relationship between student motivation and class engagement levels. *Eurasian Journal of Educational Research*, 17(71), 59–78. https://dergipark.org.tr/en/pub/ejer/issue/42485/511749
- Nguyen, D. (2020, April). *Day và học online: Vẫn còn trở ngại, cần đầu tư dài hạn* [Online teaching and learning: There are still obstacles; long-term investment is needed]. The Saigon Times. <a href="https://thesaigontimes.vn/day-va-hoc-online-van-con-tro-ngai-can-dau-tu-dai-han/">https://thesaigontimes.vn/day-va-hoc-online-van-con-tro-ngai-can-dau-tu-dai-han/</a>

- Nguyet Minh, N. T. (2021). Difficulties and some solutions suggest learning English for students of the English language department at Sai Gon University. *International Journal of Social Science and Human Research*, 05(01), 88-102. https://doi.org/10.47191/ijsshr/v5-i1-15
- Nortvig, A. M., Petersen, A. K., & Balle, S. H. (2018). A literature review of the factors influencing E-learning and blended learning in relation to learning outcome, student satisfaction, and engagement. *Electronic Journal of e-Learning*, 16(1), 46–55.
- Peterson, R. L., O'Connor, A., & Strawhun, J. (2014). Academic support & tutoring. *Special Education and Communication Disorders Faculty Publications*. http://digitalcommons.unl.edu/specedfacpub/160
- Pham, H. H., & Ho, T. T. H. (2020). Toward a 'new normal with e-learning in Vietnamese higher education during the post-COVID-19 pandemic. *Higher Education Research & Development*, 39(7), 1327-1331. https://doi.org/10.1080/07294360.2020.1823945
- Pham, N. T., & Van Nghiem, H. (2022). Online Teaching Satisfaction amid the Covid-19 Pandemic: Evidence from a Vietnamese Higher Education Context. *International Journal of TESOL & Education*, 2(1), 310-326. https://doi.org/10.54855/ijte.222119
- Que, L. T. M. (2021). Online Teaching and Learning in Higher Education During Covid-19 Pandemic: Vietnamese Students' Perspective. *IUP Journal of Information Technology*, 17(3), 23-48.
- Reynolds, L., & Parker, L. (2018). Digital resilience: Stronger citizens online. *Institute for Strategic Dialogue: London, UK*.
- Rotter, J. B. (1990). Internal versus external control of reinforcement: A case history of a variable. *American psychologist*, 45(4), 489.
- Rouadi, N. E., & Anouti, M. F. (2020). The online learning experiment in the intermediate and secondary schools in Lebanon during the coronavirus (COVID-19) crisis. *Online learning*, 7(7), 14466-14485.
- Rovai, A. P., Wighting, M. J., & Liu, J. (2005). School climate. *Quarterly Review of Distance Education*, 6(4), 361–374.
- Sha, L., Looi, C. K., Chen, W., & Zhang, B. H. (2012). Understanding mobile learning from the perspective of self-regulated learning. *Journal of Computer Assisted Learning*, 28(4), 366–378. https://doi.org/10.1111/j.1365-2729.2011.00461.x
- Sun, J. C.-Y., & Rueda, R. (2012). Situational interest, computer self-efficacy, and self-regulation: Their impact on student engagement in distance education. *British Journal of Educational Technology*, 43(2), 191–204. https://doi.org/10.1111/j.1467-8535.2010.01157.x
- Tas, Y. (2016). The contribution of perceived classroom learning environment and motivation to student engagement in science. *European Journal of Psychology of Education*, 31(5), 557–577. https://doi.org/10.1007/s10212-016-0303-z
- Tian, H., Liu, Y., Li, Y., Wu, C. H., Chen, B., Kraemer, M. U., ... & Wang, B. (2020). An investigation of transmission control measures during the first 50 days of the COVID-19 epidemic in China. *Science*, 368(6491), 638-642. https://doi.org/10.1126/science.abb6105
- Tran, T., Ho, M. T., Pham, T. H., Nguyen, M. H., Nguyen, K. L. P., Vuong, T. T., ... & Vuong, Q. H. (2020). How digital natives learn and thrive in the digital age: Evidence from an emerging economy. *Sustainability*, *12*(9), 3819. https://doi.org/10.3390/su12093819

- Tran, T. K., Dinh, H., Nguyen, H., Le, D. N., Nguyen, D. K., Tran, A. C., ... & Nguyen, T. A. (2021). The impact of the COVID-19 pandemic on college students: An online survey. *Sustainability*, *13*(19), 10762. https://doi.org/10.3390/su131910762
- UNESCO. (2020, March). With one in five learners kept out of school, UNESCO mobilizes education ministers to face the COVID-19 crisis. UNESCO. https://en.unesco.org/news/one-five-learners-kept-out-school-unesco-mobilizes-education-ministers-face-covid-19-crisis
- Van, D. T. H., & Thi, H. H. Q. (2021). Student barriers to prospects of online learning in Vietnam in the context of the COVID-19 pandemic. *Turkish Online Journal of Distance Education*, 22(3),110–126. https://doi.org/10.17718/tojde.961824
- Velichová, Ľ., Orbánová, D., & Kúbeková, A. (2020). The COVID-19 pandemic: Unique opportunity to develop online learning. *TEM Journal*, *9*(4), 1633. https://doi.org/10.18421/TEM94-40
- You, J. W., & Kang, M. (2014). The role of academic emotions in the relationship between perceived academic control and self-regulated learning in online learning. *Computers & Education*, 77, 125-133. https://doi.org/10.1016/j.compedu.2014.04.018