

Indonesian EFL Teachers' Self-Efficacy towards Technology Integration (SETI) and Their Use of Technology in EFL Teaching

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Abstract

The advance of technology nowadays has encouraged many English as a Foreign Language (EFL) teachers to use technology in EFL teaching. However, some EFL teachers are still reluctant to take the opportunity. Low level of self-efficacy has been identified as a factor that hinders EFL teachers to use technology in EFL teaching. While a lot of research on EFL teachers' self-efficacy has been reported in the literature, EFL teachers' Self-Efficacy towards Technology Integration (SETI) has been rarely studied, especially in the Indonesian context of EFL teaching. Therefore, this study aimed to examine Indonesian EFL teachers' SETI and their use of technology in EFL teaching. It involved 23 EFL teachers. Data were collected by using survey and interview. Analysis of the data showed that there is a relation between the EFL teachers' SETI and their use of technology in EFL teaching.

Keywords

Indonesian EFL teachers, Self-Efficacy towards Technology Integration (SETI), use of technology, EFL teaching

1. Introduction

Nowadays, technology has developed so fast that it becomes an unavoidable "partner" in education. This is especially the case as learners are growing up with technology; in other words, technology has been natural and integrated parts of learners' lives. Therefore, teachers of English as a Foreign Language (EFL) are encouraged to integrate technology in their EFL teaching to support learning. Thus, use of technology in the classroom has become a method to expose learners with the outside world (Dudeney & Hockly, 2007). To meet this challenge, EFL teachers should be aware of the availability of

technology for instructional purposes and take this chance to improve their teaching.

However, some EFL teachers are reluctant to take the opportunity to integrate technology into their classrooms. Several factors have been identified to play a role in teachers' decision not to use technology in EFL teaching. The factors include lack of resources, lack of training, beliefs about technology, lack of self-efficacy, and lack of time to have experiment with technological tools (Compeau & Higgins, 1995; Wang, Ertmer, & Newby, 2004; Littrell, Zagumny, M. J., & Zagumny, L. L., 2005; Buabeng-Andoh, 2012; Gilakjani, 2013; Fu, 2013). The present study focuses on EFL teachers' self-efficacy as one of influencing factors in the practice of integrating technology in EFL classrooms. "Self-efficacy" refers to the state of being confident or unconfident in doing a certain action; it deals with how one perceives his or her competences to do the intended action.

Self-efficacy is a key concept in Bandura's (1977, 1997, 1999) social cognitive theory. This theory highlights the reciprocal relationship between personal factors, behavioral patterns, and environmental events in shaping people's behavior (Bandura, 1999; Chao, 2003). In this conception, people are viewed as operators in their life paths, not just watching environmental events that shaped them. They are agents of experience, not simply undergoing the experience. The concept of human agency involves self-organizing, proactive, self-reflective, and self-regulative mechanism (Bandura, 1999, 2001). Self-efficacy is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997). It influences the way people think, feel, motivate themselves, and act (Bandura, 1999). It plays a pivotal role in social cognitive theory since it influences not only action directly but through its impacts. Self-efficacy also connects to one's motivation, decision making, goal setting, effort in conducting a task, and the length of time he or she would spend, and difficulties to achieve a specific outcome (Bandura, 1999; Khorrami-Arani, 2001; Farah, 2011).

An individual's high perception towards his or her own capabilities will result in positive outcomes and contrariwise. Thus, self-efficacy can be used as prediction whether someone is able to achieve his or her goal as he or she planned or not. As stated by Bandura (1999), one's capability to influence results makes him or her predictable. This predictability will in turn raise preparedness while inability to influence over things causes anxiety, apathy, or despair.

Educationally, a teacher's self-efficacy is defined as beliefs of his or her capabilities to bring about the desired results of students' engagement and learning, even among the unmotivated students (Tschannen-Moran & Hoy, 2001). In terms of technology integration, there are two kinds of behavior, namely teachers' acceptance or rejection of technology integration. Those who accept to use technology in their classrooms tend to be well prepared in integrating technology in their classroom and conversely those who reject it tend to avoid using technology.

