APPLICATION OF ITC IN TEACHING AND LEARNING ENGLISH LANGUAGE IN THE INDUSTRIAL REVOLUTION 4.0 OF VIETNAM

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Abstract: *In the 4.0 technology revolution, information and communication technology (ICT) plays an important role in all life activities. In education, ICT plays the vital roles in facilitating teaching and learning. Information and communication technology play an important role in promoting teaching and learning English as well. It changed communication way in the classroom and the teaching and learning strategies. In addition, ICT allows interaction and collaboration between teachers and students, between teaching and learning methods. ICT has made teaching and learning interactive and collaborative instead of the traditional way (teacher- talking and students listening). Recently, English language teachers have used ICT in the most English language class at many universities of Vietnam. The article focuses on discussing the application of ICT in the process of teaching and learning English languages and providing some suggestions. In the section on the practical research in Vietnam, the authors made an analysis of the practical needs and the necessity of the application of IT in the context of Vietnam, together with the present application. The article used statistical methods to initially clarify the current status of the ICT application capacity of students and lecturers of three Universities in Vietnam and give some suggestion for further development.*

Keywords: *Application, teaching and learning English, English language, education, experience.*

I. Introduction

In recent years, there have been more modern teaching technology devices such as smart electronic boards, electric textbooks, lesson design software...that have been used in teaching and learning English. When applying ICT in teaching, the class will become more flexible. It will promote the interaction between teachers and learners. ICT, including computers

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connected to the Internet, is a huge data source for teaching and helping teachers and students to share information, increasing time for self-study, self-solving problems. The application of ICT in teaching and learning English helps teachers have the opportunity to create a motivation class for students to practice listening, speaking and other necessary skills in English, overcoming limitations of phonetics, stress, intonation and motivating. The breakthrough in education technology will lead to new circumstances that change the traditional way of teaching and learning. This article describes how information and communication technologies can be applying in English class in some universities in Vietnam and giving some recommendation as well.

II. Theoretical background

According to the authors Ball & Levy [7], Roblyer [9], ICT in education is a combination of processes and tools that educational needs using computers and technologies and other related electronic resources. ICT applications in education are often referred to as educational technologies.

The application of IT has fundamentally changed the educational method, which has been heavily equipped with knowledge and skills for learners. According to John [8], the application of IT in education mainly focuses on three main areas: (i) teaching, (ii) manufacturing materials, and (iii) management.

In the teaching and learning English, tape recorders, videos, televisions, radios, and projectors have been used as the most common technologies at the disposal

of the teachers and learners of English language. Today, ICT have brought into the learning and teaching of English language indisputable transformation/revolution (we can use computers and internet). The different information and communication Technologies do not themselves transform the learning and teaching of English language. It is their appropriate utilizations or manipulation by the teacher that will transform their teaching methods/strategies. Therefore, teachers and learners must combine the knowledge of the ICT with practicing or professional knowledge in order to bring innovations into the classroom. The various traditional methods of teaching the language skills (listening, speaking, reading, and writing) for instance remain important for teachers of English Language. ICT can support the teacher's efforts in tackling challenges posed by the English class. In other words, they re- enforce traditional practices in the classroom, that is, chalk board and teaching –talking tradition.

III. Research Methodology

With the data collected from the databases, the study employed the standard analytical techniques commonly used in social science studies for data analysis. This involved categorizing the competency framework for ICT application of teachers and learner to apply in teaching and learning English. Following this, using the available information, the researchers identified and invited 100 teachers and 100 students of 3 universities to participate in an interview conducted via Zoom. The research participants were invited to respond to 6 interview questions on the Competency

framework for ICT application as well as 6 interview questions on the effect of applying ICT on teaching and learning.

IV. Findings and Discussions

4.1. Competency framework for ICT application in English language teaching

In 2008, the International Society for Technology in Education (ISTE) announced a set of 5 standards of IT skills for teachers, which are: (i) facilitating event and encourage students to learn and create, (ii) design and develop learning experiences and assessment activities in the digital age, (iii) build learning and working models in the age of number, (iv) are role models of digital age citizens, (v) participate in their own professional development and show leadership roles (cited by [4]).

In 2011, the United Nations Educational, Scientific and Cultural Organization (UNESCO) issued an IT competency framework for teachers (UNESCO Competency Framework for Teachers).

