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Indonesian Language Teachers' Attitudes toward ICT Utilization in Learning for Elementary School in Surakarta

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Abstract. The study deals with Indonesian language teachers' attitude toward ICT utilization in learning for the elementary school in Surakarta. It also investigates the relationship of attitudes and teachers' knowledge and the relationship of attitudes and teachers' skill toward ICT utilization in learning. Moreover, it also attempts to find out teachers' attitudes toward ICT utilization in accordance with school categories and ICT training. There were 150 Indonesian language teachers from 15 elementary schools in Surakarta, including eight state schools and seven private schools. The data obtained were then analyzed by SPSS version 12.0 program. The result shows that Indonesian language teachers' attitudes toward ICT utilization in learning are 13 tive. However, teachers' knowledge and skills still at the beginner level. Besides, it also shows that there are no significant differences in teachers' attitudes toward ICT utilization in learning related to school categories. Nevertheless, there is a significant difference between Indonesian language teachers' who had attended ICT training and who had never been.

1. Introduction

Globalization is one of the ideologies on cultural, social and political changes resulted from information and communication (ICT) development. In this context, globalization affects to construct the concepts of a world without obstacles, information liberalization, global education and behavior changes [1]. ICT has given great influences on educational system changes in developing country like Indonesia. By technology development, knowledge about ICT will promote Indonesia to become an established and competitive country which is appropriate with globalization and technology era. Revolution of information results from ICT development which improves teachers' knowledge and needs to be utilized on increasing teachers' profession prestige because it keeps changing in the 21st century [2]. Teachers' and schools roles are required for development in research related to ICT.

Consequently, developing country needs more teachers who have skill in using ICT. Training for teachers is also needed to change the paradigm and to construct competent teachers in teaching as well as to create society and country. A quality teaching and learning process and variation of media can be

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achieved by utilizing the computer and its software, networking system, internet system, etc. [3]. Learning media usage considerably can increase an time and has been considered and recognized as magnetism in the teaching and learning process [4].

In this information age, a ministry of education and culture (Kemendikbud) has introduced computers in most the schools in Indonesia. It begins when a new curriculum, known as Kurikulum 2013 (K-13), is implemented. This results in learning based ICT implementation. A new paradigm of education in the ICT era needs teachers' involvement actively on using technology in the learning process. In consequence, technology development has changed teaching and learning model to be more innovative and creative [5]. By current technology development and ICT application in teaching, teachers expectedly comprehend ICT for education. Teaching and learning Indonesia language for elementary schools need changes and innovations comprehensively. Indonesian language teachers must be innovative and not be out of date [6].

Attitude toward computer is one of three factors determining teachers' understanding of computer usage. Zulkifli dan Maznah finds that astitudes are important to encourage students to learn something [7]. Hence, attitude and awareness are the best way to predict one's commitment to computer usage. The positive attitude and strong belief toward ICT contribute to skill development process on ICT implementation during teaching and learning process in class.

This study aims to know Indonesian language teachers' attitudes toward ICT utilization in learning for the elementary school in Surakarta. Teachers' attitudes toward computer or ICT are one of three factors contributing to teachers' competence in computer usage, except computer characteristics and essential skill in computer usage.

2. Metode

The study was conducted in elementary schools in Surakarta to know Indonesian language teachers' attitudes toward IC5 utilization in a learning process. There were 100 questions for teachers and then processed through the SPSS program (Statistical Package for Social Science version 12.0). The study also employed a questionnaire as an instrument in obtaining the data. Hence, data analysis was more comfortable to conduct [8]. The survey utilized in this study has been modified from Fairose.

The Samples were 150 teachers of Indonesian language subject with the employment purposive sampling techniques. Besides, 80 teachers from the state school and 70 teachers of private schools in Surakarta are selected as respondents.

Tabel 1. List of elementary schools in Surakarta as a resarch object

No	Name of School	Category
1	SDN Banyuagung 1	State
2	SDN Banyuanyar 1	State
3	SDN Kandangsapi	State
4	SDN Mojosongo 2	State
5	SDN Nusukan	State
6	SDN Bibis Wetan	State
7	SDN Tegalkuniran	State
8	SDN Petoran	State
9	SD Kanisius Pucangsawit	Private
10	SD Ta'Mirul Islam	Private
11	SD Muhammadiyah 5	Private
12	SD Muhammadiyah 15	Private
13	SD Islam Diponegoro	Private
14	MIS Al-Islam Jamsaren	Private
15	SD Kastriyan	Private

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SDN = State elementry school

SD = Private elemetary school

MIS = Private islamic elementary school

The data obtained were then analyzed by using the SPSS program (Statistical Package for Social Science version 17.0). The analysis dealt with descriptive statistic and inference data. Descriptive statistic was used to analyze respondents' profiles, questionnaire toward teachers, knowledge and skills of Indonesian language teachers toward ICT usage in a learning process. Min. score is used to formulate respondents' follow-up related to a questionnaire. Interpretation parameters about Indonesian language teachers' attitudes in using ICT for learning can be classified as positive if min. a score is shown as the following table.

