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TOWARDS THE ESTABLISHMENT OF TEACHERS' MULTICONTEXT INFORMATION AND COMMUNICATION (ICT) TRAINING

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ABSTRACT: The 21st Century sets new challenges and new demands for teachers and educators in their professional practice. The rapid growth of information communication technology brings about changes in the nature and the ways of human communication. Today, people communicate through technology-based devices, using multimodal texts in many, if not all, aspects of their daily life through various ICT-based activities. Consequently, the teaching of English, needs to be adjusted to respond to those new challenges. In other words, ICT literacy in today's daily life is a must, and ICT-based language teaching, including in EFL teaching is therefore imperative. However, previous studies show that instead of huge number of users, the use of ICT-based devices for the purpose of learning is not necessarily promising. This study explores teachers' use of ICT-based devices in their daily and classroom teaching in the hope that the findings will provide strong basis for the utilization of ICT-based devices in classroom practice, and based on the result of this study, proposes multi-context training programs for teachers. For that purpose, a survey was conducted to collect data on the possession and use of such ICT-based devices as smartphones, tabs, laptop, and desktop computers in their daily and their classroom life to 24 junior and senior high school teachers in different areas in West Java, Indonesia. Comparative data has also been collected from 24 teachers in Nara Prefecture, Japan. The findings show that all the respondents possessed at least one smartphone, the majority possessed laptops, some possessed desktop computers, and none possessed tabs; however, the utilization of those devices in language classes is still far from being appropriate. This may be due to the nature of their status as 'immigrants' to the digital era. Based on the findings, a multi-context training programs have been proposed and elaborated.

Keywords: ICT-based devices, daily communication, classroom learning, immigrants, digital natives

INTRODUCTION

The 21st Century sets new challenges and new demands for teachers and educators in their professional practice (See also Suherdi, 2017). The rapid growth of information communication technology brings about changes in the nature and the ways of human communication. In the area of language teaching this may bring about

significant changes both in the methodology and in the industry of language teaching (Gupta, 2006; Block and Cameron, 2002). This changes are unavoidable since they are basically driven by the changes in the way the society changes. ICT-based and on-line activities are now inherent in our daily routine such as e-banking, e-commerce, e-government, e-learning, e-library, e-books, etc (See also Suherdi, 2017). That is why teachers, including language teachers, need to adjust and rethink their teaching and learning in this new environment (Vani and Kumar, 2013), and be willing to take active roles in this new world. Efforts on the implementation of ICT in language teaching has started since the introduction of Computer-Assisted Language Learning (CALL) in the 1980s (Tafazoli and Golshan, 2014). In fact, computer-assisted instruction (CAI) for other purposes has been initiated since 1950s. Along with the advancement of multimedia, today we have Multimedia Computer-Assisted Language Learning (MCALL) as well as Mobile-Assisted Language Learning (MALL) in our classrooms (See e.g. Iheanacho, 1997; Kukulska-Hulme, and Shield, 2008; Chinnery, 2006).

CALL and its related programs have now flourished in language teaching, such works as Grabe and Grabe (2001), Almekhlafi (2006), and Choudhury (2013) are just a few examples. Grabe and Grabe (2001) elaborate how technology can be used to boost teaching-learning quality through thoughtful considerations of many aspects of Learning; Almekhlafi (2006) investigates the effects of CALL on students EFL achievement and attitude; and Choudhury (2013) investigates learner-centered English language learning learning through technological mediation. In developing countries, however, the use of ICT in teaching and learning program is by no means satisfactory (Salehi and Salehi, 2012; Khan, Hasan, and Clement, 2012; Correos, 2014). Khan, Hasan, and Clement (2012) identifies barriers in the integration ICT and teaching, while Correos (2014: 22) found that:

> "English language teachers considered insufficient resources, lack of time in preparing lessons using technology, lack of ICT training, as the most dominant challenges that prevent them from using ICT in language teaching. Therefore, teachers need to seek assistance from possible sources and look for appropriate interventions to overcome the challenges of integrating ICT in language teaching."

