A Sample Lesson Study with Pre-School Teachers: Dialogic Story Reading Bags

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The Lesson Study is a professional development model that places teachers at the center of practice and is used in the professional development of teachers who are currently in teacher training or currently in service. In Turkey, the professional development of teachers from various branches is also supported by using this model. However, no previous studies have been found on the use of this model with pre-school teachers. This study was carried out to support and improve the quality of teachers' picture story reading activities by means of lesson study and therefore support the language and early literacy skills of children. Mixed method design was used in the study by utilizing convergent parallel mixed method design. The study group consisted of 14 teachers employed at two independent kindergartens in Bolu city center and 223 children attending these schools during the 2017-2018 academic year. After obtaining all qualitative and quantitative data, statistical analyses were conducted on the quantitative data and content analysis was performed on the qualitative data. As a result of the study, we determined that dialogic reading bags that are developed through the Lesson Study model support children's language development and early literacy skills. In addition, we determined that the Lesson Study model had a positive impact on pre-school teachers' professional development.

L'étude de cours est un modèle de développement professionnel qui met les enseignants au centre de la pratique et qui est employé dans le développement professionnel des enseignants en formation ou en service. En Turquie aussi, ce modèle sert à appuyer le développement professionnel des enseignants dans divers domaines. Toutefois, nous n'avons recensé aucune recherche antérieure portant sur l'emploi de ce modèle auprès d'enseignants au préscolaire. Cette étude a été entreprise pour appuyer et améliorer la qualité des activités liées à la lecture de livres d'images et ainsi appuyer les compétences linguistiques et les habiletés en lecture et écriture de jeunes enfants. L'étude repose sur une modèle mixte parallèle et convergent. Le groupe d'étude était composé de 14 enseignants provenant de deux maternelles indépendantes du centre-ville de Bolu et des 223 enfants qui ont fréquenté ces écoles pendant l'année académique 2017-2018. Suite à la cueillette de toutes les données qualitatives et quantitatives, les données qualitatives ont fait l'objet d'analyses statistiques. Les résultats indiquent que les sacs qui accompagnent la lecture dialogue et qui font partie du modèle de l'étude de cours appuient le développement des compétences linguistiques et des habiletés en lecture et écriture de jeunes enfants. De plus, nous avons déterminé que le modèle d'étude de cours avait un impact positif sur le développement professionnel des enseignants au préscolaire.

The Lesson Study is a Japanese model based on teacher collaboration in overcoming the obstacles presented by children and curricula by solving problems through the use of new information. In the 1900s, the methods of training used in Japan at that time were found to be insufficient for
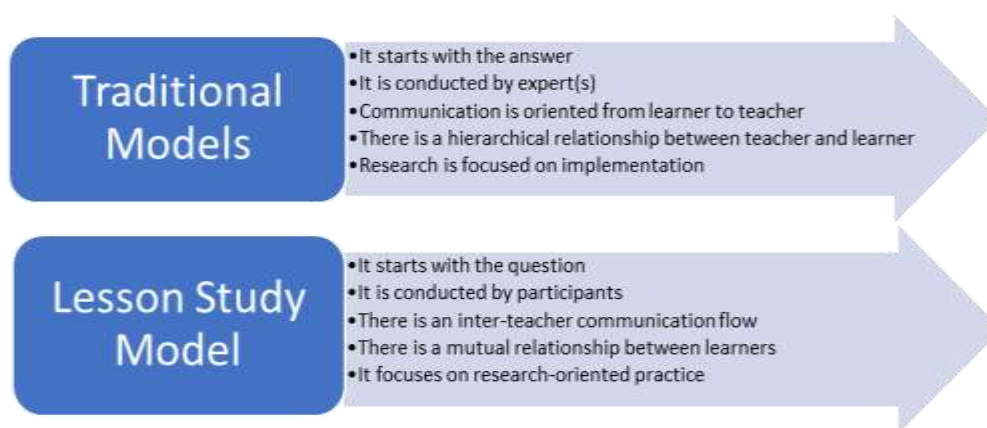
Figure 1. Differences between the Lesson Study model and other models of professional development. (Lewis, Perry, and Hurd, 2009, p.290)

teachers. Based on the need for new training methods, training and conferences were organized to introduce new methods and techniques to teachers. These conferences and training were aimed to be hands on so that teachers would be able to get immediate feedback and to evaluate themselves. Based on this idea, the Lesson Study model was developed. This model was called "Jugyo-hihyo-kai" in Japanese (criticism lesson conference) or "Jugyo-kenkyu-kai" (lesson study conference).

Lesson Study is an approach in which teachers come together for a common purpose, prepare a detailed lesson plan together, implement this plan in selected classrooms and meet after the lessons to decide in collaboration how to better implement the lesson. (Liberman, 2009). This model, used in all kinds of teacher training from higher education to pre-school, is primarily based on lesson critique and enables teacher groups to collaborate in research and development. In addition, it provides teachers with an opportunity to apply alternative techniques on students, to follow up, evaluate, and keep track of the results in a concrete way (Kim, 2008). With the help of this method, teachers spend a significant part of their working time in collaborative work by discussing the lessons they have planned and carefully observed by cooperating with one another. These lessons are described as "study" or "research" lessons in which teachers work diligently and systematically to discover how they will achieve the identified goals so that children can learn better. Teachers need to pay attention to some factors for a systematic study in research lessons such as increasing knowledge in the domain, increasing knowledge of teaching methods, techniques and differentiated instruction, developing observation methods and techniques for students in a more useful manner, establishing stronger peer networks, aiming to combine daily practices with longer-term goals, and gaining stronger competence and motivation (Chokshi & Fernandez, 2004; Watanabe, 2002).

Lesson Study includes some features that are different from other approaches to professional development. Figure 1 displays these features as described by Lewis, Perry, and Hurd (2009).

