Modern Challenges in Education

MODERN
CHALLENGES
IN EDUCATION

Editors:

Tatjana Devjak

Lidija Vujičić

Petra Pejić Papak

Modern Challenges in Education

Editors

Tatjana Devjak
Lidija Vujičić
Petra Pejić Papak

Modern Challenges in Education

CONTENTS

INTRODUCTION

The globalization processes in society promote the globalization of education and affect the speed of changes in education. It is important to develop a system that directly and indirectly enables the acquisition of new knowledge and skills, but at the same time develops educational and socializing values in pupils and students. The challenges of modern education are reflected in the competent planning, organization, management and evaluation of the process, as well as in the systematic development of teaching methods and strategies that promote active learning of subjects in the process. This requires professional and societal consensus, networking, and international collaboration. The monograph entitled „Modern Challenges in Education," produced in collaboration between the Centre for Childhood Research, Faculty of Teacher Education University of Rijeka, Croatia, and the Faculty of Education University of Ljubljana, Slovenia, presents issues in the modern educational context that the authors have addressed at the college institutional level, but also in connection with educators and teachers from practice.

Sanja Berčnik, Laura Rožman Krivec and Tatjana Devjak in the paper titled *Professional development and work of education professionals during the pandemic COVID-19* focus on the needs of modern teachers, especially during the pandemic COVID-19. The pandemic forced schools to shift from face-to-face learning to distance learning, highlighting the need for new knowledge and skills that education professionals can acquire through lifelong learning and continuous education and training. In the contribution, they determine what knowledge and skills did professionals in education gain during their studies and which are necessary for successfull professional work during the pandemic.

Željko Boneta, Petra Ljubičić and Vivien Skladany, in their paper titled *Professional Socialization and Students' Perception of the Status of the Preschool Teaching Profession*, present the results of a field study showing that initial enthusiasm was maintained among students for whom this study was the primary option and increased among those for whom it was a secondary option, which is an indicator of successful professional socialization during the study. The idealized image of the profession is a more important motive for taking up the study than the working and market conditions of the educator profession. They emphasize that sociological

analyzes recognize the dual consequences that changes in late modernity have on the status of certain professions.

A contribution by Akvilina Čamber Tambolaš and Lidija Vujičić titled *Preschool Teachers' Educational Paradigm and Structural Dimensions of Culture in Institutions of Early and Preschool Education: The Experience of Slovenia Teachers* focuses on the importance of kindergarten culture, which is constantly created and shaped by the interaction of all participants in the educational process and is reflected in the overall atmosphere of the institution. The authors present the results of the analysis of the educational paradigm of Slovenian preschool teachers and the way of shaping the structural dimensions of culture, especially the spatial-material context, in the institutions of early and preschool education in Slovenia.

Paper titled *Challenges of cooperation between parents and special education teachers during remote schooling* by authors Sabina Mlakar, Romina Plešec Gasparič and Milena Valenčič Zuljan shows that quality cooperation between school and home has a positive impact on the child and its development, especially when talking about the cooperation between school and parents of children with special needs. School closures during pandemic COVID-19 showed an even greater importance of cooperation, therefore, the authors determined how often cooperation was during the pandemic, how they experienced cooperation and what challenges they encountered.

Petra Pejić Papak, Tena Pejčić, Jasna Vukonič Žunić and Tatjana Bandera Mrakovčić, in their paper entitled *Full-day educational work: Organization of student-oriented activities*, show the importance of full-day educational work organized as an eight-hour stay of students in school, where the process of integrated teaching and learning complements the quality of organized free time of students. The article presents an example of good practice in the implementation of full-day educational work with student-oriented teaching activities in an elementary school and the opinions of class teachers on the opportunities offered by full-day educational work in the planning and implementation of student-oriented activities. Satisfaction with the organization and features of full-day educational work was also expressed by the parents of the participating students.

Tomaž Petek in his paper titled *Teaching Performances of Students – Preparing for Quality Classroom Teaching* emphasizes the imporatnce of a

teacher as a role model for the students in addition to being a coordinator, a facilitator, an organiser and the creator of a good learning environment. Author presents how the Faculty of Education in Ljubljana prepares teachers for their profession with special emphasis on acquiring appropriate professional and didactic skills, being proficient in classroom management and supremely confident in public speaking. In the empirical part he shows how well the student teachers in 3rd year meet the criteria (professional relevance; didactics; leadership; speaking perfomance) on their path to succesfull teaching performance.

A join contribution by Romina Plešec Gasparič, Petra Pejić Papak and Milena Valenčič Zuljan titled *Teachers' Perceptions of Flipped Learning and Teaching: Planning, Implementation and Evaluation* deals with the definition and the meaning of didactical innovation of instruction, with the special focus on flipped learning and teaching. They explain, that didactical innovations are necessary in modern school because of different, diverse and increasingly »demanding« students and more demanding educational aims. Flipped learning is presented as an innovation that can greately contribute to facilitating students cognitive activity, cooperative learning, innovativeness, openess, metacognition and their independance. The qualitative study focuses on teachers experiances with the planning, implementation and evaluation of flipped learning.

Vesna Podgornik and Janez Vogrinc in the paper titled *A research-based curriculum fo*r masters' *student in preschool education* present approaches that can be used to develop research-based curriculum, as the research on pedagogical practice is becoming increasingly important factor in ensuring quality of educational institution. They emphasize, that the teacher research literacy starts developing from the stage of pre-service training, that is why it is important to deliver the pre-service education program in which education is based **on the outcomes of relevant academic re**search and to engage students in research process, both through general courses and in research methods courses. The research focuses on the development of research literacy among masters' students of preschool education.

Simona Prosen and Helena Smrtnik Vitulič in their paper titled *Emotions and mental health in primary school teachers: What do they tell us about teachers` work?* show the importance of teachers ability to manage their own emotional world and mental health. They focus on pleasant emotions such as joy, pride, love and unpleasnt ones like anger, fatique,

hopelessness and show, that regarding teachers emotions it is important to consider the recommendation 3:1 in favour of pleasant emotions. The research focused on analysing emotions experianced by Slovenian teachers in the primary school context, their mental health and the connections between them.

Paper entitled *The Institutional Context of Early Childhood Education and Integrated Learning: Research, Tracking, Evaluation* by authors Lidija Vujičić, Martina Jularić, Daniela Car Mohač and Vilko Petrić shows that the fact that a child learns integrally, integrated in various physical and social relationships promotes research and determination of the starting point for integrated learning in an institutional context. The aim of the qualitative research was to determine the starting points of integrated learning in educational work with children of early childhood and pre-school age and to propose possible ways to observe and evaluate them in daily work with children. Based on content analysis and detailed analysis of video recordings of the educational process, postulates for monitoring and evaluating integrated learning are formulated.

The papers presented provide an overview of theoretical starting points and implications for practice, innovative approaches to education, and critical discussions worthy of consideration in the context of ongoing reflection and questioning of the scope of modern approaches to education. We thank all authors, colleagues, and collaborators who contributed to the content and design of this monograph with an interdisciplinary approach.

<div align="right">Editors</div>

PROFESSIONAL DEVELOPMENT AND THE WORK OF EDUCATION PROFESSIONALS DURING THE COVID-19 PANDEMIC

Sanja Berčnik*[1], Laura Rožman Krivec[2], Tatjana Devjak[3]

Abstract

Teachers today face a work environment in which they are confronted with the diversity of student learning and educational needs, the complexity of modern social and communicative circumstances, material, as well as didactic complexity, and the interdisciplinarity of learning materials. Teachers need various cognitive, social and moral competences and, more recently, in view of the Covid-19 pandemic, digital competences and different ways of teaching and interacting with students. The pandemic forced schools to adopt distance education, distance learning, and online courses and put teachers in a situation in which they had to change their teaching methods from face-to-face to distance learning. In this paper, we explore what skills and knowledge acquired during study influenced the professional development of education professionals and thus helped them with the changing learning conditions during the Covid-19 pandemic.

Keywords: Covid-19, distance learning, professional development, continuing education and training, competencies

1 *Corresponding Author. Assistant Professor, Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia; sanja.bercnik@pef.uni-lj.si.
2 Assistant, Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia.
3 Professor, Faculty of Education. University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia.

1   Introduction

The world is different than it was before the Covid-19 pandemic. The pandemic hit not only the health sector hard but also the education sector. According to UNESCO, 191 countries closed their schools in April 21, 2020, and more than 1.5 billion students were affected, representing 90% of all students worldwide. The consequences of the crisis have affected the lives of nearly 1.6 billion children, young people, and their families (UNESCO, 2020). Like the rest of the world, Slovenia chose distance education as a solution to the closure of educational institutions. Regardless of how one feels about the measures taken to contain the new coronavirus, the fact is that everyone had to switch to distance education or distance learning. The successful implementation of distance education and learning requires a new form of education and new skills in all those involved, both those who carry out the process and those who are taught, with special attention to the inclusion of disadvantaged groups. The new knowledge and skills needed to implement the educational process are provided by education professionals through lifelong learning (formal, non-formal, and informal) and through continuous education and training. This paper aims to present the views of Slovenian teachers about lifelong learning and the importance of continuing education and training for their professional development. We focus on the skills and knowledge acquired during their studies, on the skills and knowledge that have influenced their professional work, and on the forms of teacher training that support their professional development, especially when the work environment is changing.

2   Theoretical starting points

In order to achieve the set goals of the organisation (including educational institutions) and simultaneously to make a qualitative contribution to the achievement of these goals and to appreciate the success of the institution, it is important to successfully deal with the changes in our present-day global society. Coping with the changes in performing our work and tasks leads us to the awareness that our formally acquired education is not sufficient for the challenges we face (Brejc, 2000). Up-to-date knowledge is one of the most important personal and professional development factors. Constant development in the social, economic, technological, and scientific fields and the changes associated with them force us to learn continuously if we want to grow and develop personally (Krajnc, 1982; Marentič Požarnik, 2000). Continuous education and

training have proven to be the most successful 'protection' against panic and the feeling of insecurity caused by the numerous changes in various areas of society (Rojc & Bahum, 2006). Faced with the Covid-19 pandemic, many countries found a solution in the form of 'distance learning', and (almost overnight) teachers had to transform traditional forms of face-to-face learning into distance learning forms, such as online courses and teaching packages, among others. (Kostelecká et al., 2021). As a result, teachers 'experienced disorientation, questioned their previous assumptions and sought appropriate pedagogical responses to meet learning demands' (Eschenbacher & Fleming, 2020, p. 658). A large percentage of teachers had little or no knowledge of the pedagogy of online instruction prior to the lockdown (Stanistreet et al., 2021, p. 628). As never before, teachers were challenged to understand, respond, and act with sophisticated expertise. With the Covid-19 pandemic, we were confronted with an experience that was at odds with our previous understanding of the world (Bjursell, 2020, p. 675).

The term 'e-learning' is very broad and usually refers to partially technology-enhanced education, by which knowledge is delivered through computers using information and communication technology (ICT), which allows the learning process to be fully supported by technology (Ovsenik, 2014; Zrnec & Solina, 2000; Udaya Sri & Vamsi Krishna, 2014). The concept has undergone many changes over time, and various terms are used: distance education, online education, computer-assisted education, technology-enhanced education, and online education in lockstep. UNESCO (2020) generally uses the term 'open and distance education'; 'open education' is a kind of generic term for all education systems that systematically overcome various barriers to access education, whether they are related to time, space, age, gender, technology, or other circumstances. The term 'e-learning' has been used in the European Commission's programs and action plans since the year 2000. In practice, we often speak of e-learning, meaning education delivered with the help of information technology by an educational institution that organises instruction and supports learners (Bračič, 2009). According to Bračič (2009), e-learning has many advantages but also disadvantages. The advantages are: 1) educational resources and learning tools are available anytime, anywhere; travel costs are significantly lower; 2) it provides access to up-to-date information on demand; 3) learning content can be updated centrally; 4) program delivery can be adapted to the needs of the individual; 5) qualitative interactions and simulations are possible; 6) the level of collaboration and interactivity among participants is higher; 7) self-study allows

more courage to try new solutions, because mistakes are not sanctioned; 8) program providers can directly measure program performance; 9) new approaches to managing e-learning programs are possible (Bregar, 2011). The most common shortcomings are: 1) social isolation; 2) participants are in the role of passive recipients of information and only one-way communication can occur; 3) difficult access to media; and 4) the possibility of high dropout (Bračič, 2009).

E-learning, whose main feature is the use of modern ICT, opens new perspectives and opportunities for the acquisition and creation of knowledge for the adult population. The potential opportunities of e-learning depend on the extent to which and how efficiently and effectively technology is integrated into the educational process. The basis for fully realising the potential that modern technology offers for adult education is the concept of integrated e-learning. In order to realise this potential, certain factors that affect the demand and supply of e-learning programs must be met (Bregar, 2008). With e-learning, participants can learn at the time and place that suits them best. Thus, they are not bound to a specific time and geographical location. In this way, educational institutions provide their participants with a form of education that frees them from the physical constraints of the classroom and allows them to organise the time and duration of learning according to their own desires and needs (Ovsenik, 2014).

ICT has become an important companion and shaper of our daily lives over the last two decades. This technology, especially the internet, affects how we organise our work, how we spend our leisure time, how we make personal and other contacts, how we inform ourselves as consumers, citizens, and users of public services, and what tools and resources we use in the workplace and in education. ICT is undeniably changing the way people work and live in the 21st century, both in the developed and less developed world (Bregar, 2011). The fact that it will no longer be possible to practice an educational profession in the 21st century without the skills of ICT technology in education was predicted by various experts, designers, and planners of educational policy, but that it will play such an important role that without it we will not be able to carry out the educational process at all was not ever suspected. During the Covid-19 pandemic, an unimaginably complex scenario emerged that challenged even the most prepared, experienced, and stable teachers. Today, more than ever, teachers need to be prepared and trained to be effective in any circumstance, so it is important that teacher education and training opportunities are

adapted to current needs. Future teachers will need many new skills, and it remains important to use distance, hybrid, and blended learning models, regardless of the pandemic (Darling-Hamond & Hyler, 2020).

Quality education based on the principle of lifelong learning, which goes beyond the traditional division between initial and continuing education, is linked to the principle of a learning society, where everything can enable learning and the holistic development of individual talents. Within the framework of the European Employment Strategy, the European Commission and its members have defined lifelong learning as a deliberate learning activity aimed at improving knowledge, skills, and abilities. Lifelong learning is no longer just an aspect of education and training but must become a guiding principle for the provision of and participation in the entire continuum of learning. All people living in Europe should have equal opportunities to adapt to the demands of social and economic life and to participate actively in shaping Europe's future, according to the Memorandum on Lifelong Learning (2000). Education, in the broadest sense of the word, is understood as a process of acquiring and developing an individual's knowledge and skills and perfecting his or her existing knowledge (Brejc, 2000). Education professionals are lifelong learners: they constantly seek and create new ways of learning and acquiring new knowledge and are the designers of the educational process and participants in the learning process (Symeonidis, 2018). The paradigm of a good teacher has evolved from a teacher who teaches well to a teacher who promotes learning well (Marentič Požarnik, 2000, p. 9). At the same time, creating a culture of learning becomes one of the central tasks of a successful school (Fullan, 2000; Javrh, 2007).

A 21st-century school requires teachers who are confident in their teaching and willing to innovate, as well as strong leaders who create the conditions in their schools so that the first two components can be implemented (Schleicher, 2019). Therefore, it is important that teachers have a variety of opportunities to develop their professional knowledge to improve the quality of learning and teaching, because teachers who are involved in diverse professional learning communities perform better professionally: they nurture students and provide high-quality learning experiences that enable students to reach their potential (Krapše et al., 2019). Teachers' professional development occurs in a variety of ways: Through observation, collaborative planning for the implementation of learning, and the sharing of pedagogical practices, teachers guide their professional actions based on the results of the inquiry into their own practice (Hargreaves

& O'Connor, 2017). Learning occurs both formally and informally, in groups or individually. Regardless of the type of learning, professional learning is collaborative and planned. Teamwork, experience, and learning are among the most effective approaches to improving educational practice in schools. Teachers manage their professional activities based on the results of the inquiry into their own practice through observation, collaborative planning, and sharing of pedagogical practices (Krapše et al., 2019).

Among the basic competencies/skills that are much more necessary today than in the past for a person who wants to actively participate in the knowledge society and economy, there are also some new skills/competencies that need to be acquired, such as digital literacy and foreign language skills. Social skills are also becoming increasingly important in the knowledge society, as people are expected to be more autonomous, tolerant, and cooperative than in the past. Among the basic skills that everyone should possess are the ability and willingness to learn: to learn to adapt, to process a wide range of information, and at the same time to have the ability and willingness to quickly acquire new skills and adapt to new challenges and situations. At the same time, member states commit to bringing lifelong learning opportunities as close as possible to people (local approach), supporting them with ICT when needed, and ensuring partnership. Such partnerships include social and professional partners and practitioners (schools, kindergartens, other educational institutions, local communities, employers, e.g., various ministries) and ensure the translation of lifelong learning into practice (Devjak & Polak, 2007; Hajisoteriou et al., 2019; Darling-Hamond & Hyler, 2020). In the analysis prepared by Eurydice (2003), in addition to the 'classic specific competencies' that refer only to working with students or to learning and teaching, we also find competencies that emphasise the changed and new role of the teacher in today's and tomorrow's society. These include teaching with modern educational technologies, integrating children with special needs, working with groups of children from different backgrounds, including multiculturally mixed groups, school management and various administrative tasks, and conflict management.

