

## EXAMINING THE EFFECTIVENESS OF LESSON STUDY ON EFL INSTRUCTION

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### Abstract

The aim of this research study was to explore the effect of lesson study in English as a foreign language classes with respect to teacher development and students' learning outcomes. To fulfil this research aim an experimental case study was designed with three prospective English language teachers who participated in this study in the course of an eight week teaching period as the requirement of a compulsory course called Practicum offered by an undergraduate teacher preparation program. The participants engaged in lesson study through a cycle of three research lessons, with each participant only having to teach one research lesson. The data were gathered through semi-structured interviews at the end of the intervention to be analyzed qualitatively. The analysis of the data revealed the themes as changes in participants' perceptions, professional learning outcomes and challenges experienced. Overall, it was found that the participants' perceptions of lesson study were positive and that lesson study was beneficial in terms of professional empowerment.

*Keywords:* Prospective teachers, teacher education, professional development, knowledge of students to inform teaching, pedagogy

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## 1. Introduction

Teaching is a demanding multifaceted job; however, most prospective teachers are of the opinion that their job is only to deliver instruction. For this reason, they focus on content knowledge and pedagogy ignoring knowledge of students to inform their teaching. In order to address this issue, teacher training programs should incorporate teacher training techniques that focus on students' learning, such as lesson study (LS) into their curricula. LS is a form of professional development which offers teachers collaborative, school based and long-term professional progress (McMillan & Jess, 2021). As the main purpose of LS is to gain more knowledge about and insights into students' learning, it differs from other teacher training techniques, such as micro teaching. While micro teaching practice focuses on teaching skills, LS focuses on students' learning. In the Turkish Cypriot context, micro teaching courses are offered as elective courses in the teacher training programs in North Cyprus and prospective teachers are familiar with such courses; however, LS is comparatively new.

Prospective teachers need to participate in teaching practices to develop their professional abilities (Chen, 2020). Having a potential to foster professional development, LS has been widely used in the teaching and learning process (Fujii, 2014; Takahashi & Yoshida, 2004). Reflective practice and inquiry are essential in teacher development. Teachers cannot develop classroom practice without ongoing reflection and enquiry (Lamb & Aldous, 2016). In order to develop such skills teachers need to be provided with opportunities to work with their peers and evaluate their own as well as their peers' teaching practice (McMillan & Jess, 2021). To this end, LS can empower teachers and cultivate their pedagogical skills.

In a typical LS, teachers or prospective teachers work in groups to actualize five main activities inherent in a lesson study cycle. The first cycle begins with identifying a learning problem and developing a lesson plan to address this problem collaboratively and then continues with one teacher delivering the research lesson while the others observe followed by student interviews and group members' evaluations of the first research lesson and making initial plans for the second research lesson (Dudley, 2014). The second cycle comprises planning of the second research lesson followed by one participant's teaching and the others observing the second research lesson which is followed again by student interviews and concludes with joint reflections on the second research lesson and making initial plans for the third research lesson (Doig & Groves, 2011; Dudley, 2014; Lewis et al., 2011). The third LS cycle comprises the same steps as in the first and the second LS cycle only to end up with a write up to display what has been discovered and ideally, a public research lesson is conducted (Doig & Groves, 2011; Dudley, 2014; Lewis et al., 2011).

The neoliberal view of education has been criticized for focusing on short-term goals and thus failing to capture the complex nature of classroom practice (McMillan & Jess, 2021). Rather, McMillan and Jess (2021) suggest that teachers need a long-term professional empowerment that can help them adapt to the complexity of classroom practice and recommend LS as an approach. Furthermore, most teacher training programs in North Cyprus focus on developing prospective teachers' teaching skills failing to raise their awareness of learners' individual learning needs and to tailor their instructional strategies in accordance with the learners' needs. Drawing on this, this study was designed to evaluate the effectiveness of LS in the classroom practice of prospective English language teachers.

