



AN INVESTIGATION INTO QUANG TRI PRIMARY SCHOOL ENGLISH LANGUAGE TEACHER'S PERSPECTIVE OF ICT INTEGRATION DURING THE COVID-19 PANDEMIC

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Abstract:

With the transition from face-to-face classes to online classes during Covid-19 epidemic, teachers in Quang Tri have no choice but to integrate ICT into their teaching. At this time ICT has become the most essential tool in educational settings and the subject of many researchers. This study aims to investigate how English teachers perceived ICT integration in terms of the benefits, difficulties as well as challenges of incorporating ICT. The study adopted both quantitative and qualitative methods of data collection, i.e., questionnaires and interviews. The findings revealed that the majority of English teachers had a positive perception of integrating ICT due to its effectiveness. However, it was also reported that lack of technical support from schools, and limited knowledge and training in ICT discouraged teachers from using ICT. The study offers useful implications for teachers to integrate ICT in teaching English during the pandemic time.

Keywords: ICT integration, EFL primary school teachers, Covid-19, online teaching

1. Introduction

The closure of schools due to Covid-19 has led to a significant shift in education with the rapid development of ICT integration in teaching and learning, where teaching takes place remotely and through communication platforms. At that time, when students were away from school for a long time to prevent the epidemic, online learning was considered the most effective option. In circular no. 15/CT-TTg dated March 27, 2020 of the Prime Minister on drastic implementation of the peak period of Covid-19 epidemic prevention

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and control required "*strengthening information technology application, online activities in directing, operating, working, studying...*". Quang Tri Department of Education and Training as well as other provinces implemented online learning. Online teaching and learning are the most appropriate solution in the current context, helping students self-study and self-review at home during the time they are absent from school to prevent and control the Covid-19 epidemic. Because all teaching and learning activities that were previously done through face-to-face teaching need to be transformed into online teaching with the help of technology, ICT has become the most indispensable tool in education, especially in teaching English during this pandemic. It expands access to education, where teaching and learning processes can be carried out anytime and anywhere. Without ICT, neither teachers nor students would be able to have online classes. Therefore, integrating ICT into teaching English is considered very necessary. However, online teaching for students in secondary schools or high schools is more effective; when they have a certain background and knowledge about ICT applications. But for primary school students, this is quite a difficult problem because students are young, and not self-disciplined, and choosing an attractive teaching method for teachers is a dilemma.

1.1 Research questions

- 1) What are primary English language teachers' perspectives of ICT competence?
- 2) What are primary English language teachers' perspectives on the benefits and difficulties for teachers and students toward ICT-ELT integration during the Covid-19 pandemic?

2. Literature review

2.1 Online teaching during COVID-19 school closure

The COVID-19 pandemic situation has posed unprecedented challenges requiring teachers to adapt to teaching online. Until March 2020, the typical school instructional is characterized by students being convened in classrooms according to their timetables and teachers having covered the standard content of their subjects, often through formal lecturing. Under the leadership and direction of the Government and Prime Minister, the education and training sector in our country has made many innovations, promoting the application of ICT, improving facilities and teaching equipment; changing and adjusting teaching activities, organizing online teaching, contributing to developing the capacity to use ICT in teaching and learning, promoting digital transformation in education and training; expanding educational access opportunities for students, creating conditions for children, pupils and students to study anywhere, anytime, and ensure epidemic prevention and control, and adapting to the situation of the epidemic Covid-19; at the same time, well implementing the motto "*stop going to school, don't stop studying*" to meet the program goals and work plans of the school year.

2.2 ICT

ICT is standing for Information and Communication Technology and refers to a “*diverse set of technological devices and resources used for communicating, and to create, store, and manage information*” (Blurton, 1999; Albirini, 2006; Simin and Mohammad Sani, 2015). These devices include the Internet, computers, and broadcast technologies. However, due to the development of technology and demand, the Internet and computer have gained more attention to be used as educational teaching tools than others. Livingstone (2012, p. 13) states that ICT includes technologies that are specific to the school environment (e.g., interactive whiteboards) and networked technologies. ICT can be defined as information processing tools - a diverse set of goods, applications, and services that are used for the production, storage, processing, distribution, and exchange of information. They include the "old" ICT of radio, TV, and telephone, and the "new" ICT of computers, satellites, wireless technology, and the Internet.