Table 2. Min. Score Interpretation of Teachers' Attitudes

M7 imum score	Status
1.00 - 1.99	Low
2.00 - 2.99	Enough
3.00 - 3.99	Medium
4.00 - 5.00	High

3. Discussion

The result shows that Indonesian language teachers' attitudes toward ICT usage in the learning process are good, that is in between medium and high. There are differences of Indonesian language teachers' attitudes who had attended ICT training and had never been trained. The experience of ICT training changes their attitudes toward ICT usage in teaching and learning process. Teachers have a high interest in ICT usage and are willing to use it in teaching and learning process

Statements of a questionnaire, in this section, contain ten questions related to respondents' attitude of ICT usage in Indonesian language learning. They are shown in table 3. According to table 3, Indonesian language teachers' attitudes toward ICT usage in the learning process are at the high level, with minimum score 4.00-5.00. This indicates that respondents give positive attitudes toward ICT usage. The result also shows that 8 of 10 statements are highly responded. However, the rest shows a medium level. Based on table 3, the min. The score of high level refers to the need for ICT training to increase teachers' skill.

Table 3. Min Analysis of Indonesian Language Teachers' Attitudes toward the Use of ICT

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No.	Statement	A	D	AB
1	I like to take ICT training to improve competence	142	8	0
2	I support TT-based learning	148	0	2
3	believe the use of ICT can enhance the learning process	145	5	0
4	I like to use the internet in search of learning material	139	11	0
5	I have implemented ICT-based learning well	135	15	0
6	I am motivated to use ICT in education	145	4	1
7	I always use ICT in learning in class	132	16	2
8	ICT training helps me in teaching ICT-based in class	144	6	0
9	ICT-based teaching is more complicated than education as usual	4	146	0
10	I am more confident when teaching ICT in class	140	10	0

A: Agree

AB: Absence

D: Disagree

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Based on the analysis of Indonesian Language Teachers' attitudes towards the use of ICT in Indonesian language learning, the following data were obtained. In point 1, 142 teachers felt happy to take part in ICT training while 8 teachers disagreed because they thought that it was not enough to enjoy, but it must be accompanied by a follow-up of the next activity that is integrating the results of train 4g in comprehensive Indonesian learning. In point 2 about support for ICT-based education that can improve the quality of learning, almost all teachers agreed on this matter with the total of teachers, whereas the two teachers chose not to answer. At point 3, 145 teachers were convinced that the use of ICT could improve the learning process while 5 teachers disagreed with that. Teachers who liked the internet as a means to find teaching materials were 139 teachers while 11 people do not want to search for teaching materials through the internet. Point 5 about the implementation of ICT-based learning as many as 135 teachers state 4 hat they had used ICT well while 15 teachers felt it was not optimal. In point 6, teachers who felt motivated to use ICT in learning were 145 while the teachers who disagreed four people and who did not answer was one person. For point 7, the majority of teachers had used ICT in teaching as many as 135 teachers who had not implemented it with 13 teachers and who did not answer were two people. ICT training was also able to help teachers while teaching in class as evidenced by a questionnaire that 144 teachers agreed with it. Teachers also had the notion that using ICT did not complicate and harden the teaching process for teachers, namely 146 teachers were convinced. The existence of ICT was also able to increase confidence for teachers when teaching in class. A questionnaire proved this that 142 agreed with this. With the results of the survey, it v₁₀ proven that ICT had a positive influence on the teacher in the learning process.

Based on the result, it can be concluded that Indonesian language teachers who had never attended ICT training have a negative attitude toward ICT usage in the learning process. It is supported by Waryono who explained that teachers and students who cooperated one another in learning based ICT were able to improve learning achievement, but knowledge without ICT didn't show right enough quality [9]. Zulkifli and Maznah stated that teachers who have no experiences on using computer usually have negative attitudes [10]. It also supposed by Summer in Christensen who suggested that one of the leading causes why teachers have negative attitudes toward computer is the lack of knowledge and experiences [11]. Most of teachers who didn't use the computer is that because they are not confident on or afraid of using computer. Moreover, Becker and Watt said that negative attitudes of teacher resulted from teachers' comfort with learning they usually conducted, known as traditional learning, and teachers' difficulty to adapt information technology development [12]. The study conducted by Becker and Watt has been supported by Norin who proposed that most of the experienced teachers had mindset about learning process which they are interested in [13]. Besides, Padraig & Mark found that there are 35%-40% junior high school teachers clarifying that they never used the computer in a learning process in or out of school [14].

