Using Electronic Knowledge Sharing for Enhancing EFL Teachers' Teaching Competencies Eman Mohy-Eldeen Bakr (PhD)

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Abstract. The current research aimed at investigating the effect of using electronic knowledge sharing on enhancing EFL teachers' teaching competencies. It utilized a teaching competences test that included (20) items which were divided over (5) parts. The participants were (35) EFL secondary school teachers (16 males and 19 females) at Hurghada Educational Administration at Red Sea Governorate in Egypt. Following a quasi-experimental design, the research utilized the instrument to record the results and interpret them in the light of its hypotheses. Results showed that there is a statistically significant difference between the mean scores of the participants in the pre-post testing of teaching competencies favoring the post testing. Additionally, there is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable. Furthermore, there is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable. Recommendations of the research included highlighting practicing electronic knowledge sharing in both pre-service and in-service teachers' trainings to enhance the teachers' teaching competencies.

Key words: Electronic knowledge sharing – Teaching competencies – EFL

استخدام التشارك المعرفي الإلكتروني لتنمية الكفايات التدريسية لدى معلمي اللغة المتخدام الإنجليزية كلغة أجنبية

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مستخلص. هدف البحث الحالي إلى التعرف على أثر استخدام التشارك المعرفي الإلكتروني على تتمية الكفايات التدريسية لدى معلمي اللغة الإنجليزية كلغة أجنبية، استخدم البحث اختبار الكفايات التدريسية والذي تضمن عشرين سؤالا تم تقسيمهم في خمسة أجزاء، تكونت عينة البحث من (٣٥) من معلمي اللغة الإنجليزية كلغة أجنبية بالمدارس الثانوية (١٦ ذكور و ١٩ إناث) بإدارة الغريقة التعليمية بمحافظة البحر الأحمر في مصر، و اتبع البحث المنهج شبه التجريبي بتطبيق الأداة وتسجيل النتائج وتفسيرها في ضوء فروض البحث، وأشارت النتائج إلى أنه يوجد فرق دال إحصائيا بين متوسطات درجات المشاركين في الاختبارين القبلي والبعدي للكفايات التدريسية لصالح الاختبار البعدي بالإضافة إلى ذلك ، لا يوجد فرق دال إحصائيا بين متوسطات درجات المشاركين في الاختبار البعدي للكفايات التدريسية وفقا لمتغير سنوات الخبرة، و تضمنت المشاركين في الاختبار البعدي للكفايات التدريسية وفقا لمتغير سنوات الخبرة، و تضمنت توصيات البحث تسليط الضوء على ممارسة التشارك المعرفي الإلكتروني في تدريبات المعلمين قبل الخدمة وأثناء الخدمة لتنمية الكفايات التدريسية للمعلمين .

الكلمات المفتاحية: التشارك المعرفي الإلكتروني، الكفايات التدريسية، اللغة الإنجليزية كلغة أحنيية

1. Introduction

Teachers play a crucial role in society because they transform lives, foster aspirations, and push the limits of human potential. Compared to earlier times, the function of teachers in the classroom, society, and the wider world has changed. When preparing to teach a subject in class, teachers should be sure they are knowledgeable about it and confident in their ability to do so. Teachers can effectively pique pupils' interest in the ideas being taught, and they can then successfully quench their thirst for knowledge. Being an effective teacher requires both subject-matter expertise and a talent for clearly articulating concepts. To be able to provide their pupils with a high-quality education and to improve their teaching abilities, teachers should share their own knowledge with those of their peers.

Teaching is an activity that focuses on controlling the student's cognitive activity. Information is transferred, training and learning activities are engaged in, and cognitive interest is stimulated. Higher education instruction is now portrayed as a multifaceted and multidimensional reality. In order for students to explore, develop, and comprehend new ways of thinking and learning, educators nowadays are required to provide a dynamic learning environment. Such skills, which are in high demand in society, can only be acquired by highly skilled, aggressive professionals. As a result, investing in highly qualified teachers is one of any nation's most crucial investments (Akhmetova, Kim, & Harnisch, 2014). Teachers' abilities play a critical role in every educational system's development (Farahian & Parhamnia, 2020).