In general, each research lesson is carried out in four basic stages:
1. Planning phase

    a. Setting a focal point

    b. Difficulties and misconceptions of students

    c. Evaluation of instructional materials

      d. Lesson management

      e. Evaluation activities implemented in class

2. Preliminary assessment

3. Research lesson implementation

4. Evaluation

Teachers work in harmony with each other, produce solutions together for the problems that arise, and try out and implement new ways during these phases. Throughout the process of Lesson Study, an expert is responsible for process guiding, leading, and sometimes opening up new horizons for teachers. This expert may be an academic who is an expert in the field or a school principal (Bütün, 2012).

Professional development of teachers from various branches is supported by using The Lesson Study model in our country as well. However, in Turkey, there are no previous studies in this field in literature that have been conducted with the participation of pre-school teachers. We, as teacher educators, believe that the Lesson Study concept, which provides a distinctive and practical education opportunity for teacher education, can be used especially for practical training in pre-school education.

Pre-service training for preschool teachers in Turkey is usually organized by using presentations. Teachers mostly prefer hands-on training that provides teachers with opportunities to cooperate and such training is reported to be more efficient. For this reason, the stakeholders in teacher education believed that the training for preschool teachers presented with the lesson study model will be more effective since they are oriented towards practice, support cooperation, and enable teachers to obtain results quickly after the implementation (Şahin, 2017).

Preschool teachers in Turkey use a picture story book almost daily in the everyday routine at schools to support children's language skills, increase school readiness, or develop early literacy skills. The new words/concepts in picture story books open up doors to many worlds for children (Gönen, 2009). Thus, children gain new experiences and develop language skills and many new concepts. In addition, conceptual and creativity skills of children are improved via the pictures in picture story books. Different horizons are opened to children by supporting their imagination through different and innovative pictures (Girgin, 2011). It is also possible to support children's early literacy skills and print awareness through texts in picture story books. Children incidentally acquire early literacy skills when they spend time with picture book stories. Many early literacy skills such print awareness, size of text, writing direction, accents, intonations, etc. can be taught through picture story books (Erdoğan, Özen Altınkaynak, & Erdoğan, 2013).

Teachers in Turkey employed at pre-school institutions generally utilize picture story book methods and techniques that they have learned in their undergraduate education, in-service training that they opt to attend, or in other courses and activities in which they participate voluntarily. The study conducted by Tepetaş Cengiz (2015) on preschool teachers evaluated the quality of picture story book reading activities. The study concluded that teachers used uniform reading styles, did not take advantage of new methods and techniques, and could not adequately support children's literacy skills and language development with picture story book reading activities. Therefore, was indicated in the study that the Lesson Study model should be combined with pre-school teachers' picture story books reading activities to contribute to teachers' professional development. How to select a picture story book, how to share this picture story book with children in an interactive way, how to produce games with concepts and words related to the

book, and how these games and activities will have an impact on children's language development and literacy skills are all included among the constructs of the Lesson Study model. Supporting children's language development and supporting the acquisition of early literacy skills begins early. However, developing these skills via State support is carried out in Turkey by pre-school teachers with structured/semi-structured activities in a program developed the Ministry of National Education for 36-66-month-old children. For this reason, preschool teachers need to know different methods and techniques and use them actively in order to support children's language development and early literacy skills starting from this period.

Dialogic reading, which allows reading a story book in a different and creative way, is defined as the process of reading books to preschool children who do not know how to read by an adult/peer with reading skills and interacting with the child/children during book reading (Gonzalez, Taylor, Davis, & Kim, 2013; Hindman, Skibbe, & Foster, 2014). Reading picture story books together with children can be done one-on-one, with a few children as a small group, or with a large group where the entire class is present. Reading together allows the child and adult to interact, discuss the events in the story, talk about images and visuals in the book, make criticism about the story, realize the messages contained in the content, and ensure learning new words. For this reason, it must be ensured that the dialogic reading, proven to support children in many ways, should be included among the methods and techniques used by teachers while reading picture story books.

This study was carried out to support and improve the quality of pre-school teachers' picture story book reading activities via the Lesson Study model and to support the language and early literacy skills of children. Answers to the following research problem were sought in this study: "What is the effect of supporting and improving the quality of pre-school teachers' picture story book reading activities with the help of the Lesson Study model on children's language development and early literacy?"

Method

This research was designed by using mixed methods. Mixed methods require combining or integrating qualitative and quantitative research and their data in a single study (Creswell, 2017). Therefore, qualitative and quantitative data were collected in this study and they were analyzed in a manner to be integrative. The study used convergent parallel mixed method design.

Selection of the Study Group

The study group was composed of two independent kindergarten schools that were located in the same part of Bolu and who volunteered to take part in the study. These schools were identified by purposeful sampling. When selecting the study group, mixed method sampling strategies were used based on the method of the research. A total of 14 teachers and 223 children from two different schools in the 2017-2018 academic year formed the study group. Eight of the teachers in the study group worked in one of the schools in the study and six teachers worked in the other participating school. One of the schools was the experimental study group and the other school was the control group. The experimental study group consisted of six teachers who used Lesson Study. Two teachers from the same school did not want to participate in the study, but they followed it in their school and tried to learn the new information from their other colleagues. Therefore, these two teachers and their classrooms were identified as the placebo group.

Data Collection Tools and Data Analysis

Pre-test and post-test experimental design was used to collect quantitative data in the data collection process. For this purpose, the children in the study group were given the Peabody Picture Vocabulary Test-4 (PPVT-4) and the Early Literacy Skills Assessment Tool.

The pre-test for the measurement tools used in this study was conducted in the first week of October after the schools were opened and children adapted to school. Post-test was implemented in the third week of February, with a period of 18 weeks between both implementations. Pre-test and post-test were conducted in this study.

In the process of collecting qualitative data, focus group meetings were held with the teachers in the experimental group throughout the lesson study. Three focus group interviews were conducted during the process. After obtaining the qualitative and quantitative data, the quantitative data were statistically analyzed by SPSS analysis program and the qualitative data were analyzed in terms of content by using the Qualitative Data Analysis Miner Lite analysis program.

