

Future Preschool Teachers' Experiences of Mutual Learning in the Work Environment

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ABSTRACT

One of the main tasks of teachers is to improve their professional competence, which begins with their education prior to teaching. During the education process, when the identity of a future teacher is formed, their attitude should include a commitment to continuous professional development. Therefore, teacher training programmes aim to increase young teachers' readiness to engage in the development of their professional competences throughout their working lives. One of the best approaches to professional development is learning in the workplace as part of a team (i.e. mutual learning between employees). Pre-primary learning is important because a common understanding of the existing educational institution and a desire to learn from one another promote change in teachers' personal approaches and in educational institutions at the organisational level.

The theoretical framework of this research consists of theories on social learning, mutual learning, characterisation of preschool teachers' professional competence in knowledge, skills, values and social behaviour and unity. Notably, it has been found that preschool teachers learn best and gain experience by learning from one another in their communities, which is reflected in their practices.

This research aimed at examining the experience and opinions gained during the pedagogical practice of future teachers regarding the opportunities, advantages and disadvantages of mutual learning. The research methods included a literature review, and content analysis. The sample included 280 students from a preschool teacher study programme. This study uses a qualitative research method and the qualitative data processing programme NVivo. The results show that prospective teachers have developed different experiences of mutual learning during the implementation of study practice tasks. In general, students describe mutual learning in relation to the theoretical principles acquired in the study process.

Keywords: mutual learning, pedagogical practice, professional competence of preschool teachers, professional development of teachers, professional learning communities, teacher training

Introduction

One of the essential basic tasks in a teacher's professional activities is improving his or her professional competence. A teacher's professional development begins before they start real work at a school; that is to say, during the study process, when the future teacher's identity and attitude towards continuous professional development are formed. One of the tasks of teacher education programmes is to promote the readiness of young teachers to engage in improving their professional competence throughout their entire working life.

The purpose of the study is to investigate the experiences and opinions of future teachers during their pedagogical practice in terms of the opportunities, advantages and disadvantages of mutual learning. Evaluating future teachers' understanding and practical experience of learning at the workplace is important for improving teacher study programmes, goal orientation when organising student internships, cooperation among universities and student pedagogical internships. During the study process, it is necessary for new teachers to achieve readiness for further professional development.

Among the most effective ways of professional development today are learning in the workplace and learning in a team; that is, mutual learning among colleagues (Brücknerová & Novotný, 2019; Imants & Van Veen, 2010; Kokare, 2012; Meirink et al., 2010; Virkkula & Säde-Pirkko Nissilä, 2014). In a preschool educational institution, mutual learning is important, as it instils a common understanding of the institution and a desire to learn from each other. It promotes changes both at the personal level (i.e. the teacher) and at the organisational level (i.e. the educational institution). In the preparation of preschool teachers, it is important to promote students' readiness to improve their own and colleagues' pedagogical practice according to the needs of the educational environment (Kennedy & Lees, 2015; McDonald et al., 2011).

Mutual learning among teachers is part of a school's learning culture (Bredeson, 2000; Cheng, 2017; Haiyan et al., 2017; Kaulens, 2019; Kokare, 2013; Leithwood, 2006). Schools can create a learning-orientated school culture in which school leaders play an important role as creators of a positive culture of mutual learning among teachers.

Mutual learning is a process and activity designed to improve teachers' professional knowledge, skills and attitudes at an individual level so that they, in turn, can improve student learning. Research has shown that teachers' learning in practice and the formation of professional learning communities contribute to teachers' individual and collective ability to teach as well as students' success at school (Guskey, 2002; Imants & Van der Wal, 2010; Zhang et al., 2018). Professional learning communities are created in schools where teachers work together and engage in constant dialogue, analyse their practice and students' performance, search for the most effective teaching methods, solve specific

problem situations and promote teachers' emotional well-being (Cumming et al., 2021; Jones et al., 2013; Thompson et al., 2004).