In-service teacher training plays an important role in the acquisition of new skills and knowledge. In-service teacher training, as a form of lifelong learning, offers teachers the opportunity to renew, supplement and deepen their knowledge, to familiarise themselves with the innovations of the profession or, with the help of pedagogical-andragogical training,

to acquire a license to practice the pedagogical profession if they have previously graduated from a faculty without pedagogical subjects. Thus, the basic goal of continuing education and training is professional development and personal growth, which also increases the quality and efficiency of the entire educational system (Devjak, 2005). Professionalism as a multidimensional concept requires knowledge, skills, the development of professional identity characteristics, and the internationalisation of the values and norms of the profession (Možina, 2003). Professionals in education are expected to continue their education (legally/formally), publish the results of their work (advancement to professional titles), conduct and/or participate in research, implement projects, and improve practice (and thus influence theory). Starc (2014) notes that professionals are knowledge workers in their organisations, characterised by a combination of autonomy and responsibility. They represent the thinking capital in their organisations as their active knowledge is regularly improved through their education, learning, and lifelong learning process. It defines them as carriers and producers of knowledge.

If we understand continuing education and training as part of lifelong learning that enables personal and professional development, then this education has changed radically since March 2020, when we were confronted with the Covid-19 pandemic. We found ourselves in an unfamiliar situation, as all educational institutions were closed, and learning and work shifted to the internet. Distance learning tools and platforms have improved in recent years and are becoming increasingly popular, but online learning is still overshadowed by face-to-face contact with teachers. Distance education certainly contributes to a higher quality of learning and teaching at all levels of society and, therefore, to the development of an innovative, competitive, and knowledge-based society in which everyone has access to knowledge and effective learning and teaching methods. The main goal of distance education is certainly to increase economic growth, the competitiveness of Slovenian society, and ultimately the quality of life of its citizens (Bračič, 2009). Distance education has been widely used in Slovenia since 2020, but there is still ignorance and misunderstanding about it among teachers, as well as prejudices about its quality. Another major obstacle to quality distance education is the lack of professional training of teachers for their new role in the knowledge society. This mainly takes the form of occasional short courses and workshops as part of individual projects, providing the skills and abilities that a 21st-century teacher needs. The Ministry of Education, Science, and Sports has developed recommendations for the implementation of

education in the context of the Covid-19 pandemic. In its recommendations, the Ministry also promises to work with the Educational Research Institute, Arnes, the Center for Professional Education, the School for School Leadership, and the relevant faculties to prepare a series of training sessions for teachers in the digital skills required for distance education. Coordination of the trainings will be located in the Ministry of Science, Education and Sports (Kustec et. al., 2020).

3   Methodology

Teachers are part of a changing work environment in which they are confronted with the diversity of students' learning, educational, and other needs, the complexity of modern social and communicative circumstances, material and didactic complexity, and the interdisciplinarity of learning resources. The aim of the research is to determine how the changes in society affect the kindergarten and elementary school teachers in public kindergartens and schools and headteachers. We are interested in their opinions about what knowledge and skills they have acquired during their studies and how these have affected their professional development and contributed to their perception of their work as less stressful and more successful. We are interested in whether kindergarten and elementary school teachers and headteachers[4] differ in their views and assessments of the importance of certain knowledge and skills to their daily work and tasks and to their work during the Covid-19 pandemic.

Consistent with the aims, we posed the following research questions:

- R1 What knowledge and skills did kindergarten and elementary school teachers acquire during their studies?
- R2 What knowledge and skills did they acquire during their studies that helped them most in their professional work during the Covid-19 pandemic?
- R3 In the opinion of kindergarten and elementary school teachers, what forms of continuing education and professional development support their professional development?
- R4 What knowledge and skills do kindergarten and elementary teachers believe are necessary for successful professional work during the Covid-19 pandemic?

....

4   In this paper, we will mostly use the terms 'teachers' or 'education professionals' for both teachers and headteachers.

We used a descriptive and causal non-experimental method of empirical educational research. The research is based on a sample of kindergarten and elementary school teachers and headteachers in public kindergartens and elementary schools in Slovenia. We designed the questions of the questionnaire in the online tool 1ka.si. The questions in the questionnaire were closed-ended, with a five-point Likert scale, and rating scales, except for the last question, which was open-ended. The data were processed using SPSS and Excel and presented in tables.

Two hundred and seventeen preschool and elementary school teachers and headteachers in randomly selected public kindergartens and elementary schools in Slovenia participated in the study; 8% (N=18) had up to three years of professional experience in education, 9% (N=20) 4–6 years, 32% (N=69) 7–18 years, 24% (N=52) 19–30 years, and 27% (N=58) 31 years or more of professional experience in education. There were 8% (N=17) male and 92% (N=199) female participants in the study, and slightly more elementary school teachers (N=90) than kindergarten teachers (N=74).

3.1 Knowledge and skills acquired by education professionals during their studies

In the first research question, we were interested in the knowledge and skills that education professionals acquired during their studies (R1). Respondents were asked to indicate the extent to which they acquired or developed the listed skills and knowledge during their studies (I did not develop / I developed somewhat / I developed noticeably / I developed noticeably / I cannot decide).

Table 1: *Skills and knowledge acquired or developed during studies*

Skills and knowledge	Field	N	M	std. d.	α	t	g
Specific professional (subject) knowledge	school	90	3.33	0.703	0.504	0.669	162
	kindergarten	74	3.26	0.760			
Didactic-methodical knowledge	school	90	3.34	0.737	0.157	1.421	161
	kindergarten	73	3.18	0.752			
Psychological and pedagogical knowledge	school	90	3.20	0.810	0.440	-0.774	162
	kindergarten	74	3.30	0.789			

Skills and knowledge	Field	N	M	std. d.	α	t	g
Skills and knowledge in communication with children	school	90	2.88	0.910	0.096	-1.674	162
	kindergarten	74	3.12	0.95			
Skills and knowledge in communication with parents	school	90	2.32	1.047	0.002	-3.172	162
	kindergarten	74	2.85	1.081			
Planning the pedagogical work	school	89	3.28	0.826	0.077	1.778	161
	kindergarten	74	3.04	0.898			
Scientific-critical thinking	school	90	2.94	0.798	0.255*	1.143	141.159
	kindergarten	74	2.78	0.969			
Teamwork skills and knowledge	school	89	2.96	0.952	0.203	1.279	160
	kindergarten	73	2.75	1.051			
Area of learning strategies and habits	school	90	2.98	0.793	0.895	0.132	162
	kindergarten	74	2.96	0.985			
Skills in searching for professional literature	school	90	3.28	0.735	0.874	-0.159	162
	kindergarten	74	3.30	0.840			
Skills and knowledge of ICT technology	school	90	2.60	1.120	0.033	-2.152	162
	kindergarten	74	2.97	1.085			
Reflection on your work and the work of others	school	90	2.83	0.824	0.901	-0.124	162
	kindergarten	74	2,85	1,029			

* Approximate test used because the condition of homogeneity of variances (Levene's test) was not met.

Most respondents indicated that they acquired mainly subject-specific knowledge (school M = 3.33 and kindergarten M = 3.26) and didactic-methodological knowledge (school M = 3.34 and kindergarten M = 3.18). Learning strategies and habits (school M = 2.98 and kindergarten M = 2.96) and skills and knowledge of ICT technology (school M = 2.60 and kindergarten M = 2.97) were rated low. The difference between school and kindergarten teachers is evident in skills and knowledge, and communication with parents, with preschool teachers rating these higher than school teachers did (α = 0.002). According to the report of the European Commission Expert Group, the most important teacher competencies are competence for new ways of working in the classroom, competence

for new tasks when working outside the classroom, ability to develop new skills and knowledge in students, developing professionalism, and using ICT (Eurydice, 2003). All of them relate to the situation educators found themselves in during the Covid-19 pandemic. These appeared among the competencies that respondents felt were poorly developed during their studies. However, it is important to recognise that education professionals are lifelong learners who must constantly seek and create new ways of learning in order to acquire new knowledge, whether they are faced with a pandemic or 'normal' life circumstances. Creating a culture of learning is one of the central tasks of a successful school and kindergarten (Fullan, 2000).

3.2   *The influence of knowledge and skills acquired during studies on the professional work of professionals in education during the Covid-19 pandemic*

For the second research question (R2), we were interested in the impact of the knowledge and skills acquired during their studies on their professional development or how these skills helped them in their professional work during the Covid-19 pandemic. Respondents were asked to indicate the extent to which the listed knowledge and skills helped them in their professional work (from 1 (not at all) to 5 (very helpful)).

Table 2: *Skills and knowledge that are helpful in the professional work of professionals in education (rated from 1 (not at all) to 5 (very helpful)*

Skills and knowledge	Field	N	M	std. d.	α	t	g
Specific professional (subject) knowledge	school	81	4.28	0.746	0.086	1.731	151
	kindergarten	72	4.06	0.886			
Didactic-methodical knowledge	school	81	4.27	0.822	0.490	0.692	152
	kindergarten	73	4.18	0.855			
Psychological and pedagogical knowledge	school	81	4.21	0.802	0.238	-1.185	152
	kindergarten	73	4.37	0.874			
Skills and knowledge in communication with children	school	81	3.80	1.123	0.092	-1.694	152
	kindergarten	73	4.10	1.016			

Skills and knowledge	Field	N	M	std. d.	α	t	g
Skills and knowledge in communication with parents	school	81	4.10	0.875	0.356	-0.927	152
	kindergarten	73	4.23	0.921			
Planning the pedagogical work	school	80	3.66	1.006	0.573	-0.565	151
	kindergarten	73	3.75	0.983			
Scientific-critical thinking	school	81	4.02	0.961	0.483	-0.704	152
	kindergarten	73	4.14	1.018			
Teamwork skills and knowledge	school	81	3.94	0.927	0.746	0.324	151
	kindergarten	72	3.89	0.958			
Area of learning strategies and habits	school	80	3.90	0.963	0.699*	-0.387	149.834
	kindergarten	72	3.96	0.895			
Skills in searching for professional literature	school	81	4.02	1.172	0.494	0.686	152
	kindergarten	73	3.90	0.988			
Skills and knowledge of ICT technology	school	81	3.83	0.891	0.274	-1.098	152
	kindergarten	73	3.99	0.905			

* Approximate test used because the condition of homogeneity of variances (Levene's test) was not met.

The results indicate, without statistically significant differences, that all skills and knowledge are important for the quality of teachers' work; all of these were very important during the pandemic and remote learning and teaching. The most important are didactic-methodological knowledge (school M=4.27 and preschool M=4.18), specific professional (subject) knowledge (school M=4.28 and kindergarten M=4.06), psychological and pedagogical knowledge (school M=4.21 and kindergarten M=4.37), skills and knowledge in communication with parents (school M=4.10 and kindergarten M=4.23) and scientific-critical thinking (school M=4.02 and kindergarten M=4.14). We agree that the knowledge that the respondents ranked as most important and that this knowledge helped them in the implementation of distance education, but we would like to point out that the area of learning strategies and habits, as well as skills and knowledge of ICT technology, are also essential if we want to take full advantage of distance education. According to Kodelja (2020, p. 13), 'all the possibilities offered by modern information and communication technology are not yet used in distance education due to objective and subjective circumstances'. Teacher education plays a significant role in gaining new

skills and knowledge, meaning in the professional development of teachers, as it provides the opportunity to renew and deepen their knowledge and to become familiar with the innovations of the profession (Devjak, 2005). It is important for teachers to feel competent, which refers to their desire to contribute effectively to established goals that are usually related to their professional development, but developing competence requires persistence and effort (Fix et al., 2020, p. 9).

3.3 Forms of teacher training that support teacher's professional development

In the third research question, we asked what forms of teacher education support teachers' professional development (R3). The following table lists formal and non-formal forms of teacher education. Educators responded to the question regarding the extent to which each of the formal and non-formal forms of professional development supported their professional development. Responses were ranked on a rating scale from 1 (not supported) to 5 (strongly supported).

Table 3: *Forms of teachers' training that support teachers' professional development.*

Training, skills, seminars	Field	N	M	std. d.	α	t	g
Formal meetings. conversations in academic school teams	school	79	4.16	0.926	0.028	2.222	129
	kindergarten	52	3.77	1.096			
Informal conversations with professional colleagues	school	79	4.24	0.755	0.110	1.609	129
	kindergarten	52	4.00	0.950			
Writing a diary, personal notes	school	77	3.10	1.353	0.009	-2.657	127
	kindergarten	52	3.73	1.254			
Current content-methodical preparation of the teacher for the lesson	school	78	3.94	0.888	0.077*	-1.789	90.866
	kindergarten	50	4.26	1.065			
Mentoring of students, interns	school	78	3.64	1.651	0.041*	-2.066	121.796
	kindergarten	52	4.19	1.373			

Training, skills, seminars	Field	N	M	std. d.	α	t	g
Internship	school	78	3.69	1.622	0.128	-1.532	127
	kindergarten	51	4.12	1.409			
Collegial observation among pedagogical staff members	school	78	3.73	1.276	0.184	-1.334	127
	kindergarten	51	4.04	1.296			
Headteachers' Classroom visits and observation	school	78	3.19	1.349	0.191	-1.314	126
	kindergarten	50	3.52	1.418			
Supervision	school	78	3.81	1.504	0.712	-0.369	128
	kindergarten	52	3.90	1.376			
Reading reference books, articles	school	79	4.14	0.916	0.745	-0.325	129
	kindergarten	52	4.19	0.908			
Use of new teaching material (teaching aids, workbook, manual)	school	78	4.06	0.827	0.083	-1.750	128
	kindergarten	52	4.33	0.857			
Participation in the presentation of new teaching material (teaching aids, workbook, manual)	school	78	3.83	1.110	0.030	-2.200	126
	kindergarten	50	4.26	1.006			
Systemic change	school	78	3.60	1.630	0.385	-0.872	127
	kindergarten	51	3.86	1.697			
Thematic conferences in the school	school	77	3.86	1.073	0.199	-1.293	125
	kindergarten	50	4.12	1.189			
Professional meetings on a broader level (consultation, symposium)	school	79	3.90	1.267	0.168	-1.387	129
	kindergarten	52	4.21	1.258			
Author's contribution at a professional meeting (participation in a conference, symposium with presentation of own work, an article)	school	76	3.95	1.505	0.069	-1.836	123
	kindergarten	49	4.43	1.307			

Training, skills, seminars	Field	N	M	std. d.	α	t	g
Chairing study meetings	school	78	3.82	1.657	0.060	-1.895	128
	kindergarten	52	4.35	1.370			
Networking of schools, e.g., study groups	school	78	3.50	1.307	0.147	-1.457	128
	kindergarten	52	3.83	1.167			
Participation in action research, innovation project	school	79	3.73	1.456	0.112	-1.600	129
	kindergarten	52	4.13	1.314			
Participation in projects within the school	school	78	3.47	1.159	0.008	-2.677	127
	kindergarten	51	4.02	1.086			
Workshops	school	79	3.67	1.022	0.008	-2.710	129
	kindergarten	52	4.17	1.061			
Further education and training courses	school	78	3.76	1.397	0.074	-1.804	126
	kindergarten	50	4.18	1.119			
Compulsory seminars for school staff	school	79	3.59	1.104	0.180	-1.347	129
	kindergarten	52	3.87	1.155			
Other professional (evaluated) seminars - courses	school	79	3.68	1.069	0.150	-1.448	129
	kindergarten	52	3.96	1.084			
Undergraduate Studies	school	76	4.05	1.773	0.164*	-1.400	121-859
	kindergarten	50	4.44	1.327			
Postgraduate studies (part-time)	school	77	3.90	1.818	0.031*	-2.186	121.630
	kindergarten	50	4.52	1.389			
Other:	school	7	4.14	1.676	0.856	0.186	12
	kindergarten	7	4.00	1.155			

* Approximate test used because the condition of homogeneity of variances (Levene's test) was not met.

The highest-rated forms were undergraduate studies (school M = 4.05 and kindergarten M = 4.44), use of new teaching materials (teaching aids, workbook, manual) (school M = 4.06 and kindergarten M = 4.33), informal conversations with colleagues (school M = 4.24 and kindergarten M = 4.00). The lowest rated forms were school-based networks, e.g., study groups (school M = 3.50 and kindergarten M = 3.83), supervision (school M = 3.81 and kindergarten M = 3.90), and headteachers classroom visits and observation (school M = 3.19 and kindergarten M = 3.52). Statistically significant differences were seen in formal meetings and conversations in

schools (α = 0.028), with professionals in schools (M = 4.16) having a statistically significantly higher rate for this form than professionals in kindergartens. The same was also seen for writing a diary and personal notes (α = 0.009), with professionals in schools having a statistically significantly higher rate (M = 3.73) than professionals in kindergartens (M = 3.10). The same applies to the presentation of new teaching materials (teaching aids, workbook, manual) (α = 0.030), participation in in-school projects (α = 0.008), workshops (α = 0.008), and in-service training sessions (α = 0.031). Marioni, Land, and Jensen (2020) point out that distance teaching and learning require a different pedagogy. As teachers had to follow the prescribed curriculum, they also had to make certain adaptations. They used knowledge, skills, and competences acquired in formal and informal forms of teacher education. It is the use of formal and informal learning opportunities that deepens and broadens teachers' professional competence, including knowledge, beliefs, motivation, and self-regulation skills (Richter et al., 2014, p. 98). The authors also point out that teaching careers can be divided into phases that have different implications for participation in professional development. They state that new teachers are more likely to use observations and informal conversations with colleagues, while more experienced teachers are more likely to use formal meetings for their professional learning (p. 98). Formal meetings, conversations within academic school teams and informal conversations with professional colleagues were also highly valued by the respondents in our study.