Early Literacy Skills Assessment Tool. Developed by Karaman (2013), this tool consists of five sub-tests and 96 items. The first of the sub-tests of this tool, Phonological Awareness Skills Assessment, was used as the assessment tool in this study. The Phonological Awareness Skills Subtest consists of five different dimensions. Two different dimensions of the sub-test were used in this study: Matching Alliterative Words and Rhyme Awareness. The Matching Alliterative Words dimension consists of 10 items in total. The aim of this dimension is to evaluate children's ability to match alliterative words. The Rhyme Awareness dimension is composed of 9 items. KR-20 reliability value of the Phonological Awareness Skills Assessment test is 0.91, the test-retest reliability is 0.92 and the split half reliability of the test is 0.76.

Peabody Picture Vocabulary Test-4. The Peabody Picture Vocabulary Test-4 was adapted to Turkish by Kılınç (2014). Kuder-Richardson (KR-20) and Spearman Brown Split Half Test Correlation were calculated to evaluate the internal consistency of the scale. The internal consistency coefficients calculated for the reliability of the scale were as follows: KR-20 = 0.79 and Spearman Brown Split Half Test Correlation = 0.84.

Data Collection Process and Implementing the Lesson Study Model

The Lesson Study process was developed by the researcher. Throughout the process, the researcher tried to be a participant, to understand and listen to participants, and to help them solve problems by giving tips from time to time. During the course of the lesson study, the researcher prepared and presented training on the subjects that the teachers needed. In addition, she organized focus group meetings with teachers to evaluate the process, and when necessary, tried to support the self-development process by suggesting resources or individuals that could help guide the process.

The steps followed during lesson study were as follows:

Step 1: Selection of group members. This step ensured that the lesson study group came together, got to know each other closely, discovered each other's skills, and examined the current activity plans.

Step 2: Identification of the research topic. Teachers should start the lesson study process by identifying goals that they want to address during teaching, discussing ideas together, and coming to an agreement on some goals. For this reason, teachers were asked to set goals in

the second step. Teachers selected the following goals in this step: supporting children's language development, preparing children for primary education—which is the next teaching step—and developing children's early literacy skills. Teachers were asked to determine the concepts, acquisitions, and learning outcomes that they could address in line with these goals.

Step 3: Research on various teaching materials. In this step, it was ensured that methods and techniques, equipment, materials, and implementation possibilities that could be used in this study were reviewed by teachers. Teachers were asked to determine what kind of methods they would use to support children and what type of materials they would benefit from in line with their goals. It was decided to use dialogic reading method as a suitable way to achieve the targeted objectives and to use story bags used to support dialogic reading with the help of the senses. After this decision was made, teachers were trained by expert academicians in the field about the use of dialogic reading method, program development, the 2013 pre-school education program (Milli Eğitim Bakanlığı [MEB, Ministry of National Education], 2013), alternative approaches, and sensory based reading activities in order to improve teachers' professional capacities.

Step 4: Lesson study planning. This phase was carried out by identifying the stories required for dialogic reading, the contents of the story bags, and the development of activity plans based on these bags. For the teachers' common plan, *The Very Hungry Caterpillar* picture story book by Eric Carle from Mavibulut Publications was selected. This book was preferred because it addresses all age groups, the concepts presented in the book are clear and understandable, and the book is easily accessible and contemporary. Dialogic reading activity based on *The Very Hungry Caterpillar* was planned by including all necessary steps. In addition to planning all the steps of the dialogic reading activity from beginning to end, the teachers developed 20 different activities related to *The Very Hungry Caterpillar* on literacy readiness, science, arts, games, movement, mathematics, music, drama, and Turkish language activities with the help of the brainstorming session.

Step 5: Implementation of the study lesson. Following the development of the activity plan, it is necessary to decide who will guide the study lesson. Therefore, a volunteer was selected among the teachers to implement the activities with students in class by using the story bag and the developed activities. All teachers participating in the lesson study attended these sessions and observed the activities throughout the day. Since it was not possible to implement all 20 extra activities for *The Very Hungry Caterpillar* picture story book, five different activities predetermined by teachers were implemented before the end of the day.

Step 6: Discussions and reflections related to lesson study. At the end of the day, a meeting was held for assessment with the participation of the teachers in the lesson study group. All teachers shared their opinions and activity plans were examined and reviewed. Revisions were made in the lesson plan regarding goal realization and student status and participation.

Step 7: Re-planning the lesson study. During this process, critical feedback was shared on the implementation of the dialogic reading process and the training notes on the subject were revisited. No additions or changes to the planning of the activities were found necessary by the teachers.

Step 8: Implementation of the new version of the lesson study. The lesson study was once again implemented by a different volunteer teacher in class and another set of five activities was selected for this implementation. Again, this practice was made available to other teachers for observation.

Step 9: Sharing the reflections on the new version of the lesson study. The last implementation of the lesson study was discussed with a meeting held with the teachers and the activity plans were finalized.

Following the successful completion of the lesson study, new story bags were prepared for 14 different picture story books complete with activity plans. In this way, a 14-week training program was developed.

Findings

Table 1 presents Peabody Picture Vocabulary Test-4 pre-test and post-test results for experimental, control, and placebo groups. Table 1 demonstrates no significant differences for the pre-test results of experimental, control, and placebo groups (p = .898, p> .05). However, the Table points to a significant difference among the experimental, control, and placebo groups in the Peabody Picture Vocabulary Test-4 post-test results (F = 16.080, p = .000). Table 2 presents the results of the LSD test performed to determine the source of this difference.

Examination of Table 2 indicates that the difference resulted from the higher mean scores of the experimental group compared to the control group and placebo groups and that there was no significant difference between placebo and control groups (p =.340, p> .05). Table 3 shows the pre- and post-test results obtained from the Phonological Awareness Skills Assessment Test for experimental, control, and placebo groups.