Teaching competencies are the attitudes, abilities, and knowledge that educators must possess in order to successfully teach and have a good impact on students' learning. Teaching standards that are based on the following five domains are also included (Khodary, 2012). These are: Language, Culture, Instruction, Assessment, and Professionalism. Sarramona (2007) explains that "teachers' competencies should include not only technical, but also social and ethical aspects" (p.35), implying that professional problems should be solved with a critical and constructive attitude.

Knowledge sharing fosters trust, high morale, collective efficacy, and satisfaction in teams (Cannon-Bowers & Salas, 2001). Zhuge (2002) stated that knowledge sharing plays a key role in "upgrading the competitiveness of a team" (p. 23). According to Zhang, Zhou, and Zhang (2016), sharing knowledge is a valuable organizational resource that should be promoted in the teaching industry. Researchers have not given much thought to the exchange of knowledge in the teaching profession. Knowledge exchange may also help teachers feel less stressed out at work, promote their careers, and improve the state of schools (Hew & Hara, 2007).

The knowledge society is characterized by constant innovation in all spheres. Citizens and employees are required to engage in lifelong learning, knowledge growth, and information exchange. Communities of inquiry (practice, interest, etc.) enabling interchange and further knowledge growth may improve knowledge sharing (Van Weert, 2006). In order to do a task better, faster, or more effectively, a group of researchers must share their knowledge (Lin, 2007, as quoted in Charband & Navimipour, 2018). Participation in knowledge sharing depends critically on one's self-efficacy perception and performance expectations (Tseng & Kuo, 2014). Through peer engagement, knowledge is shared. Since a positive environment promotes interpersonal connection and, as a result, the interchange of learning and information, it may help to spread knowledge (Zhang, Song, & Song, 2020).

One of the most popular trends in current teaching is the use of electronic tools and modern technology (Gluchmanova, 2017). According to Schimmel (2013), teachers need to establish a knowledge domain about the pedagogical use of ICT in a manner that will affect their beliefs in a positive way. This will influence their behavior in the use of ICT in education. Therefore, the key point of research is measuring to what extent using electronic knowledge sharing is beneficial in enhancing EFL teachers' teaching competencies, and this is what the research aims to pursue.

To sum up, the above considerations highlight the need to investigate the effect of using electronic knowledge sharing on enhancing EFL teachers' teaching competencies.

2. Objectives of the research

The research aims to identify the effect of using electronic knowledge sharing on enhancing EFL teachers' teaching competencies.

3. Significance of the research

- 3.1. Discussing a critical issue in foreign language teaching which is attempting to identify using electronic knowledge sharing for enhancing EFL teachers' teaching competencies.
- 3.2. Research on electronic knowledge sharing is scarce in a teaching context.
- 3.3. Adding to literature review in the research area concerning knowledge sharing and teaching competencies.
- 3.4. Benefitting those who are carrying out teachers' training in teaching competencies and language courses.
- 3.5. Providing recommendations for EFL teachers' professional development.

4. Questions of the research:

The research seeks to answer the following main question:

4.1. What is the effect of using electronic knowledge sharing on enhancing EFL teachers' teaching competencies?

This major question can be divided into the following sub-questions:

- 4.1.1. Is there a statistically significant difference between the mean scores of the participants in the pre-post testing of teaching competencies?
- 4.1.2. Is there a statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable?
- 4.1.3. Is there a statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable?

5. Hypotheses of the research

The research hypothesized the following:

5.1. There is a statistically significant difference between the mean scores of the participants in the pre-post testing of teaching competencies favoring the post testing.

- 5.2. There is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable.
- 5.3. There is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable.

6. Research Design

Due to the nature of the research, it follows the one group quasiexperimental design (with its pre-post testing procedures). It aimed at collecting data using the research instruments and analyzing the obtained results.

7. Instrumentation:

To collect data, the research utilized a teaching competencies test aiming at measuring teaching competencies of EFL teachers. The test consists of five sections; Each section contains 4 items. One mark is assigned for each item. The total mark assigned for the test is 20. The time assigned for the test is determined by calculating the mean time, which the fastest teachers and the slowest ones took in answering the test. It was found that the time needed to answer the test was 2 hours and ten minutes (130 minutes). The test was adjusted in terms of its validity and reliability.