2.3 Implementation of ICT in primary schools in Vietnam

Many researchers also believe that Vietnamese teachers often use popular applications such as Word presentations, PowerPoint, search engines, images, sounds, and the use of more advanced applications attracts students. Learning is relatively low (Peeraer & Petegem, 2011; Dang, 2013; Huynh & Pham, 2018). When choosing ICT tools for teaching; teachers consider the lesson objectives, tool availability and accessibility as well as student needs, and level of familiarity.

Regarding teachers' perception of the use of ICT in teaching English to young learners in Vietnam, teachers see a number of benefits such as greater comfort in teaching, increased critical thinking, promoted teaching and learning, and facilitated problem-solving while acknowledging that this is a time-consuming approach (Truong & Qalati, 2020).

2.4. Advantages and disadvantages of ICT in teaching English

Without a doubt, ICT is a valuable and innovative teaching tool that enhances learning and teaching by teachers. The rapid development of ICT has naturally affected every aspect of the language teaching process. Thus, the use of technology has a positive impact on English teaching and learning. Integrating ICT into language teaching reduces teacher-centered understanding and students' anxiety about language learning, but encourages them to take risks and practice the target language because they are digital natives.

On the other hand, integrating ICT in the classroom can also have certain disadvantages. Teachers may have difficulty integrating and implementing technology tools into the curriculum. Thus, Livingstone (2012, p. 12) asserts that “*ICT is not appropriate for all learners in all situations and for all purposes, and may require some substantial learner training to use effectively*”. Classroom management issues, lack of experienced teachers, selecting the best technology tool to add to the syllabus, finding activities that are reliable and acceptable to students' learning styles, cost of new tools and technological

equipment, insufficient physical capacity of classrooms, etc. were only certain remarkable issues to be taken into consideration before employing ICT in language classrooms.

3. Research methodology

The methods used in this study are both quantitative and qualitative research. The qualitative research approach is applied in getting detailed information about feelings, opinions, and experiences of participants' actions (Denzin, 1989). There are different types of qualitative research methods such as open-ended questions in the questionnaire, interviews, or even observations.

In contrast, the quantitative method emphasizes objectivity and quantification of phenomena (Mcmillan and Schumacher, 1993). The results of the quantitative research method are likely to be generalized to a whole population or a sub-population because it includes a larger sample selected randomly (Carr, 1994). Therefore, the combination between the qualitative research method and the quantitative method makes this research more obvious and valid.

3.1 Research participants

The participants of this study are 70 teachers from some primary schools in Quang Tri province.

This research primary English language teacher's perspective of ICT integration during the Covid-19 pandemic; therefore, teachers are asked to complete the questionnaires to see the whole picture of the issue. After that, the researcher continues to conduct individual interviews of 10 voluntary English language teachers from these primary schools to have a deeper understanding of how the perspective of ICT integration during the Covid-19 pandemic and the difficulties they are facing in the teachers' characteristics were described in Table 3.1.

Table 3.1: Demographic characteristics of the respondents to the questionnaire for teachers (N=70)

		Number	Percentage
Gender	Male	12	17.1
	Female	58	82.9
Year(s) of teaching English	6 years - 10 years	26	37.1
	11 years – 15 years	21	30.0
	16 years - 20 years	8	11.4
	Over 20 years	15	21.4
Age	25 to 29 years old	8	11.4
	29 to 39 years old	40	57.1
	41 to 50 years old	22	31.4
Current English level	B1	0	0
	B2	8	11.4
	C1	62	88.6
	C2	0	0

Institution	School 1	6	8.6
	School 2	4	5.7
	School 3	8	11.4
	School 4	7	10
	School 5	6	8.6
	School 6	4	5.7
	School 7	8	11.4
	School 8	7	10
	School 9	4	5.7
	School 10	6	8.6
	School 11	5	7.1
	School 12	5	7.1

3.2 Data collection procedure

Stage 1:

The final questionnaires were sent to 70 teachers directly at 12 schools in Quang Tri province. Then, 70 completed questionnaires were sent back in a day.