Table 1

Results of One-Way Analysis of Variance for Pre and Post Tests for Peabody Picture Vocabulary Test- 4

		Sum of Squares	sd	Mean Square	F	p
Pre-test	Between groups	116.247	2	58.123	.108	.898
	In-groups	118495.412	220	538.616		
	Total	162904.210	223			
Post-test	Between groups	20694.505	2	10347.252	16.080	.000**
	In-groups	142209.705	221	643.483		
	Total	162904.210	223			

*p<0.05, **p<0.01

Table 2

LSD Test Results for Peabody Picture Vocabulary Test-4

Sections (I)	Sections (J)	Mean Difference (I-J)	Standard Error	p
Experimental	Control	20.71543	3.74214	.000**
	Placebo	16.14438	4.82879	.001*
Control	Experimental	-20.71543	3.74214	.000**
	Placebo	-4.57105	4.78127	.340
Placebo	Experimental	-16.14438	4.82879	.001*
	Control	4.57105	4.78127	.340

*p<0.05, **p<0.01

Table 3

Results of One-Way Analysis of Variance for Pre and Post Tests for Phonological Awareness Skills Assessment Test

			Sum of Squares	sd	Mean Square	F	p
Pre-test	Rhyme awareness	Between groups	1.911	2	.956	.129	.879
		In-groups	1631.803	221	7.384		
		Total	1633.714	223			
	Matching alliterative words	Between groups	13.067	2	6.534	1.853	.159
		In-groups	779.214	221	3.526		
		Total	792.281	223			
Post-test	Rhyme awareness	Between groups	509.669	2	254.834	41.047	.000**
		In-groups	1372.041	221	6.208		
		Total	1881.710	223			
	Matching alliterative words	Between groups	105.731	2	52.865	19.308	.000**
		In-groups	605.108	221	2.738		
		Total	710.839	223			

*p<0.05, **p<0.01

Table 3 presents the data for the sub dimensions of the Phonological Awareness Skills Assessment Test. According to Table 3, there were no significant differences between the groups based on the one-way variance analysis conducted for Rhyme Awareness pre-test results. Again, Table 3 demonstrates that there were no significant differences between the groups based on the one-way variance analysis conducted for Matching Alliterative Words pre-test results.

Table 3 points to a significant difference between experimental, control, and placebo groups based on the one-way variance analysis conducted for the Rhyme Awareness post-test results (F = 41.047, p = .000). According to Table 3, there was a significant difference between experimental, control, and placebo groups based on the one-way variance analysis conducted for Matching Alliterative Words post-test results (F=19.308, p = .000). LSD test results conducted to determine the source of this difference are given in Table 4.

Table 4 shows a significant difference in between the mean post-test scores of the experimental group and the mean post-test scores of the control and placebo groups in terms of the Matching Alliterative Words sub-dimension LSD Test results. There was no significant difference between the mean scores of the control group and the placebo group in terms of Matching Alliterative Words. Table 4 also demonstrates a difference between the mean post-test scores of the experimental group and the mean post-test scores of the control and placebo groups in terms of Rhyme Awareness LSD results. There was no significant difference between the control group and placebo group in terms of Rhyme Awareness.

Teachers' views on dialogic reading were analyzed in general based on the focus group meetings held with pre-school teachers. Teacher opinions were found to be classified in two categories as positive and negative. Table 5 demonstrates that teachers used positive and negative expressions about the process of dialogic reading. As a result of analyzing the three focus group meetings, it was determined that the teachers in the study group expressed 74 opinions about the procedure. Out of these expressions, 86.48% (60) were positive and 13.52% (14) were negative.

Some of the positive teacher opinions regarding the process are as follows: "I didn't think that the process would be so enjoyable when I was preparing for this project."; "I started to enjoy reading stories too with this project."; "This practice has changed my teaching perspective to an incredible extent."; "The positive changes in children's reactions have shown me that I am doing the right thing."

Some of the negative teacher opinions regarding the process are as follows: "It's really tiring to write down your plan, to really prepare."; "I don't have a lot of time to prepare a daily training flow and I am having a hard time doing it."; Teacher views on lesson study were also gathered during the focus group meetings held with pre-school teachers. Teacher views on the lesson study process are presented in Table 6.

Table 6 demonstrates that pre-school teachers' views on lesson study process were divided into five categories. Teachers expressed their opinions on the lesson study prior to, during, and after the process. They also shared their opinions about the problems encountered during the process and their suggestions. A total of 50 different opinions were shared during the focus group meetings on the lesson study process. Of these views, 14% (7) were related to the phase prior to the process, 50% (25) to the lesson study process itself and 14% (7) to the phase following the process. 10% (5) of views were relevant to the problems encountered in the process and 12% (6) were found to be suggestions directed towards improving the process. Some of the teacher views

Table 4

Phonological Awareness Skills Assessment Test LSD Test Results

	Sections (I)	Sections(J)	Mean Difference (I-J)	Standard Error	*p*
Matching alliterative words	Experimental	Control	1.495*	.244	.000**
		Placebo	1.074*	.315	.001**
	Control	Experimental	-1.495*	.244	.000**
		Placebo	-.421	.312	.178
	Placebo	Experimental	-1.074*	.315	.001**
		Control	.421	.312	.178
Rhyme awareness	Experimental	Control	3.227*	.368	.000**
		Placebo	2.639*	.474	.000**
	Control	Experimental	-3.227*	.368	.000**
		Placebo	-.588	.470	.212
	Placebo	Experimental	-2.639*	.474	.000**
		Control	.588	.470	.212

*p<0.05, **p<0.01

Table 5

Results of Analysis for Pre-school Teachers' Views on Dialogic Reading Process

	Number of expressions/views	%
Positive views on dialogic reading process	60	86.48%
Negative views on dialogic reading process	14	13.52%

Table 6

Results of Analysis for Preschool Teacher Views on Lesson Study Process

Categories of Views on Lesson Study Process	Number of Expressions	%	Number of Words	Ratio of Distribution of these words in the full text
Prior to lesson study	7	14%	157	4.20%
During lesson study	25	50%	989	26.70%
After the lesson study	7	14%	269	7.30%
Problems encountered	5	10%	309	8.30%
Suggestions	6	12%	296	8.00%

on the preparation activities before the lesson study process are as follows: "The fact that the activities were new and absorbing made me incredibly eager. I've decided that the plans I used to have were actually really bad. I am gripped with an enthusiasm to practice the new activities."; "I was unfortunately taking advantage of the ready-made plans. I am very ashamed to say it, but I had given up writing activities and I think I had become like a traditional teacher."

