# Psychological and pedagogical bases of research formation competence of preschool teachers in the context of lesson study

**Gulmira Myshbayeva** *1 Abai Kazakh National Pedagogical University, Institute of Pedagogy and Psychology, Department of Professional Training: Department of Preschool Education, Social Pedagogy and Self-knowledge, 050010, 13 Dostyk Ave., Almaty, Kazakhstan https://orcid.org/0000-0003-4133-8377

**Ulbosyn Kyakbaeva** 2 Abai Kazakh National Pedagogical University, Institute of Pedagogy and Psychology, Department of Professional Training: Department of Preschool Education, Social Pedagogy and Self-knowledge, 050010, 13 Dostyk Ave., Almaty, Republic of Kazakhstan https://orcid.org/0000-0001-5025-7646

**Gulsaya Khairlayeva** 3 Abai Kazakh National Pedagogical University, Institute of Philology and multilingual education, Department of Professional Training, Department of Practical English, 050010, 13 Dostyk Ave., Almaty, Republic of Kazakhstan https://orcid.org/0000-0001-8782-9054

**Kulshat Kamzaeva** 4 , Korkyt Ata Kyzylorda University, Humanitarian and Pedagogical University, Department of Kazakh Language and Literature and journalist, 120000, 29 a, Aiteke bi Str., Kyzylorda, Republic of Kazakhstan https://orcid.org/0000-0002-5209-6193

**Nazgul Baitas** 5 Kazakh National Women's Pedagogical University, Institute of Pedagogy and Psychology, Department of Preschool and Primary Education, 050000, 114 Gogol str., building 1, Almaty, Kazakhstan, https://orcid.org/0000-0002-5022-135X

Abstract

The aim of this study is to evaluate preschool teachers' competencies in creating research on psychological and pedagogical foundations in the context of course work, with teacher views. The study group of the research consisted of 40 kindergarten teachers working in various schools in Almaty, Kazakhstan. In this study, the phenomenological approach, one of the qualitative research methods, was used. Research data were collected with a semi-structured interview form created by the researchers. As a result of the research, it has been determined that the self-efficacy and learning tendencies of preschool teachers are generally at a moderate level. In addition, preschool teachers, related to developing competences to research psychological and pedagogical foundations, expressed their opinions about participating in activities, following publications and participating in in-service trainings. In line with the results of the research, it has emerged that it is necessary to carry out studies to increase the self-efficacy and learning tendencies of preschool teachers.

Keywords: Psychological and pedagogical foundations, preschool teachers, teacher competencies

---

* ADDRESS OF CORRESPONDENCE: Gulmira Myshbayeva, Abai Kazakh National Pedagogical University, Institute of Pedagogy and Psychology, Department of Professional Training: Department of Preschool Education, Social Pedagogy and Self-knowledge, 050010, 13 Dostyk Ave., Almaty, Kazakhstan
Email address: alken-g@mail.ru

## 1. Introduction

Although the developing, renewing and globalising world affects people in many ways, it pushes people to relearn every moment. This is only possible with education. Education needs to keep up with these rapid developments. This situation leads to the fact that education is multifaceted and the concept of education everywhere plays a key role in every field. Ensuring the continuity of access to learning, constantly increasing the level of knowledge and competence obtained, constantly updating as well as acquiring new skills and especially motivation and opportunity to continue updating knowledge and skills throughout life are keys to economic success, social cohesion and individual performance (Smith, 2002).

### 1.1. Theoretical and conceptual framework

The teacher, who is one of the most basic and indispensable elements of the learning–teaching process, undertakes the task of being a part of both the learning environment and its organiser (Tasdemir, 2007). It is known that preschool teaching has a different structure when compared to teaching practices in other branches. In order for the learning–teaching process to be carried out effectively, it is extremely important for teachers at this level to be able to blend and use the technical knowledge acquired during the academic education process with their own personality traits.

Since the preschool teaching profession requires working on people in real terms, many human-specific, uncontrollable variables such as values, expectations, attitudes and resistance can be mentioned in the educational environment (Danju and Uzunboylu, 2017) In this respect, the preschool teacher needs to apply to his own internal resources; benefit from his feelings, predictions, past experiences and his own philosophy of life; be in contact with the families of the children; and share these with other preschool teachers in the school, besides acquiring technical knowledge and skills (Sahin, 2005).

It is stated that the teacher's self-efficacy belief is highly effective on student success. The relationship between teacher's self-efficacy belief and teacher behaviours, learning products that occur in students, student success, motivation and self-esteem are frequently emphasised by researchers (Ross, 1994). Tschannen-Moran and Hoy (2001) define teacher self-efficacy belief as 'a teacher's judgment about whether the skills he/she possesses will create desired outcomes such as commitment and learning in the student'.

