

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AMONGST EFL TEACHERS: PERCEPTIONS AND CHALLENGES

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ABSTRACT

The purpose of this research was to investigate the perceptions and challenges of English teachers to the implementation of Information and Communication Technology (ICT) in ELT classrooms. The objectives of this study were to find out their perception of ICT and the challenges they face when using it. This study used mixed methods, qualitative and quantitative in nature. Purposive sampling was used to select the subjects of this study who were 26 English teachers at senior state high schools in Banda Aceh. The instruments used to collect data were a questionnaire and interviews. The data was analyzed and interpreted through qualitative and quantitative procedures. The results showed that these English teachers agreed that ICT was very helpful in teaching. However, limited time and insufficient equipment coupled with poor internet connections as well as a lack of knowledge and experience and lack of ICT training became obstacles that the teachers face in using ICT. Through this study, the teachers are expected to further deepen their knowledge of ICT so as to improve their skills in teaching English using ICT.

Keywords: *Information and Communication Technology (ICT), English Teachers, Perceptions, Challenges.*

INTRODUCTION

Indonesia, as a developing country where the availability of Information and Communication Technology (ICT) is still lacking,

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results in limited opportunities to obtain information and knowledge. Only major schools in big cities can easily get access to the internet and have facilities available. In small cities such as Banda Aceh, Maulida and Lo (2013, p. 122) concluded that financial problems, limited human resources and lack of government support resulted in less than half of the schools being able to implement ICT in teaching-learning. It is the duty of the government to meet the needs of people in the world of education in terms of the availability of technology. Every person has rights to get access to information and to solve problems in learning.

Teaching-learning a foreign language through technology has become a new trend in foreign language education all over the world. As Liu (2009, p. 101) has written, technology now has “a greater role during class and home study, as computer-assisted instruction and interactive media technologies supplement the traditional use of chalk and the blackboard”.

In the real situation of a listening class, for example, teachers can use computers and the Internet to find rich sources of authentic oral models, such as YouTube video clips, which help learners with native pronunciation and also support teachers who do not feel as confident with their own language skills. Silviyanti (2014, p. 59) has explained that the use of YouTube appeared to be interesting and beneficial for students, who seemed to be very enthusiastic and eager to watch movie-videos and then practice pronouncing words and speaking like native speakers.

Accordingly, the researcher wanted to find out the perceptions of the English teachers at all the senior national high schools in Banda Aceh and the challenges that limited their implementation of ICT in their ELT classrooms

Research Questions

Related to the background, this study was guided by the following questions:

1. What are the perceptions of teachers of English at senior state high schools in Banda Aceh to the use of ICT in English language teaching-learning?
2. What are the challenges that teachers English at senior state high schools in Banda Aceh face in the use of ICT for English language teaching-learning?

Research Objectives

In accordance with the problems outlined above, the objectives of this study are:

1. To find out the perceptions of teachers of English at senior state high schools in Banda Aceh on the use of ICT in EFL language teaching-learning.
2. To find out the challenges that teachers of English at senior state high schools in Banda Aceh face in the use of ICT for English language teaching-learning.

In this research, the researcher focused on the perceptions and challenges of teachers of English to the implementation of ICT in EFL classrooms. The subjects of this study were 26 English teachers from all the state high schools in Banda Aceh. There are 16 state high schools in Banda Aceh. The researcher analysed the perceptions and challenges of these teachers gained as the results from a questionnaire and interviews.

LITERATURE REVIEW

Theories of Perception

Ward et al (2015, p. 73) has described perception as “the process of recognizing, organizing, and interpreting sensory information”. This is especially so in education, for example between teachers and technology. Taiwo (2009, p. 75) has shown that the level and degree of technology usage depends on the way that teachers view the role of technology in classroom teaching, when teachers form an impression which is favorable or otherwise, depending on specific traits the teachers attribute to the various media.

The perceptions of teachers are needed in the process of implementation of technology in teaching-learning. Taiwo (2009, p. 75) also discovered that a teacher’s perception of technology is “predicated upon what they feel technology can do in the teaching-learning process”.