Elementary school teachers, kindergarten teachers, and principals also responded to the question of whether the SARS-CoV-2 epidemic (Covid-19) and related measures affected their work in 2020 (R4). Most respondents, 47% (N=75), answered 'yes, in a negative way'; 28% (N=44) answered 'yes, in a positive way'; 8% (N=12) responded that it had 'no influence', and 17% (N=27) responded that they 'could not decide'.

In light of the pandemic and all the changes it has brought to education, we asked teachers and principals to tell us what knowledge, skills, and/or abilities they believe are necessary for an educator's successful professional work in addition to those listed and covered in the questionnaire and had not been adequately addressed in curricula or professional development programs.

Elementary teachers mentioned these:
- Flexibility,
- Examples of best practices,

- Hands-on student work,
- Working with parents, including psychological support for parents,
- Working with students on behaviour problems, including psychological support for students,
- Knowledge in the field of ICT,
- Work-life balance,
- Didactic approaches to distance work.

Kindergarten referred to:
- Flexibility and adaptability,
- Communication with parents and children (adapted due to the epidemic),
- Knowledge in the field of ICT,
- Psychological knowledge.

School and kindergarten directors cited:
- Empathy and decency to empathise with the families' life situation.
- Psychosocial support for children and parents.

We found that the terms 'empathy', 'psychological help', and 'ability to empathise with families' life situations' appear in all three profiles. Knowledge in the area of ICT also occurs frequently.

4   Conclusion

The research has shown that, according to the respondents, the skills needed to cope with the new educational conditions during the Covid-19 pandemic, such as learning strategies and habits, as well as skills and knowledge in the use of ICT, were not developed during the studies to the same extent as specific professional and didactic-methodological knowledge were. Although no one can argue that this knowledge is not important when facing changes in education and is basically a starting point for professional work in education, the fact cannot be hidden that the sudden shift to distance education and teaching has shown that a large part of teachers (including those at the university level) had little or no knowledge about the pedagogy of online teaching (Stainstreet et al., 2021, p. 627). The Talis Report (2018) shows that in Slovenia, on average, only slightly more than half (53%) of teachers reported that 'the use of ICT for teaching' was included in their formal education or training, and only two-thirds of teachers (67%) on average felt prepared to use ICT for teaching after graduation. This means that half of the teachers had no

opportunity to learn about the use of ICT during their studies and that even one-third of the teachers entered their profession without knowing how to use ICT. Although, on average, only 59% of teachers in Slovenia had participated in professional development activities, including learning how to 'use ICT in teaching' in the 12 months prior to the survey, only 8% of teachers indicated that they had a high need for professional development in the area of 'use of ICT in teaching'. This proportion is much lower than the average of 18% for the OECD area. However, respondents are also aware that all skills and knowledge are important for the quality of their work and therefore use various forms of formal and informal teacher training that impacts their professional development. According to the teachers, the forms of training that had the greatest impact on their professional development were informal conversations with colleagues, formal meetings and discussions, reading books and articles, and undergraduate study-all forms that were readily available during the pandemic and likely helped them make the sudden transition from face-to-face to online teaching. Kindergarten teachers, however, decided otherwise. They responded that post-graduate and basic studies, active conference participation, and leading a study session were among the forms that most helped their professional development. Again, we believe that these forms were available to teachers during the pandemic because the kindergartens were closed, and conferences and studies were online and thus more accessible than under 'normal' circumstances. As noted earlier, it is the use of formal and informal learning opportunities that deepens and expands educators' professional competence (Richter et al., 2014, p. 98). The epidemic and the transition to distance education had at least one upside: teachers, students, and parents had the opportunity to learn more about the benefits of ICT than they would have had they not been forced into distance education. As a result, teachers acquired many new skills, changed their views, and probably engaged in more formal and informal teacher training than if they had been teaching under 'normal' circumstances.

References

Bjursell, C. (2020). The COVID-19 pandemic as disjuncture: Lifelong learning in a context of fear. *International Review of Education*, *66*(5–6), 673–689. https://doi.org/10.1007/s11159-020-09863-w

Bračič, S. (2009). Pomen e-izobraževanja za odrasle [The importance of e-learning for adults]. *Andragoška spoznanja*, *15*(2), 29–35.

Bregar, L. (2011). Trendi v e-izobraževanju ter dejavniki uspešnega in učinkovitega vpeljevanja v zobraževanje odraslih v Sloveniji [Trends in e-education and factors of effective and effective induction into adult education in Slovenia]. *Andragoška spoznanja*, *17*(4), 44–59.

Bregar, L. (2008). Uresničevanje potencialov e-izobraževanja v izobraževanju odraslih [the potential of e-learning in adult education]. *Pedagoška obzorja*, *14*(3/4), 8–20.

Brejc, M. (2000). *Ljudje in organizacije v javni upravi People and organisations in public administration*]. University of Ljubljana, Faculty of Public Administration.

Darling-Hammond, L. & Hyler, M. E. (2020). Preparing educators for the time of COVID … and beyond. *European Journal of Teacher Education*, *43*(4), 457–465.

Devjak, T. (2005). Nadaljnje zobraževanje in usposabljanje ter vseživljensko učenje strokovnih delavcev v vzgoji in izobraževanju za razvoj novih kompetenc [Further education and training and lifelong learning of education professionals to develop new competences]. In: Devjak, T. (Ed.), *Partnerstvo fakultete in vzgojno-izobraževalnih zavodov: izobraževanje-praksa-raziskovanje*. University of v Ljubljana, Faculty of Education.

Devjak, T. in Polak, A. (2007*). Nadaljnje izobraževanje in usposabljanje delavcev v vzgoji in izobraževanju* [Further education and training of workers in education]. University of v Ljubljana, Faculty of Education.

Eschenbacher, S. & Fleming, T. (2020). Transformative dimensions of lifelong learning: Mezirow, Rotry and COVID-19. International *Review of Education*, *66*(5–6), 657–672. https://doi.org/10.1007/s11159-020-09859-6

Eurydice (2003). *The teaching professions in Europe: Profile, Trends and Concerns. Report III.* EURYDICE.

Fix, M., Ritzen, H., Kuiper, W., Pieter, J. (2020). Make my day! Teachers' experienced emotions in their pedagogical work with disengaged students. *Journal of Pedagogy*, *11*(2), 5-27. file:///C:/Users/38641/Downloads/10.2478_jped-2020-0009.pdf

Fullan, M. (2000). *Change Forces: Probing the Depths of Educational Reform*. The Falmer Press.

Hargreaves, A. & O'Connor, M. T. (2017). Cultures of professional collaboration: their origins and opponents. *Journal of Professional Capital and Community*, *2*(2), 74–85. https://doi.org/10.1108/JPCC-02-2017-0004

Hajisoteriour, C., Panayiotis, M & Panayiotis, A. (2019). Teacher professional development for improving the intercultural school: an example of a participatory course on stereotypes. *Education Inquiry*, *10*(2), 166–188.

Javrh, P. (2007). Fazni model razvoja kariere slovenskih učiteljev [Phase model of the development of the career of Slovenian teachers]. *Sodobna pedagogika*, *58*(5), 68–86.

Kodelja, Z. (2020). Šolstvo v času pandemije: izobraževanje na daljavo [Pandemic education: distance education]. *Sodobna pedagogika*, *137*(4), 42–56.

Kostelecká, Y., Komárková, T., Novotná, V. (2021). Remote home-based education as a new phenomenon in the time of the covid-19 pandemic - The experience of Czech families. *Jour-*

nal of Pedagogy, *12*(1), 141–164.

Kranjc, A. (1982). *Motivacija za Izobraževanje* [Motivation for education]. Delavska enotnost.

Krapše, T. et. al. (2019). *Profesionalne učenje in delovanje učiteljev* [Professional learning and teacher performance]. School for school leadership.

Kustec, S. et al. (2020). *Vzgoja in izobraževanje v Republiki Sloveniji v razmerah povezanih s covid-19. Modeli in priporočila* [Education in the Republic of Slovenia under covid-19 conditions. Models and recommendations]. Ministry of Education, Science and Sport & National Education Institute & National Institute of Public Health.

Lockee, B. (2020). Designing forward: Instructional Design Considerations for online learning in the COVID-19 context. *Journal of Applied Instructional Design*, *9*(3). https://doi.org/10.51869/93bl

Marentič Požarnik, B. (2000). *Psihologija učenja in pouka* [Psychology of learning and teaching]. Državna založba Slovenije.

Memorandum on Lifelong Learning (2000). Commission of the European Communities.

Možina, T. (2003). *Kakovost v izobraževanju* [Quality in education]. Ljubljana: Slovenian Institute for Adult Education.

Ovsenik, J. (2014). *Možnost uvedbe e-izobraževanja v zavodu za izobraževanje odraslih* [Possibility of introducing e-education in the adult education institution]. Thesis. University of Ljubljana, Faculty of Public Administration.

Rojc, E. & Bahun, D. (2006). *Človeški viri - kapital podjetja* [Human resources – company capital]. Pozoj.

Schleicher, A. (Ed.). (2019). *Preparing teachers and Developing School Leaders for the 21st Century. Lessons from around the world*. OECD.

Stanistreet, P., Elfert, M. & Atcoarena, D. (2020). Education in the age of COVID-19: Understanding the consequences. *International Review of Education*, *66*(5–6), 627–633. https://doi.org/10.1007/s11159-020-09880-9

Svetlik, I. in Zupan, N. (2009). Razvoj menedžementa človeških virov [Development of human resources management]. In Svetlik, I. & Zupan, N. (Ed.). *Menedžent človeških virov* (p. 17–62). Faculty of Social Sciences,.

Symeonidis, V. (2018). *Revisiting the European teacher education area: the transformation of teacher education policies and practices in Europe*. CEPS Journal, *3*(8), 13–34.

Starc, A. (2014). *Profesionalizacija zdravstvene nege za kakovostne zdravstvene storitve* [Professionalisation of nursing for quality health services] (Monograph). University of Ljubljana: Faculty of Health Science.

TALIS (2018). *Zaostajanje Slovenije v uporabi IKT za poučevanje [Slovenia's backing in ICT use for teaching]. TALIS*, OECD Publishing. http://talispei.splet.arnes.si/files/2021/01/Zaostajanje-Slovenije-v-uporabi-IKT-za-poucevanje.pdf

Udaya Sri, K, & Vamsi Krishna, T. V. (2014). E-Learning: technological Development in Teaching for school kids. *International Journal of Computer Science and Information Technologies*, *5*(5), 6124–6126.

Vukovič, G. & Miglič, G. (2006). *Metode usposabljanja kadrov* [Personnel training methods]. Moderna organizacija.

UNESCO (2020). *Exams and assessments in COVID-19 crisis: fairness at the centre*. UNESCO.

Zrnec, A. & Solina, F. (2000). *Učenje na daljavo* [Distance learning]. Elektrotehniški vestnik, *67*(1), 41–46.

PROFESSIONAL SOCIALISATION AND STUDENTS' PERCEPTION OF THE STATUS OF THE PRESCHOOL TEACHING OCCUPATION

Željko Boneta*[1], Petra Ljubičić[2], Vivien Skladany[3]

Abstract

Professional education for the preschool teaching occupation has undergone major changes in the previous fifteen years, but its status in Croatian society has not changed significantly. This paper analyses the connections between the motives for choosing this study program, study mode, and the perception of the preschool teaching occupation by undergraduate students of Early and Preschool Education at the Faculty of Teacher Education, University of Rijeka. The results of a field survey conducted in 2022 reveal the retention of initial enthusiasm among students for whom these studies were the primary option and its encouragement among those for whom it was a backup option, which are indicators of successful professional socialisation during the studies. The idealised image of the profession is a more important motive for enrolling in the studies than the working and market conditions of preschool teachers. Students assess the status of the preschool teaching occupation in Croatian society as mediocre and believe that it should be significantly higher. The participants see the feminisation of the profession as one of the reasons for its low status and believe that the inclusion of men would increase its social status.

Keywords: preschool teaching occupation; students; status; profession

....
1   *Corresponding Author. Faculty of Teacher Education University of Rijeka, Sveučilišna avenija 6, Rijeka, Croatia; zboneta@uniri.hr.
2   Bujska 11, Rijeka, Croatia.
3   DV Bodulić, Krešimira Ćosića 4, Dobropoljana, Otok Pašman, Croatia.

1   Introduction

In the previous fifteen years, the educational professional sociali-sation (PS) required to enter the Croatian preschool teaching occupa-tion (PO) has undergone significant changes. The duration of studies in Early and Preschool Education (EPE) has been extended from two to three years; instead of being professional studies, they are now university studies, and the possibility of studying at the graduate level has also been introduced. However, the significant changes in education moving in the direction of greater PO professionalisation have not led to a significant improvement in its social status. Despite this, the interest in enrolling in EPE studies remains very high. For example, at the Faculty of Teachers of the University of Rijeka (UNIRI) in recent years, there have been eight times more registered candidates than the enrolment quota.

This paper aims to explore the attitudes of EPE students about the occu-pation for which they are receiving an education and the connection of these attitudes with the reasons for enrolment, study mode, and the year of studies. In the theoretical part of the paper, the concept of PS is briefly explained, followed by an analysis of the PO status from a sociological perspective. The empirical part of the paper presents the results of a sur-vey of students' attitudes about the motives for choosing these studies, education, feminisation, and the PO status.

2   Professional socialisation

A prerequisite for entry into most occupations is the possession of a certificate obtained by PS, which confirms that a person has the knowl-edge and technical skills required to perform the work.

> Socialization refers to the processes through which he develops his professional self, with its characteristic values, attitudes, knowledge, and skills, fusing these into a more or less consistent set of disposi-tions which govern his behavior in a wide variety of professional (and extraprofessional) situations. (Merton et al., 1957, p. 287)

Formal educational PS takes place within the defined framework of edu-cational institutions, and one of its outcomes is the construction of a pro-fessional identity. 'Professional socialization then involves the intended and unintended consequences of an educational program as the student shifts from prior reference groups to professional reference groups and

develops a relationship to the values, norms, and culture of that profession' (Miller, 2013, p. 369). The role of significant others is assumed by professors but also mentors in institutions when a part of the educational program is realised through practice.

Choosing a future occupation begins even before enrolling in education. 'Prior socialization refers to childhood or primary socialization and the bearing that early formative experiences have on an individual's development and worldview [...] this phase has direct bearing on professional socialization outcomes' (Miller, 2010, p. 931). In this period, personal desires and the search for desirable reference groups are filtered, and the role of significant others is played by parents and peers. Family norms and values greatly influence the choice of one's professional path. Research finds that caring professions are more often entered by those who 'believe in just society and human good nature' (Lev-Wiesel, 2003, p. 324). For example, students enrol in teacher education studies with 'stereotypical and idealized ideas about the educational process and their role in it, imagining the teaching profession as emancipatory and socially engaged' (Ivković et al., 2018, p. 146). Ivković and colleagues find that the idealised image of the teaching profession and the acceptance of Rousseau's assumption about the natural goodness of children are the two most important motives when enrolling in teacher education studies.

PS is a continuous lifelong process that extends even after the completion of education. With employment, developmental socialisation begins in the new conditions of the institution's specific culture. It should be repeatedly emphasised that the PS process is not a one-way process in which the individual is the object of social forces. 'Students and practitioners are active participants in their socialization and choose to accept or reject elements of the various messages received' (Miller, 2010, p. 932).

3   Professions and semi-professions from a sociological perspective

A more systematic interest of sociologists in the issue of professions began in the first half of the 20th century when the first scientific studies of ranking occupations according to their social status were created. The theoretical framework of these analyses is the trait (taxonomic) approach, which was followed up by sociologists with a structural-functionalist orientation in the middle of the century. The starting thesis of these analyses is that there are differences in the quantity and quality of

characteristics (attributes) between occupations, on the basis of which it is possible to rank their contribution to the general goals of society. Therefore, we can distinguish between professions, semi-professions, and occupations. Professions are those occupations that have a high social status, and 'incumbents in these occupations usually receive high incomes, exercise job autonomy, and receive deference from the public and those lower in the status hierarchy' (Roos, 2000, p. 2259). These employ professional, qualified persons with certificates who earn a living from their work, which differentiates them from the laymen.

> [The] true difference between a professional and a nonprofessional occupation is not a qualitative but a quantitative one. Strictly speaking, these attributes are not the exclusive monopoly of the professions; nonprofessional occupations also possess them, but to a lesser degree (Greenwood, 1957, p. 46).

The taxonomic approach places all occupations on a continuum between 'pure' professions (e.g., doctor, university professor, scientist) and less attractive occupations with fewer skills resources (e.g., cleaners, guards, farm workers). Elaborating on this idea, Etzioni (1964) introduces the term 'semi-profession' into the analysis, which refers to occupations for which the education period is shorter and which have less autonomy compared to the professions. Most often, these are feminised occupations, and Etzioni cites nurses, teachers, social workers, and librarians as examples. Although he does not state it explicitly, it is clear that PO would also fall into this category. 'The work carried out by the caring professionals is often seen as an extension of work that women are expected to carry out in the domestic sphere, and therefore as work that they can do "naturally"' (Abbott & Meerabeau, 2003, p. 8). Sociologists deal with the analysis of the position of nurses (Abbott & Meerabeau, 2003), social workers (Miller, 2010, 2013) and teachers (Ingersoll & Collins, 2018), and do not show a particular interest in the analysis of PO attributes, which is 'an indirect indicator of its fairly low social status' (Vujičić et al., 2015, p. 51).