Starting with the understanding of being a teacher with 21st-century skills, the change in the flow of information in the age in which we live in and the replacement of old information with new information has brought the teacher to a position where he needs to know the processes of acquiring, selecting and benefiting from information well. The contribution of the technological opportunities brought by the modern understanding of education to education is directly related to the success of the teacher. The more successfully the teacher can use technology and knowledge, the higher the probability of being successful. Increasing the success of the teacher increases the success of the student and accordingly the school, and increases the quality of education (Hagger et al., 2008).

The need for individuals to constantly renew their knowledge has led to the emergence of the concept of 'lifelong learning' (Lambeir, 2005). Individuals with lifelong learning skills have basic skills, can solve problems, think critically, creatively and reflectively, question, use digital technologies for

research, inquiry and self-development, have high self-regulation skills and self-evaluation, and communication skills in social and professional environments. They are individuals who can work in a high and collaborative manner (Voogt & Roblin, 2012). Teachers have ability to renew and develop themselves in various fields related to the profession and to have competencies suitable for the needs of the age we live in. It has critical features in terms of both ensuring the continuity of their professional development and being a model for students in order to develop their individual potential. This situation revealed the necessity of increasing the lifelong learning competencies of teachers (Ertmer et al., 2012). It can be expected that preschool teachers and even pre-service teachers have positive attitudes towards new learning and their skills are high. Meeting these expectations will also increase people's attitudes towards lifelong learning (Bulac & Kurt, 2019).

*1.2. Related research*

When the studies in the literature are examined, it is seen that teachers have high and low self-efficacy beliefs, such as trying to implement instructional innovations, spending more time on teaching, preventing undesirable student behaviours in the classroom, giving feedback to students with learning difficulties, having classroom management skills, professional commitment and effective teacher characteristics. It is seen that there are behavioural differences in subjects and this affects student motivation and success (Ustuner et al., 2009).

Friedman and Kass (2002) evaluated how teachers' self-efficacy beliefs affect their relationships with other teachers and staff at school. In the study, it was determined that teachers' self-efficacy beliefs affect the quality of the instructional work that teachers put forward and their performance in the teaching process. In addition, it was concluded that teachers' self-efficacy determines their belief in their social abilities.

Bullock, Coplan and Bosacki (2015) discussed the relationship between preschool teachers' professional experiences, personality traits and self-efficacy beliefs about classroom management. The participant group of the study comprised 395 Canadian preschool teachers. As a result of the research, it was determined that there was a positive relationship between the professional experiences of teachers and their self-efficacy beliefs about classroom management. As a personality trait, it is thought that teachers who are more extroverted and open to experience will have a higher classroom management self-efficacy.

When teachers with high and low self-efficacy beliefs are compared, it has been observed that those with a high level of belief are more effective in using contemporary teaching activities and they apply these activities in the classroom (Kutluca & Aydin, 2016). In addition, there are many studies in the literature on the importance of developing teachers' pedagogical content knowledge and technological pedagogical content knowledge. In these studies, the importance and results of the effective use of technology or pedagogical content knowledge by teachers were evaluated (Niess, 2005; Kramarski & Michalsky, 2009; Chuang & Ho, 2011; Hsu et al., 2013). Nathan (2009) compared the levels of pre-service teachers' self-efficacy in technology integration and technological pedagogical content knowledge, and found a moderate relationship between them. Gok (2022) examined the lifelong learning tendencies of preschool teachers in his study. As a result of the research, the highest average about the lifelong learning tendencies of the teachers was 'My self-confidence increases as I learn new knowledge and skills with its foundations', while the lowest average was 'Scientific journals, books, etc. that I believe will improve me professionally. I take time to read'.

When the researches are examined, it is seen that preschool teachers and other branch teachers focus on self-efficacy beliefs, pedagogical content knowledge or lifelong learning tendencies. The competences of preschool teachers to research psychological and pedagogical foundations in the context of this research are determined by self-efficacy, pedagogical content knowledge and lifelong learning processes. In this direction, this research, which will take the opinions of preschool teachers, has an important view.

### 1.3. Purpose of the research

The purpose of this research is to evaluate preschool teachers' competencies in creating research on psychological and pedagogical foundations in the context of course work, with teacher views. In this direction, the following questions were asked in this study, and the answers given by the preschool teachers to these questions shed light on the research:

1. What are the views of preschool teachers on self-efficacy?

2. What are the views of preschool teachers on learning tendencies?

3. What are the views of preschool teachers on developing their competence in researching psychological and pedagogical foundations?