Validity and reliability of teaching competencies test 1. Validity of the test:

In order to achieve the validity of the test, it was submitted to a jury of specialists in curricula and TEFL methodology. The test was reviewed and adjusted according to their suggestions and recommendations. Further, the correlation coefficient was used to calculate the validity of the internal consistency between the score of each question and the total score of the teaching competencies test, by

applying to a survey sample consisting of (20) respondents, as shown in table (1).

Table (1) The validity of the internal consistency between the score of each question and the total score of the reading comprehension test(N=20)

Phrase numbers and correlation coefficients between the							
score of each Question and the total degree of test							
question No.	1	2	3	4	5		
correlation coefficient	0.58**	0.76**	0.63**	0.57**	0.69**		
question No.	6	7	8	9	10		
correlation coefficient	0.61**	0.41*	0.74**	0.57**	0.78**		
question No.	11	12	13	14	15		
correlation coefficient	0.44*	0.42*	0.74**	0.57**	0.78**		
question No.	16	`17	18	19	20		
correlation coefficient	0.44*	0.58**	0.41*	0.63**	0.40*		

^(**) significant at level of 0.01.

(*) significant at level of 0.05.

Table (1) shows that the values of correlation between the score of each question and the total score of the teaching competencies test ranged between (0.40: 0.78), and all of them are statistically significant at (0.01, 0.05) levels. This indicates the high internal consistency between the test questions and refers to the high and adequate validity of the test, which makes it valid as a research instrument for measuring what it is set to measure (i.e. EFL teachers' teaching competencies).

2. Reliability of the test:

In order to verify the reliability of the test, Cronbach's Alpha formula was computed as shown in Table (2).

Table (2) reliability value of the test

Instrument			Cronbach's alpha coefficient	
Teaching competencies test	20		0.71	

Table (2) shows that the value of Cronbach's Alpha coefficient is statistically significant at 0.01 level which indicates the high reliability of the test.

8. Participants

The participants were (35) EFL secondary school teachers at Hurghada Educational Administration, Red Sea Governorate. They were selected according to two main variables (gender and years of experience variables). According to gender variable, the participants were (16) males 45.7%, and (19) females 54.3%. According to years of experience variable, (11) teachers with less than 10 years of experience 31.5%, (15) teachers with less than 20 years of experience 42.8%, and (9) teachers with less than 20 years of experience 25.7%

9. Delimitations of the research

The current research was delimited to a sample of (35) EFL teachers at Hurghada Educational Administration, Red Sea Governorate. It was delimited to a period of the second term during the academic year 2022-2023. It dealt with investigating the effect of using electronic knowledge sharing on developing EFL teachers' teaching competencies.

10. Procedures

The researcher reviewed literature concerning teaching competencies and electronic knowledge sharing. She designed the research instrument which is a teaching competencies test aiming to measure the participants' teaching competencies before and after applying the electronic knowledge sharing. Further, the participants were randomly selected: (35) EFL teachers were derived from secondary school teachers at Hurghada Educational Administration,

Red Sea Governorate. After verifying the validity and reliability of the research instrument, the researcher applied the pre-teaching competencies test before conducting the intervention. An action plan was prepared for 3hours a day on 3days a week for a period of 10 weeks. Then, the post-teaching competencies test was applied to measure the participants' teaching competencies progress. In this research, the teaching competencies test was used as data collection instrument to provide research credibility.

11. Literature review:

In their list of common difficulties and barriers to teaching cited by the teachers, Violeta & Aneta (2015) included: the need for data collection abilities in monitoring and evaluating educational work; proficiency with ICT educational technology; the need to choose an appropriate pedagogical model for various age groups and learning styles; the evaluation and proper monitoring of the students; the need for monitoring and evaluation abilities in the educational process; and the use of digital tools. Thus, in order for the pedagogical role to be accomplished in a contemporary world employing the foreign language in the teaching process as a tool for an admission to new resources and creative learning methodologies, instructors need to improve and share their pedagogical skills and abilities.