In the meantime, Salehi and Salehi (2012) found that the sample teachers are familiar with ICT and ICT usage; however, they found that this does not entail that they integrate ICT into the curriculum. They further found that insufficient technical supports at schools and little access to Internet and ICT prevent them to use ICT in the classroom.

In Indonesian contexts, the works of Cahyani and Cahyono (2012), Mulatsih and Katharina (2014), and Floris (2014). Cahyani and Cahyono (2012) investigate teachers' attitudes towards ICT in language teaching, kinds of devices and programs used, and the procedure of the use of the programs in the teaching processes; while Mulatsih and Katharina (2014) investigate the use of ICT in a genre-based teaching, claiming that the use of ICT has a positive effect on the students' motivation to learn writing, and improve the students awareness of writing several text types. A more comprehensive picture of how teachers and schools respond to ICT in teaching may be clear in Gumawang Jati's remarks in an interview with F. D. Floris (Floris, 2014: 142-143), an associate editor of TEFLIN Journal, in which he said:

> The biggest challenge in promoting the use of ICT is dealing with the institution. Some school leaders want to integrate ICT into teaching and learning merely for the sake of keeping up with technological and educational advancement. Some institutions do not have the will to integrate ICT into their school system at all. Some school leaders do not understand and believe in the benefits of ICT for their learners. Some school administrators or teachers who are new to the integration of ICT in the ELT curriculum are usually "trapped" into the sophisticated software and they just simply convert the teaching and learning materials into digital without considering the learning process.

This remark highlights the existing condition of the use of ICT in teaching, especially in EFL language teaching in Indonesia, i.e. teachers and school leaders' attitude towards the use of ICT in teaching is far from being sufficient. However, there seems to be a paradox between experimental research results and wider survey results reported. In spite of positive result and

high number in experimentations, conclusive statements cannot be formulated. This is because the research projects were developed in a rather 'sporadic' fashion. The experiments tend to be fragmented, single-shot, and the results were not well-elaborated. Hence, a better planned, systemic, and established practice of ICT integration into language teaching is needed if productive program is to be developed. For that purpose, an understanding of teachers' habit in using ICT-based devices needs to be mapped and investigated, and a sound proposal submitted. This research is intended to map teachers' possession of such devices, their use of the devices in their daily communication, and in their teaching practice, and based on the result propose alternative framework of ICT trainings for EFL teachers. To be specific, this study aims at describing the profiles of teachers' possession of smartphones, tabs, laptops, and desktop computers, and how they use them in oral and written daily communications, in internet browsing, and in ideas presentations. In addition, this study is also intended to map the use of the devices in the teachers' teaching practice, and propose a synergetic, continuous, and effective multi-context ICT trainings for EFL teachers.

This focus is chosen based on the assumption that a good ICT-based teaching needs a passion, habit, and valued attitude towards the use of ICT in teaching, particularly in EFL teaching. The data of the interrelationship between possessing ICT-based devices, using them in daily communication and information searching and presentation, and utilizing them for the sake of students' effective learning are some of the main requirements for better ICT-based teaching development. In other words, this study is trying to find out the profiles of (1) teachers' ICT-based devices possession; (2) use of ICT-based devices in their daily communication, internet searching or browsing, and information presentation; (3) use of the ICT-based devices in their teaching practices, and (4) the interrelationship among the three variables, and (5) based on the profiles, the use and the relationship, propose a ICT teacher training model suitable for the 21st century Indonesia.

This focus is critical for several reasons. First, ICT is to be inherent in the 21st century Indonesian classrooms (Kemendikbud, 2016; Kemenristekdikti, 2017). Kemendikbud (2016) specify how processes of teaching and learning are required to be conducted in Indonesian classrooms, in which integrating ICT into teaching programs is one of the main principles. In the meantime, Kemenristekdikti (2017) put the ability of integrating ICT into teaching as one of the learning outcomes to be achieved in teacher education curriculum. Hence, developing established practice of ICT-based teaching, including ICT-based language teaching, is imperative. Therefore, mapping the existing conditions is also essential.