Stage 2:

After analyzing the questionnaire data, the researcher invited 10 teachers who volunteered to join in the interview to clarify the information they supplied in the questionnaire. All interviews were carried out individually and face-to-face in Vietnamese. The interviewees' names were coded as teacher 1 (T1), teacher 2 (T2), teacher 3 (T3), teacher 4 (T4), teacher 5 (T5), teacher 6 (T6), teacher 7 (T7), teacher 8 (T8), teacher 9 (T9), teacher 10 (T10). Especially, the interviews were recorded, transcribed, and translated from Vietnamese to English. Finally, the researcher carried out data analysis.

3.3. Data collection instruments

The data collection instruments consist of questionnaires and interviews.

3.4. Data analysis

The data were analyzed in both qualitative and quantitative research methods to develop the validity of questionnaires and interviews, to study different aspects of this research as well as to cross-validate data. The quantitative method was used to identify the frequency of primary English language teachers' perspectives on ICT integration during the pandemic. The collected data through questionnaires were accounted for and analyzed by SPSS 20.0 to find out the results (mean and percentage value). The obtained results through the statistical analysis method were shown in tables in chapter 4. Whereas, the qualitative method was applied in analyzing the data by transcribing and translating the interview data. The researcher transcribed the data from teachers' interviews in Vietnamese and then translated them into English.

3.5. Research validity and reliability

a. Reliability

Nunnally and Bernstein (1994) suggested that .70 is an acceptable reliability coefficient level. In the same vein, Sekaran (2000) stated that if Cronbach's alpha reaches above .70, the instrument has internal consistency reliability. Besides, Hair et al. (2006) also had the same view as Murphy and Davidshoter (1989) regarding the criteria to measure reliability via Cronbach's alpha coefficient. Murphy and Davidshoter (1988, p.89) stated the evaluation principle as follows:

Table 3.5.1 The criteria to measure the reliability coefficient via Cronbach's alpha coefficient

Cronbach's alpha	Internal consistency
Below .6 (<.6)	Unacceptable level
.7	Acceptable/low level
.8 - .9	Moderate to high level
.9	High level

In this study, the questionnaire was divided into three main clusters. Cluster 1 comprised 5 items of Theme I, Cluster 2 involved 17 items of Theme II and Cluster 3 consisted of 16 items of Theme III. Cronbach's alpha analyzed the items in each cluster to have the exact results for the questionnaire. As can be seen obviously in the following table:

Table 3.5.2. Cronbach's alpha coefficient of three main clusters to evaluate the reliability of questionnaires

Variable (clusters)	Number of Items	Reliability Cronbach's Alpha	Comment (internal consistency)
Cluster 1	5	.847	Moderate
Cluster 2	17	.881	Moderate
Cluster 3	16	.859	Moderate

b. Validity

In this study, the information of participants listed obviously about gender, age, levels, and years of teaching experiences in Table 3.1 in Chapter 3. The subjects in this study are only English language teachers at primary schools. The instrumentation of the study is questionnaires designed following the Likert scale in 5 levels.

4. Results and discussion

4.1. Perceived ICT competencies

The responses to the first theme of the questionnaires (from items 1 to 5) represent teachers' perceptions of ICT competencies.

As shown in Table 4.1. the average score (mean value) of the statements is from 3.27 to 3.91. It means that the majority of teachers agreed with the statements on their ICT competencies. Teachers had taken the initiative to improve their own ICT capacity to

respond in the context of the pandemic. The majority of teachers believed that their ICT skills and pedagogy are enhanced after teaching online and found that ICT integration brings better quality lectures and materials, especially in the context of covid 19. The research results also showed that teachers in Quang Tri have used ICT to create various learning resources, and enrich the lesson, such as building games, songs, etc., so that teaching effectiveness increases significantly.