## 2. Review of Literature

Zepeda (2012) contends that teachers can benefit from LS in terms of improving their teaching methods and strategies, giving and getting feedback from their peers and discussing the results of their efforts. The focus of LS is students' learning (Cerbin & Kopp, 2006). While teachers work collaboratively to fine tune the lesson plans to address challenges in students' learning, they also improve their own methods and strategies of instruction (Lewis, 2016). LS also adds to teachers' knowledge and behaviours, and teachers' collaboration and professionalism (Huang & Shimizu, 2016; Xu & Pedder, 2015). In doing so, teachers develop more pedagogical content knowledge (Coenders & Verhoef, 2019) and more sensitivity towards their students' needs (Xu & Pedder, 2015; Yalcin-Arslan, 2018). Lim et al. (2011) have found that LS increases teachers' understanding of how students learn and Lee (2019) argues that LS enables teachers to be more student-oriented.

Willems and Van den Bossche (2019) have found that teachers who engage in LS practice have exhibited significant gains in terms of teaching behaviours, professional beliefs, pedagogical skills and content knowledge. Research on LS indicates that the LS approach benefitted teachers regarding pedagogical content knowledge and enhanced their teaching skills (Fernandez, 2010; Meyer, 2005; Van Sickle, 2011). Marble (2006) has found that the LS approach enables pre-service teachers to view their own teaching practice and encourages them to take a reflective stance to teaching by focusing on student learning and to this end it creates knowledge for teaching.

LS enables prospective teachers to be active learners and teachers. Through LS, they have the opportunity to construct personal and collective understanding on instructional and learning strategies (Garet et al., 2001). While teachers and prospective teachers engage in reflective practice on why their own or peers' instructional strategies work or not, meaningful learning takes place (Vermunt et al., 2019). LS research indicates increased content knowledge (Fernandez & Yoshida, 2004; Perry & Lewis, 2009) and knowledge of students' learning needs (Dudley, 2013; Nilsson, 2014). Experimenting with a variety of lesson plans and using diverse strategies in order to address students' learning needs as well as reflecting and observing upon these, help develop teachers' insights into their students' individual needs and ways of learning (Lee et al., 2016). Research also indicates significant improvements on students' learning (Dudley, 2013; Lewis & Perry, 2015; Lewis et al., 2006) since LS practices pave the way to addressing students' educational needs and thus, results in gains in terms of students' learning (Dudley, 2013).

In terms of prospective and in-service teachers' perceptions of LS practices, research indicates that the process of planning, reflection, observation and rethinking are found to be valuable and beneficial (Rock & Wilson, 2005). LS is found to be effective concerning problem sharing and promoting pedagogical and subject matter knowledge (Lim et al., 2011). In a similar vein, Cavey and Berenson (2005) argue that their study participants highly valued the collective reflection aspect of LS since they believe it has significantly fostered their professional knowledge.

### **3. Purpose of the Study**

The purpose of the study was to examine the effectiveness of LS in English as a foreign language (EFL) classes regarding teacher development and students' learning outcomes.

### **4. Research Questions**

To realize the aim of the research the following research questions were posed:

- i. What are the perceptions of prospective EFL teachers of their LS experience?
- ii. How does LS benefit prospective EFL teachers in terms of their future profession?
- iii. What challenges do prospective EFL teachers experience during their LS experience?

### **5. Methodology**

#### *5.1. Method*

The current study was designed as an experimental case study. Case studies encompass the detailed analysis of a phenomenon in its real context (Yin, 2011). This approach was selected as the researcher focused on the case of three prospective English language teachers' lesson study practice. Qualitative methods were employed to gather and analyze the data. Adopting a Yin's (2011) perspective, construct validity, internal validity, external validity and reliability were sought by utilizing the LS design principles and instruments developed by Dudley (2014).

#### *5.2. Participants*

Three prospective English language teachers who were taking the course called Practicum participated in this study. At the time of the study there were only three senior students studying at the Department of English Language Teaching of the private university where this study was conducted. Two of the participants were female and one of them was male. The age range was 23-28 and all of them were nonnative speakers of English.