## 2. Method and Materials

In this section, the demographic information of the preschool teachers participating in the research, the tools used in collecting the data and the analysis of the data are given.

### 2.1. Research method

In this study, the phenomenological approach, one of the qualitative research methods, was used. Phenomenological studies are an inquiry strategy applied to reveal the researcher's human experiences about a phenomenon defined by the participants (Creswell & Poth, 2006). In the study, the phenomenological research design, which is one of the qualitative research methods, was used because the competencies of preschool teachers in creating research on psychological and pedagogical foundations in the context of coursework were examined.

### 2.2. Participants

The study group of the research was formed by the purposeful random sampling method. Purposeful random sampling is the purposeful creation of systematic and randomly selected case samples in line with the purpose of the research. This sample was created in order to reach richer data than the cases determined by random sampling and to increase the reliability of the research. First of all, a sample group selected randomly from the population of the research is formed. Then, a small subgroup is formed among this determined group, which is thought to contribute the most to the research (Marshall & Rossman, 2014). Considering these steps, the study group of the research was formed. The study group of the research consisted of 40 kindergarten teachers working in various schools in Almaty, Kazakhstan. The study group of the research was formed on a voluntary basis. The demographic characteristics of the study group of the research are given in Table 1.

Table 1. Experience and gender distribution of preschool teachers

| Experience | Gender | | Sum |
|---|---|---|---|
| | Female | Male | |
| **1-5 Years** | 3 | 5 | 8 |

| | | | |
|---|---|---|---|
| **6-10 Years** | 9 | 4 | 13 |
| **11-15 Years** | 10 | 2 | 12 |
| **16 Years and above** | 7 | - | 7 |
| **Sum** | 29 | 11 | 40 |

Eight of the preschool teachers participating in the research have 1–5 years, 13 have 6–10 years, 12 have 11–15 years and 7 have 16 years or more experience. Twenty nine of the preschool teachers are female and 11 are male. The majority of preschool teachers participating in the research are female. A total of 40 preschool teachers formed the study group of the research.

*2.3. Data collection tools*

Research data were collected with a semi-structured interview form created by the researchers. During the preparation of the form, the relevant literature was primarily scanned. Then, a draft of the semi-structured interview form was created with the questions created. After the draft form was created, two field experts were consulted to ensure the validity and reliability of the research. After the corrections made in the questions in line with expert opinions, a semi-structured interview form was applied to three preschool teachers. After the pre-application, it was understood that the questions were understandable and the form was ready for application. The three preschool teachers who participated in the preliminary application were excluded from the study group of the research. The semi-structured interview form is presented in Annex-1.

*2.4. Data collection process*

Semi-structured interviews developed by the researchers in order to collect the data were conducted over Skype, taking into account the social distance measures during the COVID-19 pandemic process. First, interview appointments were made from the teachers participating in the study. The interview time for each teacher was determined as approximately 35–40 minutes. At the beginning of the interview, the teachers were given basic information about the ethical principles and subject of the research. Permission was then requested to record the interviews. The questions in the semi-structured interview form were asked to the preschool teachers in the same order. The interviews were ended when the teachers answered all the questions. It took approximately 6 weeks to complete the interviews with 40 preschool teachers.

*2.5. Data collection analysis*

The data obtained from the research were analysed by the inside analysis method. Content analysis is one of the most frequently used methods among qualitative data analysis types. In content analysis, mostly written and visual data are analysed. In this method, a deductive approach is adopted. In content analysis, the researcher first creates categories related to the research topic. After this stage, the researcher numerically determines the words, sentences or pictures that fall into these categories in the data set he has examined. In the category development process, the researcher should be extremely specific and should determine comprehensible and acceptable categories for researchers who plan to carry out similar studies in the field (Silverman, 2015). In this direction, the research was analysed in accordance with the content analysis method.

In the first stage, recorded interviews and audio recordings were transferred to the semi-structured interview form. The researchers independently transferred the data to the semi-structured interview form, and then the data sets that the researchers created independently from each other were compared. Minor differences in the documents created by the researchers were

corrected by rechecking. Then, the data set of the research was divided into categories, and the repeated answers to be presented in the research were given in the findings section by creating frequency and percentage and arithmetic average tables. In addition, direct quotations were made from the interview forms in order to support the findings.