A teacher's self-efficacy towards technology integration is defined as beliefs of his or her capability to integrate technology effectively in the teaching and learning process (Skoretz, 2011). The teacher's belief in his or her capabilities to work successfully with technology is an important factor in

determining the way technology is integrated in their EFL teaching (Albion, 1999; Abbit & Klett, 2007; Abbit, 2011; Buabeng-Andoh, 2012; Gilakjani, 2013) and the absence of self-efficacy for using any technological tools will cause a teacher not to integrate it successfully in his or her classroom practices (Kim et al., 2013). In other words, it is implausible that teachers integrate such a technological tool successfully into their classroom practices without possessing confidence in their abilities to use a technological tool in the classroom (Kim et al., 2013).

A noteworthy study on teachers' self-efficacy towards technology integration was conducted by Wang et al. (2004). They investigated the influence of vicarious learning experiences and goal setting on pre-service teachers' self-efficacy for integrating technology into the classroom. The results showed that vicarious experiences and goal setting significantly influence participants' self-efficacy towards technology integration. More specifically, the use of vicarious learning experiences in conjunction with specific goals resulted in the increasing of pre-service teachers' self-efficacy towards Technology Integration (SETI). In a multi-subject, multi-site case study of full time certified teachers from three different school levels (elementary, middle, and high). Farah (2011) scrutinized factors influencing teachers' levels of SETI. The findings revealed that teachers' SETI were influenced by personal, behavioral, and environmental factors. Those factors were found to enable teachers to increase their SETI which were aligned with four sources of self-efficacy explained by Bandura (1997), namely, successful experience, vicarious experience, verbal persuasion, as well as physiological and affective states.

More research studies have found that self-efficacy towards computer use or integration of Information and Communication Technology (ICT) influences teachers' ability to integrate technology into classroom teaching (Abbit & Klett, 2007; Govender, D. & Govender, I., 2009; Abbit, 2011; Buabeng-Andoh, 2012; Gilakjani, 2013; Rigi, 2015). This conforms to the idea pointed out by Bandura (1997) who stated that teachers' self-efficacy influences the application of educational technologies.

The abovementioned research has been done in different country settings and undoubtedly vary in terms of objectives. However, studies in teacher's self-efficacy has been rarely conducted in Indonesia. Therefore, conducting a study on EFL teachers' SETI in their EFL teaching is worth doing to contribute more insights in the role of teachers to integrate technology in their teaching. Two research questions are formulated as follows:

- 1) What is the Indonesian EFL teachers' level of self-efficacy towards technology integration?
- 2) How is the Indonesian EFL teachers' use of technology in EFL teaching?

2. Research Method

A case study design was chosen for this study. Twenty-three English teachers from five schools in Surabaya, the second largest city in Indonesia, were involved in this study. Table 1 presents the demographic data of the teachers involved in the survey.

Table 1. Data of the Teachers Involved in the Survey (N = 23)

No.	Category	Sub-category	f	%	Total (%)
1.	Gender	Male	7	30.4	100
		Female	16	69.6	
2.	Age	≤ 30 years old	1	4.3	100
		31-50 years old	16	69.6	
		> 50 years old	6	26.1	
3.	Educational Background	Undergraduate	17	73.9	100
		Graduate	6	26.1	
4.	Teaching Experience	≤ 10 years	3	13.0	100
		11-20 years	13	56.5	
		> 20 years	7	30.4	

Of the 23 teachers in the survey, 7 teachers (30.4%) were male and 16 (69.6%) were female. Regarding the age, one teacher (4.3%) aged below or 30 years old, 16 teachers (69.6%) aged at 31 to 50 years old, and 6 teachers (26.1%) aged at more than 50 years old. Seventeen teachers (73.9%) earned undergraduate (bachelor) degree and six teachers (26.1%) earned graduate (masters) degree. Dealing with their teaching experience, teachers (13.0%) had less than 10 years of teaching experience, 13 teachers (56.5%) had 11 to 20 years of teaching experience, and 7 (30.4%) had more than 20 years of teaching experience.