3.1   Contribution to social welfare

Functionalism claims that 'those positions convey the best reward, and hence have the highest rank, which (a) have the greatest importance for the society and (b) require the greatest training or talent' (Davis & Moore, 1945, p. 243). Teaching occupations, and thus PO, are quintessentially altruistic because their goal is the well-being of children,

parents, and the community as a whole. Research conducted in Croatia reveals that parents with children enrolled in kindergarten (Skender et al., 2016), preschool teachers (Vujičić et al., 2015), and EPE students (Miljević-Riđički et al., 2013) agree that PO has a vital role in children's lives. Despite this agreement, PO has average compensation and a mediocre status, (not only) in Croatian society, compared to other professions of a similar level of education. Bjelajac and Reić (2006, according to Jukić & Reić-Ercegovac, 2008), as well as Jukić and Reić-Ercegovac (2008), believe that PO is status-wise and materially undervalued, arguing this based on the results of research conducted among students. The students in the study by Jukić and Reić-Ercegovac evaluate the status of PO very critically, as two-thirds of them believe that it is quite bad, a quarter that it is mediocre, and one-tenth that it is better than it used to be.[4] The authors conclude that students share the public's perception that the most desirable preschool teacher traits are warmth and empathy, which they rightly consider an obstacle to the professionalisation of childcare.

Critics of this approach question the general social benefit of 'real' professions, stressing that the privileged social position of occupations is a consequence of their power, meaning lack of power. We should also add that the devalued social position of an occupation is connected with the norms and values of a specific society. For example, the negative reactions to the one-time strike of educational workers in Croatian society pointed to the present underestimating attitude of the public towards the teaching profession, which also applies to PO. 'It seems that the majority of people here believe – including the parents of school children – that quality education can be obtained if not for free then at least cheap (along with low teacher salaries)' (Županov, 1995, p. 190). Županov traces back the beginnings of the underestimation of feminised teaching professions to the deeply rooted patriarchal culture, sexism, and anti-intellectualism. The low PO status is also reflected in colloquial speech and in pejorative phrases about children and kindergarten.[5] Therefore, it is unsurprising that, for part of the public, preschool teachers' knowledge and skills are limited to looking after children, which is a job that can be done by anyone, and which does not require any specialised knowledge.

....

4   The scale used by the authors is not valid, because it includes categories of two different problems. The first is an assessment of the current status, and the second is an assessment of a change in status, because the current status could change for the better or for the worse, and the assessment would still be the same (e.g., bad).

5   In everyday communication between adults, children are a symbol of immaturity ('we're not children'), irresponsibility ('this is no child's play'), and the kindergarten is a place of optional play ('get serious, this is not kindergarten').

3.2   Degree of development of theories and techniques

Greenwood (1957) believes that the most important attribute of a profession is 'superior skill' based on the 'body of theory' that is acquired through education at the university level and is unknown to people outside the profession (laymen). The work of the profession is creative because the acquired theoretical knowledge is applied in new situations. In contrast, to perform an occupation, it is necessary to acquire only practical knowledge without a broader theoretical basis, and the work is routine. The categorisation follows from the distinction between two types of theoretical knowledge: 1) exoteric knowledge common and known to all, and 2) esoteric knowledge known only to some. 'The expression "only professionals can judge professionals" refers to the inability of those without specialized knowledge to evaluate competence' (Hodson & Sullivan, 2008, pp. 262–263). The possession of esoteric knowledge is not a guarantee of high professional status, because societies value them differently temporally and contextually. Some will be treated as extremely significant and others as ridiculous (e.g., astrology). The implicit assumption of this approach is that the longer the period of education, the more esoteric knowledge is acquired, which increases the probability of treating the occupation as a profession.

How long does the education for PO in Croatia last, and do students acquire esoteric knowledge? Until the 1970s, education for PO did not include higher education as a condition of employment. From 1972 to 2007, compulsory education for PO included two-year, then three-year professional studies, which did not permit continuing education at a higher level. Only one year after the introduction of the Bologna Process (2007/2008) did the studies become undergraduate; one year, later the implementation of the graduate level also commenced. The fact that the required level of education for employment in kindergarten is an undergraduate degree proves that PO is still lagging behind 'real professions.'

An important item in the status ranking of faculties is the interest in enrolment and the characteristics of those students who enrol. As already emphasised, the interest in EPE studies is extremely high, which is conditioned by the lack of preschool teachers in the labour market in Croatia, which results in a relatively quick possibility of employment. Two characteristics of students upon enrolment are important for the ranking of faculties: high school success and the cultural capital of their parents. In the research by Puzić et al. (2021), carried out on a sample of students at

the University of Zagreb, the Faculty of Teacher Education is placed in the category of moderately low-status faculties, because the parents of the majority of students have a completed high school education. High-status faculties are the faculties of medicine, architecture, and dentistry, because most of the parents have obtained a university education. These faculties are also at the top of the ranking list according to the average grades of freshmen enrolled in 2021 in Croatia, while faculties of teacher education are usually in the middle of that list.[6]

During their education, EPE students, in addition to methodical skills, acquire interdisciplinary theoretical knowledge from many specialised areas of science (e.g., EPE pedagogy, developmental psychology, sociology of childhood, etc.), which undoubtedly belong to specialised knowledge. Katz (1987) and Šporer (1990) state that most practitioners acquire much more knowledge during their education than they use in their work. Preschool teachers themselves, due to the perception of their work as an altruistic mission and the idea that children are their primary clients (Katz, 1987; Miljević-Riđički et al., 2013), emphasise the emotional and neglect the esoteric aspect of their work. That PO is perceived as an emotional occupation is also evident from the title attached to the employees. The title and symbol of a profession is the foundation of its recognition by the community and the creation of its authority (Šporer, 1990). Instead of recognition through the title of bachelor's degree or master's degree in EPE, the usual term for a teacher in Croatia is 'teta' (Eng. *aunt*), 'which implies empathy and altruism but simultaneously does not associate to specialized expertise' (Vujičić et al., 2015, p. 56). A simplistic reduction of PO to an emotional dimension contributes to diminishing the idea of its social significance.

3.3   *Autonomy and monopoly*

The professional authority and autonomy of a profession are based on specialised knowledge acquired through education. By granting accreditation, society formally ensures a monopoly of the profession in its field. Autonomy and monopoly provide professional associations with control over 'their domain' and enable them to sanction laypeople who enter it without authorisation. The autonomy of a profession is manifested through the authority it has 1) in relation to clients and 2) other professions.

6   Students of the Faculty of Teachers in Rijeka were the best placed (66th place out of 170 higher education institutions) and had the the highest grade average (4.05), while the lowest placed were students of the Department of Teacher Education in Gospić, University in Zadar (156th place with a 3.60 grade average) (www.srednja.hr).

The question is: Who are PO clients: children, parents, or the community? Katz (1987) claims that most preschool teachers see children as their primary clients, and the public seems to agree. Of course, this has its consequences, because the status of the profession is related to the status of clients, and the status of children as a social group is not high. However, the disjunctive form of the question is wrong; in addition to children, PO clients are also their parents and society as a whole. Although research reveals that parents of children attending kindergarten highly value PO (Skender et al., 2016), 'clients may ignore advice on issues they consider to be beyond the professional's domain' (Hodson & Sullivan, 2008, p. 261). Katz cites the differences in attitudes about the child's care between parents and preschool teachers and the parents' criticism of the preschool teacher's expertise as reasons for undermining the preschool teacher's authority. Scepticism toward and mistrust of professions are general features of late modern society (Evetts, 2009). The questioning of PO authority is also connected with the erosion of the until recently unquestioned traditional patterns of parenting. Due to the lack of clearly defined roles and statuses, young parents have to create their own parenting pattern, which is prompted by increasingly influential social networks, which often contain contradictory advice on parenting that may conflict with the work of preschool teachers.

Authority in relation to other professions is reflected in the profession's ability to act independently, make decisions, and control one's area. PO includes superiors (Professional Council of the Kindergarten) but also a high level of preschool teacher autonomy in the choice of topics and methods of their realisation. It has a significantly worse position with regard to PO monopoly in relation to other professions. Preschool teachers do not have concrete competing occupations in the labour market with which to compete for control of the field of education. The real competition is on the 'grey' market, which cannot be legally controlled: women who look after children and 'grandmother services.' The state could create order here by introducing mandatory kindergarten attendance from an early age, but due to limited material and human resources, it is not realistic to expect such a decision. In fact, the recent decision of the Ministry of Science and Education directly challenges the PO monopoly.[7] The legislator's implicit message is that work with children is identical, regardless

---

7   Due to the lack of preschool teachers and the surplus of schoolteachers on the market, amendments were made to the Preschool Education Act (May 17, 2022), which made it possible for teachers to enter PO. The condition is that within two years from the day of starting the employment relationship, they acquire the qualification of a preschool teacher.

of their age, which speaks of the non-recognition of esoteric knowledge in the field of education even by the ministry itself. The autonomy and monopoly of the profession also refer to the entry ban of those who do not have the necessary education or the removal from it of those who do not adhere to professional ethics.

3.4 Degree of development of professional ethics

The Ethical Code guarantees that the profession will not abuse the monopoly and act against the public interest, and, in this way, relations with clients and colleagues are regulated. 'Each profession develops its own subculture, a variant of the professional culture […] consists of its values, norms, and symbols' (Greenwood, 1957, p. 52). Professional culture is developed and adopted in a network of formal and informal organisations and groups and begins with university education. 'The values of a professional group in that sense mark the basic beliefs shared by its members, norms include behavioral instructions for specific situations, while symbols encompass different markings, emblems, characteristic clothing and uniforms, history, specific jargon, stereotypes, etc.' (Čavar, 2021, p. 85). Acquiring professional culture during education and traineeship enables novices to adjust to the profession and to be accepted by established professionals (Hodson & Sullivan, 2008).

The Ethical Code of PO should provide an answer to problems that arise when working with children, parents, and colleagues. 'Real professions' are characterised by a distant relationship with clients, in accordance with Weber's maxim *sine ira et studio*. Equal access to all children and parents, without any preferences, is one of the aspects of professional distance that preschool teachers can achieve relatively easily. However, the second level of this relationship, which includes emotional indifference, goes against the very essence of care and PO. Children have a need for closeness and tenderness even when preschool teachers try to keep their distance. Katz believes that the optimal distance for a preschool teacher should be responsible and compassionate, at the same time including objective judgment and the use of knowledge in response to the child's needs.

At the end of the 1960s, criticism of the taxonomic approach grew louder. Sociologists of the interactionist orientation criticised it for being static and neglecting the process in which occupations become professions. The key question is how the monopoly of a particular profession is constituted and how it acquires a high social status. The key is not that professions possess

attributes, but that they 'have the power to convince the public that they do' (Roos, 2000, p. 2261). A profession is 'an occupation which has assumed a dominant position in a division of labor, so that it gains control over the determination of the substance of its own work' (Freidson, 1970, according to Čavar, 2021, p. 86). The neo-Weberian approach considers the thesis about the altruism of 'real' professions as an ideological disguise that mystifies their social role, with the aim of maintaining privileges and high status in society. Runte criticises this approach for not defining how long the education for the 'real profession' should last but rather starts from the education of doctors as a frame of reference. He is also critical of 'particular reforms within their occupation to bring it closer to some supposed professional standard […] Does the increasing length of training in an occupation like teaching indicate its growing equality with medicine and law, or merely credential inflation?' (Runte, 1995, p. 3).

3.5   *Process of feminising professions*

It is difficult to determine if the semi-professional organisation have taken the form they have because of the high percentage of female employees or if they recruit females because of organisational reasons; in all likelihood, these factors support each other. (Etzioni, 1964, p. 89)

Feminist criticism emphasises the role of gender inequality in the process of professional conquest of monopolies and privileges, which is especially important in the analysis of the absolutely feminised PO. 'Although women have begun to gain entry into some of the professions, most professions remain predominantly male' (Roos, 2000, p. 2259). The mechanisms of limiting entry and advancement in occupations, which in the past 'successfully' filtered women, are less successful today but still work. Abbott and Meerabeau (2003) claim that women are directed into teaching professions by early socialisation, because they are perceived as a continuation of the traditional family division of labour.[8] 'These occupational groups were seen as using the "natural" qualities of women, and training as necessary only to permit the full development of these qualities' (Abbott & Meerabeau, 2003, p. 255). Bolton and Muzio (2008) optimistically predict that the mass entry of women into the workplace and new views on the 'soft skills' associated with femininity will lead to

8   Eurostat data indicate a high degree of feminization of teaching in the European Union, because, out of a total of 5.2 million teachers at all levels of education, as many as 72% (3.7 million) are women. PO in Croatia is an example of the absolute feminization of the profession, because in the 2021/2022 school year, out of a total of 14,505 employed educators, as many as 98.9% (14,349) were women (Croatian Bureau of Statistics, 2021).

women and 'women's ways' having a greater impact on the professions of the 21ˢᵗ century.

> The symbolic resource of 'woman' has become the newest source of advantage for contemporary professional projects. Yet, beneath these optimistic assumptions, the comparative experiences of a broad range of professional projects reveal the obstinate persistence of patterns of gendered exclusion, segmentation, and stratification. (Bolton & Muzio, 2008, p. 294).

The authors observe numerous paradoxes in the process of feminisation of certain professions. The first is that the mass entry of women into the profession still makes it difficult to change its status and even leads to deprofessionalisation, meaning the loss of previous privileges. Even more radical is Runte (1995), who claims that the feminised teaching profession is exposed to proletarianisation.[9] The next paradox is that, in predominantly female occupations, such as teaching, men are considered exceptional and valuable and have a better chance of advancement. As the level of teaching increases, the share and influence of women decreases, while the rewards, autonomy, and social status of the profession increase. Bolton and Muzio believe that the greatest paradox is that, without male professionalism, the educational profession will remain a semi-profession, and female teachers (and preschool teachers) will continue to be considered substitute mothers not professionals.

4 Research methodology

4.1 Research aim

This paper aims to determine the students' views on the reasons for choosing EPE studies, professional education, and the status of PO in Croatian society. The analysis problematises the differences in student attitudes with regard to enrolment option, year of studies, study mode, grade average in the previous semester, completed high school, and family socio-demographic characteristics.

---

9 'Sociologists distinguish between "historical proletarianization", which is the shift from self-employment to salaried employment, and "structural proletarianization" which is the subordination of labour to managerial control. Historical proletarianization refers only to the absorption of professionals within capitalist relations of production at a macro level, while structural proletarianization refers to the specific changes in the labour process at the micro level which allow management to exercise effective control over professional labour' (Runte, 1995, p. 8-9).

4.2   *Research hypotheses*

The research was based on the following hypotheses:

H1:   The participant's decision to enrol in EPE studies was more influenced by their idealised image of PO than by pragmatic reasons.

H2:   Students for whom EPE studies were the primary choice are more inclined to an idealised image of PO, while those who enrolled in it due to the impossibility of enrolling in some other desired studies are more inclined to recognise the pragmatic advantages of studies and work.

H3:   Students believe that the current status of PO in Croatian society is low and that it should be higher.

H4:   Senior students are more critical in assessing the status of PO in society than freshmen.

4.3.   *Measuring instruments*

The questionnaire contained five groups of closed-ended questions. The first group explored the motivation for enrolment,[10] the intention to continue studies at the graduate level, and the intention to work in PO. This was followed by variables related to students' attitudes about the required level of education to enter PO and about the demandingness of EPE studies. The third group explored the views on the feminisation of PO. In the fourth group of questions, students assessed the current and desired status of PO in Croatian society. The control variables included sex, enrolment option, year of studies, study mode (full-time or part-time), age, grade average in the previous semester, completed high school education, mother's education level, father's education level, size of the settlement where they grew up, assessment of the family's financial status, and gender (in)equality in the family through the prism of making key decisions.

4.4.   *Data collection and sample description*

The field research was conducted on the entire population of full-time and part-time undergraduate EPE students at the Faculty of Teacher Education, University of Rijeka, in May 2022. All students present at the class at the time of the survey were surveyed, so the sample included three-quarters (N=152) of the EPE student population. The data were

---

10   Items were taken from the research conducted by Ivković et al. (2018) among future teachers and adapted to PO.

processed in the statistical package SPSS 24 at the univariate and bivariate analysis levels.[11]

Table 1. Sample characteristics[12]

Sex		Age	M=24.47
Female	98.6%	19–23 years	68.2%
Male	1.4%	24–30 years	12.8%
Study mode		31–50 years	18.9%
Full-time student	66.2%	**Year of studies**	
Part-time student	33.8%	First	29.1%
Completed high school		Second	37.2%
Grammar school	52.0%	Third	33.8%
Vocational school	46.6%	**Size of childhood place of residence**	
Grade average	M=4.05	Up to 1,000	18.9%
Up to 3.5	8.8%	1,001–10,000	36.5%
3.5–4.49	66.2%	10,001–100,000	21.6%
4.5 and higher	20.9%	100,001 and more	22.3%
Mother's education level		**Father's education level**	
High school	65.5%	High school	71.2%
College degree	12.2%	College degree	13.7%
University degree	21.3%	University degree	14.9%

In the sample (Table 1), there is an absolute dominance of women[13] with a percentage that coincides with the structure of PO employees in Croatia. In terms of the parents' cultural capital, these are moderately low-status studies (Puzić et al., 2018), because two-thirds of mothers and fathers completed their education at the high school level. Therefore, a large part of the participants has a chance to surpass the education level of both parents and thus achieve intergenerational upward educational mobility.

....

11   Spearman's correlation test, Chi-square tests, t-tests, and analysis of the variance were performed. In ANOVA, a test of homogeneity of the variance was performed, the F-ratio was tested, and posthoc multiple comparison tests were performed. The Scheffe test was used in the case of homogeneous variances, and the Tamhanes' T2 test in the case of inhomogeneous variances. Due to spatial restrictions, the statistical values of p in all analyses will be presented with the notation * for $p < 0.05$, ** for $p < 0,01$ and the notation *** for $p < .001$.