To adapt to a time that is advancing quickly, teachers should improve their teaching skills (Purba et al., 2022). Moving educational institutions toward knowledge-based learning may be facilitated by the deployment of suitable digital technology for communication and information transmission (Miller, 2018). According to Schwartz (2014), there is a serious discrepancy between what "is" and what "should be" taught in our schools. As a result, we urgently need to improve teaching abilities.

According to Dyer and Nobeoka (2000), knowledge sharing is described as actions that improve teamwork, promote knowledge changes, strengthen organizational learning capabilities, and improve people's abilities to achieve both personal and organizational goals. Knowledge receiving and knowledge providing are the two categories into which information sharing activities fall (Tseng & Kuo, 2014). Lee (2001) views knowledge sharing as "activities of transferring or

disseminating knowledge from one person, group or organization to another (p.324)". Ford (2004) defines knowledge sharing as a behavior "in which an individual imparts his or her expertise, insight, or understanding to another individual" (p. 21).

Connelly and Kelloway (2003) distinguish between information sharing and knowledge sharing, noting that knowledge sharing contains an "element of reciprocity," whereas information sharing can be "unidirectional and unrequested (p. 294)" Sharing knowledge is getting information from a source or delivering information to a source. Knowledge creation, or the act of producing knowledge by the recipient, is the cornerstone of knowledge sharing. In this regard, information sharing is a crucial procedure for knowledge acquisition and support of people's learning processes, as well as for the generation of new ideas via socializing and the creation of new chances (Ergün & Avc, 2018).

According to Hislop et al. (2018), knowledge sharing encompasses actions in which knowledge and skills are transferred among organizational members. According to Topchyan (2013), information sharing (a part of knowledge management) in virtual learning teams (VLTs) for distant education is crucial for effective collaborative learning. At many types of distant education institutions, knowledge sharing may be reevaluated with student populations.

Researching teaching competencies has been a topic for various studies. Karçkay & Sanlı (2009) conducted a study to determine the impact of the microteaching application on early childhood pre-service teachers' levels of teacher competence. Normal education and secondary education students from the university's early childhood teaching department make up the study's participants. Results showed that the microteaching activity may have a good impact on students' instructor competence levels.

Brooks (2010) conducted a study to determine the core competencies needed by teachers, and to identify best practices for teaching core competencies. The researcher used survey questions. The primary results of this research were that the best approaches for teaching core competencies differ according to the demands of each

state organization and the experience and teaching styles of the trainers in the various state organizations.

In order to find out how utilizing electronic teaching portfolios affected the development of teaching skills in third-year prospective EFL instructors, Khodary, M. M. (2012) performed a research. In both the experimental and control groups, there were twenty-four future EFL instructors. The findings demonstrated that, on the post test, there were statistically significant differences between the mean scores of the experimental group and the control group in favor of the experimental group. The results demonstrated the value of utilizing electronic teaching portfolios to enhance the instructional skills of aspiring EFL instructors.

AlRweithy and Alsaleem (2014) conducted a study with the goals of introducing the University Teaching and Learning Training Program (UTL) and assessing its effectiveness in enhancing the teaching abilities of university teaching personnel. The study's sample included 26 female professors. The results showed that the performance of the training group before and after training differed statistically significantly, favoring the post-observation. The report suggests using the UTL training program, which was created to help professors at Saudi universities improve their ability to teach.

In their research, Ferrandez-Berrueco and Sanchez-Tarazaga (2014) sought to examine the weight secondary school instructors gave to teaching abilities and create professional profiles based on their replies. A representative sample of 136 secondary teachers from 23 different school departments responded to a specially created questionnaire that served as the basis for the study. The findings show that this group values competence highly. The capacity to communicate knowledge was thus the skill with the highest rating, while knowledge of a foreign language received the lowest rating, even if personal competencies as a whole received the highest ratings. Additionally, other essential skills for education in the twenty-first century—such as collaboration, multicultural awareness, and ICT—got lower grades than those pertaining to theoretical knowledge.