Table 2. Item evaluation intervals

| Item Rating Value | Value range |
|---|---|
| 1. Low | 1,00 – 1,66 |
| 2. Middle | 1,67 – 2,32 |
| 3. High | 2,33 – 3,00 |

When calculating the item intervals, it is assumed that the intervals are equal. The arithmetic mean score intervals were found to be 0.66: (The highest value – the lowest value)/3 was calculated as (3−1)/3=2/3=0.66 in the score range calculated.

**3. Results**

The answers given by the preschool teachers to the questions in the semi-structured interview form are evaluated in this section.

In Table 3, the opinions of the preschool teachers participating in the research on their self-efficacy are evaluated.

Table 3. Opinions of teachers about their self-efficacy

| Preschool teachers self-efficacy | Low | | Middle | | High | | Mean |
|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | |
| *Planning the educational process* | 4 | 10 | 27 | 67,5 | 9 | 22,5 | 2,12 |
| *Active participation in the educational process* | 2 | 5 | 22 | 55 | 16 | 40 | 2,35 |
| *Being a model for students* | 3 | 7,5 | 8 | 20 | 29 | 72,5 | 2,65 |
| *Appropriate material selection* | 1 | 2,2 | 12 | 30 | 27 | 67,5 | 2,65 |
| *Appropriate method selection* | 9 | 22,5 | 16 | 40 | 15 | 37,5 | 2,15 |
| *Preparing a student portfolio* | 4 | 10 | 31 | 77,5 | 5 | 12,5 | 2,02 |
| *Ability to analyse needs* | 21 | 52,5 | 17 | 42,5 | 2 | 5 | 1,52 |
| *Creating a classroom environment conducive to learning* | 2 | 5 | 17 | 42,5 | 21 | 52,5 | 2,47 |
| *Correct guidance and information to parents* | - | - | 16 | 40 | 24 | 60 | 2,60 |
| *Increasing student motivation and learning* | 1 | 2,5 | 20 | 50 | 19 | 47,5 | 2,45 |
| *Ability to make healthy assessment and evaluation* | 10 | 25 | 18 | 45 | 12 | 30 | 2,05 |
| **Overall Average** | | | | | | | 2,27 |

In Table 3, the opinions of the preschool teachers participating in the research on their self-efficacy are evaluated. Teachers have found high self-efficacy to participate actively in the education process, to be a model for students, to choose appropriate materials, to create a classroom environment conducive to learning, to guide and inform parents correctly, and to increase student motivation and learning. Teachers found their self-efficacy in planning the education process, choosing the appropriate method, preparing a student portfolio and making healthy assessment and evaluation at a moderate level. Finally, the teachers stated that they found their self-efficacy in

performing needs analysis low. It has been determined that the self-efficacy of preschool teachers is generally at a medium level.

Teachers were asked, 'What are your views on your self-efficacy as a preschool teacher?', and some of their answers to the question are given below.

*'I find my self-efficacy low. It's my 2nd year in this profession and I keep learning new things all the time. In order for me to feel competent, I need to have more knowledge and experience'.*

*'I don't find myself fully competent. The basis of being an educator lies primarily in the continuous renewal and development of the teacher. I think I have an intermediate level of competence because I don't have enough time for this development'.*

*'I find myself sufficient in my field. I am a teacher who attaches great importance to self-development. I care about trying new methods and using different materials in my lessons. I spend a lot of time developing myself, especially professionally'.*

In Table 4, the views of preschool teachers participating in the research on learning tendencies are evaluated.

Table 4. Teachers' views on learning tendencies

| Preschool teachers learning tendencies | Low | | Middle | | High | | Mean |
|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | |
| *Giving importance to professional development* | - | - | 9 | 22,5 | 31 | 77,5 | 2,77 |
| *To follow scientific developments in the field* | 13 | 32,5 | 15 | 37,5 | 12 | 30 | 1,97 |
| *Regularly reading publications related to the field* | 26 | 65 | 9 | 22,5 | 5 | 12,5 | 1,47 |
| *Openness to acquire new knowledge and skills* | 3 | 7,5 | 8 | 20 | 29 | 72,5 | 2,65 |
| *Learning new methods and techniques* | 10 | 25 | 24 | 60 | 6 | 15 | 1,90 |
| *Keeping up with technological innovations* | 2 | 5 | 6 | 15 | 32 | 80 | 2,75 |
| *Following pedagogical innovations* | 6 | 15 | 31 | 77,5 | 3 | 7,5 | 1,92 |
| *Making regular time for professional development* | 25 | 62,5 | 11 | 27,5 | 4 | 10 | 1,47 |
| **Overall Average** | | | | | | | 2,11 |

In Table 4, the views of preschool teachers participating in the research on learning tendencies are evaluated. Teachers stated that they have a high tendency to attach importance to professional development, to be open to acquiring new knowledge and skills and to follow technological innovations. Teachers showed a moderate tendency to follow scientific developments in the field, to learn new methods and techniques and to follow pedagogical innovations. Teachers stated that they had a low tendency to regularly read publications related to the field and to spare regular time for professional development. It has been determined that the learning tendencies of preschool teachers are generally at a moderate level.

