Implications of Lesson Study for Tertiary-Level EFL Teachers’ Professional Development: A Case Study From Turkey

İlknur Bayram1 and Fatma Bıkmaz2

Abstract
This qualitative case study carried out at a Turkish university with four English language teachers aims to explore what teachers experience in the planning, implementation, analysis, and reporting phases of the lessons study process and what the implications of lesson study for teacher professional development can be. Data in this four-month study were gathered through observations, interviews, whole group discussions, and reflective reports. Findings revealed that lesson study had potential challenges and benefits for the professional development of teachers. The model poses challenges in finding a topic and research question, determining the lesson design and teaching style, making student thinking observable and analyzing qualitative data. On the other hand, it benefited teachers in terms of increasing their pedagogical content knowledge, reflectivity, research skills, collaboration, and collegiality. This study suggests that lesson study might be a good starting point for institutions wishing to adopt a more teacher-led, inquiry-driven and collaborative perspective for professional development.

Keywords
EFL teachers, lesson study, effective professional development, in-service training, case study

Introduction
English as a foreign language (EFL) teachers need support in terms of professional development (PD) so that they can foster learning in their classrooms. Such PD support is usually offered to teachers in the form of workshops, seminars, lectures, conferences and/or courses (Diaz-Maggioli, 2004). However, it is now accepted that teachers rarely transfer the content covered in a workshop, seminar, and so on to their classrooms (Joyce & Showers, 2002), and such forms of top-down PD strategies have often been criticized both for “preventing teachers from maximizing their learning” (Fiszer, 2004, p. 1) and for not addressing the problems teachers have to deal with in their own classrooms. Although these programs are being designed and delivered with good intentions, they fall short of achieving the desired results because of lack of follow-up meetings, feedback and observation. Therefore, concerns about traditional PD efforts are increasingly being voiced by teachers themselves, administrators and other stakeholders in the field of English Language Teaching (ELT) in Turkey (Özbilgin et al., 2016; Seferoğlu, 2001).

Richardson and Diaz-Maggioli (2018) highlight that PD in ELT has mainly relied on two things: teachers themselves or in-service teacher training programs organized by teachers’ institutions. On one end of the spectrum, teachers read about methodology, go to conferences, write articles and/or give presentations at conferences to try to take full responsibility for their PD among other work-related responsibilities. On the other end of the spectrum, the institution tries to meet the PD needs of teachers with one-off sessions usually organized in a top-down manner, delivered by an outside expert, and not evaluated in terms of their compatibility with teacher needs and effect on students (Diaz-Maggioli, 2012).

Since teacher quality is a critical component of successful education (Darling-Hammond, 2006), efforts should be devoted to designing and/or carrying out PD programs that will positively affect teacher quality, teaching and learning. To this end, we should first and foremost support teachers who wish to improve their teaching practices by providing them with effective and visionary PD opportunities. Opportunities for PD play a very important role in not only

1TED University, Ankara, Turkey
2Ankara University, Turkey

Corresponding Author:
İlknur Bayram, Center for Teaching and Learning, TED University, Ziya Gokalp Caddesi No:48, Kolej, Çankaya, Ankara 06420, Turkey. Email: ilknur.bayram@tedu.edu.tr

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the development of EFL teachers but also the enactment of the curriculum (Richards & Farrell, 2005). If we want teachers to take a more active role in designing their teaching and learning, we need to make sure that they have a say in what their immediate needs are and how these needs must be addressed. To address those needs, we also need to offer teachers effective PD models through which they can collaborate with peers, reflect on their practices, discuss their teaching beliefs and learn from their in-school experiences.

In line with this view, there is a growing consensus that high quality PD should be school-based (Borko et al., 2010; Coolahan, 2002) require active participation of teachers (Birman et al., 2000; Desimone, 2009), involve reflection (Adey 2004; Sahin & Yildirim, 2016), be carried out in collaboration with peers (Allison, 2015; Richardson & Diaz-Maggioli, 2018), focus on student learning (Hawley & Valli, 2000), and engage teachers in research (Kirkwood & Christie, 2006; Stoll et al., 2012). It should be noted that the key elements of effective continuous professional development (CPD) practices listed above are inherent in certain CPD models, one of which is the Japanese lesson study.

**Lesson Study: A Brief Overview**

Lesson study, a Japanese PD model, might be considered as a great example of high quality PD because it incorporates most of the elements of effective professional learning. It is a form of job-embedded learning (Zepeda, 2012, p. 225) that combines collaboration, reflection and teacher engagement with great emphasis on student learning (Fernandez & Chokshi, 2002; Lewis & Hurd, 2011). The model has been widely used in Japan since the 1870s, and spread to the other countries in the east and the west beginning from the 2000s (Dudley, 2014). Dudley (2014, p. 2) considers lesson study to be a highly specified form of classroom action research focusing on the development of teacher practice knowledge.” This definition is also supported by Austin (2017) who asserts that lesson study is a form of action research taking roots in Japan.

The term lesson study is a direct translation for the Japanese term *jugyokenkyu*, which is composed of two words; *jugyo*, which means lesson, and *kenkyu*, which means study or research” (Fernandez & Yoshida, 2004, p. 7). Teachers engaged in lesson study jointly plan, teach and analyze a lesson (B. Cerbin, 2011) which is called a research lesson. A research lesson is like a regular lesson a teacher teaches to his own students, but it differs from actual lessons in that it is carefully planned in collaboration with colleagues, focused on a particular goal, observed, recorded and discussed (Lewis & Tsuchida, 1998). Teachers eventually revise their research lesson in the light of their observations and discussions and teach it in another lesson study cycle (Stepanek et al., 2007).

The iterative process of planning, teaching, observing and analyzing a lesson (Lewis et al., 2006) starts when teachers who wish to work in collaboration get together in teams. The lesson study team selects a topic which has an important place in their discipline, which creates problems for students while they are trying to learn it, or which poses challenges to teachers while presenting it (B. Cerbin, 2011). Teachers read the current literature about the topic to learn more about the possible pedagogical solutions. In line with the selected topic and what the literature suggests, a lesson plan aiming to achieve the intended learning goals is created for the first research lesson. Following this, the lesson study team plans in which ways they will investigate how students will learn from the research lesson, what type of evidence will be gathered and how the lesson will be observed and recorded. After the research lesson is taught and observed, the team holds meetings to critique the lesson with special emphasis on student learning, lesson goals and teaching practice. As a result of the team’s discussions, the research lesson is revised (B. Cerbin, 2011; Fernandez & Yoshida, 2004; Lewis & Hurd, 2011). Revised research lessons might be taught in another classroom, thereby repeating the cycle one more time, if deemed necessary by the team. Teams may also wish to report their research in order for their colleagues to learn from it (W. Cerbin & Kopp, 2006).