Second, there is a significant shift in the ways teaching and learning processes should be developed. In today's practice, according to the ministerial regulation (Kemendikbud, 2016), teaching-learning processes should be transformed from 'informing students' fashion to 'students searching for information'; from having teachers as the only resources to multi-source teachings; from 'focusing on cognitive domain' to 'developing competencies', etc., all of which clearly put ICT-based devices and programs in a highly-demanded position. Hence, again, the use of ICT-based devices is critical.

Last, but not least, massive use of multimodal and multi-semiotic texts (Kress and van Leeuwen, 1996; Baldry and Thibault, 2006; Bateman, 2014; Bateman and Wildfeuer, 2014; O'Halloran, 1998; Ventola and Guijarro, 2009; Mozdzenski, 2013) in even our daily life cannot be effectively done without the use of ICT-based devices (See also Suherdi, 2015a, b). In today's communication, we do not only send words to our family, friends, or other persons, but also in combination with photos, emoticon, video clips, and even sound. This will only be easily done through multimedia devices such as smartphones, tabs, laptops, or other kinds of computers. Again, it is reasonable to argue that establishing ICT-based teaching is unequivocally important, and conducting research leading to that purpose is imperative. To sum up, investigating the existing conditions of the possession of ICT-based devices and their use in daily communication and in teaching practice is critical if good developments of ICT-based EFL teaching is targeted.

METHODS

The research employed survey method to collect the data. The survey managed to collect data of

the respondents' background, possession of ICT-based devices, including smartphones, tablets or tabs, laptops, and desktop computers.

Respondents

The survey respondents consisted of 30 language teachers in various parts of West Java, Indonesia, consisting of 10 male and 20 female teachers with 10, 20, and 30 years of teaching experience. To be clear, see Table 1.

Table 1 Participant Profiles

Sex	Male			Female		
Years of Experience	10	20	30	10	20	30
Frequency	5	3	2	9	7	4
Total	10			20		
	30					

As shown in Table 1, the teachers had different years of experience, and the majority of them were female. Fourteen of them had 10 years, ten had 20 years, and six had 30 years of experience. This indicates that the respondents had different years of experience and came from different sex groups. This profiles helped us obtain data from respondents with a variety of background.

Data Analysis

The data obtained has then been analyzed using descriptive statistics to get the patterns of teachers' possession of ICT-based devices, the use of the devices in their daily life, and in their classroom teaching. These patterns help us see teachers use of those devices in the existing practice of their teachings.

FINDINGS AND DISCUSSION

Findings

From the data analysis, it is found that all teacher had smartphones (17 had only one, 9 had 2, and 4 of them had more than 2). As for the tabs, only 15 of them had them, which means 50% of all the respondents. Five out of the 15 had 2 tabs with them. Almost all of them had laptops (29 out of 30): 20 had only one, 7 had 2, and 2 had more than 2 laptops. Only 7 out of 30 had desktop. To have a concise picture of the device possession, see Table 2.

Table 2 Teachers' and Students' ICT-Based Device Possession

Devices	Number of Teachers Who Possess			
	None	1	2	<2
Smartphones	0	17	9	4
Tabs	15	10	5	0
Laptops	1	20	7	2
Desktops	23	6	1	0

As shown in the table, everybody of the respondents had at least one smartphone, 4 of them even had more than two. Laptops came second only to smartphones, followed by tabs in the third place, and desktops came last in the list. Relatively similar patterns emerge in students' possession of the devices. There were 146 out of 161 students in the slot of those who possessed smartphones, 112 had laptops, but only 63 had tabs, and 88 had desktops. The number of students who had no smartphone, tab, laptop, or desktop is bigger than that of teachers. This may indicate the difference in the level of their economic background. In the meantime, the number of those who had the smartphone indicates that having smartphones were no longer a luxury, but it had been a common practice among the teachers and the students. Surprisingly, the number of students who possessed laptops was relatively high (69.56%), as far as Indonesian junior secondary school is concerned. While desktop lose their popularity among the teachers, they were still popular among the students (54.04%). Tabs seemed not to get students preference.