The teachers were asked, 'What are your views on the process of realising learning in your field as a preschool teacher?', and some of their answers to the question are given below.

*'I actually believe that every teacher should improve himself. Unfortunately, I don't have the time to devote to it. So I regret to say that my tendency to learn is quite low'.*

*'I try to improve myself whenever I find time. I actually believe in the importance of learning, but I evaluate my learning activities moderately in daily life'.*

*'I think maintaining professional development throughout life is one of the most fundamental duties of teachers. I can say that by acting with this principle in my own professional life, I regularly learn new things'.*

In Table 5, the views of the teachers participating in the research on developing their competence in creating research on psychological and pedagogical foundations are evaluated.

Table 5. Opinions of teachers on developing their competencies in creating research on psychological and pedagogical foundations

| Category | Theme | F | % |
|---|---|---|---|
| **Attending events** | *Attending field-related seminars* | 34 | 85 |
| | *Attending personal development seminars* | | |
| | *Participating in technology-based training programmes* | | |
| | *Participating in pedagogical-based activities* | | |
| **Following broadcasts** | *Following publications related to the field* | 21 | 52,5 |
| | *Subscribing to journals related to the field* | | |
| | *Doing regular reading about the field* | | |
| **Participating in in-service training** | *Developing social skills* | 9 | 22,5 |
| | *Developing effective training skills* | | |
| | *Developing effective assessment skills* | | |

In Table 5, the views of preschool teachers participating in the research on developing their competence in creating research on psychological and pedagogical foundations are evaluated. 85% of the teachers gave the answer to participate in activities, 52.5% to follow the publications and 22.5% to participate in in-service trainings. Participating in seminars related to the field, participating in personal development seminars, participating in technology-based education programmes and participating in pedagogy-based activities were evaluated in the category of participating in activities by the teachers. It is expressed in the category of following the publications related to the field, being a member of the journals related to the field and reading regularly about the field and following the publications. In addition, they stated that developing social skills, developing effective educational skills and developing effective assessment skills are some of the ways to develop their competencies in researching psychological and pedagogical foundations by participating in in-service training.

The opinions of some preschool teachers who participated in the research on developing their competence in creating research on psychological and pedagogical foundations are given below.

*'I think that especially following the publications and doing research and reading in the field on a regular basis will be very effective. I think that in-service trainings organised at regular intervals will contribute'.*

*'A teacher's self-development will positively affect the quality of his education. For this reason, the teacher should first attend personal development seminars in order to improve himself. It can also be beneficial to participate in various certificate programmes so that they can apply technological developments to education'.*

*'I follow the publications related to the field. There are journals that I am a member of and follow closely. These publications both increase my motivation to learn and contribute to the continuous reinforcement of psychological and pedagogical foundations'.*

*'The teacher's own motivation is very important. It is very important to participate in pedagogical-based activities, to read new publications in the field, and to learn to use technology in education in a professional way. In addition, in-service training should be organised in schools. These trainings can also contribute to the development of social relations between teacher and student'.*

*'I believe that teachers should improve themselves mostly in assessment and evaluation. I find this very important in terms of guiding the parents correctly and arranging the education according to the needs of the student. For this, in-service training is needed. It is also very important to attend seminars and give importance to personal development'.*

## 4. Discussion

The teachers who participated in the research found their self-efficacy to be high in active participation in the education process, being a model for the students, choosing appropriate materials, creating a classroom environment conducive to learning, guiding and informing the parents correctly and increasing the motivation and learning in the students. In their study, Fritz et al. (1995) stated that teachers with high self-efficacy beliefs respond more easily to students' needs. In another study on the self-efficacy levels of preschool teachers, it was stated that the increase in the length of service of teachers positively affects their self-efficacy beliefs (Keskin, 2006). Teachers found their self-efficacy in planning the education process, choosing the appropriate method, preparing a student portfolio and making healthy assessment and evaluation at a moderate level. Finally, the teachers stated that they found their self-efficacy in performing needs analysis low. It has been determined that the self-efficacy of preschool teachers is generally at a medium level. Kavrayici and Bayrak (2016) evaluated pre-service teachers' self-efficacy perceptions in their study. Considering the results of the research, the self-efficacy perceptions of the preschool teachers were at a 'sufficient' level; however, it is observed that it is not at the level of 'quite sufficient'. In the literature, there are studies stating that the high level of teacher self-efficacy has a significant effect on the education given by teachers and student success (Caprara et al., 2006; Goddard et al., 2000).