Regardless of the content that teachers provide to each other during mutual learning, the network of learning relationships at schools can have various structures. Teacher learning is in diverging contexts within the school, the following three interrelated levels of learning were set out by Imants and Van Veen (2010):

1. Individual or personal learning by teachers or school leaders within the context of the school;
2. Social learning in small groups or teams of teachers.
3. Learning that occurs across the school organisation as a whole.

To ensure that mutual learning among teachers takes place, the leader of an educational institution has an important role in how it is organised. Work based learning opportunities should be provided and well organised. There should be suitable timing and conditions, and the necessary resources should be provided. Mutual learning in the work environment requires an inspiring learning vision, organisation, feedback for teachers and participation to be encouraged for the benefit of teachers' professional development. Jones et al. (2013) outlined the following research categories that can be used in the characterisation of professional learning communities:

1. Supportive and shared leadership;
2. Shared values and vision;
3. Collective learning and application;
4. Shared personal practice;
5. Supportive conditions.

Different forms of cooperation are used in the process of mutual learning among teachers, namely, meetings in small groups, joint analysis of theoretical literature, analysis of student achievements, observation of lessons and joint planning (Linder et al., 2012; Pirtle & Tobia, 2014; Stewart, 2014; Wan, 2020).

In terms of professional competence, the activities of preschool teachers at the basic level of education emphasise knowledge of specific situations that is formed using the variables of knowledge, skills, attitude and motivation. It is the process by which teachers prove their multidimensional and complex professional competence and usually reflects the interaction of their knowledge, skills, personality, attitude and motivation (Damjanovic & Blank, 2018; Keung et al., 2020).

Improving the professional competence of preschool teachers is an important and effective part of the learning process. Research on early childhood education and care, and preschool education and quality of care—more specifically, on the competence of preschool teachers—has analysed the development perspective, finding that attention is paid more to the integral role of professional development in terms of improving the quality of preschool education and care (Thornton & Wansbrough, 2012).

To improve the professional competence of teachers, professional qualities that have been shown to be essential for effective teaching are needed. These qualities ensure that teachers are prepared for the challenges, demands and responsibilities of teaching. The professional competence of a preschool teacher consists of cooperation, interest, motivation, communication, openness to new things, ethics and positivism (Imants, J. & Van der Wal, 2019).

An analysis of the theoretical literature shows that the growth of students is promoted by mutual learning among teachers improving their professional competence. To implement mutual learning, it is necessary for future teachers (including preschool teachers) to be ready to share their experience and practical challenges and to seek joint solutions to the needs in the specific work environment. The rest of this study analyses the experiences of future preschool teachers in Latvian preschools in terms of mutual learning among teachers in their work environment.

Methodology

The research describes and interprets the experience of future preschool teachers on mutual learning between teachers using empirical data.

The purpose of the study is to investigate the experiences and opinions of future teachers during their pedagogical practice regarding the possibilities, advantages and disadvantages of mutual learning.

The research draws from the pedagogical practice report materials of 280 second-year future preschool teachers on opportunities for mutual learning and teamwork in an educational institution. The internship period for the surveyed students was six weeks.

This study uses a qualitative research method and the qualitative data processing programme NVivo. Inductive coding was used to analyse information.

Fragments of practice materials of all 280 students included in the sample about the preschool educational institution as a learning organization were used in the qualitative data analysis (13 464 words). First, the frequency of words used was analysed. These are mentioned in the constructed word cloud in their basic form. The most frequently mentioned words were: opportunities, learning, team, educators, institution, education, learning, share, group, experience, preschool, happen, mutual, work, colleagues, exchange, manager, lesson, regularly and jointly. The article will cite fragments of student works marked with the letter R (respondent) and a number that indicates the order of examination of practice materials, such as *R:15*.

Based on the analysis of the scientific literature, the data obtained in the study are grouped according to four components of the learning organization:

1. Culture of the preschool institution (goals and tasks)

2. Teaching content and methods
3. Forms of cooperation
4. Emotional wellbeing

Each code group contained several subgroups. The study analysed the examples in the subgroups for their highest usage coverage in terms of frequency.