#### *5.3. Research Design*

This study was conducted at the English Language Teaching Department of a private university in North Cyprus. Three prospective English language teachers participated in this study in the course of an eight-week teaching period. Practicum is a five-credit compulsory course offered by all undergraduate teacher preparation programs during the last semester of their eight-semester program. The participants engaged in LS through a cycle of three research lessons, with each participant only having to teach one research lesson. During the first week of the semester, the participants were informed about the nature of the project and were told that their participation was voluntary, and they were free to leave the study whenever they liked without facing any negative consequences. Three prospective English language teachers participated in this study as one group. Since the participants were not familiar with the concept of LS, the first two weeks were allocated to the introduction of the process. They worked collaboratively to identify a learning problem and designed the lesson. Next, one of them taught the lesson to preparatory school students of the same private university while the other group members observed this research lesson focusing on students' learning only. After the research lesson, they got together and discussed the class

based on their observations. Then, the lesson was revised and improved to be taught once again but by another group member to a different class this time. The instructor who was the researcher herself was the instructor of the course and the prospective teachers' mentor, too. At the time of the study there were five classes of students with elementary level of English (A2) and one class with beginner level of English (A1) in the preparatory school. English level A2 is the second level of English, which is elementary in the Common European Framework of Reference and A1 is the first level which is beginner. The prospective teachers were available only on Tuesday afternoons and the head of the preparatory school informed the researcher that there were three level A2 classes which had lessons on Tuesday afternoons. One of these three classes consisted of nineteen (10 females and 9 males), another class sixteen (9 females and 7 males) and the other one fifteen students (9 females and 6 males). The age range was 19-22. LS requires that when a research lesson is taught to one class, the second research lesson needs to be delivered to another class (Dudley, 2014). Since there were three prospective teachers, all these three classes were used.

Each participating prospective teacher and the mentor participated in lesson planning activities and engaged in extensive planning prior to the three cycles of research lessons. Every prospective teacher in the group completed the three-cycle research lesson. The research lessons and meetings took place during the class hours which were two hours a week. Neither the prospective English language teachers nor the preparatory school students had prior lesson study experience. The whole process lasted two months. School-based practice which was missing in some studies on LS, such as Fernandez (2010) was implemented in this study by enabling the participants to teach at the university preparatory school where the current study was conducted. The researcher helped in the role of a mentor in the planning stage, and she taught the first research lesson which helped the prospective teachers identify the linguistic problems faced by level A2 students. Thus, this lesson served the purpose of the common initial meeting of the LS group to determine what to improve (Dudley, 2014) and the data collected were not included in the analysis. All participants who took part in the current study were assigned pseudonyms to protect their privacy. An ethical approval was granted by a higher education institution.

#### *5.4. Data Collection*

The data were elicited through semi-structured interviews which were all recorded and then transcribed to be analyzed intensively. During the interviews three questions which were drawn from Dudley (2014) were posed. More specifically, they were asked to describe their overall impression of LS, discuss what worked and what did not and comment on the professional learning if any. The interviews were conducted with the participants at the end of the LS project and hence the data from the interviews were obtained using a qualitative elicitation process. The coding procedures from grounded theory were followed (Charmaz, 2014). In lieu with constructivist grounded theory, coding consists of initial coding and focused coding. During the initial coding, the coding was done line by line by keeping the codes simple and short. Line by line coding helped the researcher understand the participants' experiences with LS. The most important codes were identified as focused codes and these codes accounted for more data than other codes. Tentative analytic categories were created through these focused codes. After the classification of the focused codes, three themes emerged which were changes in participants' perceptions, professional learning outcomes and challenges experienced.

## 5.5. Data Analysis

The interviews were transcribed verbatim and independently analyzed by the three education specialists for reliability purposes. Drawing on Tsui and Law (2007), each specialist classified the transcribed data into idea units first to be coded later. The same recurring idea in the form of examples, repetitions, details, descriptions or images were counted as one idea unit. Once they had coded the data separately each specialist came up with the themes. Standardization sessions were held until uniform themes were reached.

## 6. Findings and Discussion

The findings were listed under the three themes of participants' perceptions, professional learning outcomes and challenges experienced.