12   The table does not show the statistically negligible percentages of participants who did not answer the question, as well as those socio-demographic variables for which the analysis did not establish a statistically significant connection with the dependent variables (distribution of power in the family, assessment of the family's financial status).

13   In the continuation of the text, the term 'students' is used, which should be understood as female students.

Indicative differences between full-time students (FTS) and part-time students (PTS) were also determined, which should be kept in mind when interpreting the data. FTS are on average younger than PTS (21 and 30.5 years, respectively), have a higher grade average (4.14 and 3.88, respectively), twice as many have previously completed high school (63% and 30.8%, respectively), and their parents have obtained, on average, higher levels of education.

5   Results and discussion

5.1   Motives for choosing EPE studies and aspirations

A more successful professional socialisation during studies will be favoured by the fact that the student enrolled in studies they wanted. Therefore, its effect will be more pronounced among students for whom enrolment in EPE studies was the primary choice than among those for whom it was a backup option. Three-quarters of the sample claims that enrolling in EPE studies was their first choice, and almost all students, regardless of the enrolment option, see themselves in OP in the future (Table 2). From the data, it can be concluded that professional education is successful in building the identity of future preschool teachers, because it does not question the initial enthusiasm of those for whom the studies were the primary option and awakens the preschool teachers' Platonic love for those who enrolled in it due to the impossibility of enrolling in the desired studies.

Table 2. Correlation between the variables Enrolment option and 'Do you intend to work in OP' (in%)

		No	Maybe	Definitely	Total
Primary choice.	Row	1.8	5.5	92.7	100.0
	Column	50.0	35.3	80.3	74.3
Backup choice.	Row	5.3	28.9	65.8	100.0
	Column	50.0	64.7	19.7	25.7
Total	Row	2.7	11.5	85.8	100.0
	Column	100.0	100.0	100.0	

χ^2=17.199***; df=2; Cramer's V=.341; r_s=.334

One-third of FTS and only one-twelfth of PTS admit that EPE studies were a backup option for them (r_s=-.289***). Since there is a correlation

between the variables of study mode, age, and previously completed school, EPE was a backup option for one-third of the youngest participants (r_s =-.304***) and one-third of grammar school students (r_s =-.280***). Despite the fact that they did not enrol in the desired faculty, the mentioned categories do not differ from the others when it comes to the intention to work in PO, which also suggests the success of professional socialisation during studies.

Most students, regardless of whether their studies were a primary or backup option, have further educational aspirations. More than one-half of the participants (53.0%) intend to enrol in graduate EPE studies, while one-fifth (20.5%) is undecided, and one-quarter (26.5%) do not have this intention. The absence of differences between the two categories of the enrolment option variable can also be explained in this case as a consequence of successful professional education. Bourdieu's thesis on the intergenerational reproduction of cultural capital was not confirmed, because the relationship between the intention to continue education at the graduate level and the level of education of the parents was not established. The t-test for independent samples (t=2.300*) reveals that grammar school students are more convinced of continuing their education at the graduate level than those who have completed secondary vocational schools. ANOVA (F_{144}=3.545*) reveals that final-year students (i.e., those who will be making a decision soon) on average (M=3.92) are convinced that they will continue their education, while first and second-year students are on average undecided (M< 3.5).

In questioning the motives for enrolling in studies and entering PO, we singled out ten different reasons (Table 3). The participants admitted only for two motives that they had a decisive influence (M>3.5) on their decision to enrol in EPE studies and to pursue PO in the future. The most important motive (i.e., *I love children*) suggests that the majority of students perceive PO as primarily an emotional calling. The second most important motive is the fulfilling nature of PO and the challenges that this work offers, which points to an idealised perception of the profession.

Table 3. Motives for selecting EPE studies and PO (in%)

		1	2	3	4	M	SD
1	I love children	1.4	2.7	17.6	78.4	3.73	.578
2	Creativity and diversity of work	0.0	4.1	27.7	58.2	3.64	.560
3	Possibility of quick employment after graduation	9.5	17.6	37.8	35.1	2.99	.955
4	It is easier to work with children than with adults	12.2	20.9	31.8	35.1	2.90	1.022
5	Preschool teachers have convenient working hours	12.8	25.7	40.5	20.3	2.69	.942
6	It offers the possibility of harmonising work and family obligations	20.3	26.4	36.5	16.2	2.49	.996
7	Workplace security	32.4	27.7	25.0	14.2	2.21	1.0556
8	Significance of the teaching profession in society	33.1	27.7	25.7	13.5	2.20	1.048
9	The studies are not difficult	50.7	25.7	17.6	5.4	1.78	.927
10	It is a well-paid job	57.4	35.8	6.8	0.0	1.49	.623

(1=no influence at all, 2=a little influence; 3=a lot of influence; 4=crucial influence)

Therefore, students enrol in the course believing that PO work is not routine work, meaning that it has the attribute of a profession, because it offers creativity and diversity. This is followed by a pragmatic reason for the possibility of employment after studies, which in the conditions of relatively high youth unemployment has a significant impact on the enrolment decision. A slightly smaller but still important influence was the notion that PO is a less stressful job, because it is easier to work with children than with adults. This is followed by two pragmatic motives whose average values border on the category of significant influence (i.e., perceiving PO as a comfortable job with favourable working hours that enables (women) the harmonisation of work and family obligations). Employment security had a small impact, which is still an abstract category for most students. The importance of PO in society has identical percentages, and the arithmetic mean places both reasons in the domain of low influence (M<2.5). On average, the students' assessment that the studies are not difficult had a weak influence on the choice of studies, which means that students will easily obtain the certificate. Half of the participants completely reject this reason, while almost one-quarter attribute it to a significant influence. The only item whose mean value falls into the category of no influence at all (M<1.5) is the profitability of PO, probably because the participants consider the salary insufficient. The two most important reasons speak in favour of the first hypothesis that

the idealised image of PO has a greater influence on student enrolment than their market position and working conditions.

ANOVA reveals differences in the evaluation of motives with regard to the year of studies. Freshmen differ from the others because[14] they admit a greater influence of pragmatic reasons for enrolment than the others, and the reasons for this would certainly need to be further investigated. Based on the difference between freshmen and seniors, it does not seem reasonable to assume that the importance of pragmatic motives has suddenly increased. The hypothesis that studying corrects one element of the initial idea about PO seems more convincing: from a job that offers quick employment and a lot of free time to a job that fulfils a person with its content. The curriculum emphasises the importance of PO for society, promoting the thesis of an altruistic vocation, which students accept. Studying makes it clearer that defining one's future job as easy leads to diminishing its importance in society.

The second hypothesis was rejected, because no connection was established between the enrolment option and a single motive for choosing the studies. A conclusion about successful developmental socialisation is imposed, which should certainly be further investigated. It seems that students for whom enrolment in these studies was a backup option fit in very quickly and accept PO as an alternative life path.

5.2   Attitudes about professional education

The attitudes of the majority of those surveyed indicate successful acceptance of the new professional role and support for the greater professionalisation of PO. At the same time, there is a noticeable amount of confusion in attitudes about the length of the required education and the monopoly of the profession. From the point of view of PO affirmation, it is worrying that one in ten students does not agree with the statement that PO should have a monopoly in the field of EPE, and as many as one-third are unsure whether it is necessary to complete undergraduate studies to enter PO.

---

14 Twice as many first-year as third-year students emphasise the importance of the influence of the ability to balance work and family obligations in PO ($F_{147}=5.149^*$) and job security ($F_{146}=3.898^*$).

Table 4. Attitudes about preschool teacher education (in%)

	1	2	3	4	5	M	SD
Only people with completed EPE studies should be engaged in the PO.	0.7	2.0	6.8	14.2	76.4	4.64	.757
There should be a secondary school for PO, where the specialisation of preschool teachers would begin and continue at the university level.	14.2	9.5	23.6	20.9	31.3	3.46	1.391
If there was a secondary school for PO, I would not have the need to continue my education at the university level.	52.7	16.2	18.2	7.4	4.7	1.95	1.204

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

Indecisiveness regarding the necessary level of education for entry into PO is reduced by professional socialisation (F_{144}=9.133***). On average, final-year students fully reject the statement about the sufficiency of high school education (M=1.42), while others reject it but are inclined toward the category of indecisiveness (M=2.30). The success in the studies also affects the acceptance of this statement, because those with the lowest grade average are more inclined to accept it than those with the highest grade average (F_{141}=4.485**).

The majority of participants (53.4%) believe that EPE studies are just as difficult as other studies. This is followed by one-third of those who consider it slightly easier than other studies (33.8%), while an equal share (6.1%) considers it significantly easier and slightly more difficult. Therefore, EPE students are not inclined to dramatise the difficulty of their studies; in fact, on average (M=2.61), they tend to consider it somewhat easier than other studies. It is interesting that no differences were found in the assessments of the demands of the studies with regard to the grade average and the previously completed high school education.

5.3   Attitudes about the feminisation of PO

A statistically negligible share of men in PO in Croatia, as well as in the sample, is a clear indicator of the absolute feminisation of the preschool teaching profession. We were interested in the students' views about the gender stereotype according to which PO is suitable for women. The results reveal (Table 5) that the vast majority of participants reject this stereotype.

Table 5. Feminisation of the preschool teaching profession (in%)

	1	2	3	4	5	M	SD
There should be more men in the PO.	0.7	1.4	12.2	23.0	62.8	4.46	.811
An increase in the number of male teachers in PO would increase its social status.	4.7	4.1	25.7	31.1	34.5	3.86	1.086
The PO is undervalued because it is dominated by women.	16.2	6.8	25.7	35.1	16.2	3.28	1.283
It is appropriate to call preschool teachers 'aunt'.	29.7	16.2	27.7	13.5	12.8	2.64	1.371
Female preschool teachers are more competent than male preschool teachers.	54.7	18.9	15.5	9.5	1.4	1.84	1.088
The primary task of preschool teachers is to look after children.	50.0	30.4	14.2	4.1	1.4	1.76	.963
The PO is more appropriate for women than for men.	60.8	13.5	20.3	4.7	0.7	1.71	.991

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

Although the participants are, on average, undecided about the statement that the dominance of women is the cause of the undervaluing of PO, they agree that its status would be increased by the inclusion of men. In general, the participants do not see PO as an extension of the woman's family role, but it should be emphasised that a considerable part of the sample is undecided on these issues. The hypothesis that this is connected with resisting traditional attitudes acquired through primary socialisation with more modern attitudes promoted by professional socialisation should be further investigated. Differences in their acceptance between freshmen and seniors suggest this conclusion (Table 6).

Table 6. Testing differences in attitudes with respect to the year of studies

		N	M	SD	df	F	Posthoc
The PO is more appropriate for women than for men (Scheffe)	First	43	2.05	1.022			
	Second	55	1.53	.900	2	3.752*	1>2
	Third	50	1.62	1.008			
Female preschool teachers are more competent than male preschool teachers (Tamhanes' T2)	First	43	2.30	1.301			
	Second	55	1.62	.933	2	5.936**	1>2.3
	Third	50	1.68	.935			

Although more than half of the freshmen reject the first statement, and a statistically insignificant number supports it (<5%), a significant share of those who are undecided (39.5%) stands out. Among second and third-year students, there are almost three times fewer undecided students, and those with average grades tend to fully reject it (M<1.5). The second statement is accepted by every twentieth second and third-year student, as opposed to every fourth first-year student. The difference between freshman participants and those with longer PS experience suggests that some students begin their university education with gender-stereotyped attitudes, which the 'liberalizing effect of education' (Hello et al., 2004, p. 253) successfully eliminates. It is clear that there is little chance of overcoming the social prejudice about PO as a 'women's job' if future preschool teachers are also prone to it.

The perception of PO as not being overly demanding emotional work was investigated with two additional questions. As expected, the participants on average (M=1.76) do not agree with the statement that the primary task of preschool teachers is to look after children. However, some students have doubts about this statement, as one in twenty agrees with it and one in seven is undecided. Much greater dispersion was expressed regarding the appropriateness of using the term 'aunt' for a preschool teacher. Since the title is one of the symbols of the profession and largely affects the image of the profession in society, self-identification with the term 'aunt' does not contribute to raising the PO status. For more than a quarter of students, the use of the term 'aunt' is acceptable (26.3%), with a similar share of those who are undecided (27.7%). As in the previous statements, attitudes differ with regard to the year of studies (Table 7). The majority of students of all study years reject the statement that the primary task of PO is childcare. However, a third of those surveyed from the first year and a fifth from the second year of studies do not fully reject it, which suggests that some students enter their education with a simplified idea of PO.

Table 7. Testing differences in attitudes with respect to the year of studies

		N	*M*	*SD*	*df*	*F*	*Posthoc*
The primary task of preschool teachers is to look after children (Tamhanes' T2)	First	43	2.16	1.194			
	Second	55	1.80	.869	2	9.048**	1,2>3
	Third	50	1.38	.530			
It is appropriate to call preschool teachers 'aunt' (Tamhanes' T2)	First	43	3.14	1.207			
	Second	55	3.31	1.230	2	44.419**	2>1>3
	Third	50	1.46	.762			

The fact that 98% of the participants in the third year do not agree with this statement speaks in favour of the statement about the effect of PS. This statement is less rejected by those for whom these studies were a backup option, which nevertheless suggests their slightly lower motivation in studies (r_s =.171*).

ANOVA finds statistically significant differences (F_{145}=44.419) in the answers about the appropriateness of using the term 'aunt' for preschool teachers with regard to the year of studies. Students in the final year of undergraduate studies fully rejected it (M=1.46), while the average of the second year of studies came close to acceptance (M=3.31). Despite the two-year exposure to PS, in the second year of studies, the largest share is undecided (40.0%), and there are almost twice as many supporters (38.1%) than opponents (21.8%) of this attitude.

5.4   Current and preferred PO status

Previous research has established that students consider the PO status to be mediocre (Jukić & Reić-Ercegovac, 2008) or bad (Bjelajac & Reić, 2006). Has the students' assessment changed in the past fifteen years? Students should first rank the current PO status and then assess whether it should be higher, equal, or lower than the current one. It is evident from the results (Figure 1) that the majority of students believe that PO is a middle-ranked profession in terms of status (M=2.71), and there are three times more participants who consider the status low than high, which is in accordance with the third hypothesis. The perception of the current status of PO among students does not change, because a very similar distribution of answers was obtained by Bjelajac and Reić (2006, according to Jukić & Reić-Ercegovac, 2008).
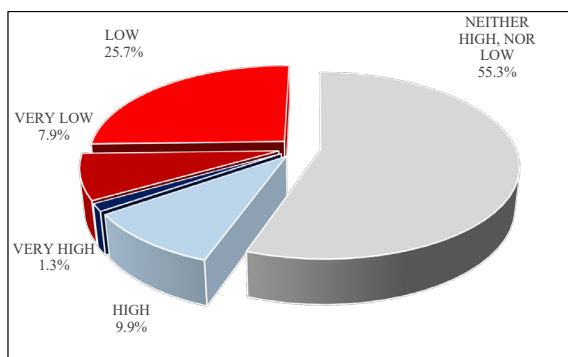
Figure 1. What is the status of PO in Croatian society?

Almost all participants (97.4%) agree that the status should be higher, and none of them thinks that it should be lower, which is in line with the third hypothesis. The t-test found (t=-2.066*) that FTS rate the status even lower (M=2.61) than PTS (M=2.90). This is also reflected in the growth of the status assessment in each older age cohort (Table 8). It is possible that the different assessments of the status of PO are related to the perception of parental cultural capital, which is lower in PTS than in FTS, so their assessment is influenced by the knowledge that by the end of their studies, most of them will achieve a higher status than their parents. Another reason could be a more realistic perception of one's current PTS status in relation to FTS, which is related to age and life experience.

Table 8. Testing the differences in the ranking of the current PO status

		N	M	SD	df	F	Posthoc
Current social status of PO (Tamhanes' T2)	First	43	2.67	.892			
	Second	55	2.98	.707	2	3.882**	2>3
	Third	50	2.44	.760			
Current social status of PO (Scheffe)	1.19-23	101	2.59	.751			
	2.21-30	19	2.74	.933	2	4.625**	1<3
	3.31-50	28	3.11	.832			

From the position of (mostly) completed secondary vocational school, which currently only provides them with employment opportunities that are at the bottom of the social status hierarchy, the completion of PS studies guarantees upward social mobility. ANOVA found differences with regard to the year of studies, which supports the fourth hypothesis, because students in their final year of studies are more critical in their evaluation of the PO status. The probable reason that senior students rate the PO status lower is their entry into kindergarten through methodical practice classes, which is the beginning of familiarisation with the real world of PO. Previous research (Miljević-Riđički, 2013; Vujičić et al., 2015) found that preschool teachers in Croatia consider their social status to be low so that communication with mentors probably affects student assessment.

6   Conclusion

Sociological analyses recognise the dual consequences that changes in late modernity have on the status of certain occupations. An increasing number of occupations have raised the entry level of education,

developed intra-professional specialisations, and emphasised their functional importance for society; in this way, they strive to win a greater amount of social power. In contrast to the process of professionalisation, scepticism towards science and scientific knowledge is spreading, which calls into question the authority of new, but also 'old,' established professions (Evetts, 2009).