Reviews of literature show that lesson study has important implications for the PD of teachers. Increased knowledge of subject matter and instruction, increased ability to observe students, stronger collegial networks, stronger connection of daily practice to long-term goals, stronger motivation and sense of efficacy, improved quality of available lesson plans (Lewis et al., 2004) are the main areas in which the model benefits the professional learning of teachers. Teachers carrying out lesson study report that working in collaboration with other colleagues enables them to improve their teaching practices (Lewis & Tsuchida, 1998), and they value the fact that lesson study is based on the premise of teachers’ learning together (Weeks & Stepanek, 2001). Sharing their existing knowledge and skills with each other (B. Cerbin, 2011) enables teachers to take responsibility for their own PD (Lewis & Hurd, 2011).

Lesson study also helps teachers to analyze lessons from a student’s point of view. Through sitting next to students and carefully observing them during research lessons, teachers develop a better understanding of what kind of questions students ask, why they ask those questions, and what hinders or facilitates their learning. Looking at the lesson through their students’ lenses (Yoshida, 1999) raises teachers’ awareness about students (Lewis, 2000).

**Lesson Study in Turkey**

Lesson study is a relatively new model in Turkey. The first research study related to the model dates back to Eraslan’s study in 2008 (Eraslan, 2008). In his article, after introducing the model, Eraslan, as a mathematician himself, suggests that researchers and teachers in the field of mathematics should explore the model more in depth. In parallel with his
suggestion, research on lesson study mostly centers on the implementation of the model by pre-service (M. Baki, 2012; Cumhur, 2016; Kanbolat, 2015; Pektaş, 2014) and in-service math teachers (Aydınhan Yenmez, 2012; Öztun, 2014; Özen, 2015). Results underlined the benefits of the model as well as potential challenges.

In their exploration of the merits and demerits of lesson study from the perspective of mathematics teachers, Bozkurt and Yetkin-Özdemir (2016) highlighted that the model boosted teacher PD by requiring their active participation, making it possible for them to monitor their teaching, and by strengthening their collaboration and communication skills. However, the researchers also underlined that physical conditions of the classrooms and lack of support from administration are the main challenges to be responded to for the model to be implemented in an effective and sustainable manner. Research conducted by Yıldız and Baltacı (2017) highlighted that the model contributed to the development of techno-pedagogical competencies of mathematics teachers. In addition to techno-pedagogical competencies, lesson study was found to increase the reflective skills of the mathematics teachers by enabling them to evaluate their teaching in a detailed and reliable manner, and by encouraging them to engage in self-evaluation of their teaching practices (Bozkurt & Yetkin-Özdemir, 2018). A case study conducted by Güner and Akyüz (2019) with four pre-service middle school mathematics teachers investigated how lesson study influenced the teachers’ noticing of students’ mathematical thinking. It was found out that planning, teaching and reflection components of the model facilitated the noticing skill of the participating teachers.

Yakar and Turgut (2017) analyzed how lesson study impacted science teachers’ beliefs about teaching and learning, and found out that microteaching lesson study had a positive effect on teacher beliefs by shifting their focus from teacher-centered instruction to student-centered instruction. Bahçivan’s (2017) study with pre-service science teachers showed that lesson study broadened teacher knowledge by positively affecting their subject as well as pedagogical knowledge. In his study conducted with two primary school teachers, Özdemir (2019) investigated how lesson study improved the PD of teachers as well as student learning. He found out that the model enabled teachers to apply different teaching methods, collaborate with each other, and exchange opinions. Özdemir (2019) also highlighted that especially low performing students, and students with difficulties in self-expression benefited from the lesson study experience.

Despite the abundance of research studies with maths and science teachers only some of which are listed above, it should be noted that lesson study has not received much attention as a PD model in the field of ELT in Turkey until 2011. The implementation of the model by EFL teachers was first mentioned in a research study conducted by Demirbulak (2011) who adopted lesson study as a tool to improve the research skills of pre-service EFL teachers. Following her study, Gök (2016) aimed to find out the initial reactions of the 14 EFL teachers as they piloted a small scale lesson study implementation. Yüzbaşıoğlu and Babadoğan (2016) carried out another study with 13 EFL teachers from four different middle schools and set out to unearth teachers’ ideas as to the applicability of lesson study in Turkish state schools. Coşkun (2017) aimed to find out how lesson study led to the improvement of an EFL lesson based on three EFL teachers and 18 students’ ideas about the first and revised research lesson. In their study which explored the lesson study experience of EFL teachers at higher education, Bayram and Bikmaz (2018) highlighted the challenges and the opportunities posed by the model. Among the challenges were feelings of anxiety experienced by teachers, teachers’ heavy workload, and conceptualizing the model. However, lesson study was also found to contribute to teacher PD in terms of collaborative lesson planning, encouraging teachers to teach in a more student-centered way, and increasing their time management skills.

In 2019, a systematic review of lesson study implementations by English language teachers around the world and in Turkey was carried out by Uştuk and Çomoğlu (2019), who recommended the model to be adopted by more languages teachers. Karabuğa and İlın (2019) conducted a qualitative study with five EFL teachers and discussed the potential advantages and disadvantages of the model in depth. Yalçın Arslan (2019) explored the role of lesson study in a pre-service EFL teacher education context, and underlined its potential as a PD model for initial teacher development. Kıncaal et al. (2019) worked with 24 9th graders and 5 English teachers at a socioeconomically disadvantaged school setting, and analyzed whether the implementation of lesson study would increase the English level of students, and what teachers would think about the model. Findings of the study were promising in the sense that there was a significant increase in students’ English levels as a result of implementing lesson study, and teachers found it highly beneficial for their PD, and they suggested using it as a model during in-service teacher training.

Among common findings reported by the studies listed above were that lesson study emphasized working in collaboration and resulted in increased self-confidence and pedagogical content knowledge. It also served to improve the research lesson. However, because of the busy schedule of teachers and lack of necessary observation skills and sufficient number of substitute teachers to cover for the teachers participating in lesson study, the model posed certain challenges.