Table 4.1: Teachers' perception of ICT competencies (N=70)

No.	Items	1 %	2 %	3 %	4 %	5 %	M	SD
1	I mastered ICT tools before the Covid-19 pandemic.	0	4.3	25.7	57.1	12.9	3.79	.720
2	I knew many types of remote teaching tools.	4.3	5.7	18.6	57.1	14.3	3.71	.935
3	I didn't have any difficulties using ICT tools.	2.9	20.0	32.9	35.7	8.6	3.27	.977
4	I learned new ICTs skills and pedagogies after teaching remotely during the Covid-19 pandemic.	0	10.0	8.6	65.7	15.7	3.87	.797
5	I explored new ICT tools by myself more than what my school provides.	0	5.7	18.6	54.3	21.4	3.91	.794

4.2. Benefits for teacher's pedagogical expertise in using ICT

4.2.1 Quality teaching and materials

Table 4.2.1: Quality teaching and materials

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
6	The use of ICT during the pandemic improved my teaching quality and performance.	0	10.0	17.1	54.3	18.6	3.81	.856
7	The use of ICT during the pandemic helped me to expand various learning resources.	0	4.3	14.3	61.4	20.0	3.97	.722
8	The use of ICT during the pandemic helped me to prepare the learning materials easily.	0	7.1	17.1	60.0	15.7	3.84	.773
9	The use of ICT during the pandemic improved my teaching with more updated materials (games, chants, songs, online quizzes, ebooks, podcasts, and blogs.)	0	1.4	14.3	61.4	22.9	4.06	.657

According to Table 4.2.1, the mean value of the questionnaires is from 3.81 to 4.06 which means that the responders agreed with the benefits that ICT brings to providing quality materials for effective teaching. This suggested that most of the responders believed that in the context of the pandemic, integrating ICT into teaching would create diverse and quality sources of teaching materials, which was significant in teaching activities.

4.2.2 Student assessment

Table 4.2.2 showed that teachers agreed with the statements in two items 11 (mean = 3.63) and 10 (mean = 3.54). This proved the majority of teachers agreed that the use of ICT brings convenience for teachers to assess students in both summative assessment and formative assessment during the pandemic.

Table 4.2.2: Student assessment

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
10	The use of ICT during the pandemic provided convenience in assessing the students in semester examinations (summative assessment)	5.7	11.4	24.3	40.0	18.6	3.54	1.099
11	The use of ICT during the pandemic provided convenience in assessing the students' (formative assessment)	0	20.0	20.0	37.1	22.9	3.63	1.052
12	The use of ICT during the pandemic provided convenience in monitoring the students' progress for continuous assessment	0	22.9	21.4	40.0	15.7	3.49	1.018

4.2.3 Classroom management

Table 4.2.3: Classroom management

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
13	The use of ICT during the pandemic helped me to create various learning activities.	0	4.3	21.4	57.1	17.1	3.89	.772
14	The use of ICT is important in teaching English, especially during the COVID-19 pandemic.	0	11.4	15.7	57.1	15.7	3.77	.854
15	The use of ICT during the pandemic makes learning processes more effective and easier.	1.4	8.6	31.4	40.0	18.6	3.66	.931
16	The use of ICT during the pandemic enhances collaborative learning among students.	1.4	5.7	22.9	54.3	15.7	3.77	.837

Table 4.2.3 showed that the mean values were from 3.66 to 3.89. This means that almost of teachers agreed that the use of ICT helps them manage their classrooms effectively during the Covid-19 period. The item with the highest agreement rate is 13 with a mean value of 3.89. This result proved that using ICT helped teachers in Quang Tri design many activities in the teaching process during the pandemic.

4.3. Benefits for students in using ICT

The mean of each item is over the average (from 3.71 to 3.93). This showed that the majority of teachers were aware of the benefits of ICTs for students, particularly in the

context of education during the pandemic. The highest mean was item 19 of 3.93, followed by item 20 (mean = 3.86) and item 22 (mean = 3.86). The results pointed out that searching, accessing, and using a variety of materials when integrating ICT into education during the pandemic has brought great efficiency to both teachers and students.