Knowledge sharing has been reviewed in various studies. To determine whether competences have a predictive association with

knowledge sharing in virtual learning teams in distance education, Topchyan (2015) developed a research. 1,355 distance learning undergraduate and graduate students participated in the research. According to the research, sharing of information is statistically significantly correlated with loyalty, honesty, cooperation, and trust.

In order to determine if the community of inquiry (CoI) paradigm can forecast self-reported knowledge sharing behaviors in graduate-level online courses, Doring (2015) performed a research. The main objective was to ascertain if high degrees of social, instructional, and cognitive presence might promote knowledge distribution in online learning settings, resulting in knowledge co-construction among students. A survey was required of the participants. There were 36 participants. The findings imply that the more social components of the CoI paradigm can better encourage student interaction and knowledge sharing.

Reynolds et al. (2016) conducted a study to compare pre-service teachers' perceptions of their professional competencies at two campuses of a significant regional teacher education university, where one campus offered students 22% more hours of professional placement in educational institutions like schools and other related settings. The 1167 future instructors who took part were. The capacity to apply understanding about kids and how they learn, classroom management, professional knowledge and practice, and community participation were all areas where students who had spent more time in schools and similar environments scored higher on the confidence scale. A pre-service teacher's impression of whether they are doing well in the classroom cannot be changed by adding more practice time in the classroom or center. Hours cannot be added by "just adding" them.

In a research published in 2016, Zhang, Zhou, and Zhang investigated the interaction between personality and burnout as it related to teacher knowledge sharing. (N=796) Participants were 395 secondary school instructors and 401 elementary school teachers. They answered questions on knowledge sharing, burnout, and the Big Five personality qualities. The findings revealed that (a) in the regression model, extraversion and agreeableness traits were positively associated

with knowledge sharing, but conscientiousness, openness, and neuroticism were not significant in predicting knowledge sharing; (b) burnout was negatively associated with knowledge sharing after controlling for personality; and (c) burnout moderated the relationship between personality and knowledge sharing, that is, when compared with those with a high level of burnout. The findings imply that efforts to improve information sharing among teachers may benefit from treatments meant to lessen their level of burnout.

Brewer (2018) did a research to comprehend and characterize the lived experiences of faculty and other significant stakeholders with regard to educating and preparing online faculty to acquire crucial online teaching abilities. The study's conclusions showed that faculty members had generally favorable experiences working as online lecturers.

In order to determine how much knowledge sharing self-efficacy, motivation, and feeling of community characteristics impact undergraduate students' knowledge sharing behaviors (knowledge receiving and knowledge providing) in online learning settings, Ergün & Avc (2018) performed a research. Undergraduate students (N=284) made up the participants. The findings showed that knowledge sharing self-efficacy, followed by incentives and a feeling of community, was the highest predictor of both knowledge providing and receiving behaviors. Knowledge receiving was impacted by external factors and goal progress, but knowledge offering was solely impacted by internal factors. The independence component influences knowledge providing more favorably than knowledge receiving, which is paradoxical.

In an investigation of the effects of information sharing on product and process innovation, Al-Husseini & Elbeltagi (2018) performed a research. A mixed methods approach was used to explore the causal links between knowledge sharing and innovation utilizing 486 valid replies. The results showed that information exchange is essential for fostering innovation in both areas.

A research by Farahian and Parhamnia (2020) investigated how EFL instructors felt about sharing information in a reflective focus group and how this knowledge sharing enhanced their reflective practice. The findings showed that the participants had a negative

attitude toward sharing information. The focus group platform might also help instructors develop their reflective practice, it was also found. Benefits of reflective practice via knowledge sharing included, among other things, getting useful feedback and seeing how theory and practice may be related. The findings demonstrated that instructors grew familiar with information sharing despite certain perceived obstacles.

According to a research by Rohmah et al. (2022), knowledge sharing has been shown to be able to enhance student learning outcomes, as well as student comprehension and desire to engage in small-group discussion. Consequently, knowledge sharing can broaden students' vision, increase students' knowledge stock, and effectively foster their learning.