We would like to emphasize that this study was conducted during the 2016 to 2017 academic year at a foundation university, and its results started to emerge in 2018 when there were only four studies, as reported above, which could guide the design of our study, and only one (Gök, 2016) was conducted in a similar setting to ours. Demirbulak (2011) worked with pre-service EFL teachers, and Coşkun’s (2017) study reported the perceptions of EFL teachers employed in a state university. Although conducted in a university context, the results of these
studies had to be interpreted with caution as we were well-aware that pre-service and in-service teachers’ perceptions as well as the perceptions of teachers working in a state and foundation university could differ from each other in certain aspects. Therefore, the pressing need for further and more comprehensive research about lesson study in a foundation university context was the main motive for this study. Despite the emerging research, we still believe that more research needs to be carried out for the model to be better understood and applied by EFL teachers in Turkey before we can fully understand the affordances and consequences of the model as perceived by English language teachers serving in different contexts in Turkey.

Our focus in this article was to investigate the implications of lesson study for EFL teachers’ PD by paying particular attention to (a) how the planning, implementation, analysis and reporting phases of the model were carried out by four teachers working at the department of foreign languages (DFL) of a Turkish foundation university, and (b) what implications these experiences had for their PD.

**Method**

Case study is especially preferred by researchers when they wish to investigate the “how” and “why” of an issue (Yin, 2014), aim at an in-depth understanding (Creswell, 2013; Saldana, 2011) of a bounded system (Merriam, 2009) and may explore the case in its natural context (Hancock & Algozzine, 2006). In an attempt to investigate how teachers carried out lesson study in their natural working environment, and to develop a thorough understanding of what they experienced, the study was carried out as a qualitative case study with the participation of four EFL teachers. The model had been piloted with three teachers before the implementation of the actual study. Pilot study lasted 2 months.

**Research Context and Participants**

The DFL where the study has been conducted aims to teach undergraduate students general and academic English so that they can communicate both in colloquial and academic settings. 35 full-time EFL teachers work at the DFL, who teach 20 hr a week. As far as PD activities are concerned, teachers are given orientation training upon recruitment. During the academic term, teachers are also offered courses, seminars and lectures given by outside experts. In addition, they are allowed to do their MAs and PhDs. There is not a PD unit at the DFL which may be the reason why PD is mostly externally driven. Since the day the university was founded in 2011, PD at the DFL has been designed in a top-down manner where teachers were not included in the decision-making of the content and the delivery of the PD activities. This has raised many concerns about the effectiveness of the PD conducted at the department.

In qualitative research, it is important to select individuals that can provide the researcher with the necessary information to answer the research question (Maxwell, 2013). Therefore, four research participants were purposefully chosen among seven volunteers according to three criteria: (a) a teaching experience of more than 3 years, (b) engagement in postgraduate studies, and (c) voluntariness to work collaboratively. Two of the participating teachers were female and two of them were male. Their ages ranged from 27 to 29, and their teaching experience was between 5 and 7 years. All of them majored in ELT. Three of them were doing their MAs in related fields. One of the participants had taken part in the pilot phase of this study.

**Lesson Study Process**

Within the scope of this research, Dudley’s (2014) lesson study model was used, which required each teacher to carry out one lesson study cycle enabling them to experience the process in its entirety. The model was implemented by four participants over the course of the fall semester of the 2016/2017 academic year. During the 4-month study, participants carried out the model by going through the following three steps suggested by Dudley (2014): (a) getting together and finding a focus, (b) conducting four lesson study cycles, and (c) writing a final lesson study report and sharing the results.

The lesson study process in our case started when a group of four teachers came together and determined a focus for themselves by investigating learning goals or student learning problems (B. Cerbin, 2011). As soon as they selected their focus, they started planning the first research lesson collaboratively. This was followed by one of the teachers teaching the research lesson in his/her classroom while other teachers observed three case students chosen among students with varying performance levels (high, average and low). Focusing on the same students was advisable because it helped teachers yield the best picture of students’ understanding throughout the research lesson (Lewis & Hurd, 2011). At the end of the research lesson, the teacher implementing the lesson conducted one-to-one interviews with case students to gain a better understanding of students’ perceptions of the research lesson. Two or three days after the research lesson, teachers held a post-lesson discussion session where they analyzed the research lesson with the help of their observations and field notes and by reflecting on the lesson (Fernandez & Yoshida, 2004). They, then, revised the lesson plan and updated it. This constituted one lesson study cycle.

Teachers were introduced with the model by the pilot lesson study team, and they learned how to carry out the essential steps of the model from previous teachers’ experiences. Additional support was also provided with B. Cerbin’s (2011) book and through a website (https://lessonstudy.co.uk/) guiding researchers and practitioners through lesson study. One of the study participants who had implemented the model in the pilot study also offered extensive guidance and help to the other three teachers in critical phases of the model such as observation and analysis of research lessons.
In this study, four lesson study cycles were completed since there were four teachers carrying out the model. Each participant taught a research lesson in their own classroom which was subsequently analyzed and revised. At the end of four cycles, a final lesson study report was written by the teachers thereby helping them document their 4-month lesson study work (B. Cerbin, 2011). In the final phase of the process, teachers presented their experiences about lesson study and their findings to their colleagues in an in-house PD gathering.

**Data Collection**

The data collection tools such as observation forms, interview questions, and the format of the reflective reports were developed by the researcher and tested during the pilot study so that the required modifications could be made before their actual implementation. Data collection process and tools are displayed in Table 1.

Before the data collection process, written and oral consent were sought from the administrator, participating teachers, and students whose research lessons would be video recorded. Participants were assured that their confidentiality would be preserved, and they could withdraw from the study at any time. Approval from the university’s Ethics Committee was also obtained. This study was conducted as a PhD dissertation, and was also approved by the Ethics Committee of the first author’s university.

During the study, the researcher observed all the meetings held by the teachers as well as the four research lessons and teachers’ final presentation where they shared the findings of the lesson study and their experiences with the rest of their colleagues. Field notes taken in each observation were recorded in the researcher’s diary (Woodside, 2010). Meetings and the presentation were audio-recorded as well, lest the researcher would have to refer back to them during data analysis.