Results

When describing mutual learning in an educational institution, the future preschool teachers mentioned forms of cooperation most often ($N = 189$). The respondents mentioned meetings ($N = 34$), observations of lessons ($N = 32$) and experience exchange seminars ($N = 20$) the most frequently as forms of cooperation.

At meetings, colleagues shared their insights, ideas and plans on how to make learning more effective. These meetings also let employees discuss what additional help they need. (R:47)

Preschool teachers organised meetings among themselves, where they discussed their experiences, shared their problems and collaborated on how to solve them. (R:12)

Teachers' meetings were held once a month. Any achieved goals were analysed together, and tasks were set for the next period. (R:203)

Work in the institution was organised so that once a week, the teachers of each group could meet to discuss their students' achievements and plan future work. (R:65)

The mentioned italicized examples of respondents indicate that information was exchanged in meetings and sessions with the aim of sharing experiences, supporting colleagues, solving problems, and analysing and planning learning content. Meetings are planned and held according to the needs and initiative of the educators of the educational institution. Based on the answers of the respondents, it can be concluded that the meetings are open, in them the teachers discuss current issues and problem situations in the pedagogical work and jointly search for possible solutions to promote the educational achievements of the students. This shows the shared values and vision of educators, which is the basis of a culture of mutual learning (Jones, et al., 2013).

Mutual learning took place through observing lessons:

We promoted the mutual exchange of experiences by having teachers go to observe and analyse the open lessons of other colleagues. (R:59)

Educators were given the opportunity to observe their colleagues in action and then provide feedback. (R:214)

Regular observations of classes and methodical discussions on work improvement took place. (R:11)

Lesson observations served to let teachers observe and analyse the learning process together. This is how pedagogical experience is learned. It is especially valuable for novice preschool teachers, for whom it is an opportunity to improve their pedagogical experience.

Experience exchange seminars (training sessions) were organised using internal resources and in cooperation with other educational institutions:

At seminars for experience exchanges, teachers presented their best practice examples. Example topics included "Hand preparation for writing", "Self-service skills" and "Descriptions of didactic games". (R:74)

Educators strengthened their teamwork skills at these experience seminars by sharing their experiences in various fields of knowledge and by creating and attending master classes. (R:138)

Excursions to facilitate the exchange of experiences were organised, as well as educational international cooperation with a preschool education institution "X" in Lithuania. (R:43)

Workshops ($N = 11$) were also mentioned as spaces to discuss issues or work in groups on a project:

From the beginning, the teachers were given reading material and questions. Once everyone was familiar with the material, management would call the teachers together. Each participant expressed their opinion on the specific issue. The future teachers shared their opinions, looked for common values and agreed on work priorities. (R:2)

Experience exchanges and workshops emphasised teamwork and cooperation, which are the bases of mutual learning. The openness of the management team of the educational institution in cooperation with preschool teachers is commendable. Discussions in the identification of common values result in priorities that derive from the values of preschool teachers. What teachers can learn from each other and how this is implemented depends on the leadership team of the educational institution, which is consistent with international research on learning culture in educational institutions (Leithwood, 2006; Walker, 2010).

Conversations and discussions were mentioned less often ($N = 13$), suggesting a limitation of time resources:

The staff discussed together how to make learning more effective. Colleagues were described as able to turn to each other for advice and consultation. (R:192)

Individual conversations among the teachers and with groups applied positive criticism, praise, group analysis and solution brainstorming. (R:257)

These conversations and discussions were described as effective for mutual learning if they involved the exchange of ideas, analyses of the pedagogical process and were organised in groups.

The second most frequently mentioned component of mutual learning was the culture of the preschool institution, specifically its goals and tasks ($N = 143$). The respondents most frequently described the institution's work planning ($N = 20$), learning of new ideas ($N = 19$), transition to a new approach in education or a competence approach ($N = 15$) and the evaluation of the institution's experience and determination of development needs ($N = 12$).