Teachers participating in the research stated that they have a high tendency to attach importance to professional development, to be open to acquiring new knowledge and skills and to follow technological innovations. Gok et al. (2011) stated that preschool teachers use information technologies effectively, and teachers who use it effectively are more successful in increasing the level of student interest and attention. Teachers show a moderate tendency to follow scientific developments in the field, to learn new methods and techniques and to follow pedagogical innovations. In their study, Kildan and Berat (2015) also stated that, similar to the findings of this study, preschool teachers' reading habits for scientific studies are at a moderate level. Teachers stated that they had a low tendency to regularly read publications related to the field and to spare regular time for professional development. It has been determined that the learning tendencies of preschool teachers are generally at a moderate level.

Preschool teachers participating in the research, related to developing competences to research psychological and pedagogical foundations, expressed their opinions about participating in activities, following publications and participating in in-service trainings. Alazcioglu (2016) states that preschool

teachers should also have field knowledge and pedagogical knowledge that shows how to transfer their knowledge of field and technology to their students while transferring information.

## 5. Conclusion

In today's world, teachers are expected to be educators who meet the needs of the age and have 21st-century skills. This expectation reveals the necessity of teachers to constantly renew themselves in a dynamic system. In addition to the importance of each level of education, the preschool period is expressed as a critical process in which learning is rapidly developed and shaped. Successful management of this process is one of the sole duties of preschool teachers. The ability of preschool teachers to effectively manage preschool learning and teaching processes is a process that is directly proportional to their motivation to continue their own development. Starting from this point of view, in this study, preschool teachers' competencies in creating research on psychological and pedagogical foundations in the context of coursework were evaluated. As a result of the research, it has been determined that the self-efficacy and learning tendencies of preschool teachers are generally at a moderate level. In addition, preschool teachers stated that participating in activities, following publications and participating in in-service trainings, can improve their competence in researching psychological and pedagogical foundations.

## 6. Recommendations

In line with the results of the research, it has emerged that it is necessary to carry out studies on increasing the self-efficacy and learning tendencies of preschool teachers. Content that contributes to the development of psychological and pedagogical foundations and encourages teacher candidates for lifelong learning should be added to the curricula of preschool teaching departments in universities. By organising in-service training programmes for preschool teachers, reinforcement of pedagogical content knowledge with current education and training approaches should be supported. Since preschool teachers creating a lifelong learning approach also require their own individual efforts, organising activities that support learning tendencies in school environments will also be effective.

## REFERENCES

Alazcioglu, H. (2016). *Examining the relationship between pre-service teachers' tpab proficiency levels and their use of web 2.0 tools* (Master's thesis, Institute of Science and Technology).https://acikbilim.yok.gov.tr/handle/20.500.12812/666701

Bulac, E., & Kurt, M. (2019). Investigation of lifelong learning tendencies of teacher candidates. *Journal of Amasya University Faculty of Education, 8*(1), 125-161. https://dergipark.org.tr/en/pub/amauefd/issue/45794/532829

Bullock, A., Coplan, R. J., & Bosacki, S. (2015). Exploring links between early childhood educators' psychological characteristics and classroom management self-efficacy beliefs. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *47*(2), 175. https://psycnet.apa.org/doi/10.1037/a0038547

Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of school psychology*, *44*(6), 473-490. https://doi.org/10.1016/j.jsp.2006.09.001

Myshbayeva, G., Kyakbaeva, U., Khairlayeva, G., Kamzaeva, K., & Baitas, N., (2022). Psychological and pedagogical bases of research formation competence of preschool teachers in the context of lesson study. *Cypriot Journal of Educational Science*. *17*(4), 1359-1372. https://doi.org/10.18844/cjes.v17i4.7160

Chuang, H. H., & HO, C. J. (2011). An investigation of early childhood teachers' technological pedagogical content knowledge TPACK in Taiwan. *Journal of Ahi Evran University Kirsehir Education Faculty, 12*(2), 99-117. https://dergipark.org.tr/en/pub/kefad/issue/59495/855162