Some of the teacher views on the implementation of the lesson study and the process of dialogic reading are as follows:

I'm not very good at reading stories. I don't think I can read books in a fun manner. But when I read books like this, I saw that the children were excited although I was not that much fun. The box was filled with so many materials and activities that I can say that the mistakes I made while reading were unimportant.

I was not taking home work for a long time. But now, I take the book bag home one or two days before I am supposed to read the story. I rehearse the story at home by reading aloud. I now know that children realize when I am unprepared.

I use ready-made lesson plans but I realized in this project that there is no plan like the one you prepare yourself. We had a brainstorming session with all the colleagues when we prepared these plans. This session really helped enrich our plans.

Some of the teacher views related to the period after the process are as follows:

I realized I was not fully aware of the vocabulary in the books I used to read before. I was reading these books but I did not really care if the children knew some words, I did not stop to think that they should learn some of the words in the book. I only answered their questions if they chose to ask. But now, when I take book in my hand, I look at the vocabulary first. I now know that words are precious.

Pre-school teachers who were in the study group shortly summarized the lesson study process with these views. Some of the problems encountered during the process are expressed as follows:

The only problem I have in implementing the training flow is the existence of the trainee students in my class. When they are in the classroom, I cannot implement the project activities. We have trainee students at least two days a week. Hence, the days they are in the classroom they handle the picture story book reading as they planned.

Preschool teachers in the study group also made some suggestions to solve the problems generally encountered and to improve the implementation. Some of the suggestions are as follows:

My suggestion for the next year to develop the plans a bit more is including the important days and weeks that we celebrate to the story books (that will be read). The books that correspond in calendar to an important day or week must be selected from an appropriate theme for the celebrated event. Therefore, story reading may be better integrated with the monthly flow of activities.

Little boxes may be placed at the end of the activities with notes, information or differentiations for disabled students or inclusion students just like the ones we use in regular training flows. Since we all have special education students in our classes, this way we can take some measures to better help them.

Some quantitative assessments were also performed in the focus group meetings held with pre-school teachers in regards to the effects of the dialogic reading bags used by teachers during the lesson study on children's development. These assessments are listed in Tables 5, 6, and 7. Teachers were asked in focus group interviews about the changes they observed regarding the effects of the dialogic reading process on children. Findings related to the changes observed by teachers in children are listed in Table 7.

Table 7 demonstrates that teacher views in regards to the changes they observed in children were divided into five categories: changes in attention span, changes in early literacy skills, changes in language development, changes in perception and awareness, and behavioral changes. A total of 18 views were expressed by teachers. Out of these, 33.3% (6) were related to the change in children's attention span, 12.5% (1) to early literacy skills, 27.7% (5) to change in language development, 16.6% (3) to changes in perception and awareness and 16.6% (3) to behavioral changes.

Some of the statements made by pre-school teachers during focus group meetings regarding the changes they observed as follows: "I noticed that I had to warn children much more before. I don't need to warn them anymore. They carefully follow story process and the materials that come out of the bag."; "I observe an increase in interest towards reading in the classroom. They are always asking when we are going to read books."; "I observe that they are beginning to use new concepts and new vocabulary."

Table 7

Results of Analysis on the Changes Observed in Children by Preschool Teachers

	Number of expressions	%	Number of words	Ratio of Distribution of these words in the full text
Changes in attention span	6	33.3%	56	1.50%
Changes in early literacy skills	1	12.5%	76	2.10%
Changes in language development	5	27.7%	56	1.50%
Changes in perception and awareness	3	16.6%	27	0.70%
Behavioral changes	3	16.6%	40	1.10%

Results, Discussion, and Suggestions

This study primarily investigated the effects of dialogic reading bags and activities prepared through the Lesson Study Model on the language development of children. Results of the Peabody Picture Vocabulary Test-4 pre-test implemented on the children whose teachers were or were not involved in the lesson study were not significantly different, however, post-test results of the same test were found to significantly differ between groups. It can be argued that this is an indicator of the support provided by dialogic reading bags prepared with the help of Lesson Study on children's language development. Wasik and Bond (2001) also reported that dialogic reading activities performed in groups in a classroom environment were useful for the language development of children. Similarly, there are studies that investigated the impact of intervention programs that aimed to support language development in children. These studies generally used book reading as a method and reported that this method was useful in children's language development (Hargrave & Senechal, 2000; Justice, 2002; Nielsen & Friesen, 2012; Pollard-Durodola et al., 2011).

Sutton, Sofka, Bojcyk, and Curenton (2007) emphasized that compared to direct reading of a text by an adult, interacting with children during reading (dialogic reading) supported language and literacy skills at higher levels. It was identified that dialogic reading had a positive impact on children's verbal expression skills (Reese, Levya, Sparks, & Grolnick, 2010; Şimşek & Işıkoğlu Erdoğan, 2015) and their vocabulary development (Opel, Ameer, & Aboud, 2009; Aram, Fine, & Ziv, 2013).

No significant differences were found between the mean scores of the placebo and control groups who did not attend the lesson study process. This may be seen as an indication that the placebo group was not affected by the process even though it was in the same school as the experimental group.In their study that support this finding, Gordon and Browne (2005) found that reading picture story books supports children's skills in listening, acquiring new words, and learning new concepts. They stated that these skills are positively influenced by asking questions and discussing concepts or events when reading picture story books, directing to do research and doing reinforcing activities after reading. Lever and Senechal (2011) also suggested that interactive reading supports children's vocabulary acquisition and verbal expression skills. The study conducted by Tetik (2015) in Turkey, which supports the findings of this study, revealed that interactive reading and post-reading activities were significant in four–five-year-old children's language development.