Reflective reports were also collected. Gibbs’ (1988) reflective cycle was used to encourage teachers to think reflectively about the phases of the lesson study process. Interviews with individual teachers were conducted in Turkish for teachers to feel more relaxed and to enable them to elaborate further on their ideas. Before each interview, the researcher read the reflective report of the participant to be

| Table 1. Data Collection Process and Tools. |
|--------------------------------------------|
| **Data collection process**                      | **Data collection tools**                      |
| Before lesson study                            |                                                 |
| Piloting Lesson Study with three volunteer teachers and introducing the model to other teachers at the DFL | One-to-one interviews |
| Reaching out to volunteers to take part in the research study through email | Observation |
| Selecting study participants                   | Field Notes                                    |
| During lesson study                            | Document Analysis                               |
| Planning the first research lesson             | RR1                                             |
| Teaching the first research lesson             | SOI1                                            |
| Analyzing the first research lesson            | RR2                                             |
| End of Cycle 1                                 | SOI2                                            |
| Teaching the second research lesson            | RR3                                             |
| Analyzing the second research lesson           | SOI3                                            |
| End of Cycle 2                                 | WGD1                                            |
| Teaching the third research lesson             | RR4                                             |
| Analyzing the third research lesson            | SOI4                                            |
| End of Cycle 3                                 | RR5                                             |
| Teaching the fourth research lesson            | SOI5                                            |
| Analyzing the fourth research lesson           | RR6                                             |
| End of Cycle 4                                 | SOI6                                            |
| Reporting and presenting the findings          | RR7                                             |
| After lesson study                             | SOI7                                            |
| WGD2                                          | RR8                                             |
| WGD3                                          | SOI8                                            |
| WGD4                                          | RR9                                             |
| WGD5                                          | SOI9                                            |

Note. DFL = department of foreign languages; RR = reflective report; SOI = semi-structured one-to-one Interview; WGD = whole group discussion.
samples and methods of data collection were used to increase the validity of the study. Next, researchers were triangulated. Randomly selected parts of the data were coded by another researcher who was pursuing her PhD in ELT, and her codes and categories were compared with those of the researcher’s to increase the credibility of the interpretation of the data. In addition, findings of the study were shared with the participating teachers and they were asked to inform the researcher if there was anything they wanted to exclude or include. Finally, the study was carried out as the first author’s PhD dissertation, so the research design as well as the data collection and analysis process were constantly scrutinized by the members of the academic committee. This enabled the researcher to refine the study in the light of the comments made and suggestions given.

Findings

The findings of the study for each research question are presented below.

Lived Experiences of the Teachers in Different Phases of Lesson Study

Findings of the study revealed that teachers carrying out the lesson study model had to face the challenges listed below in different phases of the model.

Finding a topic and developing a research question. The planning phase of the lesson study process is centered on a topic that is determined by the teachers and is subsequently transferred into a research question. This study revealed that it was challenging for teachers to decide on a common topic and develop a research question. Teachers noted,

Three of us teach the same lesson, but we have different concerns. To make things worse, we have a teacher who teaches a completely different lesson. Can we really find something common in such a case, something that interests all of us? (Teacher 2, Cycle 1-Reflective Report)

We thought hard about a topic. We looked at the syllabus. We asked our colleagues. We discussed. But it is still not easy to decide [what our topic will be]. (Teacher 4, Cycle 1-Interview)

As can be understood from teachers’ comments, finding a topic to focus on was rather challenging for teachers. Teachers were observed to think of a topic that addressed what they -as a teacher- did in class and how they taught a subject rather than issues faced by their students. This made it difficult for teachers to reach a consensus on what to improve through lesson study. After a lot of meetings and discussions, they decided to focus on helping their students become less dependent on their notes while they gave presentations. Having found their topic, teachers were ready to proceed with their research question. However, they found it even more challenging to develop a research question out of their topic. They reflected on this as follows:
We took research lessons in our MA courses, but I haven’t conducted a real study before. I remember some readymade patterns to help us develop research questions, but they don’t seem to help us now. (Teacher 2, Cycle 1-Group Discussion)

I think we should ask for help from our professors. They can check if our research question is OK, otherwise, we won’t be able to move on any further. (Teacher 3, Cycle 1-Interview)

Teachers were observed to be in need of help and guidance so that they could write an appropriate research question. They occasionally asked for help from the researcher at this point, but this did not seem to be enough. They knew their research question was important in that it would guide their whole lesson study experience, so they wanted to be sure that it was well-specified. Since there were four teachers and each had different ideas about what a research question should be like, they seemed to struggle a lot in this process.

Determining the lesson design and teaching style. Another challenge teachers had to overcome was related with the choice of the lesson design and teaching style. In terms of the lesson design they were going to use for their research lessons, teachers had lengthy discussions, and they reflected on this as follows:

We designed our research lesson in a different way, using the problem-case based design. This created some confusions because we were not used to this specific design, and first we had to internalize it through our meetings and discussions. (Teacher 1, Cycle 2-Reflective Report)

I have never designed such a lesson before. I usually tell the content in the book, ask some questions to students and then do some sort of practice. However, this design is a lot different from what I always do in my classes, and this is what makes it tough. (Teacher 4, Cycle 1-Interview)

As seen in teachers’ comments, the design they chose for their research lesson included potential risks in it because it was contrary to their established classroom procedures. It required students to find solutions to a problem or a case by working in groups and in such a design the teacher had to change their teaching style from lecturer to facilitator. This also challenged teachers:

I usually tell what is written in the book and my students listen. I always feel the urge to “tell” something. So the big question in my mind is what I will “tell” to my students during the research lesson and what I will write on the board. (Teacher 4, Cycle 1-Group Discussion)

We complain about the traditional classroom where the teacher lectures and the class finishes, but then we realize that we do just the same as teachers. In theory, we know we have to be guides and facilitators to be better teachers, but in practice we just do not know how to do that. (Teacher 1, Cycle 2-Interview)

The researcher observed that the teachers had some hesitations before they conducted their research lessons. They were hesitant because of the role they assigned to themselves as facilitators. They reported that this hesitation resulted from the fact that they were not used to act as a facilitator in the classroom. They, rather, tended to impart knowledge and expected the students to carefully listen.

Making student thinking visible. Teachers made a great effort to ensure that they could make student thinking as observable as possible. This was a demanding process for teachers for two reasons. First, they were not used to observing student behavior in the sense that was required by the lesson study model. Second, they reported that they mostly conducted their research lessons through one-way presentations. They noted,

I am not used to thinking about what students think or how I can observe this. I don’t know if this is ever possible. (Teacher 3, Cycle 3-Reflective Report)

Teacher 2: How can we observe what students are thinking? It is all in their brain. I just don’t know how to see that process.