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. https://books.google.com.tr/books?hl=tr&lr=&id=gX1ZDwAAQBAJ&oi=fnd&pg=PT13&ots=c_l35A7BFF&sig=rB14UiCmHQBmVPzRez-ZBDzG8Y4&redir_esc=y#v=onepage&q&f=false

Danju, I. and Uzunboylu, H. (2017) analysis of gender stereotypes representations studies. *PONTE International Scientific Researchs Journal*. 73 (6). https://doi.org/10.21506/j.ponte.2017.6.35

Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & education*, *59*(2), 423-435. https://doi.org/10.1016/j.compedu.2012.02.001

Friedman, I. A., & Kass, E. (2002). Teacher self-efficacy: A classroom-organization conceptualization. *Teaching and teacher education*, *18*(6), 675-686. https://doi.org/10.1016/S0742-051X(02)00027-6

Fritz, J. J., Miller-Heyl, J., Kreutzer, J. C., & MacPhee, D. (1995). Fostering personal teaching efficacy through staff development and classroom activities. *The Journal of Educational Research*, *88*(4), 200-208. https://doi.org/10.1080/00220671.1995.9941301

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American educational research journal*, *37*(2), 479-507. https://doi.org/10.3102%2F00028312037002479

Gok, N. (2022). *Examination of pre-school teachers' lifelong learning tendencies.* Pamukkale University Master's Thesis. http://acikerisim.pau.edu.tr/xmlui/bitstream/handle/11499/39004/Nefise%20G%c3%96K%20YL%20Proje.pdf?sequence=1&isAllowed=y

Gok, A., Turan, S., & Oyman, N. (2011). Opinions of preschool teachers on their use of information technologies. *Pegem Education and Training Journal, 1*(3), 59-66. https://dergipark.org.tr/en/download/article-file/209750

Hagger, H., Burn, K., Mutton, T., & Brindley, S. (2008). Practice makes perfect? Learning to learn as a teacher. *Oxford review of education*, *34*(2), 159-178. https://doi.org/10.1080/03054980701614978

Hsu, C. Y., Liang, J. C., Chai, C. S., & Tsai, C. C. (2013). Exploring preschool teachers' technological pedagogical content knowledge of educational games. *Journal of Educational Computing Research*, *49*(4), 461-479. https://doi.org/10.2190%2FEC.49.4.c

Kavrayici, C., & Bayrak, C. (2016). Self-efficacy perceptions of teacher candidates. Adıyaman University *Journal of Social Sciences Institute,* (23), 623-658. https://dergipark.org.tr/en/pub/adyusbd/issue/24305/257585

Kesgin, E. (2006). *Examining the relationship between preschool teachers' self-efficacy levels and their use of problem solving approaches (Denizli province example)* (Master's thesis). http://acikerisim.pau.edu.tr/xmlui/handle/11499/2790

Myshbayeva, G., Kyakbaeva, U., Khairlayeva, G., Kamzaeva, K., & Baitas, N., (2022). Psychological and pedagogical bases of research formation competence of preschool teachers in the context of lesson study. *Cypriot Journal of Educational Science*. 17(4), 1359-1372. https://doi.org/10.18844/cjes.v17i4.7160

Kildan, A., & Berat, A. H. İ. (2015). Reading Habits of Preschool Teachers for Scientific Studies. *Bartın University Journal of Faculty of Education*, 4(2), 634-650. https://dergipark.org.tr/tr/pub/buefad/issue/3818/51275

Kramarski, B., & Michalsky, T. (2010). Preparing preservice teachers for self-regulated learning in the context of technological pedagogical content knowledge. *Learning and instruction*, 20(5), 434-447. https://doi.org/10.1016/j.learninstruc.2009.05.003

Kutluca, A. Y., & Aydin, A. (2016). Examination of pre-service science teachers' self-efficacy beliefs in terms of various variables: The effect of constructivist teaching. *Abant İzzet Baysal University Journal of the Faculty of Education, 16*(1). https://www.acarindex.com/pdfler/347-3283.pdf

Lambeir, B. (2005). Education as liberation: The politics and techniques of lifelong learning. *Educational philosophy and Theory*, 37(3), 349-355. https://doi.org/10.1111/j.1469-5812.2005.00125.x

Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications. https://books.google.com.tr/books?hl=tr&lr=&id=-zncBQAAQBAJ&oi=fnd&pg=PP1&ots=LgibpIXtbS&sig=kgVmlAuuiB33M2-be0fL-t10ZO8&redir_esc=y#v=onepage&q&f=false

Nathan, E. J. (2009). *An examination of the relationship between preservice teachers' level of technology integration self-efficacy (TISE) and level of technological pedagogical content knowledge (TPACK)* (pp. 1-113). University of Houston. https://www.learntechlib.org/p/127311/

