



## **Lesson Study: Investigating Its Potential for EFL Students' Learning of Teaching Content**

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### **Introduction**

Lesson study (LS) is a professional teacher-development activity aimed at improving the quality of teaching through a collaborative teaching paradigm. Through collaborative teaching, three to four EFL teachers cooperate to prepare a lesson plan, implement and observe teaching, and reflect on the teaching. The role of EFL teachers here is to prepare learning activities collaboratively. The process aims to promote effective learning activities through collaborative planning, implementation, observation, and reflection. Although the LS concept originally began in Japan in 2015, it has recently spread to many countries—including the United States, China, Indonesia, the Netherlands, and Finland—as more people recognize the benefits of lesson study programs. Implementing lesson study is not only limited to elementary education, it has also extended to the university level with the aim of enhancing the quality of teaching and learning. Many well-known studies have addressed different aspects of lesson study to enrich its theoretical and practical effects in educational settings. One strong impact of lesson study rests on the changing roles of teachers and students in classroom instruction and the integration of LS into a curriculum (Coşkun, 2017; Lander, 2015). Lesson study strengthens not just the philosophical paradigms but also the practical aspects of student-centered learning, which is still considered less beneficial in terms of its learning activities. Lesson study therefore has emerged as a way to enhance learning activities through teacher collaboration in the classroom. One teacher teaches while other teachers observe student learning and reflect on the whole learning process after the conclusion of teaching. Teachers who apply lesson study are more sensitive to individual learning progress, more so than would be typical in student-centered learning, which tends to neglect this point.

Seminal works on lesson study have made academic contributions in many educational settings, affecting various domains of teaching and learning. It has also paved the way for curriculum reform, new teaching styles, fresh learning environments, methodologies, and different roles for teachers' and students' roles (Conceição, Baptista, & da Ponte, 2019; Elliott, 2015; Karabuğa & İlin, 2019; Lewis & Perry, 2017; Mayrhofer, 2019; Murphy, Weinhardt, Wyness, & Rolfe, 2017; Sarkar Arani, 2015;

Shepherd, 2019). Research into lesson study within EFL/ESL contexts in recent years conveys that LS has been integrated into curriculum and professional teacher-training programs in the Turkish EFL context. Although the findings show positive attitudes of teachers toward their professional development, they fail to lay out an ideal concept of professional development that integrates lesson study. Studies also recommend further research into scrutinizing the effectiveness of LS in terms of EFL teachers' professional development (Coşkun, 2017). Interestingly, in the digital era, lesson study has also been combined with technology to complement the conventional model of lesson study with face-to-face teacher collaborations. A seminal study of Lander (2015) examined the implementation of lesson study within a blended learning atmosphere employing online and mobile applications at university level. The combination of blended learning and LS positively increased teachers' and students' attitudes toward LS and technology integration. Although the positive contributions of lesson study, in terms of both theoretical and practical benefits, have been put forward, there is no empirical evidence for how lesson study potentially impacts EFL students' knowledge of teaching content. This research is therefore dedicated to unveiling the impact of LS on EFL classroom instruction and enriching LS as a whole.

## Literature Review

### Theoretical Framework: Lesson Study (LS)

Collaborative teaching–learning in classroom instruction has led to the emergence of a new teaching approach that is often termed “lesson study,” where two to four teachers with relevant teaching knowledge work together to prepare a lesson plan, implement classroom teaching–learning activities, and reflect on activities collaboratively. A basic notion driving this approach is teacher learning communities (TLCs) or collaborative teacher learning. Teacher learning communities actually derive from social theories about community that promote five common themes: a) interaction and participation, b) interdependence, c) common interests and beliefs, d) consideration of individual outlooks, and e) meaningful relationships (Grossman, Wineburg, & Woolworth, 2001; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Stoll et al. (2006) put forward five attributes of teacher learning communities (TLCs): a) shared vision and values, b) collective responsibility, c) reflective inquiry, d) collaboration, and e) collaborative learning. The common features of TLCs rest upon the teachers' shared aim of enhancing student learning and participating in cooperative learning activities where reflective discussions and dialogues from different perspectives are valued in order to continually enhance student learning and professional teacher enhancement (Akiba, Murata, Howard, & Wilkinson, 2019).

