

## Research Paper

# Enhancing Teaching Skills of In-service English Teachers through Online Professional Development

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## ABSTRACT

The present study examined the online professional development practices of in-service English teachers. A sample of 184 in-service English teachers from various levels of education in Turkey participated in the study through an online questionnaire. The collected data were analyzed using SPSS to assess the teachers' utilization of the Internet for professional development, classroom activities, and collaboration with others. The results revealed that the participants extensively utilized the Internet for professional development, classroom activities, and collaboration with others. Furthermore, significant differences were found between participants' teaching levels and their use of the internet for collaboration, frequency of internet use, and internet use for classroom practices, as well as ICT training experiences and the use of the internet for overall professional development, classroom activities, and collaboration. The findings suggest that in-service English teachers prioritized and benefited from online professional development practices, and their ICT training influenced their use of the Internet for such practices.



## INTRODUCTION

Professional development which is defined by Schlager and Fusco (2003) as a lifelong, context-based, and ongoing effort is regulated by teachers' own needs, career development stages, students' learning needs, and contextual factors. It is a process that continues during teachers' careers which starts from pre-service programs to in-service formal and informal professional development activities and includes practices teachers perform to improve their teaching and to satisfy students' needs (Diaz Maggioli, 2004; Richter et al., 2011). These practices enhance teachers' knowledge, motivation, and attitudes toward learning and teaching with various learning opportunities (Richter et al., 2011). However, most studies indicate that teachers were dissatisfied with traditional teacher training practices which did not present time and place flexibility (Korkmazgil & Seferoğlu, 2013). These trainings were deficient in meeting the teachers' needs because of their "one size fits all" perspective (Artman et al., 2020). It has been suggested that teachers should organize their own professional development practices regarding their personal professional necessities to ensure the ongoing professional development of in-service and pre-service teachers (Korkmazgil & Seferoğlu, 2013). Baran and Çağiltay (2006) also state that teacher training providing time and place flexibility is perceived as a future of teacher professional development.

In this regard, technology integration into education has shifted the way teachers communicate, learn, and improve themselves by searching and experiencing new ways of improving themselves professionally (Ross, 2013). Nowadays, it is nearly impossible to find a professional development program that does not make use of any kind of technology (Schlager & Fusco, 2003). Considering that teachers have difficulty in sparing time for face-to-face professional development workshops and reaching resources to support their lifelong professional development (Guemide & Benachaiba, 2012), learning via the Internet is a good opportunity for teachers. Teachers can reach many resources, attend online seminars and workshops, or be part of online communities to exchange knowledge free of time and place restrictions. Information and communication technology (ICT) has the strength to change the teachers' learning environment. Networking and the collaborative nature of technological applications both have a huge effect on teachers' ways of learning and teaching behaviours that are different from the traditionally conducted ones (Eze & Olusola, 2013). Ballıdağ and Dikilitaş (2021) state that teachers are intrinsically motivated to benefit from online professional development practices. Moreover, Bekerci Sahin and Savaş (2022) found that rural EFL teachers need professional development practices and online options can be a good choice for them. Harwell (2003) emphasizes two main advantages of online professional development practices. The first is that teachers have an opportunity to reflect on what they have learned by interacting with each other with time flexibility. The second is that the asynchronous property of online professional development practices gives teachers chances to benefit from the activities at a time that is suitable for them. Additionally, the study conducted by Houbin et al. (2023) concluded that online professional development practices can be as effective as face-to-face training practices.

E-learning makes teachers' work easier and supports their professional development. Teachers can update their teaching methods and materials by searching for the latest developments in the field. They can reach resources at a convenient time for themselves in

any place that is equipped with the required technology and the Internet, they can communicate and learn from other teachers via online communities or individual relationships, and they can enrich their teaching styles in a more student-centered, creative, and interactive way (Eze & Olusola, 2013). Therefore, teachers are willing to investigate and try new ways of teaching practices even outside of the institution to reach more authentic and various teaching materials (Chylinsky & Hanewald, 2009). In addition, the Internet helps teachers perform professional development practices in a participatory manner (He & Bagwell, 2023; Marcia & Garcia, 2016). Improvements in ICT also stimulate English teachers to use technology to develop creative ways of teaching through various multimedia sources which support the self-directed learning of the 21st century for learners (Shin & Son, 2007; Saleh & Pretorius, 2006).