Institutional work planning took place at different levels, starting from joint planning by teachers groups:

Group educators planned lesson plans together, then discussed their successes and failures. (R:138)

An annual plan was developed jointly with management for all the educators. (R:46)

The colleagues discussed how to make learning more effective and created work plans together. (R:214)

The colleagues were happy to share their knowledge and work as a team when creating work plans. (R:13)

Institutional work planning was organised by the management team and through cooperation with the educators. The evaluation of the pedagogical process informed the institution's work planning.

Learning new ideas took place through constant collaboration:

The whole team constantly learned and improved together (for example, robotics). (R:16)

Opportunities to create a culture of constant knowledge and innovation. (R:123)

The sharing of exciting ideas and various pedagogically successful events was encouraged. (R:155)

Employees were given the opportunity to share their ideas and their work successes and failures. (R: 38)

In the process of learning new ideas, mutual learning was described as an important constant promotion of knowledge. This depends on the support and trust of the management team by systematically analysing and evaluating how to promote the culture of innovation in the educational institution.

The institution's transition to a new approach in education, also referred to as the competency approach, was described as teamwork:

The transition to a new branch of education involved a competency-based approach that required teamwork, so the work of a teacher in a team is appreciated and popularised. (R:22)

In addition to terminology, active games, creative activities, singing and folklore all form the basis of the current "School 2030" planning approach that the institution is based on. (R:84)

The institution created a unified system of mutual learning for the implementation of the new curriculum. (R:139)

The school management supported various manifestations of independent and creative activities of teachers. The institution promoted the qualitative implementation of the principles of competence education. (R:57)

Mutual learning took place through the implementation of the competence approach in practice. This was based on the creation, implementation and evaluation of a unified mutual learning system. The appreciative evaluation of the work invested by each teacher was described as important.

The evaluation of the institution's experience and the determination of development needs were characterised by various aspects:

In the preschool educational institution, regular planning of the institution's work, evaluation and determination of development needs took place. (R:182)

In this evaluation process, employee groups identified the strengths of their work and realised what improvements were needed when planning future teaching and training work. (R:229)

While observing lessons, the mutual cooperation of the adults in the group was also evaluated and solutions for successful cooperation sought. (R:158)

During the mutual learning process, regularity was emphasised when evaluating the institution's experience, determining development needs, and identifying strengths and weaknesses. This resulted in the joint planning of future activities.

Emotional or subjective wellbeing was the third most frequently mentioned component of mutual learning ($N = 127$). It has been described as one of the

dimensions of wellbeing and includes wellbeing constructs (Seligman, 2012), which formed the subgroups of this component in the study.

Among the respondents' answers, support from colleagues ($N = 32$), a positive microclimate ($N = 19$), team spirit ($N = 18$) and trust and mutual respect between colleagues ($N = 11$) were mentioned the most often.

In the process of mutual learning, peer support was mainly described as help by giving advice and consultation:

Staff discussed together how to make learning more effective, and colleagues could turn to each other for advice and consultation. (R:47)

Employees of the preschool institution were like a team that helped and supported one another in any situation. (R:49)

The team included colleagues who wanted to be proactive, were able to listen to others, shared their experiences and strengthened their common goals. (R:85)

Close communication between the institution's management and teachers gave them the opportunity to improve their teaching content and receive help or support. (R:162)

In the context of mutual learning, peer support was described as related to the skill of listening and communicating, aimed at purposeful learning:

A positive microclimate in the process of mutual learning was characterised from the position of the collective. (R:24)

The team was described as friendly and that no one was left behind. (R:78)

Educators had a positive attitude towards cooperation and team learning. (R:151)

In general, there was good cooperation in the team. The teachers learned, shared their experiences and supported each other. (R:233)

There was openness and positive cooperation in the collective. (R:247)

A positive microclimate in a mutual learning work environment was described as having a positive attitude towards each other and cooperation and by fostering team friendliness and openness, which included the support of colleagues.