In conjunction with the use of the devices in the teachers' and students' daily communication, it is found that only smartphones that they preferred, the majority of the other devices was even never used. To get detailed picture of the data, see Table 3.

From Table 3, we can see that in daily life, most of the teachers used smartphones in their oral communication. Out of 30, all of them used smartphones in their daily oral communication: 24 teachers used smartphone very often and often, 4 sometimes, and 2 seldom used them. While for the use of smartphones in written communication, the number spread to all the options (9, 5, 7, 4, and 4 respectively). Laptop was

the most favored devices in written daily communication. In spite of their possession status, very few of them used desktop, even in their written communication.

Table 3 The Use of ICT-Based Devices in Teachers' and Students' Daily Communication

Device	OC					WC				
	VO	OF	ST	SD	NV	VO	OF	ST	SD	NV
Smartphones	14	10	4	2	0	9	5	7	4	4
Tabs	3	2	3	5	17	3	1	8	1	17
Laptops	1	4	4	5	16	5	9	9	1	6
Desktops	0	0	2	0	28	1	0	2	1	26

Legend:
OC: Oral Communication
WC: Written Communication
VO: Vey Often
OF: Often
ST: Sometimes
SD: Seldom
NV: Never

In relation to more sophisticated activities such as internet browsing (IB) and ideas presentation (IP) outside their teaching activities, the distribution is generally skewed to the right, meaning most of them never used the device, with some interesting exceptions. First, 10 teachers claimed often used smartphones and 13 laptops for internet browsing, and 10 for ideas presentations. This is not difficult to understand because smartphones are very handy and laptops are more comfortable for this purposes. To get the whole picture of the use of the devices in IB and IP, see Table 4.

Table 4 The Use of ICT-Based Devices in Internet Browsing and Ideas Presentation

Device	IB					IP				
	VO	**OF**	**ST**	**SD**	**NV**	**VO**	**OF**	**ST**	**SD**	**NV**
Smartphones	9	10	5	2	4	2	4	8	4	12
Tabs	6	6	1	0	17	3	0	4	0	23
Laptops	6	13	8	0	3	2	7	10	7	4
Desktops	0	0	3	3	24	0	0	2	2	26

Legend:
IB: Internet Browsing
IP: Ideas Presentation
VO: Vey Often
OF: Often
ST: Sometimes
SD: Seldom
NV: Never

In Table 4, we can see that there is no significant figures appeared, except for never used desktops and tabs both in IB and in IP. In the meantime, the use of smartphones and laptops in both IB and IP is far from being significant. This means that the habit of using ICT-based devices outside the classroom activities is not yet established. What they do is probably motivated by instant, not well-planned utilization of the device.

What happened in the classroom contexts is even worse, and the distribution is significantly skewed to the right. This means that high frequency falls in seldom and never columns. The details of the data can been found in Table 6.

As indicated in the table, the most frequent use of smartphones in both oral and written communication falls into *sometimes* (in OC) and *never* (in WC) columns. For both tabs and desktop, they fall into never columns, and for laptop use, the figures fall into never (in OC) and sometimes (in WC) columns. This indicates that the tradition of using ICT-Based is not yet established and well-programmed, as far as learning communication is concerned. In the

meantime, in terms of IB and IP, the details can be found in Table 7.

Table 6 The Use of ICT-Based Devices in Oral and Written Communication

Device	OC					WC				
	VO	OF	ST	SD	NV	VO	OF	ST	SD	NV
Smartphones	3	3	10	5	9	3	1	9	5	12
Tabs	2	1	5	1	21	2	1	6	1	20
Laptops	4	5	7	4	10	4	8	10	4	4
Desktops	1	0	0	1	28	1	0	1	2	26

Legend:
OC: Oral Communication
WC: Written Communication
VO: Vey Often
OF: Often
ST: Sometimes
SD: Seldom
NV: Never