A research review of lesson study identified that many studies revealed the positive effects of lesson study on (1) active engagement and teachers' beliefs (Akiba et al., 2019; Mayrhofer, 2019), (2) teacher's attitudes (Karabuğa & Ilin, 2019), (3) teachers' and students' awareness of technology and learners' vocabulary scores (Lander, 2015), (4) professional teacher development (Coşkun, 2017), and (5) English in young language learners' interaction, collaborative agency, (Liao, 2019) and oral fluency (Ducrey Monnier & Gruson, 2018).

Lander (2015), for example, examined whether blended learning could foster professional development and students' mastery of vocabulary. The experimental design combined the lesson study method and blended learning using computer-aided learning and Quizlet to assess students' vocabulary mastery of EFL at the university level in Japan. The findings revealed that the implementation of blended learning combined with the lesson study method could positively raise teacher and student awareness of technology and improve students' mastery of vocabulary.

In addition, Coşkun (2017) investigated the effectiveness of lesson study for a university-level class of an English preparatory program in Turkey. The participants included three English teachers and eighteen students. The research design included a qualitative open-ended survey to solicit students' and teachers' perceptions of lesson study implementation. The findings revealed that lesson study could enhance

students' research quality by addressing suggestions from the three teachers working collaboratively in the classroom.

In an endeavor to take advantage of lesson study, universities, including English education departments, began offering courses incorporating lesson study to various discussion areas, but the potential impact of LS in terms of quality and effectiveness for EFL classroom instruction has been relatively underexplored.

## Method

This study aims to pursue two main objectives. First, it seeks to examine whether the students who are taught using the lesson study approach perform better in their knowledge scores for teaching content when compared to students taught using the traditional teaching model. Second, it seeks to scrutinize EFL students' responses to the implementation of a lesson study approach. This study applies an experimental research with non-equivalent groups design. Lesson study classroom teaching activities and conventional teaching activities were therefore conducted for experimental and control groups, respectively.

## Participants

Thirty-seven EFL students (26 females and 11 males, all aged 21–23) participated in the study. All participants were English foreign language students in the English Education Department, which aims to prepare students to be potential EFL teachers in secondary schools. For this experiment, 21 English language learners who were enrolled in a teaching-reading course in the fourth semester volunteered to participate as subjects in the experimental group. They were taught in a lesson study environment (i.e., a lesson plan for the teaching-reading course was designed collaboratively, the teacher's teaching activity was recorded while two other teachers observed students' learning activities in the classroom session, and a collaborative reflection took place after the classroom session). In contrast, the control group comprised 16 English language learners who received instruction through the conventional teaching model (i.e., a lesson plan for the teaching-reading course was individually developed, individual classroom teaching was applied unrecorded, and there was no collaborative reflection on teaching).

## Data Collection and Analysis

This experimental research sought to investigate the differences between two groups who were instructed using different teaching approaches (i.e., lesson study versus traditional classroom instruction) in terms of the dependent variable, namely students' knowledge of content as reflected in course grades. The independent variable, meanwhile, was the type of classroom instruction applied, namely lesson study or the conventional teaching model. The testing of content knowledge was adopted by Cambridge ESOL and further validated by Kocoglu, Ozek, and Kesli (2011) for assessing the EFL students of MA programs in Turkey. Furthermore, the content knowledge featured in this study was characterized by three different aspects, namely the Teaching Knowledge Test (TKT) scores, final teaching-reading course grades, and open-ended feedback questions. An independent sample *t* test was carried out to estimate the homogeneity of both the experimental and control groups. The null hypothesis was calculated at the .05 alpha value level of significance. The students' responses, meanwhile, were analyzed qualitatively using a thematic analysis model.