This study used both quantitative and qualitative data obtained from a survey and interviews. Computer Technology Integration Survey (CTIS) questionnaire developed by Wang, Ertmer and Newby (2004) was used to assess EFL teachers' self-efficacy towards technology integration (SETI). There were 21 items in the questionnaire and each had five options written by using a Likert scale, varying from "strongly disagree" (valued 1) to "strongly agree" (valued 5). The questionnaire was used to measure teachers' SETI in terms of two categories: (1) teachers' self-efficacy towards technology capabilities and strategies (items number 1-16), and (2) teachers' self-efficacy towards external influences of technology use (items number 17-21). The data obtained from the CTIS were then recorded and scored quantitatively using descriptive statistics.

Three EFL teachers were selected purposively to be the sample in this case study based on their willingness to participate. The three teachers (2 females and 1 male) were interviewed to explore more about their SETI. To know how the 3 EFL teachers use technology in EFL teaching, the interview focused on three aspects of teachers' self-efficacy: efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement (Tschannen-Moran & Hoy, 2001). The demographic data of the three teachers involved in the interview are shown in Table 2.

Table 2. Data of the Teachers Involved in the Interview (N = 3)

No.	Category	Sub-category	Teacher 1	Teacher 2	Teacher 3
1.	Gender	Male	-	√	-
		Female	√	-	√
2.	Age	≤ 30 years old	-	-	-
		31-50 years old	√	√	√
		> 50 years old	-	-	-
3.	Educational Background	Undergraduate	-	√	√
		Graduate	√	-	-
4.	Teaching Experience	≤ 10 years	-	-	-
		11-20 years	√	√	-
		> 20 years	-	-	√

As shown in Table 2, Teacher 1 is a female teacher who is in 31-50 years old. She had graduate education and 11-20 years of teaching experience. Teacher 2 is a male teacher who is in 31-50 years old. She had undergraduate education and 11-20 years of teaching experience. Teacher 3 is a female teacher who is in 31-50 years old. She had undergraduate education and more than 20 years of teaching experience.

3. Results

The results of the study are presented according to the research questions, namely Indonesian EFL teachers' SETI level and their use of technology in EFL teaching.

3.1 Indonesian EFL Teachers' SETI Level

The Indonesian EFL teachers' SETI is categorized into two aspects: self-efficacy towards technology capabilities and strategies, as well as self-efficacy towards external influences of technology use. Based on the data obtained, the Indonesian EFL teachers' self-efficacy towards technology capabilities and strategies is presented in Table 3.

Table 3. Indonesian EFL Teachers' Self-Efficacy towards Technology Capabilities and Strategies

No.	Statements	Mean	SD	Remark
	I feel confident ...			
1.	that I have computer capabilities well enough to maximize them in my classroom.	3.9	1.0	Good
2.	that I have the skills necessary to use the computer for instruction.	3.9	1.0	Good
3.	that I can successfully teach relevant subject content by using appropriate technology.	3.8	1.0	Good

4.	in my ability to evaluate software for teaching and learning.	3.7	1.0	Good
5.	that I can use correct computer terminology when directing my students' computer use.	3.5	1.1	Good
6.	that I can help students when they have difficulty with the computer.	3.7	0.9	Good
7.	that I can effectively monitor students' computer use for project development in my classroom.	3.9	0.9	Good
8.	that I can motivate my students to participate in technology-based projects.	3.9	0.8	Good
9.	that I can mentor students in appropriate use of technology.	3.8	0.9	Good
10.	that I can consistently use educational technology in effective ways.	3.8	0.9	Good
11.	that I can provide individual feedback to students during technology use.	3.8	0.8	Good
12.	that I can regularly incorporate technology into my lessons, when appropriate to student learning.	4.0	0.8	Good
13.	about selecting appropriate technology for instruction based on curriculum standards.	4.1	0.8	Good
14.	about assigning and grading technology-based projects.	3.8	0.8	Good
15.	about using technology resources (such as spreadsheet and electronic portfolios) to collect and analyze data from student tests and products to improve instructional practices.	4.0	0.7	Good
16.	that I can be responsive to students' needs during computer use.	3.8	0.8	Good
	Total	3.8	0.9	Good

Table 3 shows that the mean of the Indonesian EFL teachers' self-efficacy towards technology capabilities and strategies score is in "good" category. This suggests that the EFL teachers have good self-efficacy in integrating technology and in selecting strategies to be implemented in EFL teaching. The highest mean score of self-efficacy was about "selecting appropriate technology for instruction based on curriculum standards" (4.1). They were confident of having ability to select appropriate technology to support their students to learn the content to meet the curriculum standards.