Table 7 The Use of ICT-Based Devices in Internet Browsing and Ideas Presentation

Device	IB					IP				
	VO	OF	ST	SD	NV	VO	OF	ST	SD	NV
Smartphones	6	3	8	5	8	3	2	4	6	15
Tabs	3	5	4	0	18	3	3	2	2	20
Laptops	7	12	5	2	4	2	11	7	4	6
Desktops	1	1	1	2	25	1	0	0	4	25

Legend:
IB: Internet Browsing
IP: Ideas Presentation
VO: Vey Often
OF: Often
ST: Sometimes
SD: Seldom
NV: Never

As it is clear from the table, except for laptops which were used often, the rest falls into never and sometimes (smartphone in IB) columns. Again this indicates the lack of intention in using and utilizing the devices for the sake of the betterment of their teaching.

Statistical tests on the data, using chi-square, result in counted $x^2 = 8.75$, while the tabled $x^2 = 41.34$. This means that there is no significant difference between two variables, i.e. the use of ITC-based devices in daily communication, internet searching, and ideas or information presentation and similar activities in teaching practice. It means that the difference appears in the data is due to chance. In other words, the difference in the ways the teachers use ICT-based devices in daily communication, internet searching, and ideas or information presentation has nothing to do with the difference in the ways the use the devices in classroom teaching. Hence, apart from less satisfactory levels of use of the devices, the variability of the way the teachers use the devices is not related to the variability of the ways the use the devices in their teaching practice.

In the meantime, the qualitative data collected seems to elaborate the findings, for those who used the devices most frequently (which is the minority in number), they claimed that they used very often (VO0 because *they taught ICT-course, the devices were made available by the schools, they wanted to arouse students' motivation and prevent them from boredom*. In addition, those who claimed they used the devices often (OF), they reported that they used them *to present texts in a multimedia form, including pictures, colors, lay out, and sound; to motivate students to be more creative and innovative; to maximize students' understanding, and make the best use of the devices*.

Other parts of the data indicate those who seldom, and never used them reported that they were prevented from the best use of the devices because *the facilities were not sufficient both in number and quality*. In terms of their preference if they were to use the device, they preferred to use them *to motivate students' learning (15 respondents), to present texts in a multimedia form (4), provide a variety of resources (3), to better explain the teaching materials (2), and to entertain students so as to help students avoid boredom*. Hence, it is clear that teachers' use of ICT-Based devices both in daily life and classroom teaching does not reflect good understanding of the significance of ICT-Based devices in our today's life and education. To get a more elaborate understanding of these findings, discussions on the findings will be presented in the rest of this section.

In conclusion, the findings show that the use ICT-based devices in the respondents' daily communication, internet searching, and ideas or information presentation and in their teaching practices are by no means satisfactory. In addition, the difference in the ways the use the devices in daily communication, internet searching, and ideas or information presentation is not related to the ways they use them in their teaching practice.

Discussion

The data analysis in the previous section shows that all the teachers had smartphones, most of them had laptops, some of them had tabs, and a few of them had desktop computers. On the one hand, this is not surprising because corresponding data in the national level shows similar tendency. Indonesia-investment.com reported that 40% of Indonesian population use smartphones, and predicts that it will increase from 55 million in 2015 to 92 million in 2019. In addition, in 2017, Indonesia is ranked fifth in terms of internet users after China, India, United States, and Brazil (www.statista.com), reaching 132.7 millions of users. In fact, the number of users has been significantly increasing. On the other hand, the use of the devices in teaching contexts, the data is far from being promising.

From the perspective of Indonesian government expectation as indicated in the aforementioned regulations, this is, of course, disappointing. The fact that some experiments were carried out, though necessary, they are clearly far from being sufficient. Alternative solutions are critical and in some cases urgent. In the case that the teachers are responsible for students who are native to ICT, their capacity in using the devices in teaching is urgent. Otherwise, they will prevent students from productive and effective learning. To make it worse, they may make them fail in achieving 21st century learning outcomes.