In the literature, studies were available investigating teachers' use of the Internet for professional development purposes to reach materials that were difficult to get otherwise, to collaborate with others, to prepare lessons and to develop themselves professionally both in and outside of the classroom (Meneses et al., 2012; Patahuddin, 2013; Mushayikwa, 2013; Alhabahba & Mahfoodh, 2016; Hinostrroza et al., 2016; Ibieta et al., 2017; Beach, 2017). Moreover, there were also studies on how teachers benefit from online platforms to interact with each other (Ellis et al., 2015; Dean & Silverman, 2015; Macià & García, 2016). Additionally, teachers' use of social media platforms for self-directed professional development practices was also investigated (Cook & Bissonette, 2016; Krutka and Carpenter, 2016). Considering the studies mentioned above, it is prevalent that technology provides a backdrop for developing teachers professionally. However, there is still a dearth of research in the literature concerning how English teachers benefit from online platforms for self-directed professional development purposes. Therefore, the present study aimed to investigate English teachers' use of the Internet for self-directed professional development practices and sought answers to the following research questions:

1. To what extent do participants make use of the Internet for their professional development?
2. Is there a significant difference in the use of the Internet for collaboration among participants with varying teaching levels for professional development?
3. Is there a significant relationship between participants' frequency of internet use and the impact of the Internet on their classroom practices as English teachers?
4. Is there a significant relationship between participants' ICT training experiences and their use of the Internet for overall professional development, classroom practices, and collaboration with others?

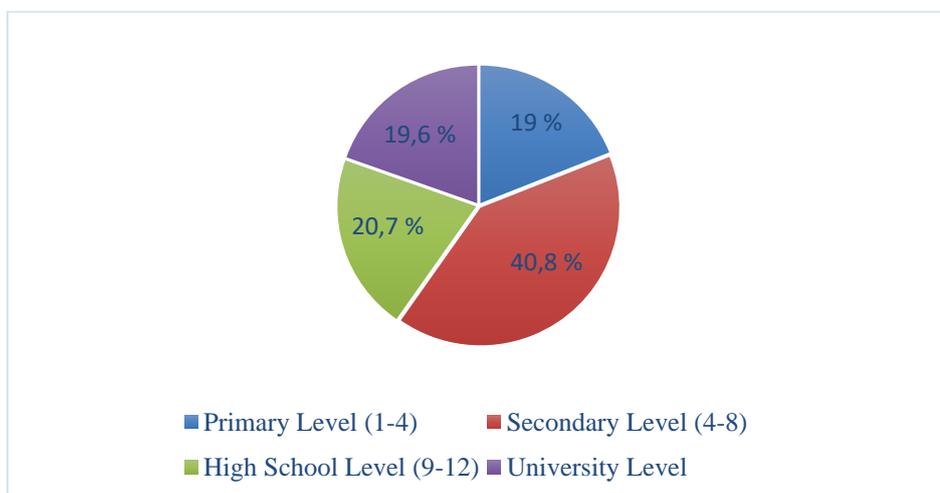
## METHOD

### Research Design

The cross-sectional survey design was chosen for the present study. This design involves the collection of data at a single point in time from a specific group of the population to reveal the prevalence of a particular characteristic in that population (Visser et al., 2000). By means of a survey, this study aimed to reveal the prevalence of in-service English teachers' use of the Internet for their professional development practices. This research design offers the possibility to see the relations between different variables and differences in a specific sample group (Visser et al., 2000). Via statistical analysis of the survey data, participants' use of the Internet for professional development was assessed with respect to the variables stated in the research questions.