In the previous fifteen years, PO has made significant steps in prolonging professional socialisation in Croatia. Although the social status of an occupation is, in principle, related to the duration of PS required to obtain authorisation, changes in the length of education have not led to an increase in the PO status. Postmodern scepticism towards experts, which is built on a deeply rooted traditional patriarchal worldview that reduces education to childcare, results in the underestimation of the specialised knowledge of PO. An additional obstacle to professionalisation is the almost absolute feminisation of PO. Last but not least, professionalisation is also hampered by the practice of some preschool teachers who, in communication with parents, articulate their specialised knowledge insufficiently clearly, and agree that their work is reduced to a superficially understood altruism, most simply expressed by reducing the title to the term 'aunt.' In these circumstances, it is extremely important to gain insight into the perception of PO through the attitudes of EPE students, 'if we assume that professionalization attracts capable recruits to an occupation, fosters their expertise and commitment, and, ultimately, provides assurance to the public of quality service to the public' (Ingersoll & Collins, 2018, p. 211).

This research established that the majority of students enrolled in EPE studies were highly motivated and that, for most of them, these studies were the primary study option. Retention of initial enthusiasm among students for whom EPE studies were the primary option and its encouragement among those for whom it was a backup option are indicators of successful professional socialisation during studies. Students perceive PO as a profession that constantly offers new challenges in its work and whose work cannot be reduced to routine. In addition to the idealised image of the profession, the impact on enrolment, primarily among freshmen, was also influenced by pragmatic reasons of quick employment opportunities and favourable working hours. During their studies, through methodical exercises in the kindergarten and in contact with in-service preschool teachers, students build a more complex image of the profession and are increasingly less inclined to describe PO as an easy profession. With the

advancement into more senior years of studies, the conviction about the functional importance of PO and its undervalued social status grows. Despite the detected relatively low PO status, students' enthusiasm for working in the kindergarten did not subside – quite the opposite. The recognition of the personal and professional mission is evident from the data that the majority of students intend to continue their studies at the graduate level and that very few of them do not see themselves in PO.

We find a greater degree of confusion, and thus less successful professional socialisation, in the attitudes of some students about professional education, the feminisation of PO, and its recognition in the public eye. The consequences of professional socialisation, which tends to professionalise PO, are more visible in the senior years of studies. The weakest link of professional socialisation was determined in relation to the public recognition of preschool teachers in the term 'aunt.' We find the recognition of preschool teachers by the public in a 'title' with an emotional connotation to be a serious obstacle to changing the collective image of PO. The self-identification of preschool teachers in the term 'aunt,' which is present among first- and second-year students, further complicates the process of PO professionalisation.

With this exception, the results lead us to a general conclusion about the success of professional socialisation in EPE studies. Students 'adapt externally to meet requirements of the particular career role and internally in terms of how they understand and conceive of themselves in that role' (Miller, 2013, p. 369). It is reasonable to assume that students, socialised in different family contexts, begin their university education with different values. However, no statistically significant differences were found in the participants' attitudes regarding the socio-demographic characteristics of their families. At the same time, the existence of differences in the perception of PO between students of different years of study was determined. Since the differences decrease with more senior years of studies, it is reasonable to assume that the reason for this is precisely the exposure to educational PS. A real test of this hypothesis will be to conduct a longitudinal study on the current first-year population when they reach their final year of studies. It would also be interesting to investigate whether high student expectations for the future job lead to professional burnout after employment, as observed in research on the professional socialisation of social workers (Lev-Wiesel, 2003).

References

Abbot, P. & Meerabeau L. (2003). *The sociology of the caring professions: Second edition.* Taylor&Francis.

Bolton, S. & Muzio, D. (2008). The paradoxical processes of feminization in the professions: the case of established, aspiring and semi-professions. *Work, Employment and Society*, *22*(2), 281–299. DOI: 10.1177/0950017008089105

Čavar, I. (2021). "The good, the bad, and the ugly" of professions: overview of the theoretical developments in the sociology of professions. *Interdisciplinary Description of Complex Systems, 19*(1), 80-93. DOI: 10.7926/indecs.19.1.7

Davis, K. & Moore, W.E. (1945). Some Principles of Stratification. *American Sociological Review*, *10*(2), 242-249.

Državni zavod za statistiku Republike Hrvatske, (26.3.2021.) Kindergartens and other legal entities https://www.dzs.hr/Hrv_Eng/publication/2021/08-01-01_01_2021.htm

Evetts, J. (2009). The management of professionalism: a contemporary paradox. In S. Gewirtz, P. Mahony, I. Hextall & A. Cribb (eds). *Changing Teacher Professionalism. International trends, challenges and ways forwar* (pp. 18–30). Routledge.

Etzioni, Amitai (1964) *Modern Organizations*. Prentice-Hall.

Eurostat. (2015). *Being young in Europe today*. https://ec.europa.eu/eurostat/documents/3217494/6776245/KS-05-14-031-EN-N.pdf/18bee6f0-c181-457d-ba82-d77b314456b9

Eurostat (2020) *Teachers in the EU*. https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20201005-1

Greenwood Ernest (1957). Attributes of a Profession, *Social Work*, *2*(3), 45–55.

Hello, E., Scheepers, P., Vermulst, A. & Gerris, J.R.M. (2004). Association between Educational Attainments and Ethnic Distance in Young Adults. Socialization by Schools or Parents? Acta Sociologica, 47(3): 253–275. https://doi.org/10.1177/0001699304046222

Hodson, T., Sullivan A. (2008). *The Social Organization of Work*. Belmont, Thompson, Wadsworth Publishing.

Ingersoll, R. & Collins, G. J. (2018). The Status of Teaching Profession. Schools and Society. In J. Ballantine, J. Spade, and J. Stuber (eds.), *Schools and Society: A Sociological Approach to Education* (6th Ed., pp. 199–213). Pine Forge Press/Sage Publications.

Ivković, Ž., Boneta, Ž. & Vujičić, L. (2018). Feminizacija učiteljske profesije – motivi studentskog odabira učiteljske profesije. In: Bacalja, R. & Vrsaljko, S. (eds), *Od glagoljaške tradicije do suvremene škole* [From the Glagolitic tradition to the modern school] (pp. 132–150). Zadar, Sveučilište u Zadru, Odjel za izobrazbu učitelja i odgojitelja.

Jukić, T. & Reić-Ercegovac, I. (2008). Zanimanje učitelja i odgajatelja iz perspektive studenata [Profession of teacher and educator from the perspective of students]. *Metodički obzori*, *3*(2), 73-82.

Katz, L. G. (1987). The Nature of Professions: Where Is Early Childhood Education? In L. G. Katz (Ed.), *Current Topics in Early Childhood Education*. (6.5.2012) http://files.eric.ed.gov/fulltext/ED281908.pdf

Lev-Wiesel, R. (2003). Expectations of costs and rewards. *International Social Work*, *46*(3), 323–332. https://doi.org/10.1177/00208728030463006

Merton , R.K., Reader, G.G. & Kendall, P.L. (eds) (1957). *The Student-Physician. Introductory Studies in the Sociology of Medical Education* (pp. 287–293). Cambridge, Massachusetts, Harvard University Press.

Miller, S.E. (2010). A Conceptual Framework for the Professional Socialization of Social Workers. *Journal of Human Behavior in the Social Environment*, *20*(7), 924–938. DOI: 10.1080/10911351003751934

Miller S.E. (2013). Professional Socialization: A Bridge Between the Explicit and Implicit Curricula. *Journal of Social Work Education*, *49*(3), 368–386. DOI: 10.1080/10437797.2013.796773

Miljević-Riđicki, R., Pahić, T. & Šarić, M. (2013). A Croatian Study of Practitioners' and Kindergarten Teacher Students' Opinions of their Role in Children's Lives. *CEPS Journal*, *3*(2), 51–69. DOI: https://doi.org/10.26529/cepsj.239

Puzić, S., Gregurović, M. & Odak, I. (2021). Horizontalne razlike u visokom obrazovanju u Hrvatskoj [Horizontal differences in higher education in Croatia]. *Revija za socijalnu politiku*, *28*(1), 5-23. Doi: 10.3935/rsp.v28i1.1726

Ross, P. A. (2000). Professions. In: Borgatta, E.F. & Montgomery, R.J.V. (eds.). *Encyclopedia of Sociology*. (Volume 3, pp. 2259–2265). Macmillan Reference.

Runté, R. (1995) Is teaching a profession? In: Taylor, G. & Runté, R. (eds.) *Thinking About Teaching: An Introduction*. Harcourt Brace.

Skender, H., Boneta, Ž. & Ivković, Ž. (2016). Roditeljska percepcija odgajateljske profesije [Parental perception of the educator's profession]. *Dijeete, vrtić, obitelj*, 80/81, 5–7.

Šporer, Ž. (1990). *Sociologija profesija [Sociology profession]*. Zagreb, Sociološko društvo Hrvatske.

Vujičić, L., Boneta, Ž. & Ivković, Ž. (2015). Social Status and Professional Development of Early Childhood and Preschool Teacher Profession: Sociological and Pedagogical Theoretical Frame. *Croatian Journal of Education*, 17(Sp. Ed. 1), 49–60.

Županov, J. (1995) *Poslije potopa* [After the Flood]. Zagreb, Nakladni zavod Globus.

PRESCHOOL TEACHERS' EDUCATIONAL PARADIGM AND THE STRUCTURAL DIMENSIONS OF CULTURE IN INSTITUTIONS OF EARLY AND PRESCHOOL EDUCATION: THE EXPERIENCE OF SLOVENIA

Akvilina Čamber Tambolaš*[1], Lidija Vujičić[2]

Abstract

Preschool culture is not static; it is constantly created and shaped by the interactions of all participants in the educational process. It is mirrored and reflected in the entire institution's atmosphere and organisation. In other words, every organisation has a culture that implies a set of unwritten expectations that shape the institution as a whole. This paper accepts the definitions of the culture of an educational institution by contemporary authors (Schein, Vujičić, Fullan, Petrović-Sočo, and others) along with a theoretical analysis of preschool teachers' educational paradigm. Therefore, this paper aims to provide insight and analysis of the educational paradigm of Slovenian preschool teachers and the way of shaping the structural dimensions of culture in the institutions of early and preschool education in Slovenia (specifically the spatial-material context), taking into account the specificities of early and preschool education in that country.

Keywords: culture of the institution, educational paradigm, preschool teacher, structural dimension

....
1   *Corresponding Author. Faculty of Teacher Education, University of Rijeka, Sveučilišna avenija 6, 51000 Rijeka, Croatia; akvilinact@uniri.hr.
2   Faculty of Teacher Education, University of Rijeka, Sveučilišna avenija 6, 51000 Rijeka, Croatia.

1   Introduction

The educational paradigm consists of preschool teachers' values and beliefs, which, in turn, govern their behaviour and strongly determine how they organise and implement their educational work. Therefore, the improvement of practice and the change of the culture of an institution of early and preschool education will not occur if it is not connected with questioning and changing these beliefs and preschool teachers' overall educational philosophy (Fullan, 2007). For these reasons, the need to create conditions in which preschool teachers will have the opportunity to acquire new knowledge, adapt and change their teaching styles, their educational approach, and frequently modify their fundamental beliefs and values (Schein, 1998; 2004; Prosser, 1999; Stoll, 1999; Hopkins, 2001; Schoen & Teddlie, 2008; Vujičić, 2011). Following this thinking, Fullan (1993) maintains that changing the culture of an educational institution requires changing not only the organisational dimensions of the institution but also going a step further: changing the preschool teacher's way of thinking, meaning raising the quality of their understanding of the educational process (Vujičić, 2007). From all of the above, it is clear that the preschool teacher's educational paradigm, as a set of their personal beliefs, values, and attitudes about the child and the process of their learning, care, and education, largely shapes and determines the entire culture of the institution as a place where children and adults live together (Vujičić & Čamber Tambolaš, 2019). However, it is not enough for only the preschool teachers to change the image of the child; it is vital that this happens at the level of the entire educational community (principal, professional team, parents, technical staff). Based on the understanding of the relationships between employees in an educational institution, how and how often they talk to each other, and how they behave, an understanding of the culture of the educational institution is obtained (Vujičić & Čamber Tambolaš, 2019a).

The quality of the child's environment is given crucial importance due to the understanding that the child in their environment constructs and co-constructs their knowledge in cooperation with other children and adults, which is why the quality of the organisation of the institutional context is vital (Vujičić et al., 2020). The child's social and physical environment has been given special attention in the previous twenty years, meaning that the quality of the institution's context has become increasingly relevant. The primary emphasis is on creating conditions that enable the child to participate in daily life, care, and learning in the institution with others

(Petrović-Sočo, 2009). The importance of the environment has already been emphasised for early-age children, so Miljak (2015) points out that preschools are a place for children and adults to live, play, and learn; they should be a 'children's house', a place of comfort, and a place where children will want to spend time and where it will be interesting to live and learn.

Different, interconnected structures in the institutional context determine the quality of learning conditions and relate to how the space is organised, how many learning materials are offered and whether they are of good quality, what their daily interactions with the child are like, what kind of adult-child interaction they have, how adults talk to each other and what kind of relationship they have, and how the time structure is composed.

Creating a pedagogical environment filled with incentives, challenges, and comfort is considered a very important role of preschool teachers. The environment in the preschool should be organised in such a way that it enables each child to make an independent choice, depending on their competencies and types of intelligence, and encourages diverse activities, ideas, and strategies for solving problem situations that the child will eventually encounter (Gardner, 1993). The learning environment cannot be viewed only as a passive space for carrying out activities; the space should instead become an integral part of learning that helps shape the personality of each child.

Preschool teachers pedagogically shape the space in accordance with what they have learned about the children, while later, the shaping of the space is taken over by the children, who instruct the preschool teacher in line with their interests and what they want to do while they are in the preschool. The child is a 'leader' for the preschool teacher, and the preschool teacher should be aware of the importance of their role in the care and education of children but also of what the preschool teachers offer to the children in the environment because what the children will learn depends on this. The environment directly shows the child what the preschool teacher expects from them, what image they have of the child, and their learning, care, and education (Miljak, 2009). A challenging learning environment allows children to see the world from their perspective, which is why they need to be given time and space for research, experimentation, searching for answers, and correcting what is already known (Vujičić, 2016). In this way, the child, independently and in cooperation with adults, develops an awareness that the truth is revealed by seeking instead of receiving information. The child's environment should be an essential source of learning,

and children should be offered rich, varied, and well-thought-out material, which will invite them to play, encourage them to explore and discover, and solve problem situations, which will enable the child to be independent and autonomous in the learning process. When determining the quality of social interactions between children and between children and adults, it is essential to think about the spatial organisation because the environment should be pleasant and similar to a family atmosphere, regardless of how much time children spend in preschool.

An educational institution has three basic types of structure – physical, organisational, and social (Hargreaves, 1999). Under the physical element of the structure, Hargreaves considers the location of classrooms, the arrangement of rooms, staff, corridors, laboratories, and other premises of the institution. The social elements include the distribution of power, authority, status, and influence of people in the institution. The organisational type of structure refers to the organisation of the preschool teacher's schedule (e.g., work in shifts), the organisation of the time sequence from breakfast, activities leading up to lunch, and beyond. Similarly, Stoll and Fink (2000) consider the structural elements of an institution to be space, time, and the roles and relationships of people in it. Stoll and Fink (2000) see the organisational structure as a general representation: a sketch of desirable patterns of activities, expectations, and exchanges among members of an organisation. Petrović-Sočo (2007) states the socio-pedagogical, physical environment, and time as dimensions of the context of the institution of early and preschool education. Thus, the socio-pedagogical environment, the spatial-material environment, and the temporal organisation of life in the institution become the materialisation of the educational paradigm of the preschool teachers who live and work in that institution. Therefore, Vujičić (2008) points out that when changing elements of culture (i.e., beliefs, attitudes, and values of the members of the institution), one should ask the following questions: What physical, organisational, and social structures lie in the background and reinforce certain aspects of culture? In what ways do structures inhibit the change of culture? What short-term structural changes should be made to encourage changes in culture? What long-term changes need to be made to the structure to support the change once it has occurred?

It is necessary to emphasise that changes (organisational dimensions and preschool teachers' way of thinking) do not happen simultaneously (Vujičić, 2021). These changes take a certain amount of time: some institutions achieve them sooner, while others require more time. The quality

of the educational process is improved based on the changes that have occurred, for example, changes in the space of the educational group and changes in the preschool teachers' ways of thinking. All these changes in the space and preschool teachers' thinking can be modified and adjusted according to the needs of early and preschool-aged children.

2   Methods

2.1   Research aim

The empirical part of this paper is based on the data collected as part of the scientific-research project *Culture of Educational Institutions as a Factor in the (Co)construction of knowledge* (grant number 13.10.2.2.01), Faculty of Teacher Education, University of Rijeka, which lasted from 2013 to 2018. The aim of the broader research was to determine the connection between the different dimensions of the culture of the institution of early and preschool education and preschool teachers' educational paradigm and identify those dimensions of the institution's culture that support preschool teachers' professional development. The research sample consisted of preschool teachers from three countries: Croatia, Serbia, and Slovenia. For the purposes of this paper, we will focus on data obtained from a sample of Slovenian preschool teachers.

Therefore, the specific aim of the research is to provide insight and analysis of the educational paradigm of Slovenian preschool teachers and the shaping of the structural dimensions of culture in institutions of early and preschool education in Slovenia (specifically the spatial and material context), taking into account the specificities of early and preschool education in that country.

2.2   Research tasks

Following the set aim, the following research tasks were formulated:
1.   Gain insight into the educational paradigm of preschool teachers in Slovenia, i.e., their views on various aspects of the educational process, specifically in eight dimensions: the image of the child, understanding of knowledge, understanding of the learning process, understanding of the curriculum aim, method of creating the curriculum, educational strategies, social formation, and perception of the preschool teaching profession.

Gain insight into how preschool teachers in Slovenia shape the structural dimensions of culture in institutions of early and preschool education, specifically the spatial-material environment.