The fact that the relationship between the use of ICT-based devices and the contexts of daily communication and that of teaching contexts signifies the urgency of finding sound solution to the problems highlighted in the previous section. This finding, among others, indicates that the capability in using the devices in the teaching contexts is not automatic. Comparative data that we collected from 24 English teachers in Nara Prefecture, Japan. The data was similar in the patterns of teachers' responses (skewed to the right in terms of the use of ICT-based devices in their teaching practices), highlighting the nature of 'immigrant' (Jones, 2010) status of the teachers to ICT, who are expected to teach digital natives or net generation (ibid). Special trainings needs to be established to develop teachers' capacity in establishing the ICT-based teaching expected. In addition, the needs for such training is also supported by the fact that the challenges that teachers are faced with is not only that of improving their understanding, capability, and good belief in the significance of ICT in today's teaching, but also worsened by the lacks of required facilities, leaders' supports, and conducive environment.

Based on the findings and the discussions, the writer has the following to propose. First, as it is shown that teachers vary in their possession, use of the device in daily communication and in their teaching contexts, the training needs to be suited to teachers' conditions. Hence, the training needs to be developed in many packages. Second, as the findings show that the habit of using the devices in one contexts is not automatically transferable to other contexts (in this case, the use of ICT-based devices in daily communication to that in teaching contexts), it is reasonable to argue that the training needs to be carried out in well-planned, monitored, and established ways. Third, from all the data, there

is no evidence that the teachers were familiar with LMS and relevant programs, it is advisable that some education-related systems and programs are included in the training curriculum.

For the purpose of putting the proposal into a doable plan, we need to categorize teachers in terms of the class characteristics. In this case, the classes will be grouped into three, i.e. highly, fairly, and lowly ICT-supported classes. We do not use 'classroom' as the category with the intention that learning may take place in many places, not only classrooms. All the categories and their description may be found in Table 8.

Table 8. Types of Classes in Terms of ICT Support

Types of Class	Description
Highly ICT-supported (HIS)	School is equipped with multimedia language lab, and LCD projectors; students are equipped with smartphones, and laptops
Fairly ICT-supported (FIS)	School is equipped with language lab and laptops and LCD projectors; students are equipped with cellphones
Lowly ICT-supported (LIS)	School is equipped with laptops and LCD projectors; some students are equipped with cellphones

In the meantime, how ICT-based learning needs to be conducted is formulated as a continuum between minimum and maximum levels of application. To get a clearer idea on the learning activities to be carried out in the three different classes, see Table 9.

As can be found in Table 9, and in line with the vast variety of Indonesian teachers and educational settings, at least three categories of training curricula for teachers so that they can utilize ICT in their teaching in their contexts, i.e. for HIS, we have a span from PU-LMS to FU-LMS; for FIS, that from IB-WCA to PU-LMS; and that in LIS, from PIBT to IB-WCA. To help readers understand this proposal, the alternative training curricula will be discussed in detail in the rest of this section.

Table 9. Activities to Be Developed in ICT-based Learning

Types of Class	Minimum	Maximum
Highly ICT-supported	Partial Use of LMS (PU-LMS)	Full Use of LMS (FU-LMS)
Fairly ICT-supported	ICT-based Whole Class Activities (IB-WCA)	Partial Use of LMS (PU-LMS)
Lowly ICT-supported	Partial ICT-based Teaching (PIBT)	ICT-based Whole Class Activities (IB-WCA)

First, we must have an agreement on what we mean such terms as LMS, IB, and WCA. LMS (Learning Management System). LMS has been interchangeably used with CMS (Course Management System), LCMS (Learning Course Management System) Computer-Assisted Instruction (CAI), Computer-based Instruction (CBI), and Computer-Assisted Learning) (Cf. Reigeluth *et al.*, 2008; Watson and Watson, 2007). In this paper, following Reigeluth *et al.* (2008: 32), LMS is defined as 'a comprehensive, integrated tool for the information-age paradigm of education comprising *recordkeeping for student learning, planning for student learning, instruction for student learning, and assessment for (and of) student learning as the primary roles; and communication, general student data, school personnel information, and LMS administration as the secondary roles'*. In this perspective, we will include any terms used in the literature as far as it shares those characteristics. Hence, Blackboard, Moodle, MOOCS, and Edmodo as well as SPOT (an LMS developed by Universitas Pendidikan Indonesia) are some of the examples.