The data obtained from the survey also revealed Indonesian EFL teachers' self-efficacy towards external influences of technology use, which is presented in Table 4.

Table 4. Indonesian EFL Teachers' Self-Efficacy towards External Influences of Technology Use

No.	Statements	Mean	SD	Remark
	I feel confident ...			
17.	about keeping curricular goals and technology uses in mind when selecting an ideal way to assess student learning.	3.8	0.9	Good
18.	that I will be comfortable using technology in my teaching.	4.1	0.7	Good
19.	that, as time goes by, my ability to address my students' technology needs will continue to improve.	4.0	0.7	Good
20.	that I can develop creative ways to cope with system constraints (such as budget cuts on technology facilities) and continue to teach effectively by using technology.	3.9	0.5	Good
21.	that I can carry out technology-based projects even when I am opposed by skeptical colleagues.	3.7	0.6	Good
	Total	3.9	0.7	Good

Table 4 shows that the mean of the teachers' self-efficacy towards external influences of technology use is in "good" category. This points out that the teachers have good self-efficacy to cope with external factors that may hinder technology integration. The highest mean score is in their confidence about their being "comfortable using technology in their teaching". This indicates that the teachers are already familiar with technology and use technology in their EFL teaching.

Based on the analysis of the two aspects regarding SETI, the Indonesian EFL teachers' level of SETI can be determined. To determine the Indonesian EFL teachers' SETI level, the survey results were quantified into three categories: low technology self-efficacy, medium technology self-efficacy, and high technology self-efficacy. Table 5 shows the overall survey results of all teachers at each SETI level.

Table 5. Survey Results at Each SETI Level

No.	SETI Level	f	%
1.	Low	0	0
2.	Medium	7	30.4
3.	High	16	69.6

Table 5 indicates that out of the 23 EFL teachers who completed survey questionnaires, no teachers were in the low level, 7 teachers (30.4%) were in the medium level, and 16 teachers (69.6%) were in the high level. Teachers with high SETI are higher in number than those with medium SETI. It implies that most of the teachers possess high self-efficacy towards technology integration.

The distribution of SETI level across gender, age, educational background, and teaching experiences is shown in Table 6.

Table 6. Survey Results at Each SETI Level across Gender, Age, Educational Background, and Teaching Experience

Category	Sub-category	Level			Total
		Low	Medium	High	
1. Gender	Male	0	2 (8.7%)	5 (21.7%)	7 (30.4%)
	Female	0	5 (21.7%)	11 (47.8%)	16 (69.6%)
2. Age	≤ 30 years old	0	0	1 (4.3%)	1 (4.3%)
	31-50 years old	0	2 (8.7%)	14 (60.9%)	16 (69.6%)
	> 50 years old	0	5 (21.7%)	1 (4.3%)	6 (26.1%)
3. Educational background	Undergraduate	0	6 (26.1%)	11 (47.8%)	17 (73.9%)
	Graduate	0	1 (4.3%)	5 (21.7%)	6 (26.1%)
4. Teaching experience	≤ 10 years	0	0	3 (13.0%)	3 (13.0%)
	11-20 years	0	3 (13.0%)	10 (43.5%)	13 (56.5%)
	> 20 years	0	4 (17.4%)	3 (13.0%)	7 (30.4%)
Total			7 (30.4%)	16 (69.6%)	23 (100%)

Table 6 shows that based on gender category, 2 (8.7%) of male teachers were in the medium level and 5 (21.7%) male teachers were in the high level. Five (21.7%) of female teachers were in the medium level and 11 (47.8%) of female teachers were in the high level. None of the teachers were in the low level. For both male and female groups, the number of teachers who have high SETI level is higher than those who have medium level.