Information and Communication Technology (ICT)

Information and Communication Technologies (ICT) have developed very rapidly in recent years. Wang and Woo (2007, p. 149) have stated that ICT are basically tools, they can be hardware such as computers, projectors, digital cameras, etc. and they can also be

software such as Microsoft Word, Power Point, etc. Rank, Warren and Millum (2011, p. 1) have found evidence that ICT is commonly used in English language teaching and “as most English teachers would acknowledge, there is still much more to do to make effective and enjoyable use of the (latest) technology”.

ICT in Education

Wekke and Hamid (2013, p. 588) have stated that ICT can be accepted as a paramount part of the (new) education system that is turning into an ever increasing and more challenging system with new challenges in education, especially at the school level due to expansion of education and development of universal world standard education concepts plus information sharing and communication which are being discussed and addressed worldwide.

It has been noted by Valk et al. (2010, p. 118) that “ICT can empower teachers and learners by facilitating communication and interaction, offering new modes of delivery, and generally transforming teaching-learning processes”.

Barriers

Schoepp (2005, p. 2) has listed difficulties in integrating ICT into education especially into classroom instruction, which is a complex process where many difficulties may be encountered as ‘barriers’. Balanskat et al. (2006, p. 50) have acknowledged that although teachers appear to recognize the value of ICT in education, difficulties nevertheless continue to be encountered during the process of integrating ICT into teaching-learning. The difficulties are primarily met by teachers as they are at the forefront of executing the integration.

Bingimlas (2009) has concluded that lack of teacher confidence, lack of teacher qualifications, resistance to change and negative attitudes, lack of time, lack of effective training, lack of accessibility and lack of technical support act as barriers in the process of integration. Since the obstacles are centered on the teachers, Kurniawan (2014) wants to see them from the teachers’ point-of-view.

Teaching English with Technology

Today, technology can assist teachers in many ways. As Sosca (1994) has stated: “Teachers can utilize the technologies briefly described here for instructional testing and assessment, to teach culture, to help students learn academic content, to develop critical thinking

skills and to expand students' speaking, listening, reading and writing skills". As Salehi and Salehi (2012, p. 215) have pointed out, since the 1960s, technology such as television, tape recorders and videos have been used as tools in teaching EFL. Therefore, EFL teachers should familiarize themselves with all these technologies.

Advantages of ICT for Teaching-Learning English

For students of a second language, ESL, Jurich (2001, p. 8) has shown us five advantages of using ICT for teaching-learning processes in an EFL classroom. The first is multi-sensory stimuli. According to Garimella and Srinivasan (2014:13), multi-sensory technology can quickly enhance EFL skills.

The second is motivation. Granito and Chernobilsky (2012, p. 20) have stated that "technology has the potential to be a powerful educational tool for those that have an interest in it and (it) needs to be taught and embraced at an early age". Students who use technology are likely to stay working on tasks for longer periods of time.

The third is collaborative learning. As Domalewska (2014, p. 28) has mentioned: "Technologically-supported collaborative learning enhances language development as students learn in social interactions". For example in blogging by using the Internet, students can give comments on each other's work and share their experiences, reflect on their own and their classmates' work and analyze it, thus developing their critical thinking skills.

The fourth is cultural understanding. Hollenbeck and Hollenbeck (2009, p. 5) in French (n.d.) have claimed; "the newfound technology provides teachers with tools to address equity and access issues, to accelerate students' linguistic and conceptual development, to provide support for students who learn in different ways, and to create authentic and meaningful learning experiences". By using technology for cultural understanding, students are able to interact and fully participate in their learning as they acquire language skills and cultural awareness. They can improve their ability in EFL and also learn about western cultures at the same time.

Fifth and last is self-expression. McBride (2009, p. 35) in Lornicka (2009) has categorized "self-expression and social interaction as some of the most important contexts for EFL users to create, or at least to imitate, in an EFL classroom to encourage language acquisition".

Disadvantages of ICT in Learning EFL

Kolbakova (2014) has suggested that “using ICT in class may mean much overwork and extra effort from teachers to meet the needs of every single student because ICT is not suitable for all learners in all situations and for all purposes, and may require some considerable learner training for effective use”.