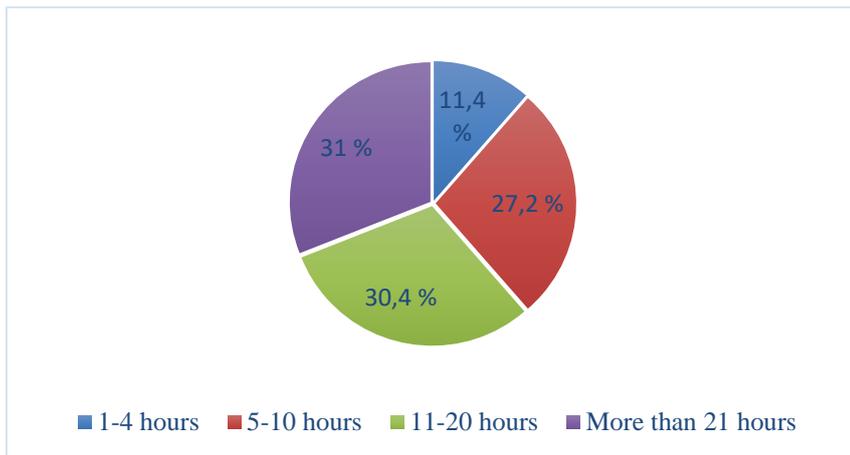
### Participants

Participants were 184 English teachers working at primary, secondary, high school, and university levels in Turkey. They were selected through snowball sampling as one of the non-probability samplings because of the difficulty of reaching English teachers, which is why the number of teachers working at various levels was not distributed equally. Among the participants, thirty-five teachers (19%) worked at the primary level, 75 of them (40.8%) worked at the secondary level, 38 of them (20.7%) worked at the high school level and 36 of them (19.6%) worked at the university level (Figure 1).



**Figure 1.** School levels of participants

Regarding the participants' overall use of the Internet in a week, most participants used the Internet for more than 21 hours (31%), as seen in Figure 2. In addition, 30.4% of the participants used the Internet between 11-20 hours., 27.2% of the participants used the Internet between 5-10 hours, and 11.4% of the participants used the Internet between 1-4 hours.



**Figure 2.** Participants' overall use of the Internet in a week

Participants also had different ICT training experiences (Figure 3). The majority of the participants (37%) did not receive any ICT training. Thirty-five-point nine percent of the participants said that they received very useful ICT training, and 27.2 percent of the participants stated that they received barely useful ICT training.



**Figure 3.** ICT training of participants

**DATA COLLECTION AND ANALYSIS**

Data were collected through a questionnaire called “Online Professional Development Practices” which was adapted from the study of Alhabahba and Mahfoodh (2016) with necessary permissions. The questionnaire included 39 Likert statements investigating teachers’ use of ICT resources for self-directed professional development. Several questions were added to the questionnaire to gather demographic information about the participants. The questionnaire was prepared through google forms and participants were reached via online social media groups and emails. Cronbach’s Alpha reliability was calculated to check the instrument's internal consistency. The General Cronbach Alpha value of the questionnaire was .953. The questionnaire was completed anonymously and only volunteer English teachers participated in the study for privacy and ethical reasons.