Teacher 3: I agree. I’m not used to observing students. I just watch out for their responses. If they respond, I feel relieved, but I just don’t pay attention to how they found out the correct response.

Teacher 4: Think aloud activities may help us observe what students are thinking, but I have never done them in my classroom, though. (Cycle 2-Planning Meeting)

Teachers’ comments above are typical examples of how they struggled in this process. Because teachers were traditionally accustomed to focusing on their own behavior in the classroom, they had a difficult time concentrating on student reactions. They especially could not think of ways that would help them collect observable evidence regarding student thinking.

Analyzing the collected data. During the four research lessons, the teachers collected various data from their classrooms. For example, they video recorded the research lessons, observed case students, collected students’ work, and interviewed case students. At the end of each research lesson, they analyzed these data and made some modifications before they implemented the next research lesson. Once all four research lessons were completed, teachers gathered to write a final report. To do this, they had to refer back to their research question and analyze all the data. This was perceived to be a daunting task by all the teachers. They noted,

We have collected many sources of data from students, but I have never analyzed such kind of classroom data. (Teacher 4, Cycle 2-Interview)
It was difficult at first to analyze video recordings of research lessons or samples of student work. There were also the interview transcripts. We felt overwhelmed by all these data. We didn’t know what to do with them. (Teacher 3, Cycle 3-Reflective Report)

Where should we start? All the data that we have are in the form of comments. It would be easier if we had collected numerical data, but this is hard work. (Teacher 1, Cycle 4-Group Discussion)

As suggested by teachers, analyzing qualitative data was difficult for teachers because they had no prior experience in any form of data analysis. The fact that they collected only qualitative data was observed to make the process even more difficult for teachers to handle. They needed support from an outside expert in this process.

**Implications of Teachers’ Lived Experiences in Different Phases of Lesson Study for their PD**

Findings of the study revealed that lesson study benefited teacher PD in four main areas listed below.

**Enhancing pedagogical content knowledge.** During the planning and analysis of research lessons, teachers held several meetings in which they shared ideas and questioned their beliefs and assumptions about teaching and learning. Collaborative lesson planning enabled them to go over their existing knowledge about lesson planning as well as learn new things from their colleagues as articulated by two of the teachers:

As teachers we all have to prepare lesson plans, but I must admit that I have never planned such a detailed lesson before. It was good to hear how others plan lessons or what they think about lesson aims and goals. I learned a great deal from them. (Teacher 1, Cycle 2-Interview)

Planning lessons with colleagues produces better results. We have experienced this thanks to lesson study. Choosing the right material, setting a time limit for activities, discussing how to exploit the texts, all of this was invaluable for me. I feel like I know more about lesson planning now. (Teacher 3, Cycle 4-Reflective Report)

Teachers were observed to spend quite a lot of time revising their instructions and questioning the underlying reasons why they gave instructions the way they usually did in their regular classes. Teachers articulated that lesson study helped them realize how important it was to give clear instructions during lessons although they regarded it to be a trivial issue in their daily teaching routine:

When my own professional development is concerned, there is one important thing I learned as a result of the analysis of research lessons. From now on, while planning my lessons, I will not ignore instructions. Because as a teacher, I used to think that I was good at giving clear and understandable instructions, but lesson study helped me become aware that I need to work more on this. Now that I learned some techniques from my colleagues, I will try and use them in my classes. (Teacher 2, Cycle 3-Group Discussion)

Now I know what to do exactly while giving instructions. For example, I have to give instructions before distributing the reading text. I used to do just the opposite, and we saw [in the research lessons] that if we do it like that, students will start reading the text and they will not pay attention to what you are saying. (Teacher 4, Cycle 4-Interview)

Teachers observed students during research lessons and this was a totally new experience for them because they had never observed a class of students before. They highlighted that lesson study enabled them to look at their lessons from their students’ point of view and they improved their ability to understand student needs, interests and ideas:

I must admit that I realized [throughout the lesson study process] I planned lessons for an empty classroom, free of students. (Teacher 1, Cycle 2-Reflective Report)

Thanks to lesson study, I began to think about how I can find out my students’ genuine ideas and honest reactions. Lesson study made me believe that what students think matters and I have to find this out one way or another. (Teacher 2, Cycle 3-Reflective Report)

Lesson study helped me put myself into my students’ shoes and look at many aspects of a lesson from their perspective. Sitting near the students as an observer totally changed my point of view as a teacher. This way, I understood how they felt and what they really thought about a lesson. (Teacher 4, Cycle 4-Interview)

Teachers also emphasized that they realized how important it was to use technology effectively in a classroom, and they learned a lot from Teacher 3 who was pursuing his MA in the field of Computer Education and Instructional Technology, and was personally very interested in designing visual materials and integrating them into his classes.

He [Teacher 3] taught us a lot about how to use the power point in our lessons. He made me realize my strong and weak points in the use of instructional technology such as PowerPoint presentations. He does some certain things very nicely and was kind enough to show us how he does them. (Teacher 4, Cycle 3-Interview)

Since we started working together at the beginning of this term, we have been making use of his [Teacher 3’s] knowledge and expertise in educational technology. I was lucky enough to watch him design a PowerPoint presentation and I picked up one or two basic skills from him. (Teacher 2, Cycle 4-Group Discussion)

**Becoming more reflective as a teacher.** Teachers emphasized that lesson study made a significant contribution to their PD as it helped them become better reflective thinkers. Peer...
observations were also observed to facilitate reflection by providing teachers with the chance to compare their teaching style to that of their colleagues. They reported that this positively affected their teaching repertoire:

Observation and watching myself teaching, these two things helped me see things from a different perspective. While observing a friend, I compared my teaching with her way of teaching and I realized she was doing some things better than I did and I felt I had to improve myself. (Teacher 4, Cycle 4-Reflective Report)

Below are excerpts from teachers who reflected on what they should have done differently after having assessed their teaching practices by watching the video recordings of research lessons:

If I had the chance to reteach this research lesson, I wouldn’t have made the same mistakes. For instance, I wouldn’t have repeated the instructions over and over again by using exactly the same words. I would have tried to paraphrase or simplify them. (Teacher 1, Cycle 1-Reflective Report)

Upon identifying potential areas for improvement in their teaching practices, teachers expressed how they planned to work on these areas as follows:

Lesson study made me realize that I can audio or video record my classes. I already started to do so and I plan to work on how I pronounce some words, why I keep repeating the same words so often, and so on and so forth. (Teacher 3, Cycle 4-Group Discussion)

**Encouraging teacher research.** Teachers participating in this research were not previously involved in a form of PD that required them to do some sort of classroom-based research. The classroom-based research component in lesson study was observed to encourage teacher research, which was also articulated by teachers as follows:

I have never done such kind of [classroom] research before. Lesson study helped me see myself as a researcher rather than a regular teacher who comes in, teaches the book and leaves. (Teacher 1, Cycle 4-Interview)

Teacher 1: As a teacher engaged in lesson study, I can say that it encourages you to do research.