In terms of age, only 1 teacher (4.3%) below or 30 years old was in the medium level. Two teachers (8.7%) of 31 to 50 years old were in the medium level, and 14 teachers (60.9%) were in the high level. Five teachers (21.7%) above 50 years old were in the medium level and 1 teacher (4.3%) was in the high level. None of the teachers in the three age-based groups was in the low level.

With regard to educational background, 6 teachers (26.1%) with undergraduate educational background were in the medium level and 11 teachers (47.8%) were in the high level. One teacher (4.3%) with graduate educational background was in the medium level and five teachers (21.7%) were in the high level. The data show that the number of teachers with undergraduate educational background was higher than those with graduate educational background. For both groups of teachers, the number of teachers who have high SETI level is higher than those who possess medium SETI level.

Finally, in terms of teaching experience, 3 teachers (13.0%) who have less than 10 years of teaching experience were in the high level and none of them was in the low and medium levels. Three teachers (13.0%) who have 7 to 20 years of teaching experience were in the medium level and 10 teachers (43.5%) were in the high level. Four teachers (17.4%) who have more than 20 years of teaching experience were in the medium level and 3 (13.0%) were in the high level. None of the teachers in the three groups of teaching experience was in the low level.

The data imply that in general the Indonesian EFL teachers have good SETI level. Each level came up

with diverse distribution of teachers regarding gender, age, educational background, and years of teaching experience. There is no significant difference in the pattern of the male teachers' level of SETI and female teachers regardless of their different frequencies. Similarly, the data also show a pattern of SETI level attained by both the majority of teachers with undergraduate educational background as well as those with graduate educational background. Whereas compared to those who aged more than fifty years old, teachers whose age was less than or at fifty years were better in their SETI level. Correspondingly, teachers with less than or twenty years of teaching experience were also found to pose better SETI level than those with more than twenty years of teaching experience.

3.2 Indonesian EFL Teachers' Use of Technology in EFL Teaching

The data obtained from the interview unpacked the three EFL teachers' self-efficacy in three aspects: efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement.

Efficacy in instructional strategies involved the teachers' beliefs in their capabilities to use appropriate teaching strategies by using technology in their teaching. Teacher 1 mentioned that she used technology in her speaking class to help her students learn the content. She used dialogues in the form of video from YouTube as a model before she asked the students to make similar dialogues of various topics. Teacher 2 described his experience in using Internet application Quipper School in his class. The students could access the materials provided in Quipper School and then they discussed the materials with their classmates. Teacher 3 also shared about the teaching strategy she selected to teach her students a topic by using technology. For example, she used a song to teach grammar. She distributed a worksheet containing the lyrics of the song with incorrect verbs. After giving a chance for her students to listen to the song, she asked them to write the correct form of verbs based on what they had listened. Efficacy in classroom management dealt with the participants' beliefs in their capabilities to manage their classroom and at the same time to use technology for teaching,

The teachers were found to have a good confidence level in managing their classroom activities while teaching with technology. Teacher 1 stated that technology helped her create a good classroom learning environment. The students got more excitement in learning. They could use their creativity to do the tasks. Similarly, Teacher 2 also specified that the integration of technology in his teaching made his classroom learning environment conducive for learning and promote learner centered learning activities. His students became more active. Teacher 3 managed her classroom activities in such a way that her students could be involved in learning although the class was not equipped with a number of personal computers for each student. She applied collaborative learning in which students worked in groups to do the tasks.

Efficacy in student engagement constitutes the teachers' beliefs in their capabilities to engage students in the learning process by using technology. The result of interview confirmed that the three teachers had a good level of confidence in engaging students in the learning process by using technology. Teacher 1 found that some students were reluctant and got difficulties in doing their projects. Soon after

she tried to give them more treatment, they were finally successful to accomplish their projects. Teacher 2 highlighted the increase of students' motivation and learning achievement as indicators of their engagement in the learning process. To cope with the slow learners in his classroom, he stated that he provided them with extra assistance until they could learn better. In line with Teacher 2's view on students' motivation, Teacher 3 stated that teaching with technology had made her students more interested in learning English than before she used technology. She observed that her students' learning motivation improved as she employed technology in her teaching.