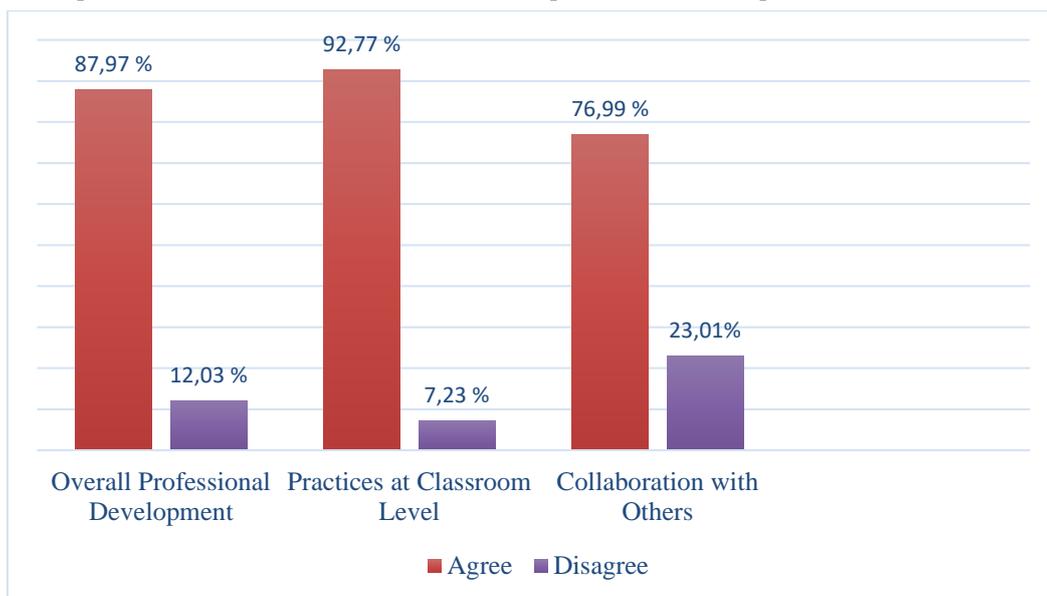
The data were analyzed quantitatively through SPSS. Quantitative data analysis involves converting the data to numerical representations for statistical analysis to explain the area of research (Babbie, 2010). The questionnaire included four sections with 39 Likert-type statements. Their scorings range from one to four (Strongly agree=4, Agree=3, Disagree=2, Strongly Disagree=1). Scores of participants were converted to percentages to make the results more understandable. Descriptive, frequency analysis and ANOVA were conducted to analyze the data.

**RESULTS**

**Research Question 1: To What Extent Do Participants Make Use of the Internet to Develop Themselves Professionally?**

As shown in Figure 4 below, most participants agreed that they used the Internet for overall professional development, practices at the classroom level, and collaboration with others to a great extent. Participants’ most frequent Internet use for professional

development was for practices at the classroom level (92.77%) and the least frequent use was for collaboration with others (76.99%). Participants also used the Internet for their overall professional development (87.97%).



**Figure 4.** Participants' Internet use for their professional development

Results showed that in-service English teachers utilized the Internet for their professional development practices. A majority of the participants agreed that they used the Internet to develop themselves professionally. They mostly used the Internet for practices at the classroom level. These practices involved both in-class Internet use and out of class Internet use to get prepared for the lesson. The Internet provided teachers easy access to materials and a variety of different methods and ways to teach a topic. In addition, the Internet also helped teachers to engage students in the classroom and to attract students' attention and thus, to increase students' motivation. The second common purpose for using the Internet was for overall professional development. Teachers were also aware that they needed to be lifelong learners and develop themselves professionally to be effective teachers.

Therefore, they also used the Internet to develop themselves professionally. The Internet provided many opportunities for teachers to follow updated information and studies in the field with time and place flexibility. Teachers also facilitated the Internet to collaborate with others. More than half of the teachers agreed that they used the Internet to collaborate for professional development purposes. There were many social networking sites where teachers could meet with each other and work in collaboration with other teachers. They could easily share their teaching problems and ask for help from more expert teachers. They could also share their materials and help each other to perform their teaching practices.

#### **Research Question 2: Is There Any Significant Difference Between Teaching Levels of Participants with Respect to Their Use of the Internet to Collaborate with Others for Their Professional Development?**

Participants of the study were in-service English teachers working at primary, secondary, high school and university levels. The results indicated that (Figure 4) most of the participants used the Internet to collaborate with each other. However, it was not clear from the overall results whether teachers' teaching levels had a significant influence on participants' Internet use to collaborate with each other. Therefore, a one-way ANOVA was utilized to observe the effect of teachers' levels of teaching on their use of the Internet to collaborate with others for their professional development.