The disadvantages found also included the difficulties in class control, distractions and the students’ tendency to use short forms in their writing. As Yunus et al. (2013, p. 1) have stated in their study: “it was also revealed that teachers are generally weak in managing problems and planning activities involving the use of ICT in the teaching of ESL writing”.

RESEARCH METHODOLOGY

Research Design

The researcher used a mixed method approach in this research. The methods used were both quantitative and qualitative. A mixed method approach (Creswell, 2003, p. 21), using the collection of both quantitative data from a questionnaire followed by qualitative analysis of focus group interviews, was used to address the research questions. It was designed to find out the teacher’s perceptions and the challenges they felt to the implementation of ICT in their EFL classrooms.

Data Collection Technique

To collect the data, the researcher used a questionnaire plus interviews which were appropriate for the purposes of this research.

Questionnaire

The researcher went to the public schools to give the questionnaire to the teachers from March 14, 2016 to April 30, 2016. It took a month and a half to collect the completed questionnaires from the teachers.

The questionnaire was designed and modified from Zare-ee (2011) and also Karakaya (2010) to collect quantitative data on English teachers’ perceptions and challenges due to the implementation of ICT in EFL classrooms. The questionnaire was given to 26 English teachers in Banda Aceh. The teachers were assured that the information they gave was confidential and would only be used for research and academic purposes. The teacher participants were each given 30

minutes to answer all the questions in the questionnaire in front of the researcher. The researcher then collected the completed questionnaires.

Interviews

The researcher conducted the interviews with the teachers from May 16, 2016 to May 20, 2016. It took one week to complete the interviews with all the teachers.

For the qualitative part of data collection, the leading interview questions were focused on the answers from the questionnaires completed before. After analysing the data from the questionnaires, the researcher selected five teachers to be interviewed. The teachers were selected based on the answers they provided in the questionnaires which showed very significant differences from the other teachers. Each interview was done individually with each teacher using a pre-prepared list of questions, and each interview lasted approximately 15 minutes. The interview sessions were recorded with a mobile phone.

RESULTS AND DISCUSSIONS

Questionnaire Results

There were 12 questions in the questionnaire focussing on the EFL teachers' perceptions of the implementation of ICT in EFL classrooms. Questions 1 to 10 plus 12, and 14 are listed in Table 4.1 below; plus the answer scale. Microsoft Excel was used to display the findings.

Table 1. English Teachers' Perceptions on The Use of ICT

No	Statement items	Scales				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	In my view, ICTs are more powerful tools of teaching than discussion and teaching without the use of ICTs.	0	1 (4%)	6 (23%)	11 (42%)	8 (31%)
2.	ICTs (referring generally to computers, videos, hardware, software, and networks) increase my knowledge and skills as an English teacher.	0	0	2 (8%)	12 (46%)	12 (46%)
3.	ICTs are highly needed by teachers in teaching	0	0	6 (23%)	12 (46%)	8 (31%)

4.	English. ICTs can be used as advanced instructional tools in teaching English to my students.	0	0	1 (4%)	20 (77%)	5 (19%)
5.	In my view, ICTs can replace teachers' role in teaching English.	17 (65%)	9 (35%)	0	0	0
6.	As far as I know, ICTs can be used to effectively manipulate instructional contents and materials.	0	3 (12%)	11 (42%)	12 (46%)	0
7.	I know that ICTs can spread knowledge and information fast.	0	0	0	12 (46%)	14 (54%)
8.	In my view, ICTs are more effective for teaching and learning than books and other printed materials.	0	2 (8%)	8 (31%)	13 (50%)	3 (12%)
9.	I think ICTs do NOT have noteworthy values for human societies in general.	3 (12%)	19 (73%)	1 (4%)	3 (12%)	0
10.	I think ICTs do NOT offer educational/instructional values for student in learning English.	1 (4%)	23 (88%)	2 (8%)	0	0
12.	In my view ICTs can be used as curriculum materials at school.	0	1 (4%)	8 (31%)	15 (58%)	2 (8%)
14.	I use/have used ICTs for teaching and in daily life.	1 4%	0 0%	2 8%	19 73.%	4 15%

Some additional questions focused on the challenges in implementing ICT in EFL classrooms, viz: no's 11, 13, and 15 to 20 shown in Table 4.2 below. All answers used a scale.