No	Component capacity	Expression	The competency framework of teachers											
			Hanoi Open University				HCM Open University				University of Labour and Social Affairs			
			0	1	2	3	0	1	2	3	0	1	2	3
1	Competence to analyse and evaluate problems of IT application in foreign language teaching	- Update and analyse trends and policies of IT application in foreign language teaching in the world and in the country. - Proposing solutions to apply IT to the process of teaching foreign languages in accordance with the objective and subjective conditions.			x				x			x		
2	Capability to use technical means	- Using common technical means such as computers, projectors, disc players ... in foreign language teaching. - Using the internet to search, exploit and manage information for learning foreign languages. - Use software to design and edit foreign language teaching materials such as documents, presentations, pictures, photos, movies, simulations ... - Combine the IT application with active teaching methods towards the development of student capacity				x			x				x	
3	Competence of applying IT in designing and implementing foreign language lessons	- Using the internet to search, exploit and manage information for learning foreign languages. - Use software to design and edit foreign language teaching materials such as documents, presentations, pictures, photos, movies, simulations ... - Combine the IT application with active teaching methods towards the development of student capacity				x			x			x		

No	Component capacity	Expression	The competency framework of teachers											
			Hanoi Open University				HCM Open University				University of Labour and Social Affairs			
			0	1	2	3	0	1	2	3	0	1	2	3
4	Competence of applying IT in testing and evaluating students' learning results	- Use software to support construction, design and banking management to test. - Apply IT to use a variety of forms of process test-evaluation to provide teacher feedback on teaching and learning.		x				x				x		
5	Competence of IT application in class management and organization	- Use IT tools to manage time and organize classes. - Use IT tools to communicate, monitor, manage, and support students outside of the classroom		x				x				x		
6	Competence to apply IT in fostering pedagogical and professional expertise	- Use the internet and advanced search engines to stay up to date on information related to your career area. - Use IT tools to reference, share resources, work collaboratively with colleagues.		x				x				x		

This capacity framework is organized in three directions, corresponding to three levels, applying IT in teaching. The first level includes knowledge and technology skills (ICT literacy), helping learners know how to use technology to learn effectively; The second level is knowledge deepening, which helps learners acquire in-depth knowledge to apply in solving complex problems in life; The third level is knowledge creation, helping learners later, when becoming citizens, employees can create new knowledge necessary to build a harmonious and prosperous society than. This framework refers to 6 areas of applying IT in teachers' teaching, that is: (i) understanding ICT in education, (ii) curriculum and evaluation (curriculum and assessment), (iii) pedagogy, (iv) tools, IT and communication (ICT), (v) organization and management, (vi) professional training and teacher professional learning.

Domestically, in 2014, the Ministry of Information and Communications issued Circular 03/2014 / TT-BTTTT regulating standards of skills in using information technology [2]. In the same year, the Ministry of Education and Training and the Ministry of Home Affairs issued Joint Circular 36/2014 / TTLT-BGDĐT-BNV defining basic IT skills for lecturers of grades I and II and III [3]. However, the description of IT skills standards in the Circular is generally applicable to all working fields, not exclusively for the teaching field, and not linked to specific tasks of teachers.

Notably, in a publication in the Science Journal of Ho Chi Minh City in 2016, the two authors Thai Hoai Minh and Trinh Van Bieu [4] proposed to build a competency framework for IT application in teaching for pedagogical students learn. The competency framework consists of 6 component competencies corresponding to 6 tasks that teachers usually perform in the teaching process and 12 corresponding indicators. Each indicator has 4 levels of manifestation, that are: No capacity (level

0), Low capacity (level 1), Moderate capacity (level 2), Competent at a high level (level 3). Based on the correlation level of lecturers 'tasks, this article applies the IT application capacity framework of the two authors Thai Hoang Minh and Trinh Van Bieu, with adjustments to suit the nature of the students and teachers' work.