**Table 1.** Descriptive statistics of participants' levels of teaching on their use of the Internet to collaborate with others for their professional development

	Teaching Levels of Participants	N	Percentage	Std. Deviation
<b>Collaboration with others</b>	Primary level (1-4)	35	79.28	19.56
	Secondary level (4-8)	75	79.80	14.77
	High School level (9-12)	38	76.91	16.83
	University level	36	68.34	14.77
	<b>Total</b>	184	76.86	16.65

Descriptive analysis results given in Table 1 showed that teachers from all levels used the Internet to collaborate with each other. According to percentage scores, secondary level, and primary level teachers used the Internet to collaborate with each other slightly more than others. High school teachers also used the Internet to collaborate more than university-level teachers. Teachers working at university levels also exploited the Internet to collaborate but not as much as teachers from primary, secondary, and high school levels.

Analysis also indicated that there was a statistically significant difference between groups as determined by one-way ANOVA ( $F(3,180) = 4.398, p = .005$ ). A Tukey post hoc test revealed that there were significant differences between teachers who worked at

the primary level and the university level  $p < 0.05$ , and the secondary level and the university level  $p < 0.05$ . However, there was not a significant difference between teachers who worked at the high school level and the university level  $p > 0.05$ . Teachers working at the primary and the secondary levels used the Internet to collaborate with each other more than the university level teachers, and the ANOVA result found a significant difference between these levels with respect to the use of the Internet to collaborate with each other.

### Research Question 3: Is There Any Significant Difference Between Participants' Frequency of Use of the Internet with Respect to the Internet's Contribution to English Teachers' Practices at Classroom Level?

The results indicated (Figure 4) that the teachers used the Internet for classroom practices to a great extent. It was teachers' most common way of Internet use for professional development practices. However, it was not clear from the results whether participants' frequency of Internet use affected their Internet use for classroom practices. Therefore, a one-way ANOVA was implemented to observe the effect of teachers' frequency of Internet use with respect to the Internet's contribution to English teachers' practices at the classroom level.

**Table 2.** Descriptive statistics of participants' frequency of Internet use with respect to the Internet's contribution to English teachers' practices at classroom level

	Frequency of Internet use	N	Percentage	Std. Deviation
<b>Practices at classroom level</b>	1-4 (hours)	21	70.89	15.80
	5-10 (hours)	50	78.33	10.57
	11-20 (hours)	56	78.57	8.89
	More than 21 (hours)	57	79.09	7.68
	<b>Total</b>	184	77.79	10.26

It was clear from the descriptive statistics (see Table 2) that teachers' percentage scores for the use of the Internet for classroom practices increased with the increase in the frequency of the use of the Internet. Teachers who used the Internet more than 21 hours in a week had the highest percentage, while teachers who used the Internet for between one and four hours in a week had the lowest percentage. However, it was also clear from the percentages that even the participants who did not use the Internet frequently had a fairly high percentage score, indicating that they used the Internet for classroom practices to a great extent.

Analysis indicated that there was a statistically significant difference between groups as determined by one-way ANOVA ( $F(3,180) = 3.784, p = .005$ ). A Tukey post hoc test revealed that there were significant differences between teachers who used the Internet 1-4 hours in a week and 5-10 hours,  $p < 0.05$ ; 1-4 hours in a week and 11-20 hours  $p < 0.05$ ; 1-4 hours in a week and more than 21 hours  $p < 0.05$ . As can be seen, there was a significant difference between teachers who used the Internet for 1-4 hours and the others with respect to the use of the Internet for classroom practices. Teachers who used the Internet more frequently also used the Internet more for classroom practices. Participants' frequency of use of the Internet affected the percentages of their use of the Internet for classroom practices.

### Research Question 4: Is There Any Significant Difference among Participants' ICT Training Experiences with Respect to Participants' Use of the Internet for Overall Professional Development, Practices at Classroom Level, and Collaboration with Others?