Silitonga, et al. (2020) conducted a study to evaluate the impact of implicit and explicit knowledge on teachers' capacity for creativity. 453 samples made up the returned and reliable survey findings. According to the study's findings, teachers' capacity for creativity is positively and significantly impacted by tacit knowledge exchange.

Sobandi, et al. (2021) conducted a study to examine how the knowledge management and sharing processes affected teachers' literacy abilities. An inquiry was utilized to gather information. Intentionally, 162 instructors were given the study to complete. The results showed a favorable impact on teachers' literacy abilities from information management and sharing methods.

Lee, et al. (2022) conducted a study to evaluate the many mediating influences of self-efficacy and prosocial behavior on the link between knowledge sharing and sustained happiness. Preschool instructors' opinions on several linked topics, including sustainable happiness, were examined using a survey. The link between information sharing and long-term satisfaction was shown to be favorably mediated by self-efficacy and prosocial conduct, according to the results. Preschool instructors' perspectives of information sharing about their professional happiness and workplace wellbeing to attain sustainable development objectives have an impact on their long-term satisfaction.

Langdal (2023) conducted a study to investigate how instructors educational programs on financial literacy of entrepreneurship skills experienced information sharing as a source of informal learning in the workplace. According to the results, instructors' informal learning is facilitated by information sharing. These methods of information exchange assist educators in developing their methods. The exchange of information among educators is encouraged by a conducive social environment. The research results imply that instructors may find it useful to support knowledge-sharing behaviors while presenting fresh subjects and pedagogical approaches in the classroom.

12. Statistical analysis

The researcher analyzed the obtained data using Statistical Package for Social Sciences (SPSS) and the following statistical methods:

- Pearson correlation coefficient for estimating consistency and relationships between variables.
- Cronbach's alpha coefficient for estimating reliability.
- Mean.
- Standard Deviation.
- t-Test for calculating the significance of the differences between groups.
- One-way analysis of variance (ANOVA).

13. Results and discussion

- Testing the first hypothesis

There is a statistically significant difference between the mean scores of the participants in the pre-post testing of teaching competencies favoring the post testing.

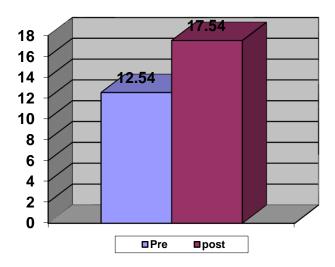
Table (3) Indication of significance of the differences between the mean scores of the participants in the pre-post testing of teaching competencies (N = 35, df = 34)

(11 88) 41 81)							
Variables	Test	Mean	Std. Deviation	(t) Value	Sig	ETA square	Effect size
testing of teaching	Pre	12.54	1.24	18.59**	0.01	0.911	Large
competencies	Post	17.54	1.29				U

Results verify the hypothesis. Table (3) shows that there is a statistically significant difference at the level (0.01) between the mean scores of the participants in the pre and post test of teaching competencies favoring the post test, indicating a "t" value of (18.59).

Since statistical significance indicates the extent of confidence in the results of differences, regardless of the effect size of those differences; which is calculated "ETA square"; and it is found to be "large" as the value of ETA square was (0.911). This indicates that the effect size of the independent variable (the use of electronic knowledge sharing) on the dependent variable (enhancing EFL teachers' teaching competencies) is high. This confirms the effect of the experimental treatments that were conducted on the experimental group of the research.

Figure (1) shows the significance of the differences between the prepost testing of EFL teachers' teaching competencies



Results of the research are generally consistent with other studies (Zhang, Zhou & Zhang (2016); Brewer (2018); Ergün & Avcı (2018); Al-Husseini & Elbeltagi (2018); Farahian & Parhamnia (2020); Rohmah, et al. (2022); Silitonga, et al. (2020); Sobandi, et al. (2021); Lee, et al. (2022); Hove Langdal (2023). For instance, Knowledge sharing has a favorable and considerable impact on instructors' performance, as Silitonga et al. (2020) have proven. The practices of knowledge-sharing, according to Hove Langdal (2023), may also help teachers' pedagogical approaches in educational settings.