Teacher 3: Yes, it makes you feel like a researcher rather than a teacher.

Teacher 2: You know what the books say; teachers are researchers. But they don’t usually say how you should carry out research as a teacher. Lesson study helped me visualize this and even conceptualize the term “teachers as researchers.”

Teacher 1: You are absolutely right, and remember what we talked about this morning? We said to each other that we feel like research assistants nowadays. (Cycle 2-Group Discussion)

In our case, by collecting data about their research lessons through observation and student interviews, analyzing all these data and reporting it, teachers highlighted that they improved their research skills:

Data analysis and reporting findings by interpreting data are done as part of academic studies, and I observed I improved myself in those areas. I had the opportunity to discover the “researcher” side of myself to some extent. Lesson study process and interactions with my peers taught me how to analyze qualitative data gathered from students and classroom observation. I definitely improved my research skills. I didn’t even know I had those skills. (Teacher 2, Cycle 3-Reflective Report)

Although three of the teachers were pursuing their MA degrees and took a course in research methodology, they appeared to be hesitant about doing research. However, as stated below, they reported feelings of increased self-efficacy through the end of the lesson study process:

Before I did lesson study, I used to think that as a teacher I wasn’t able to do research because it was an academician’s job to do it and I was not qualified to carry out research. But now I feel like I am capable of carrying out research as well, in my classroom, with my students and colleagues. (Teacher 1, Cycle 2-Interview)

**Building teacher collaboration and collegiality.** Lesson study in our case study was observed to promote interaction among peers. It should be noted that prior to taking part in this study, the research participants’ collegial interaction had been very limited. They were meeting each other in bimonthly regular meetings or having occasional chats about teaching and learning. However, lesson study experience, as expressed by teachers, facilitated teacher collaboration and collegiality and provided them with different learning opportunities both personally and professionally. It was found out that working in collaboration with their peers aroused positive feelings among teachers. Teachers expressed their satisfaction with their team and its performance as follows:

We have got a shared feeling of curiosity and excitement. None of the group members is irresponsible or uninterested. Therefore, I believe that what we do is an exemplary case of how teamwork should be handled. In each meeting, I get the feeling that we have made a superb team. We enrich each other. This affects the lesson study process positively, and I value the fact that four totally different people manage to find common ground on key issues about teaching and learning. (Teacher 4, Cycle 2-Reflective Report)

Teachers in this study had negative ideas about teamwork because of their past experiences. Engaging in lesson study seemed to help teachers make a considerable change in their understanding of teamwork and transform their pessimistic views about it.
Teacher 1: Lesson study changed my understanding of teamwork, actually. To me, teamwork used to mean dividing up the work among people and working alone to finish your part, which would decrease my motivation to a great extent because there would always be people who wouldn’t take things as seriously as I did.

Teacher 2: You are absolutely right. What we are doing now has nothing to do with my understanding of teamwork as well. We are doing everything together, working in collaboration, supporting each other in every sense, sometimes challenging each other. And I can say that this is what teamwork should be about.

Teacher 3: I agree with both of you ladies. As an undergrad student, I used to dislike working in a team. If I could do something alone, I would usually prefer not to do it in collaboration. But this lesson study experience changed my mind and showed me that there are some things that can be done better if people work in collaboration. (Cycle 3-Group Discussion)

In addition, teachers also expressed that they appreciated the constructive feedback they received from their teammates throughout their lesson study experience:

I felt my perspective and teaching practices changed for the better thanks to the feedback I got from my peers. To me, one of the most important parts of lesson study was hearing about the ideas of my colleagues and their reactions to what I said or did. (Teacher 3, Cycle 3-Interview)

Teachers also expressed that working together as a group enabled them to realize some aspects of their personality and how they were perceived by others, leaving them with a heightened sense of self-awareness:

Working as a team enabled me to realize that people thought I was getting angry, but actually I was not. I didn’t know that I seemed angry when I was discussing an issue, but my teammates asked me from time to time “Why are you getting angry? What happened?” Those questions helped me reflect on my behavior and body language. Next time when I do such kind of teamwork, I will definitely be more careful about how I sound and look. (Teacher 3, Cycle 4-Reflective Report)

**Discussion**

This study aimed to investigate the phenomenon of lesson study in the Turkish tertiary education context at a foundation university with a focus on EFL teachers’ lived experiences. The underlying reason for this investigation was to explore the potential of lesson study as a PD tool for English language teachers in a specific context. The results of the study showed that teachers engaged in the lesson study process had to face several challenges in different phases of the model. However, the model contributed to teacher learning in various aspects.

In line with the results of this study, studies carried out by Fernandez and Chokshi (2002), and Bjuland and Mosvold (2015) highlight similar challenges in terms of finding a topic and a research question. Bjuland and Mosvold (2015) claim that teachers tend to mistakenly believe that the goals and objectives created for research lessons are synonymous with their research question, and for this reason, they do not feel the need to develop research questions. In our case, however, teachers felt the need to formulate research questions from the very beginning of the lesson study process, but they could not do so as easily as we expected. As mentioned earlier, three of the four teachers were conducting their MAs and they had already taken courses in research methodology. This, surprisingly, did not seem to facilitate the process at all. On the contrary, their knowledge of how a scientific research question should be formed seemed to be in direct contrast with the formation of research questions specifically designed for classroom-based research.