Demographic information of the participants indicated that teachers had different ICT training experiences. Some of the participants did not receive any ICT training, some barely received useful training, and some received very useful training. Therefore, a one-way ANOVA was used to observe the influence of participants' ICT training experiences on their Internet use for overall professional development, and practices at the classroom level and in terms of collaboration with others.

**Table 3.** Descriptive statistics of participants' ICT training experiences on their Internet use for overall professional development, practices at the classroom level, and collaboration with others.

	ICT training	N	Percentage	Std. Deviation
<b>Overall Professional development</b>	Did not receive	68	79.74	14.02
	Received barely useful training	50	78.70	13.73
	Received very useful training	66	86.85	10.97
	<b>Total</b>	184	82.01	13.36
	<b>Practices at classroom level</b>	Did not receive	68	75.69
Received barely useful training		50	75.94	8.83
Received very useful training		66	81.35	8.10
<b>Total</b>		184	77.79	10.26
<b>Collaboration with others</b>		Did not receive	68	75.98
	Received barely useful training	50	73.37	16.01
	Received very useful training	66	80.42	17.09
	<b>Total</b>	184	76.86	16.65

From the descriptive statistics above (Table 3), it was clear that participants who received very useful ICT training had a higher percentage with respect to all the professional development practices (overall professional development, classroom activities, and collaboration with others). In addition, participants who received very useful ICT training had the highest percentage of overall

classroom practices followed by practices at classroom level and collaboration with others. Moreover, for all of the professional development practices, the percentage of participants who did not receive any ICT training and who received barely useful ICT training was close to each other, indicating that ineffective ICT training did not have a positive influence on teachers' Internet use to develop themselves professionally.

Analysis indicated that there was a statistically significant difference between groups as determined by one-way ANOVA ( $F(2,181) = 7.323, p = .005$ ) with respect to participants' Internet use regarding overall professional development. In addition, there was a statistically significant difference between groups as determined by one-way ANOVA ( $F(2,181) = 6.590, p = .005$ ) with respect to participants' use of the Internet for practices at classroom level. However, there was not a statistically significant difference between groups as determined by one-way ANOVA ( $F(2,181) = 2.757, p = .005$ ) with respect to participants' Internet use for collaboration with others. Statistical analysis indicated that ICT training had a significant effect on teachers' overall professional development practices and practices at the classroom level. Teachers who received useful ICT training used the Internet for overall professional development practices and practices at the classroom level more than the teachers who did not receive ICT training or who received barely useful training. However, no statistically significant difference was found among the participants who received very useful ICT training, participants who received barely useful training, and those who did not receive any training with respect to teachers' use of the Internet for collaboration among teachers. There were differences with respect to the percentage scores of participants. However, the difference was not found to be significant.

## CONCLUSION AND DISCUSSION

Results indicated that participants utilized the Internet for professional development purposes including classroom practices, both inside and outside of the classroom, overall professional development practices, and collaboration with others, which is compatible with the study findings of Ibieta et al. (2017), Alhabahba and Mahfoodh (2016), Shin and Son (2007), Tella et al. (2007). Results also showed that teachers' most common professional development practice via the Internet was for classroom activities. Teachers facilitated the Internet both inside the classroom and outside the classroom. Inside the classroom, the Internet helped teachers to make the lesson more effective, to assess students' performance, to conduct more interactive lessons, etc. Outside of the classroom, the Internet helped teachers to prepare classroom materials, design their lesson plans and syllabus, enrich their lessons with creative ideas, etc. Compatible with these findings, the study by Ibieta et al. (2017) also found that teachers used ICT resources more frequently outside of the classroom for class preparation. Moreover, Tella et al. (2007) stated that teachers used the Internet to make the lessons more interesting.

Another finding of the study was that teachers' second most common professional development practice through the Internet was for overall professional development practices. Most teachers were aware that they needed to be lifelong learners and develop themselves professionally. Therefore, they used the Internet to benefit from professional development opportunities, which is compatible with the findings of Ibieta et al. (2017). Teachers stated that they joined webinars and online courses, read current articles about the field, followed ELT websites and news, etc. These findings are contrary to those by Mann (2005), who remarked that most EFL teachers did not attend self-directed professional development activities; instead, they attended obligatory in-service seminars and workshops. In addition, these findings contrast with those of Krutka and Carpenter (2016), who stated that teachers' most common professional development activity via the Internet was for professional development rather than communication and classroom activities.