Table 2. English Teachers' Challenges on The Use of ICT

No	Statement items	Scale				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11.	I know that many forms of ICT tools and techniques	1 (8%)	1 (4%)	1 (4%)	18 (69%)	4 (15%)

	at school are accessible for use in teaching English.					
13.	I can avoid problems in many areas such as in handwriting and in organizing ideas when I use ICTs.	1 (3%)	3 (12%)	10 (38%)	10 (38%)	4 (15%)
15.	I have no difficulty in using ICTs.	1 (4%)	3 (12%)	6 (23%)	13 (50%)	3 (12%)
16.	I know about ICT materials related to English language learning that I can use for my teaching.	1 (4%)	0	4 (15%)	14 (54%)	7 (27%)
17.	I know how to access Internet and get some information from it.	1 (4%)	0	0	15 (58%)	10 (38%)
18.	Internet access is easily accessible and available at my school.	0	4 (15%)	2 (8%)	14 (54%)	6 (23%)
19.	Generally speaking, I have enough experience and training on computers and software.	1 (4%)	4 (15%)	11 (42%)	9 (35%)	1 (3%)
20.	I have limited time to integrate ICT into my teaching.	0	8 (31%)	10 (38%)	4 (15%)	4 (15%+)

Interview Results

The interviews took place in some senior state high schools in Banda Aceh, after the teaching-learning processes were done. Some questions and answers from the interviews are presented below:

- Researcher (R) : Do you think ICTs are more powerful tools of teaching than discussion and teaching without the use of ICTs?
- Participant 1 (P1) : I don't agree about the statement. Discussion is more effective to create critical thinking for the students. Sometimes ICT makes the students lazy to think. They can get the answers easily from the Internet. They seem to have no effort to find the answers. ICT is just for help. The important thing is the innovation and motivation of the students to think creatively.
- Participant 2 (P2) : I agree that ICTs are powerful tools of teaching. Compared with discussion and printed books, ICTs

- are more interesting. The students will not feel bored during learning English.
- Participant 3 (P3) : I am neutral. I can teach with or without ICT. ICT is important but the more important thing is how the teachers teach the students. The material should be easily understood by the students.
- Participant 4 (P4) : I strongly agree. ICT can make efficient use of time for teaching and make teaching easier. If we do discussion using ICT, the information that we get is more varied. That is why I strongly agree about that.
- Participant 5 (P5) : I strongly agree. The students can directly watch conversations and videos and find many pictures related to the lessons. It makes discussion easier.

It can be concluded that most of the teachers think ICTs are more interesting. Students can easily find materials needed by searching for them on the Internet. ICTs make teaching easier and make teaching time more efficient.

- Researcher (R) : Do you think many forms of ICT tools and techniques at school are accessible for use in teaching English?
- Participant 1 (P1) : ICT tools and techniques at school are accessible but still limited. The teachers have to wait for the chance to use a projector. It is more efficient if the school provides one projector for each class. So the teachers will use it properly without wasting time to find a projector from another teacher.
- Participant 2 (P2) : Our school provides some tools such as computers and projectors but we cannot access the Internet.
- Participant 3 (P3) : I am not sure about ICT tools at school. There could be computers or projectors but I never use them for teaching. I use my own laptop. Sometimes I print materials at home and share them with my students, then ask them to copy them if necessary.
- Participant 4 (P4) : ICT tools are accessible at our school but limited. We have a problem of low connection to the Internet. I often waste time to prepare the tools. So I decided to provide all the tools I need by myself. I always bring a laptop, a projector, a set of loud

speakers and any cables I need in my car.

Participant 5 (P5) : The tools are accessible. The Internet is also connected. But the problem is that I cannot use it. I do not know how to use any tools. So I decided not to use them for my teaching.