3   Research Methodology

3.1   Data collection

The research was conducted in September 2015 on a random sample of N=167 preschool teachers in Slovenia. The research was carried out using the survey method, by which the preschool teachers were guaranteed anonymity.

3.2   Methods of data processing

The collected data were statistically analysed with SPSS software. Descriptive statistics were used to display the socio-demographic data of the sample, to gain insight into the current way of shaping the spatial-material environment in the institution, and to gain insight into the educational paradigm of the surveyed Slovenian preschool teachers.

3.3   Instrument

For the purpose of data collection, the *Questionnaire for the assessment of the culture of the educational institution* was used, which was constructed for the needs of the research project *Culture of Educational Institutions as a Factor in the (Co)construction of knowledge* at the Faculty of Teacher Education in Rijeka. The Questionnaire consists of three scales: 1) *The scale of the state of preschool culture*, 2) *The scale of preschool teachers' educational paradigm*, and 3) *The scale of preschool teachers' professional development*.

The *scale of the state of preschool culture* was used to determine the current state in the following five dimensions: spatial-material environment, educational work, time organisation of work, relations in the institution, and relations with parents. The participants assessed the degree to which the stated claims relate to practice in the educational institution where they are employed. For the purposes of this paper, items related to the spatial-material environment will be analysed.

The spatial-material environment was examined with the following items:

1.   Free space in the middle of the room is used for activities in which all or most of the children from the educational group participate;
2.   Offered materials are ambiguous and uncertain (that is, when we offer them to children, we do not know what they will do with them, how they will use them, etc.);
3.   Space is organised into activity centres so that the child can choose activities according to his/her interests and needs;
4.   Children can 'circulate' freely throughout the entire preschool (in their room, in the rooms of other educational groups, in corridors, changing areas, etc.);
5.   Space is organised in such a way as to encourage joint encounters and communication among children, especially socialising in smaller groups.

Participants were offered a five-point Likert-type scale on which they had to assess the degree to which the stated statements relate to the educational practice of the kindergarten where they work (1 – *does not apply at all; 2 – mostly does not apply; 3 – neither applies nor does not apply; 4 – mostly applies; 5 – fully applies*).

The *scale of preschool teachers' educational paradigm* was used to examine preschool teachers' views on various aspects of the educational process: the image of the child, understanding of knowledge, understanding of the learning process, understanding of the curriculum aim, method of creating the curriculum, educational strategies, social formation, and perception of the preschool teaching profession and professional development. Since the attitudes on the mentioned aspects reflect the preschool teachers' educational paradigm, items are classified on the *scale of preschool teachers' educational paradigm*. Participants had to express their level of agreement for each statement on a five-point Likert scale (1 – *I fully disagree; 2 – I mostly disagree; 3 – I neither agree nor disagree; 4 – I mostly agree; 5 – I fully agree*). For the purposes of this paper, seven of the mentioned eight dimensions of the educational paradigm were analysed, whereby the dimension *Perception of the preschool teaching profession and professional development* was excluded from the analysis because it is the only one that does not include statements related to direct educational work with children in the preschool.

Items used to examine the image of the child included:
1.   Despite their interest in complex phenomena and concepts (e.g., how an internal combustion engine works, how electricity is

generated, etc.), a preschool-aged child is still too young to truly comprehend them.

2.   Children should be offered the so-called 'dangerous' materials and objects (e.g., hammers, nails, glass objects, etc.) because doing so, they will learn to handle them with care.

3.   Valuable objects (e.g., cameras, microscopes, works of art, etc.) should be given to children only in the presence of a teacher so that they are not destroyed or damaged.

A greater preference for the first and third items indicates a traditional approach to understanding the image of the child, while a greater preference for the second item refers to a modern approach.

Understanding of knowledge includes the following items:

1.   Children's joint free play is the richest source of new knowledge and insights.

2.   If children come to the wrong conclusion in a game or activity, it is the preschool teacher's task to provide the children with the correct answer and not leave them in the dark.

3.   Children should be allowed to find their own truths and theories (even if they are incorrect) through active and direct research and not be taught facts.

A greater preference for the first and third items indicates a modern approach to understanding knowledge, while a greater preference for the second item reflects a traditional approach.

Understanding of the learning process was examined with the following items:

1.   A child learns best in those activities planned and designed for them by the preschool teacher.

2.   or successful learning of more important content (e.g., letters, numbers, scientific phenomena), activities need to be led and directed by the preschool teacher, while the child can learn less important content on their own.

3.   The very process in which the child seeks a solution is more important than the result itself.

4.   The preschool teacher does not need to teach children because they learn best from each other and with each other.

A greater preference for the first and second items indicates a traditional

approach to understanding knowledge, while a greater preference for the third and fourth items refers to a modern approach.

Items used to examine the curriculum aim are:
1. The basic purpose of early and preschool education is to create the best possible conditions for a child's living, raising, and learning 'here and now' and not for some future time.
2. One of the main tasks of preschool is to prepare the child for school.

A greater preference for the first item indicates a modern approach to the understanding of the curriculum aim, while a greater preference for the second item refers to a traditional approach.

Methods of creating the curriculum include the following items:
1. Instead of the preschool teacher precisely planning the activities, children should be allowed to design, plan, and manage their own activities.
2. In order for preschool teachers' educational work to be of high quality, it is necessary to plan it carefully in advance and not to design it 'on the go'.

A greater preference for the first item indicates a modern approach to understanding how the curriculum is created, while a greater preference for the second item refers to a traditional approach.

Educational strategies were examined with the following items:
1. The preschool teacher should always 'keep an eye' on the children because otherwise, the children can be injured or make mischief.
2. In order for children to really learn something, it is important that the preschool teacher teaches them, demonstrates, explains, presents facts, and points to important conclusions.

A greater preference for the above-mentioned items indicates a traditional approach to understanding appropriate educational strategies.

Items used to examine social formation are:
1. Mixed-age educational groups are better for the child because they have the opportunity to communicate with other children with different interests, abilities, and skills in them.
2. It is easier for the preschool teacher to work in same-age groups

because they include children of approximately equal abilities and interests.

A greater preference for the first item indicates a modern approach to understanding social formation, while a greater preference for the second item refers to a traditional approach.

3.4   Sample – socio-demographic characteristics

The research was conducted in 2015 on a random sample of N=167 preschool teachers in Slovenia, 46.1% of whom are from the city of Ljubljana and 53.9% from the city of Koper. The total sample consists of 92.8% female preschool teachers and 1.2% male preschool teachers. The average age of the participants is 44.2 years, ranging from 21 to 62 years. The average length of service is 22.47 years, ranging from a minimum of 1 to a maximum of 41 years. The largest percentage of surveyed preschool teachers has completed secondary school (47.3%), some have a university degree (graduate studies) (29.3%), while the smallest percentage of participants had obtained a college degree (14.4%) (Table 1).

Table 1. Socio-demographic indicators in%

Place of residence		Age *	44.2
Koper	53.9	Min – Max	21-62
Ljubljana	46.1	Education level	
Sex		Secondary education	47.3
Female	92.8	College degree, professional or undergraduate studies	14.4
Male	1.2	University degree (graduate studies)	29.3

* For the age category, the arithmetic mean and the minimum and maximum values of years are shown.

Regarding the desired education level for preschool teachers, 55.7% of participants believe that it is the university, 34.7% of them believe that it is college, and only 5.4% believe that completed secondary education is sufficient. Based on the obtained data, a significant discrepancy can be observed between the current and desired education level of preschool teachers in Slovenia, as the largest percentage of preschool teachers have completed only secondary education (47.3%), while 29.3% have obtained a university degree. However, one specific feature in the organisation of the work of preschool teachers in institutions of early and preschool

education in Slovenia should be noted. Specifically, in recent years, within the system of early and preschool care and education in general, the necessity to involve additional people in the care and education of early and preschool children, who would cover the parts of the work that require help or specialisation, has been recognised. Within the European Union, this need is resolved differently, but in most cases, it is the role of an assistant who, alongside the preschool teacher, participates in the immediate process of care and education, although this is by no means the rule (Blanuša Trošelj, 2012). Unlike in Croatia, where two 'equal' preschool teachers are equally responsible and in charge of direct educational work in the group, in Slovenia, in addition to the preschool teacher, there is an assistant preschool teacher (Slo. *Pomočnik vzgojitelj*), who may also have a bachelor's degree, but not less than a degree obtained from a secondary pedagogical school. They work alongside the preschool teacher and mostly overlap with the preschool teacher during working hours and are involved in direct educational work (Blanuša Trošelj, 2012).

4 Results and discussion

4.1 Spatial-material environment

The *scale of the state of preschool culture* was used to determine the extent to which the statements related to the spatial-material environment refer to the practice of institutions of early and preschool education where the participants from Slovenia work, and they provided their assessments on a five-point Likert scale (*1 – does not apply at all; 2 – mostly does not apply; 3 – neither applies nor does not apply; 4 – mostly applies; 5 – fully applies*).

Table 2 shows the descriptive data of the participants' assessment of the ways and practices of creating the spatial-material environment in the institution where they work. Due to the simpler interpretation of the descriptive indicators of the spatial-material environment, all items contain combined modalities of the answers *does not apply at all* and *mostly does not apply* not and the answers *mostly applies* and *fully applies*.

Table 2. State assessment – spatial-material environment (in%)

State in the kindergarten / Spatial-material environment	Does not apply at all	Mostly does not apply	Neither applies nor does not apply	Mostly applies	Fully applies	n/a	M	sd
1. Space is organised into activity centres so that the child can choose activities according to their interests and needs.	0.6	1.2	3.6	37.1	56.9	0.6	4.49	0.685
2. Free space in the middle of the room is used for activities in which all or most of the children from the educational group participate.	6.6	3.6	12.6	41.3	34.1	1.8	3.95	1.109
3. Space is organised in such a way as to encourage joint encounters and communication among children, especially socialising in smaller groups.	2.4	4.8	21.0	40.1	31.1	0.6	3.93	0.967
4. Children can 'circulate' freely throughout the entire preschool (in their room, in the rooms of other educational groups, in corridors, changing areas, etc.).	32.3	26.3	22.2	13.8	4.8	0.6	2.32	1.201
5. Offered materials are ambiguous and uncertain (that is, when we offer them to children, we do not know what they will do with them, how they will use them, etc.).	45.5	29.9	18.6	4.8	0	1.2	1.82	0.904

As can be seen from Table 2, the organisation of kindergarten space into activity centres in accordance with the interests and needs of children (M =4.49; sd=0.685) stands out as the most common practice of shaping the spatial-material environment in the examined Slovenian preschools, which is also a feature of the modern approach to the organisation of space. As many as 94% of the surveyed preschool teachers declared that such organisation of space mostly or fully corresponds to the practice of

the preschool where they work. However, as a common way of designing space, Slovenian preschool teachers also consider one practice that testifies to the traditional approach to the organisation of space, specifically the existence of free space in the middle of the room for the simultaneous activity of most or all children (M=3.95; sd=1.109). As many as three-fourths of the surveyed preschool teachers (75.4%) assessed that the use of free space in the middle of the room mostly or fully corresponds to the practice of their preschool, which is in contradiction with the answers and results obtained in the previous section, which speaks in favour of an almost 100% organisation of preschool space into activity centres. We can look for a possible explanation precisely in the existence of the teaching hour, whose reconceptualisation and reorganisation are advocated in the Slovenian National Curriculum for Preschool Education (1999). It is possible that the still present practice of organising children's joint activities as part of the teaching hour entails such an organisation of the space that will enable it to run smoothly.

As a frequent practice of space organisation in Slovenian preschools, preschool teachers assess those in which the space is organised in such a way as to encourage joint meetings and communication of children, especially in small groups (M=3.93; sd=0.967), which testifies to the modern approach in the organisation of space. Almost three-fourths of the surveyed preschool teachers (71.2%) assessed that such organisation of space in the institution mostly or fully applies to their kindergarten, 7.2% of them assess that it does not apply at all or mostly to their practice, while one-fifth of them (21%) are undecided in their assessment (neither applies nor does not apply to kindergarten practice).

According to Slovenian preschool teachers, children have relatively little ability to 'circulate' throughout the preschool (rooms of other educational groups, corridors, changing area), which is a feature of the modern approach to the organisation of the preschool (M=2.32; sd=1.201). Specifically, more than half of the surveyed preschool teachers (58.6%) stated that the children in their kindergarten do not have the possibility at all or mostly do not have the possibility to circulate around the space, while less than one-fifth of them (18.6%) observed that such an opportunity exists in their preschool.

Finally, as the rarest practice in shaping the spatial-material environment, Slovenian preschool teachers state offering ambiguous and uncertain materials, for which they are not sure how the children will use them or what

they will do with them (M=1.82; sd=0.904), whereby as many as three-fourths of them (75.4%) stated that such materials are not offered at all or mostly in the preschool where they work. Not offering such materials is mainly a reflection of the cultivation of the traditional image of the child as a small, incompetent being, so it is possible that the obtained results testify to exactly that. The second, even more probable explanation of the results is the possibility that the participants misunderstood the statement, believing that the ambiguous and uncertain nature of the material reflects an insufficient responsibility and competency of preschool teachers in planning and conducting educational work with children.

Summarising the descriptive indicators of all the items of the spatial-material environment from the *scale of the state of preschool culture*, we can conclude that a combination of contemporary and traditional practices permeates the shaping of the spatial-material environment of the preschool. Among modern approaches to the organisation of space, in Slovenian preschools, the organisation of the room into activity centres and the organisation of the entire space of the preschool in a way that encourages joint meetings and communication between children and adults in the institution stands out. In contrast, from the presented descriptive data, some traditional features of the design of the spatial-material environment in Slovenian preschools are clearly visible, such as the use of free space in the middle of the room for the simultaneous activity of all or most of the children, the low possibility of 'circulating' children around the premises of the preschool and a weak supply of ambiguous and uncertain materials.

4.2   *Preschool teachers' educational paradigm*

With the *scale of preschool teachers' educational paradigm*, we tried to determine what image of the child is prevalent among preschool teachers in Slovenia. The participants had to express their level of agreement for each statement on a five-point Likert scale (*1 – I fully disagree; 2 – I mostly disagree; 3 – I neither agree nor disagree; 4 – I mostly agree; 5 – I fully agree*).

Table 3. Preschool teachers' educational paradigm – the image of the child (in%)

Image of the child	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. Valuable objects (e.g., cameras, microscopes, works of art, etc.) should be given to children only in the presence of a teacher so that they are not destroyed or damaged.	5.4	3.6	11.4	41.9	37.1	0.6	4.02	1.061
2. Children should be offered the so-called 'dangerous' materials and objects (e.g., hammers, nails, glass objects, etc.) because doing so they will learn to handle them with care.	1.8	4.8	18.6	40.7	33.5	0.6	4.00	0.92
3. Despite their interest in complex phenomena and concepts (e.g., how an internal combustion engine works, how electricity is generated, etc.), a preschool-aged child is still too young to truly comprehend them.	24.6	33.5	27.5	11.4	2.4	0.6	2.33	1.047

Table 3 shows the descriptive data for the statements used to examine preschool teachers' image of the child as one of the components of their educational paradigm. For a simpler interpretation of the descriptive indicators, in all items, in all the tables that follow, the answers *I fully disagree* and *I mostly disagree* and the answers *I mostly agree* and *I fully agree* are combined.

The participants' greater preference for the first and third items in Table 3 testifies to their traditional view of the child and their abilities, while the greater preference for the second part speaks in favour of the modern image of the child.

As can be seen from Table 3, the surveyed preschool teachers to the greatest extent (M=4.02; sd=1.061) agree with the statement that valuable objects (e.g., cameras, microscopes, works of art, etc.) should be given to

children only in the presence of a teacher so that they are not destroyed or damaged, which speaks of their traditional view of the child. If we look at the distribution of their answers on a five-point scale, we can observe that 79% of them mostly or fully agree with the statement that valuable objects should be given to children only in the presence of preschool teachers, 9% of them do not agree at all or mostly with the statement, while 11.4% of them do not have a firm opinion about it.

Items to which the participants are somewhat less inclined than the previously mentioned item is that children should be offered 'dangerous' materials and objects (e.g., hammers, nails, glass objects, etc.) because doing so they will learn to handle them with care (M=4.00, sd=0.92). The more a participant agrees with the statement, the more they lean toward the modern view of the child and their abilities. Almost three-fourths of the surveyed preschool teachers (74.2%) mostly or fully agree that children should be offered 'dangerous materials' and objects because that way, they will learn to handle them with care, in contrast to 6.6% of preschool teachers who disagree. Somewhat less than one-fifth of the surveyed preschool teachers (18.6%) neither agree nor disagree with the statement that children should be offered the so-called 'dangerous materials'.

The item about the preschool teachers' view of the child to which the preschool teachers are the least inclined that the preschool child is still too young to truly be able to comprehend complex phenomena and concepts (e.g., how electricity is generated) (M=2.33, sd=1.047). Less adherence to this statement also means greater trust in the child and their abilities, which speaks in favour of the preschool teachers' greater adherence to the modern image of the child. More than half of the surveyed preschool teachers (58.1%) do not agree at all or mostly with the statement that a preschool-aged child is too young to be able to comprehend complex concepts such as an internal combustion engine, while a little more than a quarter of the preschool teachers (27.5%) do not have a firm opinion about it. Only 13.8% of preschool teachers fully or mostly disagree with the statement that the child is too young to comprehend complex concepts such as how electricity is generated and similar matters.

Summarising the descriptive indicators of the three items about the preschool teachers' image of the child from the *scale of preschool teachers' educational paradigm*, we can conclude that there is a combination of modern and traditional attitudes about the child and their abilities among the surveyed Slovenian preschool teachers.