## The Teaching Knowledge Test (TKT)

The TKT was developed by Cambridge ESOL with the aim of assessing EFL learners' knowledge of language-related concepts, such as language use, teaching methodology, and practices for language teaching and learning in an EFL/ESL context. It contains four band descriptors (i.e., teaching

methodologies, resource use in language teaching, lesson plan, and classroom management) and 14 dimensions with a total of 80 questions. The 14 dimensions cover grammatical terms (5 items), grammatical structures (5 items), lexical categories (6 items), phonological awareness (8 items), language functions (6 items), speaking sub-skills (5), reading and writing sub-skills (5 items), learning styles (5 items), teaching decisions (5 items), language learning (5 items), course book activities (8 items), assessment (6 items), presentation activities (5 items), and classroom activities (6 items) (Spratt, Pulverness, & Williams, 2005). The *Cronbach* alpha reliability for this test is 0.706.

## Findings

### RQ 1: Do students taught using a lesson study approach perform better in learning content knowledge than those students taught through a traditional teaching model?

To establish whether the two groups of EFL students differed in terms of their awareness of the content knowledge before the experiment, the Teacher Knowledge Test (TKT) was administered as a pre-test. Descriptive statistics and an independent t-test were applied to explain the similarity of EFL mean scores for both groups before the experiment. Table 1 shows that the mean TKT test scores for the groups were 63.00 (SD = 7.560) in the lesson study group and 65.40 (SD = 6.891) in the conventional group ( $t = 0.789$ ,  $p = 0.368$ ), indicating no significant differences in the different groups' awareness of content knowledge before the experiment.

TABLE 1  
*EFL Students' TKT Test Scores*

	F	Sig	<i>t</i>	<i>df</i>	Sig 2-tail
Equal variance assumed	.789	.383	.789	37	.426
Equal variances not assumed			.816	18.422	.412

To establish the impact of the lesson study implementation on EFL learners' learning of content knowledge for their teaching-reading course, descriptive statistics and independent sample *t*-tests were applied for the course grades of the two cohorts following the experiment to assess the EFL student groups' mastery of content knowledge and course scores. As described in Table 2, the mean score for content knowledge mastery and course grades of the lesson study group was 4.70 (SD = 0.696) after the experiment.

TABLE 2  
*Students' Teaching Content Knowledge (TKT) Test Results*

Dimensions	Lesson study group				Traditional group		
	Items	Pre-test	Post-test	Change	Pre-test	Post-test	Change
Grammatical terms	5	3.56	4.00	0.44	3.54	4.00	0.46
Grammatical structures	5	3.43	3.86	0.43	3.47	3.86	0.39
Lexical categories	6	3.17	3.67	0.50	2.96	3.25	0.29
Phonology	8	2.46	3.00	0.54	2.39	2.66	0.37
Language functions	6	2.96	3.22	0.26	2.68	2.75	0.07
Speaking	5	3.00	3.66	0.66	2.82	3.00	0.18
Reading and writing	5	3.25	3.75	0.50	2.88	2.96	0.08
Learning styles	5	2.86	3.54	0.68	2.88	2.98	0.10
Teacher's decision making	5	2.57	3.25	0.68	2.50	3.00	0.50
Language learning	5	2.54	3.25	0.71	2.66	3.25	0.59
Course books	8	3.16	3.77	0.61	3.27	3.70	0.43
Assessment activity	6	2.77	3.25	0.48	2.59	2.75	0.16
Presentation activity	5	3.65	3.73	0.08	3.65	3.73	0.08
Classroom teaching activity	6	2.73	3.04	0.31	2.62	2.66	0.04
		42.11	48.99	6.88	40.91	44.68	3.77

Table 2 shows the mean scores for the learners' knowledge of teaching content. Those who were taught using the lesson study approach scored 48.99 overall for teaching content knowledge with a mean change in score of 6.88, which were greater than the mean scores and improvements of those learners taught using the traditional model (44.68 with a mean change of 3.77).