When the teachers were asked whether access to ICT tools and techniques at school was available for use in teaching English, the researcher got various answers. It can be concluded that ICT tools and the Internet are accessible at some schools but generally are still limited.

Researcher (R) : ICTs do not have noteworthy values for human societies in general. Do you agree with that the statement? And why?

Participant 1 (P1) : I strongly disagree with that statement. In my opinion, ICTs have many roles in our life. In a positive sight, ICTs will be very helpful in our society, for example in communication. We can use the Internet to communicate without having to worry about running out of credit for SMS or calls.

Participant 2 (P2) : I can say that I agree with that because in my opinion, only some people can use ICTs or technology in the right way, at the right time, for the right purpose. As we know that, technology can also provide negative things, for example bad web that shares bad cultures, bad videos and many things that can affect people, especially students and children.

Participant 3 (P3) : I do not agree with that statement. Technology is like our friend. I use Line to communicate with other people. It is easy to communicate and important in our society. Among teachers, we use the internet or smartphone to communicate and share information.

Participant 4 (P4) : I disagree about that. Our lives are strongly influenced by ICTs or technology. Their functions help us in many ways that are very important for our communities. When compared to my school in the past, life today is very easy.

Participant 5 (P5) : I do not agree. ICTs are important in society. But I do not know how to use them. I believe those tools

are very helpful in our lives. We can get information easily, for example when there is an earthquake. We can get information about the earthquake fast.

In conclusion, most of the teachers think ICTs have noteworthy values for human societies in general. They help people in many ways in society despite some possible negative aspects that could possibly interfere.

- Researcher (R) : Do you think ICTs can be used as curriculum materials at school? Why?
- Participant 1 (P1) : I do not really understand about that. As I know, we have computer lessons at our school. The students are able to use computers, they are even better than the teachers.
- Participant 2 (P2) : Yes I do. We are already familiar with computer lessons or Information Technology (IT) lesson at our school.
- Participant 3 (P3) : I do not think that ICTs can be used. Since ICT is just a learning tool that can be taught to all teachers for the delivery of subject matter. ICT is understood to be tools so should not be considered as curriculum materials.
- Participant 4 (P4) : I agree with that statement. We have a computer laboratory in our school. In National Examinations, students are provided with a computer to answer the questions. They are called computer-based national exams (UNBK). So I agree that ICT can be used as curriculum material.
- Participant 5 (P5) : I do agree. Nowadays, students are interested in every kind of technology. So it must be supported and directed to things that are positive. Like learning the positive things for example, in English, they can practice grammar or search for English language videos from the Internet in order to learn correct pronunciation in English. Anyway I agree with that.

Based on the question whether ICTs can be used as curriculum materials at school, the researcher found that the majority of the

answers tended to agree. It can be concluded that most of the teachers stated that ICTs can be used as curriculum materials at school.

- Researcher (R) : What do you consider to be some of the challenges of using ICT in English language teaching?
- Participant 1 (P1) : The most common is very limited time to use the tools. Because the tools are still lacking. Personally, I have no difficulty in using them. I bring my own laptop to school. The school also provides internet. I just find the materials needed.
- Participant 2 (P2) : Internet is not available. So I or our students if we need materials, we have to look outside the school (internet cafes) or by phone. But that would take time. So it is not efficient. And also takes time. Because I am the only English teacher here. So automatically I have little time to find materials outside with my hectic teaching schedule.
- Participant 3 (P3) : I can say that there are many challenges. My school still gives less attention. There is no internet at school. I have never had any computer training. I learned how to use a computer from my son at home.
- Participant 4 (P4) : My training experience is still lacking. I can use the computer as taught my son. I know how to use a computer and how to install and run the projector. But if I have to create a power point presentation, I ask my son to do it.
- Participant 5 (P5) : I am not able to use ICT. I never took part in any ICT training because I'm too old. So in teaching, I do not use it because I am not able to.

In conclusion, there are three major challenges found in this research from the interviews. They are (1) limited ICT tools and the Internet at schools, (2) limited time and (3) lack of knowledge and training experience for using ICT.