4. Discussion

The results of the CTIS revealed that EFL teachers participating in this study had good confidence about their technology capabilities and strategies. The finding also shows that they possessed good confidence to deal with external influences that they may face in using technology. As stated by Bandura (1997), people with belief in their capabilities will persist in their attempts in numerable difficulties and obstacles. In fact, the teachers' confidence appeared in various levels of reported Self-Efficacy towards Technology Integration (SETI) in EFL teaching, which is from the medium to the high categories. None of them was in the low category. Moreover, those who had high level of self-efficacy was higher in number than those who were in the medium level of SETI.

Based on the teachers' demographic characteristics including gender, age, educational background, and teaching experience, EFL teachers' level of self-efficacy came up with different distribution for each level. Findings related to the EFL teachers' gender and educational background showed that the two demographical characteristics did not significantly affect the level of the teachers' SETI. It is in line with previous research suggesting that gender has no significant influence on teachers' self-efficacy (Riggs, 1991; Tweed, 2013) while some other research reported that male teachers tend to have higher technology self-efficacy than female teachers (Cassidy & Eachus, 2003; Farah, 2011) or female teachers have higher computer self-efficacy than male teachers (Aremu & Fasan, 2011). In terms of educational background, technology professional development that is so called as vicarious experience was found to significantly influence teachers' SETI (Wang et al., 2004; Brinkerhoff, 2014), not that of educational background in general sense.

Meanwhile, findings dealing with age and teaching experiences showed that both of them gave significant contribution to the different SETI levels. The increase of age and the length of teaching experience were found to decrease EFL teachers' SETI levels. Teachers who aged more than fifty years old and those with more than twenty one years of teaching experience were found to have lower self-efficacy levels. Some previous research examining teachers' perceived self-efficacy in terms of Technological Pedagogical Content Knowledge-Web (TPCK-W) conducted by Lee and Tsai (2010) also reported that older and more experienced teachers were found to have lower levels of self-efficacy in connection with TPCK-W.

Concerning the teachers' confidence about external influences of technology use, finding revealed that

teachers with high SETI level were proven to be persistent in their attempts to integrate technology in their teaching although they had to deal with some existing constraints, for instance skeptical comments from colleagues. This was experienced by Teacher 1 in dealing with her technology use and the preparation she made before bringing it into her classroom. It matches with the condition mentioned by Bandura (1997) who states that higher self- efficacy will result in the higher effort. The stronger the sense of self-efficacy the greater the perseverance and the higher the possibility that the taken activity will be accomplished successfully.

To see how the three EFL teachers' SETI was reflected in their EFL teaching, triangulation was used to make a linkage between beliefs and practice. The finding of this study showed that teachers with high self-efficacy reported that their beliefs in their capabilities to integrate technology in their actual teaching appeared in three aspects of teachers' self-efficacy which are efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement. It implies that their levels of SETI were related to their actual teaching practices. As stated by Tschannen-Moran and Hoy (2001), teachers' self-efficacy has proven to be robustly relates to many meaningful educational outcomes such as teachers' perseverance, enthusiasm, commitment, and instructional behaviors, as well as student learning outcomes such as achievement and motivation.

One more interesting finding on the relationship between the EFL teachers' SETI and their actual EFL teaching practices was that teachers with high self-efficacy level found that their prior experiences in successfully integrating technology affected their use of technology in the classroom. These experiences had challenged them to use more various and more advanced technology types in their next classes. That is so called as "enactive mastery experiences" in which successful attainments of particular behavior result in the increase of teachers' self-efficacy (Bandura, 1986; Albion, 1999).

