Teachers' preference toward and needs of ICT use in ELT

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ABSTRACT: The aim of this research was to describe teachers' preferences for using ICT in ELT and teachers' needs in relation to ICT use in the ELT process. In this research, the authors used a descriptive method by involving 46 senior secondary school teachers of English in South Sulawesi. The sample was taken using the cluster sampling technique. The research results show that: 1) teachers' preference for ICT use in ELT was high; and 2) most English teachers needed training on generic computer applications and in Internet based e-learning programmes. They also needed an ICT technician, additional ICT hardware and learning software, and additional Internet bandwidth capacity. The conclusion drawn by the authors is that the ICT hardware at schools was not yet adequate, but that the teachers already had adequate basic ICT skills, which provide the potential to be further developed.

INTRODUCTION

The role of Indonesia in international alliances, especially in the ASEAN Economic Community (AEC) imposes on its society the need to interact and communicate with other nations in various sectors, such as the economy, politics, culture and education. The language agreed to as the communication tool among the AEC members is English. Therefore, the mastery of English becomes more important for those who want to win competitions and grab opportunities.

In the Indonesian school context, English is a compulsory subject at junior and senior secondary schools. At many elementary schools, it is even taught as local content. However, the learning outcome obtained could not make students have the ability and skills to communicate actively in English. One of the causes is that the time allocated for the English course is quite limited, so that the students do not have enough opportunity to practice the English they are learning in the classroom. Therefore, there should be a strategy that can help to bridge the gap.

One of the strategies is the use of ICT (information and communication technology) in English language teaching at schools. In many aspects of education, the advancement of ICT has brought a new paradigm. The various kinds of applications supported by hi-tech hardware can definitely promote ICT-based learning innovations. The current ICT hardware and software are equipped with multimedia capacity, which can be employed to optimise learning opportunities for students to practise the target language in the context of both classroom interaction and outside classroom activities.

The benefits of ICT tools in fostering affective domains and learning achievement have been shown in research. Oliveira found that in the virtual learning process, the affectivity is stimulated, making the participants feel like they are part of the group and motived to stay in the process [1]. Some other studies also found the success of ICT roles in supporting ELT [2-6].

To date, many applications have been created to meet educational goals. In the context of foreign or second language learning, the emergence of ICT has been inspiring language education practitioners to incorporate ICT tools, especially computers into second language pedagogy, which is commonly called computer assisted language learning (CALL). To anticipate the variety of ICT facilities available, the teachers must be careful to ensure they select the ones in which the features can support learning and practising English language skills and elements. Therefore, the teachers' preference in this matter should be taken for granted in order for the selected ICT applications to be used effectively.

In addition, teachers should also consider supporting ICT facilities and infrastructure, such as Internet connections, electricity supply and required ICT tools. Downloadable learning resources are so abundant that teachers need to be competent and skilled to select the relevant ones according to set principles and criteria. The selected learning resources should correspond with the lesson plan, students' competence, cultural context, and so on.

To ensure the adequacy of the implementation of ELT with ICT tools, it is necessary to get accurate information about the teachers' practice of ICT use at school. However, the data about this issue are not yet comprehensively available. The aim of this study is to describe the teachers' preferences in the use of ICT in ELT and the teachers' needs in relation to the use of ICT in ELT.

The needs may include ICT hardware and software of learning applications and learning materials in the form of text, audio and video. The needs may also include training in the use of ICT facilities and applications in ELT delivery. Hence, it is expected that the information from this study can help to bridge the gap between ICT integration and ELT at senior secondary schools.

RESEARCH METHOD

This research used a descriptive method. There are four aspects to describe; namely, the profile of ICT tools and senior secondary school teachers of English; teachers' preferences for using ICT in ELT; implementation of ICT in ELT; and teachers' needs in ICT use to facilitate their teaching. The sample for the research consisted of English teachers at public senior secondary school in South Sulawesi. The sample taken using cluster sampling technique consisted of 46 teachers from six districts.

The instrument used was a questionnaire divided into several parts; namely, questions or statements about the profile of ICT tools at schools and English; teachers' preferences on ICT use in ELT; implementation of ICT use in supporting ELT delivery; and needs in relation to the ICT facilities. The second, third, and fourth parts of the questionnaire used a Likert scale, which provided five options for each question or statement.

The first part used varied scales. The data collection was conducted by distributing the questionnaire to the targeted sample of respondents by visiting all sample schools in the six districts. In this data collection, the researcher was assisted by other research team members. To anticipate misunderstanding by the respondents about the questions or statements of the questionnaire, the team were requested to be available at the sites.

This research used descriptive analysis. The respondents' answers were firstly scored according to a Likert scale. These raw scores were then converted into the range of 20-100, which was classified into six categories; namely, very high, high, fair, slightly low, low and very low. The converted scores were further analysed using frequency, percentage and mean analysis. The results of the analysis were either tabulated or presented in a diagram.