Going into more detail for the results of the lesson study group for all fourteen TKT elements, grammatical terms (4.00) and grammatical structures (3.86) showed higher scores than the other TKT elements, indicating that grammatical terms and structures were the easiest areas to understand in the TKT. The lowest scores, meanwhile, were observed for phonology (3.00) and classroom teaching activity (3.04), implying that phonology and classroom teaching activities were the most challenging elements to comprehend.

In the traditionally taught group, meanwhile, grammatical terms (4.00) and grammatical structures (3.86) also saw higher scores than the other TKT elements. In this case, the form of instruction (lesson plan or traditional model) did not influence EFL learners' mastery of content knowledge. However, both groups had covered grammatical concepts during their previous semester, thus explaining why there was no significant influence of teaching method on students' mastery of grammatical terms and structures. Once again, the lowest scores were seen for phonology (2.66) and classroom activity (2.66), implying that both groups struggled with understanding these topics.

TABLE 3  
*Independent t-test Results*

	Levene's test					
	F	Sig	T	Sig. (2-tailed)	Mean Score	Mean Difference
Equal variances assumed	2.159	.146	5.027	.000	48.99	4.13
Equal variances not assumed			5.047	.000	44.68	4.13

Table 3 shows the results of an independent t-test, clearly indicating the significance level (sig. 2-tailed)  $.000 < 0.05$ . It can therefore be deduced that there was a noticeable difference between the learners' scores for content knowledge when taught using the lesson study method or the traditional model, with the lesson study group performing better in terms of their content knowledge scores than the group taught using the traditional teaching model.

## **RQ 2: What are students' opinions toward the implementation of a lesson study approach?**

At the conclusion of the semester's program, an open-ended questionnaire was distributed to the participants in the lesson study group to solicit their opinions about various aspects of lesson study.

### 1. What do you think of the lesson study implemented in your teaching-reading course?

Most participants in the lesson study group gave positive responses, indicating that lesson study activities were beneficial and motivational. Furthermore, they also enhanced students' autonomous learning through collaborative activities.

*Personally, I liked the various learning activities implemented in the classroom. Lesson study helped me increase my understanding of the topics. The teacher often simplified his or her explanation. So, it made it easy to understand the topics by myself. I liked the discussion as I could share my ideas and learn from others.*

### 2. What would you suggest to improve the lesson study activities?

Participants felt satisfied with the lesson study implementation, and none of them provided any suggestions for further improvement. They simply appreciated the lesson study approach because it made it easier for them to complete the course.

*I felt satisfied with the lesson study activities during the semester course. I think I didn't see any weaknesses in the implementation.*

Participants did, however, criticize the area of collaborative learning, with some complaining about group members not actively contributing to group work activities.

*I felt that two group members did not actively contribute during the discussion process. They were just busy writing notes.*

3. What are the merits and demerits of the lesson study approach implemented in your class?

Some participants mentioned a few disadvantages, such as overwhelming tasks. They also felt that the teacher was a little slow in providing feedback for their written projects. In addition, a lack of personal attention and interaction also emerged as a shortcoming.

*I felt that I got so many projects from the teacher but he or she often returned our project work two weeks after submission. It's too long for us. The teacher did not provide individual consultation for our tasks.*

In summary, the EFL students who received the lesson study approach mentioned the convenience and advantages of the program. They felt that the lesson study approach helped them complete their course more effectively than a traditional model would have. They also felt that lesson study enhanced their learning autonomy.

## Discussion

This research confirms lesson study's potential for improving EFL students' learning of content knowledge, suggesting its superiority over the traditional teaching model. The findings reveal that (1) better learning outcomes and potentials are achieved through classroom instruction based on lesson study activities than when using the traditional model and (2) EFL learners find that lesson study motivates them in learning activities. Furthermore, it also enhances students' critical thinking and autonomous learning.