The results also highlighted that more than half of the teachers agreed that they used the Internet to collaborate with others for professional development purposes even if it was less frequent compared to practices at the classroom level and overall professional development activities. Participants interacted with others via the Internet. They collaborated, received help, or gave help to other teachers for teaching and learning practices, and this is compatible with the findings of Ellis et al. (2015), Ross et al. (2015), Mills (2014), He and Bagwell (2023). Compatible with the findings, OECD (2009) results showed that the most common professional development activity among teachers was informal communication with others. It was also evident from the results that teachers working at primary and secondary levels used the Internet to collaborate with each other more than university level teachers, and there was a significant difference between these levels with respect to the use of the Internet to collaborate with each other. In addition, the mean scores of participants showed that their use of the Internet to collaborate with others for professional development decreased as the level of teachers' target students moved up, indicating that teachers who work with younger students need more professional support from their colleagues with respect to their teaching practices.

Another result obtained from the study was that participants who utilized the Internet more frequently also used the Internet more for classroom practices. Participants' frequency of the use of the Internet affected the percentages of their use of the Internet for classroom practices. Additionally, participants who received very useful ICT training used the Internet more for overall professional development, classroom activities, and collaboration with others, indicating that ICT training is important to benefit more from the Internet for professional development purposes. There was not a significant difference between the mean scores of teachers who received barely useful ICT training and those who did not. In parallel to the findings, the study by Savaş (2014) indicated that the lack of ICT training might inhibit teachers' use of these resources for professional development purposes. In addition, the studies by Hubbard (2008), OECD (2009), Ali et al. (2013), Charalambous and Ioannou (2008), and Hasibuan (2013) also stated that ICT training would be beneficial for teachers to realize the potential of using ICT resources for teaching and learning practices. Moreover, Johnson (2016) remarked that teachers needed more support to benefit from technology more effectively.

Overall, the results obtained from the study suggested that the participants utilized the Internet to develop themselves professionally. Participants utilized the Internet for classroom activities, overall professional development, and collaboration with others to a great extent. In addition, it was realized that there were significant differences between teachers who work at different levels with respect to their use of the Internet to collaborate with others. University level teachers used the Internet to collaborate with others less than

primary level and secondary level teachers. Moreover, the results suggested that teachers' frequency of use of the Internet affected their use of the Internet for classroom practices. There was a significant difference between teachers who used the Internet for about one and four hours a week and others. As the frequency of use of the Internet increased, teachers' use of the Internet for classroom activities increased. Lastly, results indicated that teachers who received useful ICT training used the Internet for classroom activities, professional development, and collaboration with others more than teachers who did not receive any ICT training or who received barely useful ICT training.

### Limitations of the Study

The current study has certain limitations, and the results should be interpreted considering these constraints. Firstly, the participants were selected through snowball sampling. Consequently, teachers working at different levels were not equally distributed, which could potentially have had an adverse effect on the statistical outcomes. Secondly, the study employed a cross-sectional survey design, collecting data only once through a single survey administration. It would have been more robust to gather data at multiple time points. Thirdly, the data were acquired via an online questionnaire, potentially creating inequitable access for all EFL teachers to reach and complete the questionnaire.

### Suggestions for Further Study

As a suggestion for further studies, longitudinal studies are recommended to investigate English teachers' use of the Internet for their professional development purposes. Classroom observations can be realized by observing teachers' use of the Internet and ICT resources. In addition, online communities where teachers participate and collaborate with each other for professional development purposes can be observed and analyzed phenomenally. Moreover, teachers' use of ready-made materials taken from the Internet can be investigated more deeply with respect to the appropriateness of the materials and adaptations of these materials for a specific context of the teaching setting.

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