All things considered, the findings revealed that teachers' SETI was unfailingly echoed in their actual teaching. The finding of this study confirms prior research findings which suggest that teachers' self-efficacy towards teaching with technology is directly related to their actual practices (Albion, 1999; Littrell et al., 2005; Kim et al., 2013) and becomes a useful indicator of the success (Oliver & Saphiro, 1993; Albion, 1999) and the level (Wang et al., 2004) of technology integration in the classroom.

5. Conclusions

The Indonesian EFL teachers' SETI cannot be separated from their actual EFL teaching because their self-efficacy was directly connected to their use of technology in the teaching and learning process. Their self-efficacy determined their efforts to successfully integrate technology in their teaching. Teachers with high self-efficacy were able to manage their technology use to attain their teaching goals. The aspects of teachers' self-efficacy including instructional strategies, classroom management, and student engagement were embodied in their teaching practices. Thus, it can be concluded that the EFL teachers' SETI aligned with their actual EFL teaching.

Some factors may affect the EFL teachers' SETI including age, teaching experience, technology

professional development, and enactive mastery experience. Both age and teaching experience were predicted to contribute to the decline of teachers' self-efficacy towards use of technology in teaching. The older and the longer their teaching experience the lower the self-efficacy levels are. In contrast, technology professional development and enactive mastery experience led to the increase of their SETI levels.

Considering the benefits of integrating technology in ELT teaching, EFL teachers should use more effective technology to support their teaching and to help student learning. Teachers should be creative in using instructional technologies to meet the needs of the students. It is also recommended for school institutions to provide supporting facilities and to facilitate EFL teachers with supportive and continuous technology professional development related to ELT. These efforts will give substantial supports and opportunities for EFL teachers to upgrade their technology professional development both pedagogically and practically that result in the increase of English language teaching quality.

This study also suggests further investigation in both quantitative and qualitative designs. Additionally, further researchers who are interested in investigating EFL teachers' SETI and their technology integration in ELT are also recommended to explore more technology integration practices in terms of learning activities, design tasks, and case development.

References

- Abbitt, J. T. (2011). An investigation of the relationship between self-efficacy beliefs about technology integration and Technological Pedagogical Content Knowledge (TPACK) among pre-service teachers. *Journal of Digital Learning in Teacher Education*, 24(4), 134-143. <https://doi.org/10.1080/21532974.2011.10784670>
- Abbitt, J. T., & Klett, M. D. (2007). Identifying influences on attitudes and self-efficacy beliefs towards technology integration among pre-service educators. *Electronic Journal for the Integration of Technology in Education*, 6, 28-29.
- Albion, P. R. (1999). Self-efficacy beliefs as an indicator of teachers' preparedness for teaching with technology. In J. D. Price, J. Willis, D. A. Willis, M. Jost, & S. Boger-Mehall (Eds.), *Proceedings of the Society for Information Technology & Teacher Education International Conference 1999* (pp. 1602-1608). San Antonio: AACE.
- Albion, P. R., & Ertmer, E. A. (2002). Beyond the foundations: The role of vision and belief in teachers' preparation for integration of technology. *TechTrends*, 46(5), 34-38. <https://doi.org/10.1007/BF02818306>
- Aremu, A., & Fasan, O. (2011). Teacher training implications of gender and computer self-efficacy for technology integration in Nigerian schools. *The African Symposium*, 11(1), 178-185.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

- Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin, & O. John (Eds.), *Handbook of personality* (2nd ed., pp. 154-196). New York: Guilford Publications (Reprinted in D. Cervone & Y. Shoda (Eds.), *The coherence of personality*. New York: Guilford Press).
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 8(1), 136-155.
- Cassidy, S., & Eachus, P. (2002). Developing the Computer User Self-Efficacy (CUSE) scale: Investigating the relationship between computer self-efficacy, gender and experience with computers. *Journal of Educational Computing Research*, 26(2), 169-189. <https://doi.org/10.2190/JGJR-0KVL-HRF7-GCNV>
- Chao, W. (2003). Self-efficacy toward educational technology: The application in Taiwan teacher education. *Journal of Educational Media and Library Sciences*, 40(4), 409-4015.
- Compeau, D., & Higgins, C. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, June, 189-211. <https://doi.org/10.2307/249688>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education.
- Dudenev, G., & Hockly, N. (2007). *How to teach English with technology*. Harlow: Pearson Education Limited.
- Eduviews. (2008). *Teaching in the 21st Century: A review of the issues and changing models in the teaching profession*. Retrieved July 31, 2016, from http://www.k12perspectives.com/teaching_21century.asp
- Ertmer, P. A., Ottenbreit-Leftwich, A., & York, C. S. (2006). Exemplary technology-using teachers: Perceptions of factors influencing success. *Journal of Computing in Teacher Education*, 23(2), 55-61.
- Farah, A. C. (2011). *Factors influencing teachers' technology self-efficacy: A case study* (Unpublished Doctoral Dissertation). Lynchburg, VA: Liberty University.
- Fu, J. S. (2013). ICT in education: A critical literature review and its implications. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, 9(1), 112-125.
- Gilakjani, A. P. (2013). Factors contributing to teachers' use of computer technology in the classroom. *Universal Journal of Educational Research*, 1(3), 262-267.
- Govender, D., & Govender, I. (2009). The relationship between information and Communications Technology (ICT) integration and teachers' self-efficacy beliefs about ICT. *Education as Change*, 13(1), 153-165. <https://doi.org/10.1080/16823200902943346>

- Henson, R. K. (2001). Teacher self-efficacy: Substantive implications and measurement dilemmas. *A paper presented at the annual meeting of the Educational Research Exchange*. Texas: Texas A&M University, College Station.
- Kagan, D. M. (1992). Implication of research on teacher belief. *Educational Psychologist*, 27(1), 65-90. https://doi.org/10.1207/s15326985ep2701_6
- Khorrami-Arani, O. (2001). Researching computer self-efficacy. *International Education Journal*, 2(4).
- Kim, C., Kim, M. K., Lee, C., Spector, J. M., & DeMeester, K. (2013). Teacher beliefs and technology integration. *Teaching and Teacher Education*, 29, 76-85. <https://doi.org/10.1016/j.tate.2012.08.005>
- Lee, M. H., & Tsai, C. C. (2010). Exploring teachers' perceived self-efficacy and technological pedagogical content knowledge with respect to educational use of the world wide web. *Instructional Science*, 38(1), 1-21. <https://doi.org/10.1007/s11251-008-9075-4>
- Lemon, N., & Garvis, S. (2015). Pre-service teacher self-efficacy in digital technology, teachers and teaching. *Research Quarterly*, 29(2), 37-47.
- Littrell, A., Zagumny, M. J., & Zagumny, L. L. (2005). Contextual and psychological predictors of instructional technology use in rural classrooms. *Educational Research Quarterly*, 29(2), 37-47.
- Oliver, T. A., & Shapiro, E. (1993). Self-efficacy and computers. *Journal of Computer-based Instruction*, 20, 81-85.
- Rigi, A. (2015). Enhancing Iranian EFL in-service teachers' self-efficacy beliefs for technology integration. *International Journal of Language and Linguistics*, 3(5), 307-312. <https://doi.org/10.11648/j.ijll.20150305.15>
- Silverman, S., & Davis, H. (2009). *Teacher self-efficacy*. Retrieved July 31, 2016, from <http://www.education.com/reference/article/teacher-efficacy>
- Skoretz, Y. M. (2011). *A study of the impact of a school-based job-embedded professional development program on elementary and middle school teacher efficacy for technology integration* (Unpublished Doctoral Dissertation). West Virginia: Marshall University Graduate School of Education and Professional Development.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Wang, L., Ertmer, P., & Newby, T. (2004). Increasing preservice teachers' self-efficacy beliefs for technology integration. *Journal of Research on Technology in Education*, 36(3), 231-250. <https://doi.org/10.1080/15391523.2004.10782414>
- Ward, F. (2016). *Integrating technology and literacy*. Retrieved July 31, 2016, from <http://www.edutopia.org/blog/integrating-technology-and-literacy-frank-ward>