4.2. Current situation of teaching and learning English language in Vietnam

4.2.1. The competency framework of teachers

According to the standard regulations on basic IT skills for lecturers of grades I, II and III, and especially according to the

description of IT application competency in foreign language teaching, we can see the requirement. Although basic, but very comprehensive, IT application capacity of lecturers is applied in most of lecturers' work tasks. Regarding the teaching staff of Hanoi Open University, HCM Open University, University of Labor and Social Affairs in terms of certificates, as of 12/2020, more than 80 % of teachers have degree with basic IT application. In terms of practical use, it can be seen that teachers mainly perform only three competency groups, component 2, 3 (accounting for 50% of the component competency groups), with the level 1-2 (from low to medium).

4.2.2. The competency framework of students

No	Component capacity	Expression	The competency framework of students											
			Hanoi Open University				HCM Open University				University of labour and Social Affairs			
			0	1	2	3	0	1	2	3	0	1	2	3
1	Competence to analyse and evaluate problems of IT application in foreign language learning	- Update and analyse trends and policies of IT application in foreign language learning in the world and in the country. - Proposing solutions to apply IT to the process of learning foreign languages in accordance with the objective and subjective conditions.				x				x			x	
2	Capability to use technical means	- Using common technical means such as computers, projectors, disc players ... in foreign language learning. - Using the internet to search, exploit and manage information for learning foreign languages. - Use software to design and edit foreign language learning materials such as documents, presentations, pictures, photos, movies, simulations ... - Combine the IT application with active learning methods towards the development of student capacity				x				x			x	

No	Component capacity	Expression	The competency framework of students											
			Hanoi Open University				HCM Open University				University of labour and Social Affairs			
			0	1	2	3	0	1	2	3	0	1	2	3
3	Competence of applying IT in designing and implementing foreign language exercises	- Using the internet to search, exploit and manage information for learning foreign languages. - Use software to design and edit foreign language learning materials such as documents, presentations, pictures, photos, movies, simulations ... - Combine the IT application with active learning methods towards the development of student capacity				x				x		x		
4	Competence of applying IT in testing	- Use software to support construction, design, and banking management to do the test.			x				x			x		

4.2.3. There are many reasons for the above situation.

Firstly, lectures perform the function of managing and organizing classes for students, as well as doing most of the communication and monitoring, manage and support students outside the classroom. Meanwhile, teaching-learning, testing-evaluation activities do not have many requirements on using ICT for lecturers and students. Some evidence such as: the textbooks, including the language practice textbooks, do not have online support software; or test-evaluation activities are done almost exclusively in the traditional form in the classroom. Moreover, a not small part of lecturers is not aware of using technology to provide professional support for students outside the classroom. Therefore, lecturers of English language almost do not use their ability to apply ITC in management, class organization (competency group of components 5), as well as their ability to apply ITC in testing and evaluating study results (competency group component 4).

Secondly, the age of the faculty is also one of the reasons leading to the limitation of the ability to apply ITC in foreign language teaching. The statistical results show that up to 20/24 lecturers are over 40 years old (accounting for 83%). At this age, lecturers often lack confidence, fear, even anxiety in getting used to and using new ITC means in teaching.

Thirdly, the rapid development of educational technology in the 4.0 era also leads to the risk of lagging in the application of ITC in the teaching. In addition, ITC has also been widely applied in the testing work, with the introduction of software for online testing, software for creating essay questions from question banks, software for mixing exams.

Fourthly, the development of ITC application capacity of lecturers must accompany the ITC infrastructure development of the faculty because

a modern and synchronous ITC infrastructure is a solid foundation for all activities and applications. However, it can be seen that the current ITC infrastructure of the faculty has not been focused on investment in construction and development to be able to deploy the application of ITC in management, teaching-learning and co-evaluation the set.

Finally, in the past few years, only a handful of officials and lecturers have participated in training courses on ITC application in management and teaching.

4.3. The ICT application in teaching and learning English

The using of ICT tools helps to mediate new way of communication among the language teaching and learning is becoming increasingly new trend and important part of education curriculum.

4.3.1. In teaching and learning Speaking skill

Information and Communication Technology can be used by the English teacher to enhance students' ability in speaking. For example, teachers can use images or videos through the projector and students discuss what they get from them, or the instructor can distribute activities through computers and make students express themselves. Power point projector is also good for teaching spoken English. Documentation of formal speech or debate can be made on CD-ROMS. The students can be taught the art of public speaking through slide presentations with power point projector. The use of power point projector enables almost all the students to see the points projected in slides and sometimes even images accompanying the texts. After the presentation, the students will be made to watch formal speech or debate on certain issue/topic that has been documented. This will offer them training in public speaking and expressing themselves in English Language.