Cajkler et al. (2014) state that another topic mostly discussed by teachers during the planning phase of lesson study is teaching methods and techniques. This finding is parallel to what our research suggests. However, the reasons underlying teachers’ discussion were different and needed further attention. Lesson study practitioners in Japan and England see the teaching methods in a more student-centered manner, and they employ methods to cater for students’ needs. In our case, teachers had a difficult time reaching this understanding. Their discussions revealed that they considered a teaching method as a strict guide to show them what students would do in class step by step instead of what students would learn. This finding implies that researchers who study in contexts where teacher-fronted instruction is the norm should bear in mind that they might have a long way to go before arguing that lesson study enables teachers to be more student-centered.

Studies (Bjuland & Mosvold, 2015; Ono & Ferreira, 2010) also highlight the hardships encountered by teachers engaged in lesson study in terms of observation and making students’ thinking visible. Making student thinking visible was especially challenging for the teachers in our study. Teachers agreed that in situations where the teacher lectured throughout the lesson and students stayed silent, they would not be able to observe much about student thinking and reactions, which was an eye-opening experience for them. Admitting that this was the case in their usual classes, they attempted to change their style and create opportunities for students to openly voice their thoughts and suggestions through small group discussions and think-aloud tasks. Teachers had detailed discussions about how to put these into practice as well. However, their long-held beliefs about their students seemed to prevent them from getting students to discuss in groups. They thought that their students would not be able to comment on their thinking processes because they were not even eager to reply yes-no questions. It should be kept in mind that teachers’ prejudices and low opinions about their students might get in the way of observing students...
effectively. In addition, teachers’ conceptualization of observation needs to be questioned. In our study, we found out that for teachers observation solely meant observing teacher classroom behavior rather than student reactions and learning. This stems from the fact that in our context, observation as part of PD is mainly done for the purposes of observing teachers not students. This might hinder the effective implementation of lesson study in Turkey.

The findings of our research are also supported by studies conducted by researchers such as Lewis et al. (2003) and McDowell (2010) who acknowledge that teachers tend to regard the data collection and analysis process as frightening and demanding. Teachers in our study had never collected in-class data and analyzed it before. To make things more complicated, data gathered were mostly qualitative, and its analysis posed additional challenges. Although it should be noted that it was this process that teachers mostly benefited from when they evaluated and improved their research lessons (Aydınoğlu Yenmez, 2012; Bütün, 2015; Pektaş, 2014), they should not be left without guidance and support in data analysis and interpretation process. In our case, teachers pursuing their MA studies asked for support from their professors, but they still struggled. Since research is an important component of lesson study, we cannot leave it to chance. Effective support mechanisms should be put into place to help teachers collect more quality data, and interpret it with more ease and efficiency.

Having listed all the hardships, we, nonetheless, believe that lesson study should be practiced by more EFL teachers because, as the finding of this study also suggest, lesson study is a PD model that improves teaching (Yoshida, 1999) by enhancing teachers’ pedagogical content knowledge and classroom practices (W. Cerbin & Kopp, 2006; Harle, 2008; Smith, 2008). The findings of several studies reinforce the idea that lesson study helps teachers to enhance their understanding of how to teach a subject matter (Cajkler et al., 2014; Gök, 2016; McDonald, 2009; Wright, 2009) such as science (Akerson et al., 2017) mathematics (Ni Shuilleabhain, 2016), chemistry (Lucenario et al., 2016) and English (Çoşkun, 2017; Uştük & Çomoğlu, 2019). Research into effective CPD practices such as lesson study underscores the importance of practical implementation and experimentation by teachers, enabling them to apply new strategies in their classrooms, reflect on them and adapt them to their own context (Richardson & Diaz-Maglioli, 2018). This study demonstrates that lesson study might serve these purposes for the Turkish EFL teachers, as well. We believe this is one of the most important findings of this study because an individualistic approach to teacher PD in the field of ELT seems to prevail in the Turkish higher education context and collaborative PD models such as lesson study receive little attention from practitioners and researchers.

Teachers in this research who reported that lesson study helped them grow as reflective practitioners are a great example of the fact that when teachers are provided with the opportunity to explore their in-class practices, they reflect and improve themselves. Reflection is inextricably linked with self-observation and self-evaluation (Gün, 2010) and it is reported to provide teachers with insights into their strengths and weaknesses (Eröz-Tüğ, 2013). Edge (2011) emphasizes that teachers observing themselves or their peers might decide to take further action based on their observations, which will eventually lead to improved observation (Hui & Yan-jun, 2006; Myers, 2012; Yalım Arslan, 2019). This research corroborates the key role reflection plays in teacher PD. We found out that lesson study paved the way for quality reflection, and it helped teachers observe themselves and their peers in a systematic way. We highly value the systematic reflection involved in lesson study and suggest it as a vehicle to foster reflection among teachers.

Freeman (1998, p. 3) claims that teachers “have left it to others to define the knowledge that forms the official basis of teaching” and that teachers are not familiar with research as much as they are supposed to be. Sadly, the same problems seem to prevail in Turkey even among tertiary level teachers. It can be understood from teachers’ reflections in this study that conducting research is not considered as an essential attribute for an EFL teacher. This results in teachers’ making a sharp distinction between being a researcher and being a teacher. Although familiar with terms such as “teacher researcher” or “teacher researcher, they do not know how to conduct research in their classes, and they do not see their classes as a venue for research. Lesson study might help us change this view. Hibbs (2015, p. 30) speaks of the “inherent synergy between teaching and research which can be achieved through teacher research,” and we believe that engaging in lesson study might bridge the gap between teaching and research. Seeing teachers exploring their classroom-based problems and issues concerning their teaching context brings fresh hope to everyone aiming to improve teaching through teacher research. Findings of this study suggest that lesson study encourages teachers, who think of themselves as professionals whose most important job is to teach in class, to develop themselves as researchers as well.

Since teacher research plays an important role in teachers’ professional learning (Borg, 2013) and studies suggest that teachers should be supported in their endeavor to undertake teacher inquiry (Atay, 2008; Kirkwood & Christie, 2006), every effort should be made to integrate teacher research into the PD programs. Lesson study might be of great help for institutions wishing to introduce their teaching staff to classroom research (Ermeling, 2010). However, as rightly pointed out by Burns and Westmacott (2018), it is a challenging task for school administrators to support teachers in being engaged with research. This research supports this view. In our case, this support was provided by the teacher from the pilot lesson study team, the professors in the departments where three participant teachers were pursuing their MAs, and the researcher. However, it is apparent that for lesson study to yield positive results for teacher PD, special
and systematic support mechanisms are needed. Those mechanisms are especially important for countries like Turkey where teachers are not educated as potential researchers during their pre-service training.