- Testing the second hypothesis

There is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable.

Table (4) Indication of significance of the differences between the mean scores of the participants in the post testing of teaching competencies according to gender variable

$$(N = 35)$$

	Male= 16		Female = 19			Type of
Variables	Mean	Std. Deviation	Mean	Std. Deviation	(t) Value	significance
post testing of teaching competencies	17.25	1.29	17.78	1.27	1.24	Not statistically significant

Results verify the hypothesis. Table (4) shows that there is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable. This means that knowledge sharing contributed to achieving a balanced amount of enhancing the participants' teaching competencies and was not affected by the gender variable after conducting the experimental treatment. Rather, the post-test scores were close, which confirms the application of knowledge sharing in a way that takes into account gender differences.

The results of the research go in line with Vidushy, et al. (2020) who conducted a study to assess the levels of teaching proficiency among secondary school instructors and to pinpoint gender-based inequalities. There were 500 instructors in the sample. The results showed that gender had no discernible influence on teaching ability. The present findings also support a research by Sanchez Prieto et al. (2020) that found no significant variations in teaching abilities across instructors based on gender.

Generally, the research results contradict with some other studies. For instance, Boateng, et al. (2015) conducted a study aimed to determine the effect of demographic factors in knowledge sharing among instructors in senior high schools. The study found that male teachers share more of their knowledge than female teachers. Further, the results somewhat do not agree

with Le & Dai Trang (2017) who conducted a study to investigate the connections between two types of knowledge sharing behavior (KSB) and demographic factors. The study found that males tend to share more of their knowledge than females. Similarly, Omar (2019) indicated that there is a significant impact of gender on knowledge sharing. Akosile and Olatokun (2020) conducted a study to examine the factors that influence knowledge sharing. Findings showed that gender has a significant influence on knowledge sharing. Zhao, et al. (2021) conducted a study that proved that significant differences were found in favor of male college teachers in the perception of digital competencies. Moreover, Maji (2022) conducted a study to compare the teaching competencies of a sample of 65 teachers. The findings revealed that female teachers are more competent in teaching than the male teachers.

- Testing the third hypothesis

There is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable.

Table (5) Indication of significance of the differences between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable

(N = 35)

Variables	source of contrast	Sum of Squares	df	Mean Square	F	Sig.	Type of significance
post testing of teaching competencies	Groups	3.554	2	1.777	1.070 .3	.355	Not statistically significant
	Within Groups	53.131	32	1.660			
	Total	56.686	34				

Results verify the hypothesis. Table (5) shows that that there is no statistically significant difference between the mean scores of the participants in the post-test of teaching competencies according to the years of experience variable. This means that knowledge sharing contributed to achieving a balanced amount of enhancing the participants' teaching competencies and was not affected by the experience variable after conducting the experimental

treatment. Rather, the scores of the post-test were close, which confirms the application of knowledge sharing in a manner that takes into consideration the differences between the respondents according to the years of experience.

The research results are contrary to the findings of some studies. For instance, Le & Dai Trang (2017) conducted a study to investigate the connections between two types of knowledge sharing behavior (KSB) and demographic factors. The study found that more experienced participants tend to collect knowledge more those of less experience. Also, Omar (2019) the study aims to assess the influence of the work experience on knowledge sharing behavior. The results revealed a significant impact of work experience on knowledge sharing. Furthermore, Zhao, et al. (2021) conducted a study to examine how gender and number of years of teaching experience affected college teachers' digital abilities. The sample consisted of 536 in-service teachers. Results showed that teachers with less classroom experience rated their own view of their digital abilities as being higher.. In other words, Maji (2022) conducted a study to compare the teaching competencies of a sample of 65 teachers. Results confirmed that teachers over 40 had greater competences than teachers under 40. As a result, more experienced teachers are more competent than less experienced ones.

14. Recommendations and suggestions for further research

In the light of the obtained results, the research recommends that there is a need for activating the practices of electronic knowledge sharing to enhance the teachers' teaching competencies. Teaching competencies should be given a great importance and emphasized during preparing pre-service teachers. Providing teachers with professional training opportunities is highly recommended. The upgrade programs should include teaching competencies tests for assessing teachers. Integration between language and modern technology should not be just a mere theory but it should be also a practical outcome.