4.3.2. In teaching and learning Reading skill

Using ICT can help students with poor reading skills since they are more accessible and handier too. Videodiscs contain authentic documentations that if manipulated well by the teacher will facilitate learning and teaching of English in classes. This technology helps the teacher to bring almost real-life situation into the classroom. Interactive videodiscs are suitable for teaching reading. The teacher for instance can introduce a novel or play; explain the settings, the themes, and characters. After introducing the novel or play, the teacher assigns the students to read the text which will be followed by showing the film version to the students. The class can be divided into groups to create conducive viewing environment as viewing in class could be noisy and students sitting far away may not have clear viewing or hearing. It has been noticed that students insist on understanding every word and find it difficult to take my advice of reading for the general idea, or only looking for required information.

4.3.3. In teaching and learning Writing skill

Teacher can utilize power point projector and Videodiscs to teach the

different writing tasks that students may be engaged in. Students can use technology to collaborate on writing projects. Teacher prepares his lessons to be delivered in slides for projection to the students. Projectors are visual aids that enable the teacher to display information or lecture points to the students. Materials or diagrams can be displayed to a large class thereby enabling more time for teaching and class discussion. However, teacher must select appropriate existing method as the power point projector will only facilitate viewing and understanding of the major points. Teacher may prepare and present outline, introduction, body, and conclusion of an essay in slides. Teacher also can explain all the strategies/methods of presentation of each to the students.

4.3.4. In teaching and learning Listening skill

New ICT skills learnt in the classroom (e.g. Internet search skills) can be transferred to real life. Using a range of ICT tools and a web-based environment can give learners exposure to practicing listening regularly, and consequently, become a more effective listener. The use of technology via web-based environment can be current, e.g. using a listening activity with today's news from news websites can add a dimension of immediacy to listening practice. While listening to digital audio or watching a video clip, learners have the opportunity to pause at will, and listen and read a transcript. Moreover, learners can get instant feedback on what they have done (e.g. you watch a video clip/listen

to audio and check answers immediately after watching/listening).

4.4. Discussions

In order to help improve the capacity of applying ICT in foreign language teaching and learning, we have four recommendations:

It is necessary to develop regulations and policies to encourage lecturers to use ICT. In addition to building a transition roadmap from traditional teaching methods to blended learning methods, and building policies oriented to promote the capacity to exploit and apply ITC. In order to improve the quality of lectures in class, it is necessary to have policies to encourage teachers to use technology applications to manage and professionally support students outside the classroom.

Invest in building modern and synchronous ITC infrastructure for the management and teaching of foreign languages. Pay attention to building a technology-friendly learning environment: classrooms have a network connection, supplement labs, use textbooks with online support software, and put into use test-rating software. online price, invest more in technology equipment to support foreign language teaching and learning.

Regularly organise training courses on ITC application capability for teachers. In order to be practical and effective, it is necessary to do the survey of the current situation of teachers' knowledge and skills in using ITC, focusing on the ability to apply ITC in teaching. In addition to basic ITC knowledge and skills, lecturers need updated information on new trends in ITC

application in foreign language teaching, as well as being trained to use those skills.

V. Conclusion

The using of ICT digital resources helps the teachers and students to enhance their mind changing and their teaching and learning environment become digital revolution. Although the frequency of interaction between teachers and students has decreased, the link between students and teachers is still important, still affecting the quality of education as the old model. By looking back at the development of technological solutions and the impact of technology on social life, we know that the 4.0 era English model indeed gives us a lot of excitement by its opportunity and its open future. The impact of the 4.0 era in English education trend will affect more people: from students, students, office workers, even job opportunities for people who are good at English. In Vietnam, the ability of teachers to apply ICT is playing an increasingly important role in improving the quality of training. In such a context, with the current situation, we should focus on fostering their ability to apply ICT in teaching, as well as having favourable conditions and environments for development. To conclude, it is strongly believed that the implementation of ICT into English class provides flexible and diverse set of technological tools, promotes problem solving skills of students, encourages active independent, autonomous, and collaborative language learning, motivates and facilitates language learning, enhances teacher training.

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