The skills that were investigated in the study, namely rhyme awareness and matching alliterative words, are generally studied under early literacy skills. The Rhyme Awareness sub dimension of the Early Literacy Skills Assessment Tool, which was implemented on the children included in classrooms where the preschool teachers participated in the study, presented no significant differences in the pre-test for experimental, control, and placebo groups. However, a meaningful difference was identified between the control and placebo group children and experimental group children whose teachers were active in lesson study and who used dialogic reading bags and activities in class. This can indicate that dialogic reading bags have positive impact on children in terms of developing rhyme awareness.

Similarly, the Matching Alliterative Words sub dimension of the Early Literacy Skills Assessment Tool, which was implemented on the children included in classrooms where the preschool teachers participated in the study, presented significant differences in the post-test for experimental, control, and placebo groups. This difference was between the mean scores of the

experimental group and the control and placebo groups. This finding indicates that dialogic reading bags prepared by teachers with the help of the Lesson Study model supported children's skills in matching alliterative words. Wasik and Bond (2001) reported a similar finding as well and argued that reading picture story books helps children to come across new vocabulary, information on new letters and syntax that they do not often encounter, and facilitates learning. This study also identified that books read by using the dialogic reading method and activities based on this method support early literacy skills. Sim and Berthelsen (2014) also reported that dialogic reading had positive impact on children's early literacy skills.

Studies conducted by Neuman, 1996; Schickedanz, 1999; Sonnenschein and Munsterman, 2002; and Sheri (2004) also found that reading picture story books in different ways and reinforcing these picture story books with games and other activities support children's early literacy skills. Doyle and Brambell (2006) also found that dialogic reading is associated with early literacy skills. These researchers also reported that that interactive reading supports children's social emotional learning and supports the development of not only early literacy skills but various other skills.

Results of the focus group meetings held with preschool teachers in the study group demonstrate that they generally expressed positive views on the dialogic reading process. Some teachers, however, expressed negative views on the process. Detailed examination of the negative views shows that these views were usually related to planning the daily program and writing down plans. The study conducted by Bozkuş et al. (2017) to determine teacher views on the Lesson Study model also identified some negative teacher views related to preparation and implementation of the Lesson Study model. Teachers were found to report that preparing lesson plans was inconvenient and coming together to prepare lesson plans created time constraints in their schedules. On the other hand, it was also reported in various studies that preparing lesson plans increased the content and pedagogical knowledge of teachers who participated in the lesson study, developed their skills in observing students and using practical knowledge, allowed them form stronger relationships with colleagues, provided them with higher motivation, and obtained higher quality in lesson plans (Lewis et al., 2009). Aydın (2014) emphasized that teachers can prepare effective lesson plans when they set aside sufficient time for this task. It can be argued that although teachers have negative feelings about writing plans, they can produce impressive results to support children's development when plans are part of the process.

Teachers reported their reservations and concerns on reading picture story books in regards to their views on implementing the lesson study and the dialogic reading process. They mentioned that since the bags needed for dialogic reading required pre-planning, they were better prepared even though some of them were not very successful in terms of reading techniques and as a result of better preparation on the part of the teachers, children were more motivated. Baki and Arslan (2012) claimed that lesson study allowed teachers to observe their students, to perceive their capabilities, to comprehend how to teach in a concrete manner, pushed teachers to become better prepared and do research, and allowed revisiting prior knowledge. It can be argued that preparing dialogic story book bags and implementing dialogic reading with the help of the lesson study in this research compelled teachers to make prior planning and gave opportunities for revisiting and refreshing their knowledge.

Some of the teachers in the study mentioned ready-made lesson plans and related materials to be used in the classroom. However, after the lesson study practice, it was identified that teachers realized the disadvantages of using ready-made plans, regretted their prior practices, and understood how the lesson study process supported them to prepare their own lesson and activity

plans. In their study, Bozkuş, et al. (2017) reported that the most remarkable view expressed by teachers in Turkey in regards to preparing and implementing the lesson study was the belief that preparing lesson plans provided important contributions to the quality of teaching despite all challenges related to it. Bilen (2002) also emphasized the positive contributions of detailed lesson plans prepared by teachers themselves. Konyalıoğlu, Konyalıoğlu, and Işık (2002) reported that lessons implemented with the guidance of a lesson plan achieved more compared to lessons implemented without lesson plans. These findings support the significance of preparing lesson plans. The statistical data obtained in this study, which demonstrated that implementing the dialogic reading bags and all materials developed with the lesson study model developed and improved children's language development and early literacy skills, also point to the significance of lesson plans prepared by teachers themselves. According to Gutierez (2015), plans prepared with the help of The Lesson Study model are unique and specific to teachers and students and they are open to continuous development. Therefore, all plans and materials developed in the framework of this study can be updated and used in the future as well. Boran and Tarım (2016) claimed that working on a common plan during the lesson study process by giving all teachers equal responsibility provides teachers with an academic perspective. The Lesson Study model generates a sharing environment that allows teachers to question each other's approaches to teaching and which ensures exchange of expertise and practices.

This study aimed to practice a lesson study model with pre-school teachers to contribute to their professional development. There are several studies on the Lesson Study model on various branches in our country, but no research exists on lesson study in the field of pre-school education. We suggest that this model, which is a different perspective on in-service training, be used for the professional development of pre-school teachers.

More detailed studies can be planned by using the Lesson Study model to better understand how preschool teachers structure their professional development. A meta-analysis study can be done by combining the studies that present the long-term and short-term results of the Lesson Study model used for in-service teacher training in Turkey. Different models and approaches that can be applied to in-service training to improve preschool teachers' instructional skills can be studied and tested.