Literature on effective CPD practices suggests that CPD should be peer-collaborative. Contributions of collaboration and collegiality to teachers’ personal and professional growth have long been discussed by scholars studying PD (Deborah & Helene, 2001). Middleton (2000, p. 52) underscores that there should be “a shift from teaching in isolation and one-on-one mentoring to school-wide collaboration and conversation” which might be achieved through getting teachers to work together in learning development groups (Allison, 2015), teacher study groups (Zepeda, 2012) or teacher support groups (Richards & Farrell, 2005). Findings of this study suggest that lesson study might be another alternative to encourage teachers to work in teams in a supportive atmosphere, thus reducing teacher isolation. This is another crucial finding of this study in that despite the fact that teachers in our case had no previous experience with any form of teacher collaboration, they displayed conscious efforts to work collaboratively throughout the lesson study process. By offering and receiving feedback about their ideas, actions and products, teachers developed a friendly relationship. They worked toward a common goal in a trustworthy atmosphere, and were observed to notice their different personal traits as individuals trying to function as a team member. This personal awareness had important implications for both the personal and professional development of teachers because it was observed that by openly sharing how they felt during times of hardships and conflicts, teachers managed to overcome the feelings of intolerance and anger. This, in turn, helped build up a cooperative relationship among teachers.

**Conclusion and Recommendations**

It should not be forgotten that lesson study is very different from many traditional forms of PD carried out in Turkey. The model requires teachers to work together, question their actions and critique their lessons from students’ perspectives. In such a model, we should be ready for challenges and find ways to address them. The results of our study have important practical implications for institutions wishing to implement lesson study in their own contexts. First and most importantly, the workload of teachers needs to be considered. The teachers who participated in this study were teaching only 10 hr a week, which is 10 hr less than their usual workload. This reduction was not specifically made for the purposes of this study (it was because of an unexpected decrease in the number of students registered for the university during 2016/2017 academic year). This was observed to free up the required time for teachers to get together for meetings.

Workload becomes even more critical in a foundation university context in Turkey. The number of hours teachers at foundation universities are contracted to teach is 20 whereas this hour reduces to 12 at state universities. This shows us that teachers teach 8 hr more in a week than their counterparts employed at state universities. They mostly do not have flexible working hours, and they cannot teach and go, for instance. They are held more accountable for student achievement and satisfaction. In such a context, putting another burden on teachers’ shoulders even if it is for their own good should definitely be handled with caution and care. Yet, we are almost sure that expecting administrators to reduce 10 hours from teachers’ weekly workload will refrain them from trying out the model. We, therefore, suggest at least a 5-hr reduction for a group of three teachers, and allowing each year a different group of teachers to experiment with the model will enable more teachers to benefit from this unique experience.

Another point that needs caution is the feelings of anxiety that teachers suffer from during the specific phases of lesson study. Taking a more student-centered approach to teaching, finding a topic and research question, observing student thinking, analyzing the data collected during research lessons create growing stress and uneasiness among teachers. These feelings stem from the fact that current PD practices in Turkey do not ask teachers to do any of these things. The “sit and get” approach to PD prevails in most university settings, and CPD practices such as lesson study may demand too much from teachers. Moving away from such passive approaches to PD requires time and patience, and even more importantly it requires certain mechanisms to support teachers. Before teachers can independently conduct lesson study, they need scaffolding from more experienced teachers to help them carry out the demanding aspects of the model (Lewis & Tsuchida, 1998). In Japan, this expertise is readily available to all lesson study practitioners, but in Turkey no such outside experts exist at present. Faculty from teacher education departments and experienced in-service teacher trainers could substitute “knowledgeable others” in our context. Institutions must also be ready to support teachers without judging them or having them feel insufficient. The support should be twofold; administrative (e.g., scheduling observations) and academic (e.g., forming interview questions).

To minimize the possible challenges posed by lesson study, we have several suggestions. First, we suggest lesson study to be implemented more extensively in pre-service teacher education contexts. Introducing teacher candidates to lesson study earlier may help us respond to challenges more easily. In cases where this is not possible, it is advisable to start with simplified versions of lesson study implementations. This can be achieved through reducing the number of cycles to be completed and allowing teachers an extended period of time to complete each cycle. Our second suggestion is that rather than an outside expert introducing lesson study to teachers, we advise the model to be piloted with volunteer teachers before it is used institution-wide. This enables teachers to gain firsthand experience and to make a smooth transition to its adoption. Pilot study is also important as it provides valuable insights into issues which otherwise may go unnoticed within a specific context. It also helps other teachers to learn from the experiences of the pilot lesson study team as well as increase
the likelihood of the model’s being supported by more teachers. Our final suggestion is also proposed by Lewis and Hurd (2011) who suggest that optimal number of participants in a lesson study group should be four to six teachers. From our experience, we concluded that it would be great if the number of teachers is not more than four. The more the number of the teachers are, the more difficult it gets to implement lesson study in an efficient way in terms of conducting observations, holding post-lesson discussion meetings, and etc. It would be wise to choose lesson study team members from teachers who teach the same course to facilitate the process of finding a topic to focus on and developing a research question.

At the end of the all lesson study cycles, the results of the lesson study process may be presented to the whole group of teachers in an in-house PD gathering, hence helping teachers learn about the model from their colleagues who have participated in a lesson study implementation. Teachers should also be encouraged to write a report to document their study. They should also be given opportunities to deliver conference presentations, or produce articles out of their reports.

The study has implications for future research. Four teachers with similar backgrounds took part in this study. The study may be replicated with teachers who differ from each other in terms of experience, age and major. This study was designed as a holistic case study and carried out with a single group of teachers working in the same university. The same study may be designed as a multiple case study and carried out with the participation of multiple groups. Although teachers’ ideas were taken into consideration regarding lesson study, this study was not specifically designed as a program evaluation study. Studies aiming at evaluating how effective lesson study is as a PD model may be conducted. Lesson study is reported to increase student achievement (Fernandez & Yoshida, 2004). Studies may be designed to investigate the effect of lesson study on student achievement. Longitudinal studies may also be conducted to explore how teachers engaging in lesson study reflect the knowledge and skills they have retained from their implementation of lesson study on their in-class practice.

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ORCID iD
İlknur Bayram https://orcid.org/0000-0001-8109-8051

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