The lesson study and traditional teaching courses applied the same learning texts with different instructors and measured the same student learning outcomes for the same course content. The findings revealed that students in the lesson study environment performed better in terms of their awareness of content knowledge and course scores than those students taught using the traditional teaching model. The lesson study approach therefore appears to be an acceptable alternative teaching method for EFL classroom instruction. Effective teaching also seems to result from teachers' attempts to always try new things in the classroom, as was demonstrated in the lesson study cycles. These findings support those of Van Sickle (2011), who claimed that the key to successful teaching and learning was a teacher's initiative in trying out new things in the classroom (Karabuğa & Ilin, 2019; Van Sickle, 2011). Teaching innovations result from collaborative planning, observed teaching, and collaborative reflection, as implemented in every session through lesson study, unlike in traditional teaching.

Furthermore, previous studies in different countries that have examined teaching content knowledge (TKT) to EFL learners in a Master's program taught through blended and traditional learning revealed similar results (Chen & Jones, 2007; Kocoglu et al., 2011; Mödritscher, 2006). Most of these study's findings showed no significant difference between students who were taught using either blended or traditional teaching models. In contrast, the lesson study method used in the present study to teach content knowledge led students to achieving higher TKT scores on average than those taught with the traditional approach. This study therefore provides insights that differ from previous studies.

The findings also demonstrate the benefits of applying lesson study in EFL classroom instruction, because it enabled EFL students to increase their awareness of content knowledge and served as an asset for them before they would move on to teaching in real classrooms in the future. In EFL classroom instruction, lesson study can increase learners' motivation, critical thinking, and autonomous learning. This study's results may therefore motivate other English teachers to incorporate lesson study into their classroom teaching and learning practices. In the open-ended responses, however, the students criticized the limited personal interaction between the EFL teacher and students. This implies that teaching did not rely merely on physical learning aspects—such as interesting learning activities, effective collaborative tasks, and effective classroom management—but also students' need for personal attention from the teacher to maintain psychological aspects of learning and maintain a harmonious atmosphere. In addressing critics for teaching improvement, Lee (2008) asserted the importance of criticism during the implementation of LS. He further suggested that both teachers and students should enhance their mindset, so that criticism will result in more effective teaching.

Arifani and Suryanti, (2019) found that teacher creativity and involvement were significantly influential in EFL teaching. However, the results of this study suggest that additional notions beyond these two elements are psychological factors that impact learning conditions. Learners need more than just creativity and engagement, and a good teacher should be able to create personal relationships with his or her students.

This current study included some limitations, however. First, the number of participants in the lesson study group was relatively small and not equal to the number of participants in the control group. Consequently, the findings' generalizability cannot be assured. While the findings of this study provide some insights into the field, they also uncovered other areas of concern that warrant further research, such as to use a larger sample size and to survey teachers' perceptions of lesson study implementation. The findings of this study support the idea that differences in learning outcomes exist when using lesson study and traditional teaching approaches. It is therefore suggested that English language departments integrate lesson study programs into their EFL curriculums. Future research should also look at conducting a similar study with a larger sample to strengthen the generalizability of the findings.

## Conclusion

This study sought to investigate the impact of lesson study on EFL students' awareness of content knowledge and their responses toward the implementation of lesson study. The findings of this study proved that EFL students scored higher when taught with a lesson study approach compared to those students who were taught using the traditional teaching model. The EFL students within the lesson study experimental group also expressed positive opinions about the lesson study activities. These findings suggest that lesson study is a suitable form of collaborative teaching activity for EFL teachers to enhance students' learning of content knowledge. Consequently, it is recommended that EFL teachers consider incorporating lesson study into their EFL classroom activities.