Many intervention programs have been developed in pre-school field to develop children's language development and many studies have been conducted with this aim. However, more studies should be carried out to increase the quality of teachers' picture story book reading activities and new methods should be introduced to pre-school teachers. Plans should be made to encourage pre-school teachers work collaboratively, to cooperate with one another and to increase the quality of daily educational activities, and practical examples should be presented.

References

Aram. D, Fine. Y, Ziv. M. (2013). Enhancing parent–child shared book-reading interactions: promoting references to the book's plot and socio-cognitive themes. *Early Childhood Research Quarterly, 28*(1), 111–22. https://doi.org/10.1016/j.ecresq.2012.03.005

Aydin, H. (2014). A comparative study between the United States and Turkey on teachers' lesson planning effort. *Revista de Cercetare şi Intervenţie Socială, 46*, 99–117. Retrieved from https://www.rcis.ro/en/section1/125-volumul-462014septembrie/1815-a-comparative-study-between-the-united-states-and-turkey-on-teachers-lesson-planning-effort.html

Baki, M., & Arslan, S. (2012). *Investigating prospective primary teachers' knowledge in teaching through lesson study [PDF file].* Paper presented at 12th International Congress on Mathematical

Education. Retrieved from
https://www.academia.edu/8973544/INVESTIGATING_PROSPECTIVE_PRIMARY_TEACHERS_K
NOWLEDGE_IN_TEACHING_THROUGH_LESSON_STUDY

Bilen, M. (2002). *Plandan Uygulamaya Öğretim* [Instruction from Planning to Practice]. Ankara: Anı.

Boran, E., & Tarım, K. (2016). Ortaokul matematik öğretmenlerinin ders imecesi hakkındaki görüşleri [Opinions of math teachers on collaborative work]. *Türk Bilgisayar ve Matematik Eğitimi Dergisi, 7*(1), 259–273. Retrieved from https://dergipark.org.tr/tr/download/article-file/201411

Bozkuş, F., Kablan, Z., Pak, K., Özdişçi, S., Özdemir, A., Aydın, M. & Boğazlıyan, D. (2017). Ders imecesi modeli hakkında uygulayıcı görüşleri [Practitioners' views on collaborative work model]. *International Periodical for the Languages, Literature and History of Turkish or Turkic, 12*(28), 141–160. https://doi.org/10.7827/TurkishStudies.12545

Bütün, M. (2012). *İlköğretim matematik öğretmeni adaylarının uygulanan zenginleştirilmiş program sürecinde matematiği öğretme bilgilerinin gelişimi* [Development of elementary pre-service mathematics teachers' pedagogical content knowledge]. (Unpublished doctoral dissertation). Karadeniz Teknik Üniversitesi Eğitim Bilimleri Enstitüsü, Trabzon.

Chokshi, S. & Fernandez, C. (2004). Challenges to importing Japanese lesson study: Concerns, misconceptions, and nuances. *Phi Delta Kappan, 85*(7), 520-525. https://doi.org/10.1177/003172170408500710

Creswell, W. J. (2017). *Karma yöntem araştırmalarına giriş* [Introduction to mixed methods research] (M. Sözbilir, Trans.). Ankara: Pegem.

Doyle, B. G. & Brambell, W. (2006). Promoting emergent literacy and social-emotional learning through dialogic reading, *International Reading Association, 59*(6), 554–564, https://doi.org/10.1598/RT.59.6.5

Erdoğan, T., Özen Altınkaynak, Ş. & Erdoğan, Ö. (2013). Okul öncesi öğretmenlerinin okuma-yazmaya hazırlığa yönelik yaptıkları çalışmaların incelenmesi [Examination of the prepatory works of pre-school teachers on reading and writing]. *İlköğretim Online. 12*(4), 1188–1199. Retrieved from http://ilkogretim-online.org.tr/index.php/io/article/view/1377/1233

Girgin, Ü. (2011). Dil gelişim etkinlikleri [Activities for language development]. S. Topbaş (Ed.). *Çocukta dil ve kavram gelişimi*, (pp. 245–275). Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi Yayınları.

Gönen, M. (2009). *Okul öncesi dönemde dil eğitimi* [Language education in pre-school period]. Paper presented at Uluslararası Çocuk, Aile ve Okul Öncesi Eğitim Kongresi. Trabzon.

Gonzalez, J. E., Taylor, A. B., Davis, M. J. & Kim, M. (2013). Exploring the underlying factor structure of the Parent Reading Belief Inventory (PRBI): Some caveats. *Early Education and Development, 24*(2), 123–137. https://doi.org/10.1080/10409289.2011.623651

Gordon, A. M. & Browne, K. W. (2005). *Beginning and beyond foundations in early childhood education*. CA: Thomson Delmar Learning.

Gutierez, S. B. (2015). Collaborative professional learning through lesson study: Identifying the challenges of inquiry-based teaching. *Issues in Educational Research, 25*(2), 118–134. http://www.iier.org.au/iier25/gutierez.pdf

Hargrave, A. C., & Sènèchal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly, 15*(1), 75–90. https://doi.org/10.1016/S0885-2006(99)00038-1

Hindman, A. H., Skibbe, L. E., & Foster, T. F. (2014). Exploring the nature of parental talk during shared book reading and its contributions to preschool language and literacy: Evidence from the Early Childhood Longitudinal Study–Birth Cohort. *Reading & Writing: An Interdisciplinary Journal, 27*(2), 287–313. https://doi.org/10.1007/s11145-013-9445-4

Justice, L. M. (2002). Word exposure conditions and preschoolers' novel word learning during shared storybook reading. *Reading Psychology, 23*(2), 87–106.

https://doi.org/10.1080/027027102760351016

Karaman, G. (2013). *Erken Okuryazarlık Becerilerini Değerlendirme Aracı'nın geliştirilmesi, geçerlik ve güvenirlik çalışması* [The development of a tool on Evaluation of Early Literacy Skills, validity and reliability study] (Unpublished doctoral dissertation). Gazi Üniversitesi, Ankara.