### 6.1. Changes in Participants' Perceptions

Regarding the perceptions of the participants, it was found that all the three participants were not very happy with LS initially. They failed to understand the aim of the LS and found it a waste of time because they held the opinion that they needed more courses to contribute to their pedagogical development but did not believe LS would help them in this respect. As commented by Esra,

I was expecting this course to be of help to me to become a better teacher introducing new methods that I will use when I become a teacher but at first, I was a bit uneasy because the course instructor told us what we would be doing and what we needed to do but I couldn't understand before I started teaching but still, I felt that I didn't actually know what I was supposed to do.

Esra felt at a loss because LS was very different from the courses that she had taken so far. The reason for her uneasiness might be that she needed to step out of the comfort zone. In the previous semesters, she had prepared lesson plans, given presentations and taught micro teaching classes and in doing so, she focused on how to deliver the course effectively. Actually, this highlighted the fact that the foreign language education syllabus in North Cyprus covers the courses that are more focused on pedagogical skill development failing to develop an understanding of knowledge of students to inform teaching. Contrary to her initial perceptions, Esra felt quite positive once she started teaching the research lesson. As she argued, LS "broadened her horizons".

Ali did not believe that he would benefit from LS first. More specifically, he did not like the idea that he needed to teach in the presence of the other two participants and the researcher since he thought that he would not feel comfortable. As he commented,

I am not a teacher, yet. For this reason, I am always nervous while I am teaching even my peers. In LS I am supposed to teach preparatory school students in front of three observers, which is terrifying.

Seeing how helpful and constructive his peers and the mentor were, he got over his reservations in time and his perception towards LS changed for the better. He asserted that because he found several people helping him out, he did not feel isolated. Working collaboratively eased his anxiety in teaching research lessons and he realised that the other participants and the researcher in his class were not observing him as a teacher but observing the effectiveness of the collaboratively designed lesson with the case students. He

also discovered that when he was preparing lesson plans prior to this intervention, he was ignoring how students would react to the activities prepared and that he believed that students' reactions did not matter.

Like the other participants, Aisha did not believe LS would be beneficial for her in the beginning. She commented,

I am going to be a teacher and I need to develop my teaching abilities. In some courses that I took we engaged in micro teaching practices focusing on developing teaching skills and strategies. I was expecting this study to be like micro teaching practice but seeing that the focus of LS is completely different I found it difficult to adapt first. I needed to change my focus from teaching to students' learning. At this stage it's very difficult for us all to think of students' learning. We are not experienced enough to do so.

Later she displayed positive perceptions of LS practice. As she reported,

I used to think that if I teach perfectly, my students will learn anyway because there is this belief in the Turkish culture that good teachers raise good students, so my aim was to learn how to teach perfectly. I didn't know that I had to use different strategies with each student in my class. I didn't even know that my students' learning styles could be different from one another.

Aisha believed LS enabled her to observe students' learning and adjust her own instructional strategies accordingly and hence, she described LS as a beneficial and productive process. She stated,

I was more focused on my own teaching... I was thinking like what I should say now... how could I explain this better, and I tried to choose enjoyable activities, but LS made me think the other way round. It made me think from the students' perspective, so I was more like goal oriented, and the goal has to be always students' learning. Our instructional strategies are also important, but they do not make sense if student learning doesn't take place. I benefitted a lot from LS, and I prepared lesson plans, observed students, participated in discussions and evaluations, incorporated feedback, taught a research lesson and shared experiences.... a lot of work but fruitful.

## *6.2. Professional Learning Outcomes*

With regard to professional learning, all the participants reported great efficacy. All the participants raised the issue that they had never prepared joint lesson plans before and that the lesson plans they had prepared were standard plans. Once they prepared their lesson plans, they never gave it a second thought as to how the students would react. However, lesson planning was done collaboratively in LS practice by prioritizing students' reactions. Upon deciding on the possible inclusion of an activity, the participants held discussions on how students would react to the activity and the expected learning outcome from students through the activity. They reported that they found the feedback that they got from the mentor and the observation reports of their peers as to what worked well and what did not in research lessons very valuable. In the light of the feedback, they modified the lesson plans so as to address students' learning needs. The collaborative preparation of the lesson plans enhanced their lesson planning skills in this respect. They reported that they benefitted from the process of collaboratively prepared lesson planning.