The present research could be replicated on a larger sample of EFL teachers derived from different educational stages. Moreover, other variables could be investigated such as the effect of using electronic knowledge sharing on enhancing EFL teachers' competencies according to teaching grade and age variables. Further,

researchers can explore the attitudes of EFL teachers towards using electronic knowledge sharing.

15. Conclusion and implications

The major purpose of the research is to investigate the effect of using electronic knowledge sharing on enhancing EFL teachers' teaching competencies. Results showed that there is a statistically significant difference between the mean scores of the participants in the pre-post testing of teaching competencies favoring the post testing. Additionally, there is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to gender variable. Furthermore, there is no statistically significant difference between the mean scores of the participants in the post testing of teaching competencies according to years of experience variable. Course designers can make use of the recommendations of the research to include electronic knowledge sharing in the teacher guides and activities' procedures. Teacher training institutions can make use of the results when designing their TEFL training programs and materials that should focus on enhancing EFL teachers' teaching competencies. TEFL researchers can adopt or adapt the instrument designed in the research in other studies related to content area and teaching competencies. It could be concluded that using electronic knowledge sharing proved to have considerable effect on enhancing EFL teachers' teaching competencies.

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Appendix

(Using Electronic Knowledge Sharing for Enhancing EFL Teachers' Teaching Competencies)

Dear Participants,

This test aims at measuring teaching competencies of the research sample. It is an instrument from a research that assesses EFL teachers' teaching competencies. Teaching competencies are defined as the ability to perform or carry out defined tasks in a particular context at a high level of excellence (Slavik, 2008). Since the research identifies the role of gender and years of experience, kindly use the following table to state your bio-data.

Bio-Data			
Name (Optional)			
Affiliation	Teacher □	Senior teacher□	Supervisor
Gender			
Years of Experience			
Phone			
Email			

Part One

Answer the following questions:

- 1. Differentiate between formative and summative assessment according to purpose, time and procedures.
- 2. Mention some benefits of electronic knowledge sharing among teachers./
- 3. Summarize the steps of presenting new vocabulary appropriately.
- 4. Identify multi-sensory approach in teaching.

Part Two

Choose the correct word to judge each of the following objectives:

- 1. To listen for gist.
- a. practical

- b. impractical
- c. poorly constructed
- 2. To act out a story section.
- a. unlimited time
- b. teacher oriented
- c. student oriented
- 3. To scan for details and specific information.
- a. unobservable
- b. student centered
- c. unmeasurable.
- 4. To actively participate in class discussions.
- a. unachievable
- b. teacher centered
- c. achievable

Part Three

Give at least three examples on the following:

- 1. Giving feedback
- 2. Student- centered strategies
- 3. Steps of effective lesson plan
- 4. Classroom management skills

Part four

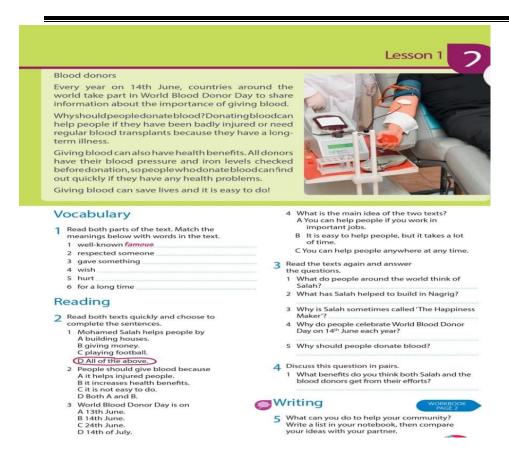
Define the following terms:

- 1. Learning outcomes
- 2. Performance indicators
- 3. Using ICT in education
- 4. Students with academic learning difficulties

Part five

Read the following activity carefully then accomplish the required tasks:

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- 1. Formulate at least two performance indicators.
- 2. Design a warm-up activity.
- 3. Write steps of presentation.
- 4. Design an evaluation task.