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## References

- Akiba, M., Murata, A., Howard, C. C., & Wilkinson, B. (2019). Lesson study design features for supporting collaborative teacher learning. *Teaching and Teacher Education*, 77(1), 352-365.
- Arifani, Y., & Suryanti, S. (2019). The Influence of Male and Female ESP Teachers' Creativity toward Learners' Involvement. *International Journal of Instruction*, 12(1), 237-250. doi: <https://doi.org/10.29333/iji.2019.12116a>
- Chen, C. C., & Jones, K. T. (2007). Blended learning vs. traditional classroom settings: Assessing effectiveness and student perceptions in an MBA accounting course. *Journal of Educators Online*, 4(1), 1-15.
- Conceição, T., Baptista, M., & da Ponte, J. P. (2019). Lesson study as a trigger for preservice physics and chemistry teachers' learning about inquiry tasks and classroom communication. *International Journal for Lesson and Learning Studies*, 8(1), 79-96. doi: <https://doi.org/10.1108/IJLLS-11-2018-0081>
- Coşkun, A. (2017). The application of lesson study in teaching English as a foreign language. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 18(1), 151-162.
- Ducrey Monnier, M., & Gruson, B. (2018). Lesson study research and initial teacher education: How to teach interactive speaking in English as a foreign language (EFL) in primary school? *Ristal*, 1(1), 118-133.
- Elliott, J. (2015). Towards a comprehensive pedagogical theory to inform lesson study: An editorial review. *International Journal for Lesson and Learning Studies*, 4(4), 318-327. doi: <http://dx.doi.org/10.1108/IJLLS-08-2015-0028>
- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community. *The Teachers College Record*, 103(1), 942-1012.
- Karabuğa, F., & İlin, G. (2019). Practicing lesson study in a Turkish education context: Considering the challenges, suggestions and benefits from EFL teachers' perspectives. *International Journal for Lesson and Learning Studies*, 8(1), 60-78. doi: <https://doi.org/10.1108/IJLLS-05-2018-0036>
- Kocoglu, Z., Ozek, Y., & Kesli, Y. (2011). Blended learning: Investigating its potential in an English language teacher training program. *Australasian Journal of Educational Technology*, 27(7), 1124-1134.
- Lander, B. (2015). Lesson study at the foreign language university level in Japan: Blended learning, raising awareness of technology in the classroom. *International Journal for Lesson and Learning Studies*, 4(4), 362-382.
- Lee, J. F. (2008). A Hong Kong case of lesson study: Benefits and concerns. *Teaching and Teacher Education*, 24(5), 1115-1124.
- Lewis, C., & Perry, R. (2017). Lesson study to scale up research-based knowledge: A randomized, controlled trial of fractions learning. *Journal for Research in Mathematics Education*, 48(3), 261-299.
- Liao, P. C. (2019). Understanding EFL learner agency in collaborative activities: A case study in a Taiwanese English course. *The Journal of ASIA TEFL*, 16(3), 768-782.

- Mayrhofer, E. (2019). Lesson study and teachers' beliefs: How a Bourdieuan perspective could make a difference. *International Journal for Lesson and Learning Studies*, 8(1), 19-33. doi: <https://doi.org/10.1108/IJLLS-11-2018-0091>
- Mödrtscher, F. (2006). E-learning theories in practice: A comparison of three methods. *Journal of Universal Science and Technology of Learning*, 28(1), 3-18.
- Murphy, R., Weinhardt, F., Wyness, G., & Rolfe, H. (2017). Lesson study: Evaluation report and executive summary. London: Education Endowment Foundation.
- Sarkar Arani, M. R. (2015). Cross cultural analysis of an Iranian mathematics lesson: A new perspective for raising the quality of teaching. *International Journal for Lesson and Learning Studies*, 4(2), 118-139.
- Shepherd, A. V. (2019). Integrating lesson study in Myanmar teacher training. *International Journal for Lesson and Learning Studies*, 8(1), 34-47. doi: <https://doi.org/10.1108/IJLLS-04-2018-0024>
- Spratt, M., Pulverness, A., & Williams, M. (2005). *The TKT course*. Cambridge: Cambridge University Press.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Van Sickle, J. A. (2011). *Lesson study's impacts on teacher perception of efficacy in teaching* (Unpublished thesis). Arcata, California: Humboldt State University.