Additionally, the participants found it valuable that each of them had the opportunity to teach a research lesson. They had first-hand knowledge in planning the research lessons and teaching them. The

teaching practice was especially found useful since they believed they gained the experience that they would gain in five years. This boosted their confidence and self-efficacy as a teacher since they learnt to put theory into practice under the guidance of and through the collaboration with experienced teachers. Research lesson practices served as a catalyst for some participants during the transition from theory to practice.

Next, all the three participants observed the case students when they were not teaching the research lesson and reflected on the research lesson in terms of student learning during post class discussions. They believed observations and reflections were highly rewarding in terms of their professional growth. What they found surprising was that even a minor change in the lesson plan could make such a huge observable difference in students' reactions. This experience enabled them to reflect more deeply about their own teaching. Ali reported he learnt to pay attention to see everything from students' perspectives though he admitted that he had difficulty in doing so in the beginning. Aisha commented that she realized that she did not know how to observe students and she learnt how and what to observe via LS. Esra argued that understanding students' reactions to a class enabled her to approach them with various instructional strategies. Ali felt better at classroom management and Aisha learnt how to encourage student participation.

All participants had positive perceptions of the role of LS in pedagogical empowerment. They highlighted the role of the mentor in helping them acquire pedagogical literacy. They believed that through LS they enhanced individual teaching skills and how to switch to different instructional strategies to address students' learning needs. The participants reported that all the lesson plans that they had prepared prior to the LS intervention were standard lesson plans containing standard activities and that they did not have the opportunity to teach the course in lieu with the lesson plan to see how it worked with real students. In comparison to these standard lesson plans the ones they prepared for LS were very well designed in terms of the variety of the activities. They also valued the lesson preparation stage. Ali commented that before preparing the lesson plan all team members shared how they would teach the lesson and the researcher as an experienced team member shared her experiences of teaching that lesson in terms of what went wrong and what went well and also students' difficulties related to the topic to be taught. They also discussed different types of activities to be used while teaching the lesson and discussed each activity in relation to particular learning gains. That the lesson plans were prepared collectively was another advantage since every team member contributed a different perspective which could be discussed.

### *6.3. Challenges Experienced*

The first challenge was found to be the fact that LS was time-consuming, more time-consuming than the other teacher training approaches. Completing the three cycles of LS took considerable time and there were several national holidays during the semester in which this study was conducted. Due to these national holidays, we had to reschedule the three research lessons. As the meetings took place during the class hours, it was not problematic for prospective teachers to attend the meetings but it was difficult for all the participants and the researcher to attend all meetings. The participating prospective teachers indicated that they had other classes to attend as well as homework and assignments to complete. They complained about the lengthiness of the process. The observations of case students were also problematic. Although the participants were informed about how to observe students' reactions, during the first two weeks they were not sure about what to observe. The case student observation forms borrowed from Dudley (2014) were



shared with them prior to the intervention. They were told to observe and note down the questions students asked, the responses of students to the teacher's questions, students' reactions to the lesson as well as their attentiveness. While this was the case, one of them failed to complete the observation form leaving some sections empty during the first week. A remedial meeting was arranged with him/her to sort out the problem.

The results of the study revealed that the prospective English language teachers who participated in the study held positive perceptions of LS as an effective teacher training approach. This result corroborated the finding of Chassels and Melville (2009) that the participants expressed positive perceptions of the course of LS noting that the experience helped them learn more about their weaknesses as teachers. The collaborative planning of the lesson was found to be rewarding by the participating prospective English language teachers. This result aligned with the finding of Hurd and Licciardo-Musso (2005) that collaborative lesson planning played an important role in teacher achievement. In a similar vein, this result was verified by the results of other studies (Carrier, 2011; Chassels & Melville, 2009; Lewis, 2005; Rock & Wilson, 2005) that the lesson planning stage was valuable for professional growth.