Table 4.3: Benefits for students in using ICT

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
17	The use of ICT during the pandemic makes learning more enjoyable.	0	5.7	25.7	50.0	18.6	3.81	.804
18	The use of ICT during the pandemic increases students' interest and motivation toward learning English.	0	12.9	21.4	47.1	18.6	3.71	.919
19	The use of ICT during the pandemic facilitates my students to find information, knowledge, and other learning resources.	0	7.1	14.3	57.1	21.4	3.93	.804
20	The use of ICT during the pandemic helps my students to understand the materials in more effective ways.	0	7.1	17.1	58.6	17.1	3.86	.785
21	The use of ICT during the pandemic encourages the students to be more active and involved their engagement.	1.4	7.1	24.3	51.4	15.7	3.73	.867
22	I think audio and video materials can improve my students' learning.	0	11.4	12.9	54.3	21.4	3.86	.889

Research results showed that the majority of teachers believe that the integration of ICT during the Covid-19 pandemic brought significant benefits to their teaching process. The biggest benefit that teachers all agreed on is diverse materials for students to approach by finding from a variety of resources. In addition, most teachers also agreed that the integration of ICT makes the lesson more interesting and attractive, motivating students to participate in English learning activities. Lectures with ICT integration help students be more active, thereby bringing efficiency to the teaching process, especially for primary school students in a complicated epidemic environment.

4.4. Perception of challenges of ICT-ELT integration

4.4.1. Challenges in teaching English online to primary school students

Table 4.4.1: Challenges in teaching English online to primary school students

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
23	Teaching with ICT is very time-consuming.	1.4	17.1	30.0	28.6	22.9	3.54	1.073
24	There is more workload.	0	8.6	28.6	42.9	20.0	3.74	.879
25	Teaching activities are more stressful.	5.7	18.6	31.4	31.4	12.9	3.27	1.089

26	It is more difficult to teach primary children online.	2.9	4.3	22.9	35.7	34.3	3.94	1.006
27	Students need parents' help with technology.	1.4	5.7	20.0	47.1	25.7	3.90	.903
28	Students need more interactions and hands-on activities.	0	5.7	17.1	55.7	21.4	3.93	.786

Table 4.4.1 showed us that most teachers recognized the challenges when integrating ICT into teaching, especially in teaching primary school students. The items with the high agreement including item 26 (mean=3.94), item 28 (mean =3.93), and item 27 (mean =3.9) were the 3 biggest challenges in integrating ICT into teaching. Specifically, in item 26, 70% of teachers chose "agree", and only 7.2% chose "disagree". This figure reflects the general reality of teaching primary school through online platforms.

4.4.2. Internal factors affecting teacher integration of ICT

Table 4.4.2: Internal factors affecting teacher's integration of ICT

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
29	I do not have extra time to set up the ICT tools for my teaching.	1.4	12.9	42.9	34.3	8.6	3.36	.869
30	I lack confidence in integrating ICT tools into my teaching.	2.9	22.9	37.1	30.0	7.1	3.16	.958
31	I find it difficult to change from my current teaching practice to integrate ICT tools in teaching.	1.4	22.9	34.3	32.9	8.6	3.24	.955
32	Lack of knowledge and training in ICT discourages me from using ICT.	4.3	21.4	34.3	34.3	5.7	3.16	.973

Table 4.4.2 showed that the majority of teachers asked about the internal factors affecting the integration of ICT almost answered "not sure" with the statements. The mean of each item ranged only from 3.16 to 3.36 indicating most of the responders believed that the factors of time (29); confidence level in knowledge and ICT capabilities (30; 32) and barriers to teaching habits (31) did not cause great difficulties in integrating ICT into their lessons.

4.4.3. External factors affecting teachers' integration of ICT

The highlight of Table 4.4.3 was the standard deviations of the statements are all greater than 1 except for item 36 (.883), which meant that for external factors affecting the ICT integration process, teachers have markedly different points of view.