Discussion

English Teachers' Perceptions on the *Implementation of ICT for EFL*

In order to answer the first research question that is 'to find out the perceptions of English Teachers at public senior high schools in Banda Aceh on the use of ICT for teaching-learning EFL', it was found that

the teachers have good perceptions for the implementation of ICT in EFL classrooms.

This finding is also supported by Sharndama (2013, p. 34) who has stated that ICT has an important role in facilitating teaching-learning that has made it interactive and collaborative instead of the traditional teacher-talking and students-listening approach.

Most of the teachers thought that ICT is a powerful tool that they need in teaching. They believe that ICT can increase their knowledge and skills as English teachers. However, ICT will not replace the role of the teachers in teaching. In addition, Hismanoglu (2012, p. 191) has stated that “ICT presents a powerful learning environment for learners in the classroom that has resulted in many countries making investments in ICT integration as ICT is viewed as an effective tool for renewing educational practices in any field”.

One conclusion that can be drawn is that most of the EFL teachers have good perceptions of the potential role of ICT in their EFL classrooms. Goodwin et al (2015, p. 135) have stated that “the perceived importance of ICT is the extent to which teachers believe that the integration of ICT for teaching-learning is important”. Their findings suggested that it is only when an individual perceives the value of ICT in teaching-learning and has confidence in their ability to utilize ICT for teaching-learning will they adopt ICT in their teaching-learning practices.

English Teachers’ Challenges on the Implementation of ICT in ELT Classrooms

There were several answers to the second research question, viz: ‘What are the challenges that EFL teachers at senior state high schools in Banda Aceh face in using ICT for EFL teaching-learning?’. It was found that most of the teachers had no difficulty in using ICT in their teaching-learning processes, but some of them especially the older teachers had no experience and were not willing to learn about ICT, for example to get computer training, so, they decided not to use ICT in their teaching. However, they understood and realized that ICTs are very useful tools to improve teaching-learning performance. Limits on time was still a challenge for the teachers for learning and using ICT. Limited amount of equipment in schools and low speed connections to the Internet were also handicaps.

Karakaya (2010, p. 110) also got similar results to this study. The common challenge is the lack of technological tools that can be used

during class teaching-learning. The interview data suggested that many of the EFL teachers use LCD projectors a lot in order to present course materials to their students. They often have to share a projector with their colleagues. Because the equipment is limited, this can sometimes affect the English teachers' overall use of it in their classes.

In conclusion, the researcher found that limited ICT tools and limited access to the Internet at the various schools, limited amounts of time for preparation and lack of knowledge and lack of training opportunities are the main challenges that EFL teachers commonly face in the implementation of ICT in their teaching-learning processes.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the results of this research into the EFL teachers' perceptions and challenges to use ICT in EFL classrooms, several conclusions can be drawn.

The first is that EFL teachers have good perceptions of the potential of ICT for use in EFL classrooms. ICT can help teachers get and present a lot of information easily and fast. The teachers also think that ICT can make classes more interesting than just discussions and teaching-learning without using any technical tools. The teachers agreed that ICTs are very useful tools that help them in teaching EFL English. To summarize, ICT is very useful for teachers teaching EFL.

The second conclusion is about the challenges. This study found that the teachers faced three major challenges in using ICT. (1) Limited ICT tools and (2) low level connections to the Internet at the schools are the dominant challenges. The teachers often had to share ICT tools with other teachers and waste time waiting their turn to use them. This limited the time that they could use ICT in their classrooms and became a challenge for each teacher. (3) The last challenge is a lack of knowledge and lack of training and experience that the teachers have. It makes some teachers unable to use ICT as they need more training to gain knowledge and skills to use ICT.

Suggestions

Based on the evidence gathered during this research, the researcher has the following suggestions for improving EFLT (English Foreign Language Teaching).

First: Teachers should learn more about ICT and apply it in their teaching in order to improve their knowledge and skills in teaching

EFL. This is because ICT can give teachers many ways to create interesting teaching materials to make teaching-learning easier.

Second: Schools should provide and support all types of ICT tools and get high speed Internet connections in order to make teaching more efficient. It is better to provide one projector for each classroom.

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