Kılınç, F. E. (2014). *Peabody Resim Kelime Testinin Türkiye Norm Çalışması (Standardizasyonu)* [Standardization of Peabody Picture Vocabulary Test for Turkey]. Abant İzzet Baysal Üniversitesi BAP Project, Project Number:2014.02.04.697.

Kim, J. S. (2008). *An examination of EFL professional development in Korea: Strategies for teacher learning* (Doctoral dissertation). University of Wisconsin, Madison.

Konyalıoğlu, A.C., Konyalıoğlu, S., & Işık, A. (2002). Matematik derslerinde planlı eğitim üzerine [Planned education in mathematics classes]. *Kastamonu Eğitim Dergisi, 10*(2), 351–358.

Lever, R. & Senechal, M. (2011). Discussing stories: on how a dialogic reading intervention improves kindergartners' oral narrative construction. *Journal of Experimental Child Psychology,108*(1), 1–24. https://doi.org/ 10.1016/j.jecp.2010.07.002

Lewis, C. C., Perry, R. R., & Hurd, J. (2009). Improving mathematics instruction through lesson study: A theoretical model and North American case. *Journal of Mathematics Teacher Education, 12*(4), 285–304. Retrieved from https://link.springer.com/article/10.1007%2Fs10857-009-9102-7

Liberman, J. (2009). *Using lesson study to develop an appreciation of and competence in task design*. B. Clarke, B. Grevholm, & R. Millman (Eds.), Tasks in primary mathematics teacher education, (pp. 11–24). https://doi.org/10.1007/978-0-387-09669-8_2

Milli Eğitim Bakanlığı [MEB, Ministry of National Education], (2013). *Okul öncesi eğitim programı* [Curriculum of pre-school education]. Ankara: MEB Basımevi.

Neuman, S. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly, 11*(4), 495–513. https://doi.org/10.1016/S0885-2006(96)90019-8

Nielsen, D. C., & Friesen, L. D. (2012). A study of the effectiveness of a small-group intervention on the vocabulary and narrative development of at-risk kindergarten children. *Reading Psychology, 33*(3), 269–299. https://doi.org/ 10.1080/02702711.2010.508671

Opel, A., Ameer, S. S., & Aboud, F. E. (2009). The effect of preschool dialogic reading on vocabulary among rural Bangladeshi children. International. *Journal of Educational Research, 48*(1), 12–20. doi:10.1016/j.ijer.2009.02.008

Pollard-Durodola, S. D., Gonzalez, J. E., Simmons, D. C., Kwok, O., Taylor, A. B., Davis, M. J., … Simmons, L. (2011). The effects of an intensive shared book-reading intervention for preschool children at risk for vocabulary delay. *Exceptional Children, 77*(2), 161–183. https://doi.org/ 10.1177/001440291107700202

Reese, E., Leyva, D., Sparks, A., & Grolnick, W. (2010). Maternal elaborative reminiscing increases low-income children's narrative skills relative to dialogic reading. *Early Education and Development, 21*(3), 318–342. https://doi.org/10.1080/10409289.2010.481552

Şahin, M. (2017). Öğretmen görüşlerine göre hizmet içi eğitim etkinliklerinin işlevselliği [The effectiveness of in-service training in the views of teachers]. *Akademik Sosyal Araştırmalar Dergisi, 52*, 23–38. Retrieved from http://www.asosjournal.com/DergiTamDetay.aspx?ID=12634

Schickedanz, J. A. (1999). *Much more than the ABCs: The early stages of reading and writing*. Washington, DC: National Association for the Education of Young Children. ERIC Number: ED438933

Sheri, E. D. (2004). *An enhanced dialogic reading approach to facilitate typically developing pre-schoolchildren's emergent literacy skills*. (Doctoral dissertation). East Tennessee State University Electronic Theses and Dissertations. Retrieved from http://dc.etsu.edu/etd/867

Sim, S., & Berthelsen, D. (2014). Shared book reading by parents with young children: evidence-based practice. *Australasian Journal of Early Childhood, 39*(1), 50–55.

https://doi.org/10.1177/183693911403900107

Şimsek, Z. C., & Işıkoğlu Erdogan, N. (2015). Effects of the dialogic and traditional reading techniques on children's language development. *Procedia-Social and Behavioral Sciences, 197*, 754–758. https://doi.org/10.1016/j.sbspro.2015.07.172

Sonnenschein, S. & Munsterman, K. (2002). The influence of home-based reading interactions on 5-year-olds reading motivations and early literacy development. *Early Childhood Research Quarterly, 17*(3), 318–337. https://doi.org/10.1016/S0885-2006(02)00167-9

Sutton, M. M., Sofka, A. E., Bojczyk, K. E., and Curenton, S. M. (2007). Assessing the quality of storybook reading. In Khara L. Pence (Ed), *Assessment in emergent literacy*, (pp. 227–272). CA: Plural.

Tepetaş Cengiz, Ş. (2015). *Okul öncesi öğretmenlerinin resimli öykü kitabı okuma etkinlikleri ile çocukların dil gelişimleri arasındaki ilişkinin incelenmesi* [The examination of the relationship between preschool teachers' picture story book reading activities and children's language development] (Unpublished doctoral dissertation). Hacettepe Üniversitesi, Ankara.

Tetik, G. (2015). *Farklı hikâye anlatma teknikleri ile okunan öykülerin dört-beş yaş çocuklarının dil gelişimine etkisi* [The effect of the stories read with different story telling techniques on the language development of four to five years old children] (Unpublished postgraduate thesis). Pamukkale Üniversitesi Eğitim Bilimleri Enstitüsü, Denizli.

Wasik, B. A. & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 93*(2), 243–250. https://doi.org/ 10.1037//0022-O663.93.2.243

Watanabe, T. (2002). Learning from Japanese lesson study. *Educational Leadership, 59*(6), 36–39. ERIC Number: EJ640977

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