Table 4.4.3: External factors affecting teachers' integration of ICT

No	Items	1 %	2 %	3 %	4 %	5 %	M	SD
33	Classroom interactions are limited.	1.4	11.4	51.4	14.3	21.4	3.43	1.001
34	Students do not have computers or laptops connected to the Internet.	4.3	4.3	30.0	38.6	22.9	3.71	1.009
35	Students are easily distracted due to limited teacher's control.	1.4	10.0	32.9	31.4	24.3	3.67	1.003
36	ICT tools are changing too fast to be up-to-date.	0	8.6	30.0	41.4	20.0	3.73	.883
37	Students lack ICT skills.	2.9	7.1	41.4	25.7	22.9	3.59	1.014
38	Students give negative feedback on ICT supported teaching.	2.9	20.0	30.0	34.3	12.9	3.34	1.034

The results showed that the first challenge recognized by many teachers is the "technology" challenge. Many teachers believed that their students need technology support in learning online, the second challenge in the process of teaching ICT integration during the pandemic, which many teachers agreed with, is the problem of facilities. In the context of the pandemic, when the whole country implemented online teaching, the problem of facilities was a matter of concern.

5. Recommendations

This study was carried out in some primary schools in Quang Tri province. Thus, it is recommended to conduct the study at other primary schools in Vietnam. Further studies can fulfill these limitations with investigations into the perspectives of parents, students, and schools, broadening research to rural and remote areas.

6. Conclusion

On the teachers' perceptions towards teaching using ICT in teaching online during the pandemic time, we can conclude that the teachers in Quang Tri have a positive attitude towards using ICT in the classrooms and the intention to implement ICT in their teaching. The integration of ICT in the syllabus facilitated the adaptation and personalization of the contents and the creation of innovative environments that impacted learning and teaching practices. Besides, there are still many difficulties, online teaching and learning is not a regular job so when the Covid-19 epidemic broke out, teachers were extremely confused about implementation techniques. There are many reasons, but mainly, the ability to apply ICT in teaching is still limited for many teachers, and the use of online learning software is not fluent, leading to ineffective implementation.

Conflict of interest statement

The authors declare no conflicts of interest.

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References

- Adedoyin, O. B., & Soykan, E. (2020). *COVID-19 pandemic and online learning: The challenges and opportunities*. *Interactive Learning Environments*, 1-13. <https://doi.org/10.1080/10494820.2020.1813180>.
- Altun, M. (2015). *The integration of technology into foreign language teaching*. *International Journal on New Trends in Education and Their Implications*, 6(1),
- Asabere and Enguah (2012). *Use of Information & Communication Technology (ICT) in Tertiary Education in Ghana: A Case Study of Electronic Learning (E-Learning)*.
- Babbie, E. (1989). *The practice of social research* (5th edition). Belmont, CA: Wadsworth.
- Bertram, D. (2007). Likert scales. Retrieved November, 2, 2013.
- Blurton, C. (1999). *New Directions of ICT-Use in Education*, *World Communication and Information Report*. UNESCO.
- Bộ Giáo dục và Đào tạo (2020) .*Hướng dẫn dạy học qua internet, trên truyền hình đối với cơ sở giáo dục phổ thông, cơ sở giáo dục thường xuyên trong thời gian học sinh nghỉ học ở trường vì COVID-19 năm học 2019 - 2020*. (Ban hành công văn 1061/BGDĐTGDTrH ngày 25 tháng 3 năm 2020)
- Bộ Giáo dục và Đào tạo (2020). *Hướng dẫn dạy học qua internet, trên truyền hình đối với cơ sở giáo dục phổ thông, cơ sở giáo dục thường xuyên trong thời gian học sinh nghỉ học ở trường vì COVID-19 năm học 2019 – 2020* (Ban hành Công văn 1061/BGDĐTGDTrH ngày 25 tháng 3 năm 2020)
- Bộ giáo dục và đào tạo (2021). *Thúc đẩy chuyển đổi số trong quản trị, quản lý giáo dục và đào tạo*. (Ban hành Thông tư số 42/2021/TT-BGDĐT Ngày 30/12/2021,)
- Bộ giáo dục và đào tạo . *Đại dịch và công việc của nhà giáo* (2021).
- Bộ trưởng Nguyễn Kim Sơn, *Một năm giáo dục đảo lộn vì Covid-19* (2021). <https://vnexpress.net/mot-nam-giao-duc-dao-lon-vi-covid-19-4404607.html>