RESULTS AND DISCUSSION

This section summarises the results of the data analysis and discussion, which covers three issues; namely, teachers' preference towards ICT use; implementation of ICT use; and teachers' needs in relation to their ELT delivery. The results of the data analysis and discussion of the three issues are consecutively presented in the following sections.

Teachers' Preferences towards ICT use in ELT

The first part is the teachers' preferences towards ICT use. The descriptive analysis showed that the average percentage was 75.4%, which is classified into the *high* category. This means that in general, the respondents had a high preference for using ICT in ELT at senior secondary school level. However, the item-based analysis showed that seven of 12 items were in the high category (score range: 75-87); namely, preference for:

1) applying ELT with ICT;
2) using blended learning of ICT assisted learning and traditional learning;
3) using ICT if given the opportunity to apply it;
4) using social media, such as *Facebook, Twitter, WhatsApp,* and *Line,* in daily life;
5) using e-learning, if they had the chance to implement it;
6) using presentation applications, such as *Microsoft Powerpoint* in ELT; and
7) not refusing to use e-learning if they had the chance to implement it.

Teachers' preferences in the *fair* category (score range: 62-74) included:

1) the preference for applying on-line teaching;
2) preference for using social media, such as *Facebook, Twitter, WhatsApp,* and *Line* in ELT;
3) preference for using *word processing applications* in ELT; and
4) preference for using *spreadsheet applications*, such as *Microsoft Excel* in ELT.

The preferences in the *low* category (score range: 49-61) included the preference for using traditional teaching.

The results of data analysis above show the level of teachers' preferences for using ICT in the English teaching and learning process. In general, the level of teachers' preferences for the use of ICT in ELT was in the *high* category. It can be further elaborated that at this level, it can adequately encourage teachers applying ICT tools in their ELT delivery. In other words, the teachers at this level already have a positive tendency to practise ICT assisted language learning. What they need, then, is self-confidence, which can be obtained by increasing their ICT competence and skills, as well as support from related stakeholders, especially school principals as the academic leaders at school.

In detail, there are some indicators which fall into the high category. The first one is the teachers' preference in delivering teaching with ICT and blended ICT assisted learning with traditional teaching. This indicator denotes that the teachers of English have a tendency to use ICT facilities. The second is the tendency of teachers to use e-learning, if they have the chance to use it. The other tendency is the use of presentation applications in ELT. These preferences should be given more attention, because they are one level above the category of the aggregate average percentage. In other words, the teachers' preferences for these issues should be more prioritised, if related stakeholders plan to provide intervention in the form of capacity building for teachers.

The other finding is the teachers' preferences in the *fair* category, which include several aspects. The first one is the application of on-line learning. Much research has shown that on-line teaching positively contributes to both students' learning achievement and affective domains, such as students' learning motivation, interest and attitude. ICT integration has great effectiveness for teachers and students, in which teachers' well-equipped preparation with ICT facilities and applications is one of the determinant factors in the success of ICT-assisted teaching and learning [7]. They also found that teacher professional development training programmes were quite strategic in increasing students' quality learning.

The second is the use of social media, such as *Facebook, Twitter* and *WhatsApp,* in daily life. Even though it was in the *fair* category, this preference should be grasped as a potential that could be manipulated to actualise on-line learning activities. The trend to using social media either for communication needs or just for life style can be a good starting point to bring them into the virtual learning environment. There is no need to provide social media training. Social media literacy has already been achieved. Researchers have shown that social media, if used properly, can constructively facilitate English learning. As an example, English grammar was worth promoting for discussions on Facebook, since there were significant correlations between the scores gained in the grammar and writing parts [8].

They also found that the students' attitudes were positive towards the use of Facebook as a device for learning grammar and writing. Facebook is deemed to contribute to students' learning experiences by offering them various target language samples, authentic learning materials, autonomous learning, more interaction with teachers and native speakers, getting peer support and feedback, updating outdated information and being notified about the classes [9].

The next is the use of word processing applications in ELT. Word processing applications, such as *Microsoft Word* is a generic application, which is commonly used for administration work or for creating files. However, this application also provides some facilities, which are beneficial for facilitating English learning, such as *spelling and grammar checker* that can be used automatically or manually to check English spelling or grammar mistakes, *thesaurus*, which is useful for finding synonyms or appropriate words (dictionary) for certain contexts, *translate* for text translation into another language, *define* for word meaning, *new comment* to give notes on students' writing tasks, and *track changes* for correction and feedback to students' writing tasks.