Niess, M. L. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. *Teaching and teacher education*, 21(5), 509-523. https://doi.org/10.1016/j.tate.2005.03.006

Ross, J. A. (1994). The impact of an inservice to promote cooperative learning on the stability of teacher efficacy. *Teaching and teacher education*, 10(4), 381-394. https://doi.org/10.1016/0742-051X(94)90020-5

Sahin, E., & Ozkilic, R. (2005). Opinions of pre-school education teacher candidates about the practice guide prepared for practice lessons. *Journal of Gazi University Gazi Education Faculty, 25*(2), 115-133. https://dergipark.org.tr/en/download/article-file/77253

Silverman, D. (2015). *Interpreting qualitative data*. Sage. http://research.gold.ac.uk/id/eprint/13619

Smith, A. (2002). The EU memorandum on lifelong learning. *UNESCO Institute for Education*, 47. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.202.9509&rep=rep1&type=pdf#page=63

Tasdemir, M. (2007). Classroom teachers' perceptions of school, colleagues and their own professional competencies. *National Education, 36*(174), 171-192. https://app.trdizin.gov.tr/makale/TmpZMU9EZzQ=/sinif-ogretmenlerinin-okul-meslektaslari-ve-kendi-mesleki-yeterliklerini-algilamalari

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education*, 17(7), 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1

Myshbayeva, G., Kyakbaeva, U., Khairlayeva, G., Kamzaeva, K., & Baitas, N., (2022). Psychological and pedagogical bases of research formation competence of preschool teachers in the context of lesson study. *Cypriot Journal of Educational Science*. 17(4), 1359-1372. https://doi.org/10.18844/cjes.v17i4.7160

Ustuner, M., Demirtas, H., Comert, M., & Ozer, N. (2009). Secondary school teachers' self-efficacy beliefs. *Journal of Mehmet Akif Ersoy University Faculty of Education, 9*(17), 1-16. https://app.trdizin.gov.tr/publication/paper/detail/TWpJMk1UazBOQT09

Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of curriculum studies*, *44*(3), 299-321. https://doi.org/10.1080/00220272.2012.668938

**Annex-1** Preschool Teachers' Semi-Structured Interview Form

| Demographic Characteristics of Teachers | | | | |
|---|---|---|---|---|
| Experience: | 1-5 Years (    ) | 6-10 Years (    ) | 11-15 Years (    ) | 16 Years and above (     ) |
| Gender: | Male  (    ) | | Female     (    ) | |

| Preschool Teaching Questions | | | |
|---|---|---|---|
| 1. What are your views on your self-efficacy as a preschool teacher? …………………………………………………………………………………………………………………………………………………………………. …………………………………………………………………………………………………………………………………………………………………. | | | |
| Give yourself a score of 1-3 on your self-efficacy. | Low | Middle | High |
| | 1 | 2 | 3 |
| Planning the educational process | | | |
| Active participation in the educational process | | | |
| Being a model for students | | | |
| Appropriate material selection | | | |
| Appropriate method selection | | | |
| Preparing a student portfolio | | | |
| Ability to analyse needs | | | |
| Creating a classroom environment conducive to learning | | | |
| Correct guidance and information to parents | | | |
| Increasing student motivation and learning | | | |
| Ability to make healthy assessment and evaluation | | | |
| 2. As a preschool teacher, what are your views on your learning process in your field? ………………………………………………………………………………………………………………………………………………………….……. ………………………………………………………………………………………………………………………………………………………………. | | | |
| Give yourself a score of 1-3 on your self-efficacy. | Low | Middle | High |
| | 1 | 2 | 3 |
| Giving importance to professional development | | | |
| To follow scientific developments in the field | | | |
| Regularly reading publications related to the field | | | |
| Openness to acquire new knowledge and skills | | | |
| Learning new methods and techniques | | | |
| Keeping up with technological innovations | | | |
| Following pedagogical innovations | | | |
| Making regular time for professional development | | | |
| 3. What are the views of preschool teachers on developing their competence in researching psychological and pedagogical foundations? | | | |

Myshbayeva, G., Kyakbaeva, U., Khairlayeva, G., Kamzaeva, K., & Baitas, N., (2022). Psychological and pedagogical bases of research formation competence of preschool teachers in the context of lesson study. *Cypriot Journal of Educational Science*. *17*(4), 1359-1372. https://doi.org/10.18844/cjes.v17i4.7160

......................................................................................................................................................................

......................................................................................................................................................................