Team spirit related to activity planning for the educational institution and events preparation, which involved both management and educators:

The work of the kindergarten team was described as clearly manifested in those moments when they had to prepare an event for the entire kindergarten. Everyone got involved, including management, teachers, technical staff and sometimes also the children's parents. (R:53)

The teachers planned the institution's annual tasks, monthly themes and holiday ideas together. (R:69)

To strengthen team spirit, excursions were organised twice a year, such as themed afternoons and creative workshops. (R:212)

In the context of mutual learning, the respondents described thinking about how to promote team spirit by offering different forms of cooperation.

Trust and mutual respect between colleagues were also described as aspects of mutual learning in the following statements:

Trust and mutual respect are core values. (R:28)

Trust, mutual respect for each other, support and help for new teachers from existing employees of the institution. (R:74)

Colleagues feel comfortable turning to other colleagues for advice, ideas and consultation. (R:223)

Working in a team builds mutual trust in the team. We learn from each other and gain experience every day. (R:248)

In the process of mutual learning, trust and mutual respect between colleagues were described as the basic values of emotional wellbeing, facilitated by teamwork.

The new learning content and methodology were analysed to help describe the last components of mutual learning included in the study ($N = 44$). Among the responses, the learning of new skills ($N = 12$), use of modern technologies in the learning process ($N = 11$) and changes of experience in curriculum planning ($N = 10$) were mentioned most often. The frequency of the responses was fairly equal, indicating that all the mentioned characteristics of mutual learning were valued equally.

Learning new skills was described as related to the openness of the institution's staff, as shown through the following statements:

Employees learn to cooperate together and tend to exchange new ideas. (R:71)

The institution's staff is open to innovation. (R:105)

Every day, colleagues share their insights, ideas and plans on how to make learning more effective. (R:186)

The respondents described the implementation of modern technologies in the learning process to promote the effectiveness of mutual learning, as shown through the following statements:

Currently, the technologies more actively used are computers and projectors. (R:64)

Interactive technologies and tools are used. (R:80)

The staff of the institution are more than happy to use the digital board for their teaching work. (R:138)

Experience is exchanged by sharing video materials, filming the lessons and sending [the recording] to other colleagues in the e-class, where the video material is easily available. (R:171)

To ensure mutual learning and teamwork, the Board of Education created a link on its website where preschool institutions can post work materials. (R:247)

The responses indicate that the surveyed educators have acquired IT skills and use the latest technologies per their own initiative.

The change of experience in curriculum planning was characterised by the institution's management team cooperating with educators to promote the targeted involvement of children in the learning process. This is demonstrated through the following statements:

Every day, teachers regularly plan child-centred and integrated learning content within the learning areas, integrating the development of cross-cutting skills, so that this process is full of joy and surprises for the children. (R:7)

To ensure the children's meaningful involvement in learning, the institution's educators, in cooperation with management, create monthly plans that specifically indicate the results to be achieved, according to the learning areas and the children's age. (R:83)

These responses indicate that the change of experience when planning the curriculum took place in accordance integrated curriculum planning and with the age and needs of the children.

Conclusions

1. Future preschool teachers generally have a positive experience of mutual learning in their work environment.
2. For future educators, mutual learning is mainly connected to the form of cooperation chosen ($N = 189$).
3. From the point of view of future preschool teachers, the culture of the preschool institution ($N = 143$) and emotional well-being ($N = 127$) are equally important in the process of mutual learning.

4. Future preschool teachers analyse mutual learning less in relation to teaching content and methodology. Although educators indicate that they learn new methods of implementing the curriculum in the process of mutual learning, this does not happen regularly.
5. Future preschool teachers understand the essence of mutual learning and can name its advantages, namely goal orientation and teamwork and cooperation in the planning, implementation and evaluation of the learning process.
6. Based on the results of the research, positive mutual learning is based on the common goals of the educators of the preschool educational institution in terms of what the institution wants to achieve as well as the awareness and implementation of self-improvement in practice. Fostering a collaborative, open, trusting relationship that enhances collegial support and cohesion among preschool educators is the essence of peer learning among preschool educators.
7. The results of the study show that mutual learning among preschool teachers results from cooperation with the management team. To promote a mutual learning culture for preschool teachers in the work environment, it would be important to know the management team strategies of educational institutions that promote mutual learning among teachers.

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