On the other hand, there were some aspects that teachers did not prefer; namely, traditional teaching, use of social media in ELT and use of *spreadsheets* in ELT. This can be elaborated by showing that the teachers have the tendency to avoid traditional teaching and the shift to new paradigms of technology assisted language learning. This also justifies the teachers' need for capacity building in manipulating ICT facilities for the purpose of English learning. The fact that they did not prefer to use social media in ELT might be caused by the absence of their creative ideas due to a lack of knowledge and skills in ICT integration, particularly social media.

Teachers' Needs for ICT in ELT

This part presents results of the data analysis of teachers' needs in relation to their use of ICT to support their ELT delivery at school. Five issues should be put forward; namely, needs in terms of training, skilled staff or technicians, additional ICT hardware, English learning software and increased Internet bandwidth. The result shows that on the whole, the teachers' needs are in the high category with an average percentage of 86.32%.

To consider the needs in detail, the researchers used itemised percentage analysis. There were 17 sub-items of five core items for the respondents to respond. Four of the 17 sub-items were in the very high category with average percentages ranging from 88 to 100. They were the need for skilled staff who are always available to be trouble shooters for the ICT tools at school; additional computers/laptops; additional printer units and additional scanners. The rest were in the high category, with average percentages ranging from 75 to 87.

The needs in this category are: 1) the need for training on basic word processing applications, such as *Microsoft Word*, presentation applications (*Microsoft Powerpoint*), spreadsheet applications (*Microsoft Excel*), database applications, Internet use to search for information and learning resources, Internet use to develop Web sites, Weblogs, on-line learning, ICT use in ELT, use of multimedia facilities other than computers (such as digital video, audio aids and scanners), *e-learning* applications (such as *Quipper School, Moodle*, and *Edmodo*) and authoring tools; 2) adding an *LCD projector*; 3) English learning software; and 4) increased Internet bandwidth.

Based on the results of the analysis above, the teachers' needs in relation to the use of ICT in ELT at senior secondary schools is generally high. However, the results of the itemised analysis show that the needs fall into two categories; namely, very high and high. One of the needs, which is in the very high category is the availability of skilled staff who are capable of providing ICT troubleshooting. He/she is expected to have adequate capacity and skills in repairing both hardware and software. This is important since teachers are only users of ICT tools. They are not experts in ICT troubleshooting. The need to add more ICT hardware, especially computers/laptops, printers and scanners is also very high. The demand for this issue is crucial for meeting the standard ratio that is one computer laboratory should be able to accommodate one class. Every computer laboratory has to be equipped with one computer per two students, one printer, one scanner, LAN, an Internet connection and user manuals [10].

This research suggests that before deciding what ICT hardware and software is appropriate for certain institutions, especially in schools, there are some stages that should be considered; namely, planning, procurement, management and maintenance. The planning stage should be preceded by a needs assessment and base line assessment. Procurement should take place according to the specifications stipulated in the planning document, and the management stage is important to make sure that the ICT tools are maximally used to support all school programmes. At the maintenance stage, there should be skilled staff who are assigned to take care of the ICT tools.

Other needs are in the high category. Training for teachers is one of the aspects which is needed. The training should include the use of computer applications, especially word processing, presentation, spreadsheets and data bases. In addition, they also need training on Internet use, especially, surfing information and learning resources, creating Web sites and Weblogs, on-line learning programmes, e-learning applications, such as Quipper School, Moodle and Edmodo, authoring tools, such as Hot Potatoes, SmartBuilder and Adobe Captivate 9, and additional multimedia other than computer, such as digital video, audio aids and scanner. This training is intended to enhance teachers' competence and skill in utilising ICT tools to support their teaching. According to the regulations, one of the core competencies teachers must have is using ICT for the sake of learning and teaching process of the subject matter they teach [11].

At this level, they also need additional Internet bandwidth. This indicates that the Internet bandwidth capacity at senior secondary schools to date is inadequate. This condition makes the Internet connections slow, which unfavourably affects Internet-connected activities, such as big file downloading, on-line learning, which simultaneously connects a number of computer/laptops, live video streaming or synchronous Web-based learning interaction. It is a fact that the quality of Internet connections in cities is not as good as in districts. Therefore, there should be more effort by the government to promote ICT infrastructure for educational purposes.

CONCLUSIONS

Based on the data analysis and discussion of the research, the researchers put forward the following conclusions:

1. The teachers' preference for ICT use in ELT was high. This indicates that the teachers had a positive inclination for using ICT tools in their teaching delivery. At this level, they need confidence, which can be obtained by increasing their knowledge and skills, as well as support from all school communities, especially school principals as the academic leaders at the school level.
2. Most teachers needed training on the use of ICT applications, especially generic computer applications and Internet-based e-learning applications. They also needed ICT technicians, additional ICT tools and learning software, as well as increased bandwidth capacity.

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