In conjunction with the definition, PU and FU in this research means the partial use and full use of such LMSs in teaching practices. Hence, in full use of LMS, teachers take all the aforementioned roles of LMS; while in partial use, for some reasons, they take only few or some of the roles. We suggest that HIS take any forms of these roles in the continuum between PU and FU-LMS. In the meantime, FIS take it between IB-WCA and PU-LMS. By IB, we mean any activities

involving the use of ICT-based devices such as mobile phones, laptops, tabs, and even desktop computers in teaching; and WCA means that the use involving the whole class. For example, the use of students' smartphones or laptops, social media or websites, in teaching texts included in the curriculum (See Suherdi, 2015a, b, 2017; Cahyani and Cahyono, 2012). As for blended learning and flipped classrooms (See Bonk and Graham, 2006, Purnawarman, Susilawati, Sundayana, 2016), and Chen and Summers, 2015), their categories will be determined by whether it is incidental or well-organized. Incidental ones belong to PU, while well-organized ones belong to FU.

Second, though relative, all the alternatives should end up with maximum achievement of students' learning. This means that relative to the situations, all ICT-based teaching needs to be carried out to the maximum level of implementation and establishment. This entails that the implementation needs to be well-planned, organized, monitored, assessed, and continually improved. Hence, students in all parts of the country will get the benefits of the program. This will result in more ICT literate and quality human resources for the 21st century Indonesia. We will have more people with 21st century skills: Indonesian human resources with critical thinking, effective communication, productive collaboration, and high ever-growing creativity (Cf. Trilling and Fadel, 2009; Bellanca and Brandt, 2010; Plata, 2010; Meek, 2010).

Third, all of the proposed alternatives need to be supported by synergetic, continuous, effective training: pre-, in-, and on-services. This is not to mean that training has not been conducted at all, but rather to highlight the importance of synergy, continuity, and effectiveness of the training. By synergy, it is expected that all the trainings (pre-, in-, and on-service) need to be conducted not only in high standard but also mutually enhancing among each other. The pre-service lays a strong foundation for the growth of teachers' passion, interest, and motivation in making the best use of ICT in their teaching; of their working and productive knowledge to make their ideals inspiring and helpful for students learning; and of their skills in operating the systems. In the meantime, in-service trainings serve to further develop, refresh, and upgrade their knowledge, attitude, and skills in utilizing ICT for better learning; while on-service to help them implement all their potentials and capacity in making the best use of ICT for their teaching and students' learning.

As for the continuity, it is required that the training be conducted in a well-ordered levels and the teachers be train in a continuous and well-monitored, and sustained series. This is by no means easy as far as Indonesia is concerned. The huge number of teachers (more or less 2.7 millions) is not easy to manage. However, having them undergo one-shot, ill-managed and far from sustainable efforts is counter-productive. Instead of developing their capacity, this way of doing training will only put them in a confusing, pre-mature understanding, attitude, and skills and vulnerable to 'malpractice' in the teaching practice. Hence, good management of teacher training is a must. Last, effectiveness here is simply intended to mean that their knowledge, attitude and skills are appropriately developed and measured, corrected, and continually improved.

CONCLUSION

This paper has been successful in describing the existing conditions of the possession and the use of ICT-based devices in daily communication and in teaching practices in Indonesian language classrooms. It is found that the use of ICT-based devices vary from teachers to teachers and from one type to others both in daily and teaching communication. In addition, the use of the devices for the sake of learning is far from being facilitative to better learning. This may be due to the nature of 'immigrant' status of the teachers to digital era. It is therefore suggested that some trainings suited to the vast variety of Indonesian teachers' background and contexts, taking the level of ICT support and corresponding curricula.

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