Further, the results revealed that knowledge of students to inform teaching was fostered through LS. This result concurred with that of Lim et al. (2011) that LS increased teachers' understanding of how students learned. Additionally, this result was also endorsed by Lee (2019) who argued that LS enabled teachers to be more student-oriented.

Moreover, consistent with the results of Rock and Wilson (2005), the results indicated that the participants valued teaching research lessons. Rock and Wilson (2005) reported that their participants viewed the teaching practice incorporating LS as a means for professional growth. Lewis (2005) found that incorporating LS increased teachers' knowledge of instruction. Teacher education research indicates the potential of LS as a powerful platform for linking teacher learning with teaching practice (Kotelawala, 2012). Additionally, this result aligned with the results of Lim et al. (2011) that LS was effective for 'problem-sharing, generating ideas from peers' experience, and promoting pedagogical and subject matter knowledge'. Furthermore, this result was also supported by Cavey and Berenson (2005) that LS experience significantly promoted the professional knowledge of pre-service teachers. Last but not least, this result was endorsed with Chassels and Melville's (2009) finding that LS helped pre-service teachers' professional development by highlighting their strengths and weaknesses in the teaching and lesson planning.

Next, the results revealed that LS boosted participants' self-efficacy and confidence. This result was supported by Hurd and Licciardo-Musso (2005) that efficacy building was one of the appeals of the LS process. This concurred with the findings of Puchner and Taylor (2006) that participation in LS increased knowledge growth resulting in improvement in teacher self-efficacy. The result regarding confidence corroborated Rock and Wilson's (2005) result that LS was beneficial for promoting teachers' professional confidence.

Further, it was found that the LS experience in general and reflection and observation in particular enhanced professional knowledge. This result was consistent with the results of relevant literature (Cavey & Berenson, 2005) that reflection and observation significantly increased the professional knowledge of prospective teachers who engaged in LS practice. This result also corroborated Chassels and Melville's (2009) and Lewis' (2005) findings that observation in LS paved the way for instructional growth. The result that working collaboratively in lesson planning and designing fostered pedagogical empowerment aligned with the findings of Chen (2020), Fraser et al. (2007), and Ro (2017) who found that collaborative learning

inherent in LS promoted teachers' professional development. Last but not least, the results indicated that LS was a valuable approach in teacher training since it enabled prospective teachers to put theory into practice, which concurred with Ponte's (2017) findings.

In terms of challenges, the results revealed that LS was a time-consuming process. Carrier's (2011) study also reported the time issue as a major challenge against effective collaboration and lesson planning due to participants' busy schedule. The other result of the study that research lessons had to be rescheduled due to national holidays posed challenges regarding the implementation of LS. This result corroborated the findings of Sims and Walsh (2009) and Tsui and Law (2007) that the organization and implementation of LS could be challenging due to logistical obstacles.

## 7. Conclusion

This study is designed to evaluate the influence of LS on EFL instruction. To this end, three prospective English language teachers' practicums underwent an LS intervention. The results indicate that LS has a profound positive effect on EFL instruction. As the results of this study indicate prospective language teachers' pedagogical empowerment as well as knowledge of students to inform teaching can be enhanced through the application of LS. The results of the study reveal that the perceptions of prospective English language teachers are positive towards the implementation of LS in teacher training programs. The success of the LS practice is due to the research lessons taught repeatedly in a cycle of three, each time improving the lesson design based on the observation of case students. The research lessons are especially valuable for prospective teachers since they offer practice and more importantly the collaborative lesson planning and contemplating on the effective activities to be included in the lesson plans help them train to be inquiring teachers and deepen their knowledge of student learning. Despite all these benefits, the results of this study suggest that LS poses some challenges as well. Completing the three cycles and numerous meetings take time; however, LS requires at least three cycles. LS is a time-consuming teacher training approach, but it is rewarding. For this reason, it is worth spending that time. Case student observations are also problematic, which can be solved by conducting remedial practices as in this study.

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