- Carr, L. T. (1994). *The strengths and weaknesses of quantitative and qualitative research: what method for nursing?* Journal of advanced nursing, 20(4), 716-721.
- Compton, L. (2009). Preparing Language Teachers to Teach Language Online: A Look at Skills, Roles, and Responsibilities. Computer Assisted Language Learning 22 (1): 73–99. doi:10.1080/09588220802613831. [Taylor & Francis Online].
- Cox, M. J., Preston, C., & Cox, K. (1999). Paper presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2-5 1999
- Cha, H., Park, T., & Seo, J. (2020). What Should Be Considered When Developing ICT-Integrated Classroom Models for a Developing Country? Sustainability, 12) <https://doi.org/10.3390/su12072967>
- Chakma, U., Li, B., & Kabuhung, G. (2021). *Creating online metacognitive spaces: Graduate research writing during the COVID-19 pandemic*. Issues in Educational Research, 31(1), 37–55.
- Chakraborty, P., Mittal, P., Gupta, M. S., Yadav, S. and Arora, A. (2021). *Opinion of students on online education during the COVID-19 pandemic*, Human Behavior, and Emerging Technologies, Vol. 3, pp. 357-365, doi: 10.1002/hbe2.240.
- Dau Thi Thanh Luy, 2021. *Remote Teaching amid the Covid-19 Pandemic in Vietnam: Primary School EFL Teachers' Practices and Perceptions*, AsiaCALL Online Journal,
- Denzin, N. K. (1989). Interpretive interactionism. Newbury Park, CA: Sage.
- Gacs, A., Goertler, S., & Spasova, S. (2020). *Planned online language education versus crisis-prompted online language teaching: Lessons for the future*. Foreign Language Annals, 53(2), 380–313.
- Grabe, M., & Grabe, C. (2007). Integrating technology for meaningful learning (5th ed.). Boston, MA: Houghton Mifflin.
- Graham, A. and Sahlberg Pasi (2020). *Schools are moving online, but not all children start out digitally equal*, The Conversation, available at: <https://theconversation.com/schools-are-moving-online-but-not-all-children-start-out-digitally-equal-134650> (accessed 25 June 2021).
- Gratz and Looney (2020). *Faculty Resistance to Change: An Examination of Motivators and Barriers to Teaching Online in Higher Education*. International Journal of Online Pedagogy and Course Design (IJOPCD)10(1). Doi: 10.4018/IJOPCD.2020010101
- GS, TS Nguyễn Quý Thanh, Hiệu trưởng Trường đại học Giáo dục, Đại học Quốc gia Hà Nội, Sự thích ứng của giáo dục trong đại dịch Covid-19 (2021).
- Hamdan, M., Jaidin, J. H., Fithriyah, M., & Anshari, M. (2020, December). *E-Learning in Time of COVID-19 Pandemic: Challenges & Experiences*. In 2020 Sixth International Conference one-Learning (econf) (pp. 1216). <https://asiacall.info/acoj>, Vol. 13, No. 1, 2022, pp. 1-21. <https://moet.gov.vn/tintuc/Pages/tin-tong-hop.aspx?ItemID=7624> <https://nhandan.vn/su-thich-ung-cua-giao-duc-trong-dai-dich-covid-19-post667303.html>

Lê Anh Vinh, Đặng Thị Thu Huệ, Bùi Thị Diễm, Đỗ Đức Lân (2021). *Thực trạng học tập trực tuyến của học sinh phổ thông Việt Nam trong bối cảnh COVID-19*. Viện Khoa học Giáo dục Việt Nam.

Thủ tướng, dịch COVID-19 cũng là cơ hội để ngành Giáo dục đẩy mạnh chuyển đổi số. (2021). https://moh.gov.vn/tinnoibat//asset_publisher/3Yst7YhbkA5j/content/thu-tuong-dich-covid-19-cung-la-co-hoi-e-nganh-giao-duc-ay-manh-chuyen-oi-so-congngh-thong-tin-vao-day-hoc-pot.htm

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