Indonesian language teachers who had never been attended ICT must be trained about knowledge and skills on using ICT through ICT training proposed by schools and government. This is similar to Fuad who imposed that the willingness to master and to use ICT comprehensively in the learning process requires two changes on teachers [15]. First, teachers have to believe that there are many positive benefits on using ICT in a learning process. Second, teachers need enough skills to use ICT devices well and effectively. Moreover, Albion suggested that one of an ideal way to improve teachers' competences on using ICT is by providing ICT training [16].

4. Conclusion

So all the way around, the result of the study shows that teachers of Indonesian language for an elementary school in Surakarta have positive attitudes toward ICT usage in the learning process. It also indicates that Indonesian language teachers have less knowledge and skill in using ICT. This results in low-level ICT usage. Ministry education and culture and related institutions altogether have to cope with those problems because if they are not trained and has no competences in using ICT, Indonesian language teachers will be left behind. The more concrete way is that teachers with no knowledge and skills about ICT must collaborate in ICT training. School categories concerning state

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and private do not show any problems. We need to pay attention to suburb schools in which their infrastructures, facilities and human resources still show in a small amount. Besides, Indonesian language teachers also have to take own initiative to improve knowledge and skills on ICT and to apply it in a learning process.

References

- [1] Mwakisole K F, Kissaka M M, and Mtebe J S 2018 Feasibility of cloud computing implementation for eLearning in secondary schools in Tanzania. International Journal of Education and Development using Information and Communication Technology (IJEDICT) 14 1 pp 91-102
- [2] Mekki K et al. 2018 A comparative study of LPWAN technologies for large-scale IoT deployment. KICS ICT Express pp 2405-9595
- [3] Munir 2009Kontribusi Teknologi Informasi Dan Komunikasi (TIK) Dalam Pendidikan di Era Globalisasi Pendidikan Indonesia. Jurnal Pendidikan Teknologi Informasi dan Komunikasi 2.
- [4] Rahim M Y 2011 Pemanfaatan ICT sebagai Media Pembelajaran dan Informasi pada UIN Alauddin Makassar. Jurnal Sulesana 6 2 pp 129-135
- [5] Saddhono K. 2015 Integrating Culture in Indonesian Language Learning for Foreign Speakers at Indonesian Universities. Journal of Language and Literature 6 2 pp349-353
- [6] Marsudi 2009 Jati Diri Bahasa Indonesia di Era Globalisasi Teknologi Informasi. JSH Jurnal Sosial Humaniorah 2 2 pp 133-148
- [7] Manaf Z A and Hussain R M R 1994 Attitudes, knowledge and previous computer experience of teacher trainees in the Diploma of Education Programme at the University of Malaya. Journal of Educational Research 16 pp 1-19
- [8] Shamsudin F 2006 Sikap guru-guru Bahasa Melayu terhadap penggunaan teknologi maklumat dan komunikasi (ICT) dalam pengajaran. Projek Penyelidikan Sarjana Pendidikan Bangi Universiti Kebangsaan Malaysia
- [9] Waryono A 2009 Pembelajaran Berbasis ICT dengan Metode Evaluasi Presentasi untuk Meningkatkan Prestasi Belajar Inspeksi dan Pengujian Benda Tuang Siswa Kelas III Teknik Pengecoran Logam SMK Negeri 2 Klaten Tahun 2008/2009. Jurnal DIDAKTIKA 1
- [10] Manaf Z A and Hussain R M R 1994 Attitudes, knowledge and previous computer experience of teacher trainees in the Diploma of Education Programme at the University of Malaya. Journal of Educational Research 16 pp 1-19
- [11] Christensen R 1997 Effect of technology integration education on the attitudes of teachers and their studies. Doctoral Dissertation (University of North Texas: Denton)
- [12] Becker W E and Watts M 1996 Chalk and talk: A national survey on teaching undergraduate economics. American Economic Review 86 2 pp 448-453
- [13] Mustaffa N 2004 Kemahiran, masalah dan Chap penggunaan komputer dalam kalangan guru sekolah bestari negeri Perak. Projek Penyelidikan Sarjana Pendidikan Bangi Universiti Kebangsaan Malaysia
- [14] Wims P and Lawler M 2007 Investing in ICTs in educational in developing countries: An evaluation of their impact in Kenya. International Journal of Education and Development using Information and Communication Technology (IJEDICT) 3 1 pp 5-22
- [15] Othman A F 2003 Pendidik dan pendidikan di era digital: Pendekatan dan cabarannya Wawasan: Pusat Sumber Pendidikan Negeri Kedah Bil 17 Bi 1
- [16] Albion P R 1999 Self efficacy beliefs as an indicator of teachers' preparedness for teaching with technology. Association for the Advancement of Computing in Education

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