After analysing the image that the preschool teachers have of the child, Table 4 follows up below with the way preschool teachers understand knowledge, specifically, whether they consider knowledge to be a personal (co)construction or a reproduction of the learner.

Table 4. Educational paradigm – preschool teachers' understanding of knowledge (in%)

Understanding of knowledge	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. Children should be allowed to find their own truths and theories (even if they are incorrect) through active and direct research and not be taught facts.	0	2.4	7.2	23.4	66.5	0.6	4.55	0.74
2. Children's joint free play is the richest source of new knowledge and insights.	1.2	3.6	26.3	34.1	34.1	0.6	3.97	0.94
3. If children come to the wrong conclusion in a game or activity, it is the preschool teacher's task to provide the children with the correct answer and not leave them in the dark.	4.2	9.0	19.2	31.7	34.7	1.2	3.85	0.129

We conclude that the participants' greater preference for the first and second items in Table 4 testifies to their modern understanding of knowledge as a construction of a person who learns, while a greater preference for the third item testifies to the traditional understanding of knowledge as reproduction.

As can be seen from Table 4, the surveyed preschool teachers to the greatest extent (M=4.55; sd=0.74) agree with the statement that children should be allowed to find their own truths and theories (even if they are incorrect) through active and direct research, and not be taught facts. Such a high degree of agreement with the stated item speaks in favour of the fact that preschool teachers adhere to the modern understanding of knowledge in accordance with the socio-constructivist theory of learning, according to which knowledge is a personal construction. If we

look at the distribution of answers on a five-point scale, we can observe that as many as 89.9% of participants mostly or fully agree with the statement that children should be allowed to come up with their own theories through active and direct research, while only 2.4% of preschool teachers disagree.

The item with which the participants agree to a slightly lesser extent than the previously stated one is that children's joint free play is the richest source of new knowledge and insights (M=3.97; sd=0.94). Greater adherence to this statement speaks of the preschool teachers' modern understanding of knowledge. More than two-thirds of participants mostly or fully agree with the statement about the importance of joint play for children's learning; only 4.8% of them do not agree at all or mostly do not agree with it, while about one-fourth of them (26.3%) are undecided.

The item to which, in the context of understanding knowledge, preschool teachers are the least inclined that the preschool teacher should give children the correct answer if they come to the wrong conclusion in a game or activity (M=3.85; sd=0.129). Giving children ready-made answers and preventing them from becoming aware of their wrong theories and modifying them is a feature of the traditional understanding of knowledge. Therefore, the more the surveyed preschool teachers agree with this statement, the more they cultivate a traditional understanding of knowledge. Only 13.2% of the preschool teachers believe that it is not necessary to give children the correct answer if they reach a wrong conclusion during an activity; almost one-fifth of them are undecided (19.2%), while two-thirds of the participants (66.4%) believe that children should be offered the correct answer in the case of a wrong answer.

When summarising the descriptive indicators from Table 4, it can be observed that the surveyed Slovenian preschool teachers are more inclined to the modern understanding of knowledge as a personal construction rather than a reproduction of the learner.

The third dimension of the educational paradigm is the preschool teachers' understanding of the learning process. The descriptive data are shown in Table 5.

Table 5. Educational paradigm – preschool teachers' understanding of the learning process (in%)

Understanding of the learning process	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. The very process in which the child seeks a solution is more important than the result itself.	0	0.6	4.8	34.7	59.3	0.6	4.54	0.62
2. The preschool teacher does not need to teach children because they learn best from each other and with each other.	8.4	30.5	39.5	14.4	6.6	0.6	2.80	1.010
3. For successful learning of more important content (e.g., letters, numbers, scientific phenomena), activities need to be led and directed by the preschool teacher, while the child can learn less important content on their own.	13.8	26.3	32.3	21.0	5.4	1.2	2.78	1.101
4. A child learns best in those activities planned and designed for them by the preschool teacher.	13.8	35.9	37.1	9.0	3.0	1.2	2.51	0.95

The participants' greater preference for the first and second items in Table 5 testifies to their modern understanding of the learning process, while greater preference for the third and fourth items testifies to their traditional understanding of the learning process of an early-age child.

From Table 5, it is evident that the surveyed preschool teachers to the greatest extent (M=4.54; sd=0.62) agree with the statement that the very process in which the child seeks a solution is more important than the result itself. Such a high degree of agreement with the above-mentioned item speaks in favour of the fact that preschool teachers adhere to the modern understanding of the child's learning process in accordance with the socio-constructivist theory of learning. If we look at the distribution of answers on a five-point scale, we can observe that as many as 94.0% of participants mostly or fully agree with the statement that the process in which the child seeks a solution is more important than the result itself, while only one participant (0.6%) disagrees with this.

The next item to which the surveyed preschool teachers are much less in-
clined than the previous one is that the preschool teacher should not teach
children because children learn best from each other (M=2.80, sd=1.010).
Teaching early-age children, rather than giving them the opportunity to
learn from each other, is a feature of the traditional understanding of the
learning process. So, the less the surveyed preschool teachers adhere to
that statement, the more they cultivate a traditional understanding of the
learning process. Only one-fifth of preschool teachers (21%) adhere to the
modern understanding of the learning process, believing that their role
in working with children should not be teaching. Almost twice as many
preschool teachers surveyed (38.9%) do not agree with this statement,
thus adhering to the traditional view of preschool teachers' role in the
educational process as instructors. It is significant to note that a large per-
centage of the surveyed preschool teachers (39.5%) are undecided about
their role in educational work (i.e., whether it should be teaching or not).

The item that preschool teachers are less inclined to than the previously
mentioned one is that for successful learning of more 'important' content
(e.g., letters, numbers, scientific phenomena), it is necessary that activi-
ties be led and directed by the preschool teacher, while the child can learn
less important content on their own (M=2.78, sd= 1.101). One-fourth of
the participants (26.4%) mostly or fully adhere to the stated position,
thereby expressing a traditional view of the child, their abilities, as well
as the process of their learning. Nevertheless, a larger percentage of the
participants (40.1%) do not agree at all or mostly that preschool teachers
should lead activities related to 'more important' content about numbers,
letters, and similar topics, because children can learn this by themselves,
thus expressing a modern image of the child and the process of their
learning. Also, a higher percentage of the participants, almost one-third
of them (32.3%), are undecided on this statement.

The items to which the participants, in the context of understanding the
learning process, lean to the smallest extent is that the child learns best
in those activities that have been planned and designed for them by the
preschool teacher (M=2.51; sd=0.95). Less acceptance of this statement
speaks of the preschool teacher's modern understanding of the learning
process of the early-age child. Only 12% of the participants mostly or fully
agree with the statement about the importance of the preschool teacher's
design and organisation of activities for children, which is a feature of
the traditional educational approach. Almost half of them (49.7%) do not
agree at all or mostly with this statement, thus expressing a modern view

of the way early-age children learn. It is important to note that a large percentage of the surveyed preschool teachers (37.1%) remained undecided on this statement.

In the context of the interpretation of the descriptive data of the statements presented in Table 5, which sought to examine preschool teachers' understanding of children's learning process as one of the components of their educational paradigm, it is important to point out the large percentage of participants (more than one-third) who remained undecided on as many as three of a total of four statements offered. The greatest preference is for the item that reflects the modern view of preschool teachers on learning in the sense that the process itself is more important than the result. However, a high percentage of undecided preschool teachers on the other three items (two of which are traditionally oriented) tells us that preschool teachers still have unresolved dilemmas in terms of positioning their role in the process of children's learning, hesitating between their role as a teacher or, in contrast, being children's equal, a partner, and a motivator.

Summarising the descriptive indicators from Table 5, we conclude that the examined Slovenian preschool teachers express ambivalent attitudes in the context of understanding children's learning process, considering their role in children's learning between traditional (teaching) and modern (partnership and encouragement).

The next dimension of the educational paradigm that we examined among Slovenian preschool teachers is their understanding of the curriculum aim: specifically, whether they think that the early and preschool education curriculum has the primary aim of preparing children for the coming period of life (enrolment in school) or if its aim is to create the highest quality conditions for the life of children in the institution 'here and now', thus positioning the period of early childhood as a period in a person's life that is important and valuable in and of itself. Descriptive data on the preschool teachers' understanding of the curriculum aim are presented in Table 6.

The participants' greater preference for the first item in Table 6 speaks of their contemporary understanding of the (preschool) curriculum aim, while the greater preference for the second part testifies to the traditional understanding of the (early and preschool education) curriculum aim.

Table 6. Educational paradigm – preschool teachers' understanding of the curriculum aim (in%)

Understanding of the curriculum aim	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. The basic purpose of early and preschool education is to create the best possible conditions for a child's living, raising, and learning 'here and now' and not for some future time.	7.2	12.6	24.0	25.7	29.3	1.2	3.58	1.240
2. One of the main tasks of preschool is to prepare the child for school.	18.0	26.9	31.1	19.8	2.4	1.8	2.61	1.077

As can be seen from Table 6, the surveyed preschool teachers to the greatest extent (M=3.58; sd=1.240) agree with the statement that the main purpose of early and preschool education is to create the best possible conditions for the child's life, education, and learning 'here and now' and not for some future time. Greater adherence to this statement speaks in favour of preschool teachers' modern understanding of the (preschool) curriculum aim. An overview of the distribution of answers on a five-point scale reveals that slightly more than half of the participants (55%) mostly or fully agree with the statement that the main purpose of early and preschool education is to create the best possible conditions for children's lives 'here and now', one-fifth of the participants (19.8%) do not agree with this statement at all or mostly, while about one-fourth of the participants (24%) are undecided on this issue.

The item to which, in the context of understanding the curriculum aim, the participants are much less inclined than was the case with the previous item is that the main preschool task is to prepare the child for school (M=2.61; sd=1.077). The more the participant agrees with this statement, the more their understanding of the (preschool) curriculum aim leans toward the traditional point of view. A little more than one-fifth of the participants (22.2%) believe that one of the main preschool tasks is to prepare the child for school, while a little less than half of the participants (44.9%) do not agree at all or mostly do not agree with this statement. As

many as one-third of the surveyed preschool teachers (31.1%) do not have a specific opinion on whether preparing a child for school is one of the main preschool tasks.

It is important to note that, just as with the statements in Table 5 and Table 6, a considerable number of participants (on one statement 24%, and on the other 31.1% of participants) expressed an undecided attitude regarding the fundamental purpose of early and preschool education and the aim of the early and preschool education curriculum to create quality conditions for children's lives 'here and now' and not for some future time, such as the preparation for and enrolment in school. We can conclude that the surveyed Slovenian preschool teachers still largely lean toward the modern understanding of the purpose of early and preschool education and the curriculum aim, with a considerable percentage of those who do not have a firm opinion about it.

The next dimension of the educational paradigm that we examined among Slovenian preschool teachers is their understanding of how the curriculum is created, specifically, whether they think that the early and preschool education curriculum should be precisely planned and designed by preschool teachers or, in contrast, if it is preferable to approach its creation in a significantly more flexible way, enabling all involved stakeholders in the educational process (preschool teachers, children, parents) to jointly (co)construct it. Descriptive data on the preschool teachers' understanding of the method of creating the curriculum are presented in Table 7.

The participants' greater preference for the first item in Table 7 testifies to their traditional attitude about the way of creating an early and preschool education curriculum, while a greater preference for the second item testifies to their modern understanding of the way how early and preschool education curriculum is created, based on the joint (co)construction of all members.

Table 7. Educational paradigm – preschool teachers' understanding of how the curriculum is created (in%)

Methods of creating the curriculum	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. In order for preschool teachers' educational work to be of high quality, it is necessary to plan it carefully in advance and not to design it 'on the go'.	1.8	11.4	34.7	28.7	22.8	0.6	3.60	1.021
2. Instead of the preschool teacher precisely planning the activities, children should be allowed to design, plan, and manage their own activities.	2.4	12.6	38.9	35.3	10.2	0.6	3.39	0.92

As can be seen from Table 7, the surveyed preschool teachers to the greatest extent (M=3.60; sd=1.021) agree with the statement that it is important for the preschool teacher to carefully plan the educational work in advance in order for it to be of high quality, and not to design it 'on the go'. Greater adherence to this statement speaks of the preschool teachers' traditional understanding of how the curriculum is created. An overview of the distribution of answers on a five-point scale reveals that a little more than half of the participants (51.5%) mostly or fully agree with the fact that careful planning of educational work in advance is vital, thus expressing their traditional understanding of how the early and preschool education curriculum should be created. A smaller percentage of participants (15% of them) do not agree at all or mostly with this statement, thus expressing their preference for a modern, (co)constructive approach in creating the early and preschool education curriculum. Again, as in the previous two tables, it is noticeable that more than one-third of the participants (34.7%) are undecided about the way how the early and preschool education curriculum is created, specifically whether it needs to be carefully planned in advance or with the involvement of all stakeholders in the educational process, whether it should be designed more flexibly 'on the go'.

The items to which, in the context of the understanding of the way in which the curriculum is created, the participants lean to a slightly lesser

extent than the one mentioned above is the modern approach-oriented statement about the importance of the preschool teacher in enabling children to participate in the design, planning, and managing of their activities, instead of the preschool teacher meticulously planning such activities for them (M= 3.39; sd=0.92). A little less than half of the participants (45.5%) mostly or fully agree with this statement, thus expressing a supportive attitude towards the inclusion of children in the creation of the curriculum. A small part of the participants (15%) does not agree with this statement at all or mostly, thus expressing the opinion that the preschool teacher should have the main and exclusive role in planning and designing preschool activities. Again, we observe that more than one-third of the surveyed preschool teachers (38.9%) do not have a specific opinion about whether and to what extent preschool teachers should allow children to participate in the planning, designing, and managing activities in preschool.

As in the previous two tables, as well as in this Table 7, it is noticeable that a considerable number of participants (on one statement 34.7%, and on the other, 38.9% of participants) expressed an undecided attitude regarding the decision on children's participation in the curriculum creation. It is noticeable that about half of the participants agree with both statements from the dimension of how the curriculum is created as part of preschool teachers' educational paradigm. Based on this, we conclude that the participants generally believe that it is necessary for the preschool teacher to carefully plan the educational work in advance and not to design it 'on the go' (which is a feature of the traditional approach to curriculum creation), but at the same time, that the curriculum creation process also needs to include children (which is a feature of the modern, (co)constructive approach to curriculum creation). The fact that more than half of the participants adhere to the traditional position that the preschool teacher should carefully plan the educational work in advance can perhaps be explained by the possibility that the participants misunderstood the statement, believing that planning the educational work 'on the go' reflects the preschool teachers' insufficient responsibility and competency instead of flexibility approaches in creating the early and preschool education curriculum. Therefore, we can conclude that the surveyed Slovenian preschool teachers express a combination of traditional and contemporary views on the way of creating the early and preschool education curriculum, with a considerable percentage of those who do not have a decided opinion on it.

The next dimension of the educational paradigm that we examined among Slovenian preschool teachers is their understanding of educational strategies that preschool teachers should use in their work. Descriptive data for that dimension are shown in Table 8.

Table 8. Educational paradigm – educational strategies preschool teachers should use in their work (in%)

Educational strategies	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	Sd
1. The preschool teacher should always 'keep an eye' on the children because otherwise, the children can be injured or make mischief.	0.6	14.4	25.1	37.1	22.2	0.6	3.66	1.000
2. In order for children to really learn something, it is important that the preschool teacher teaches them, demonstrates, explains, presents facts, and points to important conclusions.	8.4	24.6	31.7	24.6	9.0	1.8	3.01	1.102

The participants' greater preference for both items in Table 8 testifies to their traditional attitude about the appropriate educational strategies that preschool teachers should use in their work.

As can be seen from Table 8, the surveyed preschool teachers to the greatest extent (M=3.66; sd=1,000) are inclined to the statement that the preschool teacher should always 'keep an eye' on the children because otherwise, the children could be injured or make mischief. If we look at the distribution of answers on a five-point scale, we can observe that slightly more than half of the participants (59.3%) mostly or fully agree with the fact that it is important for the preschool teacher to always 'keep an eye on' the children, thereby expressing their traditional view of the appropriateness of using the mentioned educational strategy. A smaller percentage of participants (15%) do not at all agree or mostly disagree with this statement, thereby expressing their preference for the modern view of appropriate educational strategies in work. Again, as in the previous

two tables, it is noticeable that a larger number of participants, about one-fourth of them (25.1%), are undecided about whether the preschool teacher should always 'keep an eye' on the children so that they do not injure themselves or make mischief.

The item to which, in the context of the attitude toward the adequacy of educational strategies, the participants are slightly less inclined than the previously mentioned is the traditionally oriented statement about the importance that the preschool teacher teaches the children, demonstrates, explains, presents facts and conclusions so that the children can really learn something (M=3.01; sd=1.102). One-third of the participants (33.6%) mostly or fully agree with the statement, thus expressing a supportive position about the role of preschool teachers as teachers, demonstrators, and educators. In contrast, one-third of the participants (33%) do not agree at all or mostly with this statement, while a third (31.7%) are undecided. The distribution of answers on this item gives us an interesting picture. Specifically, according to the degree of adherence to the statements, the participants are divided into thirds: one-third of them see the role of preschool teachers as teachers and demonstrators, one-third disagree with this, and one-third are undecided. A possible reason for such a distribution of answers may be the vagueness of the item's content (perhaps the participants are not sure 'what is meant by it'), and it is also possible that the participants have ambivalent attitudes regarding the role of the preschool teacher as a teacher and demonstrator.

As in the previous tables, Table 8 also shows a higher percentage of participants (on one statement, 25.1%, and on the other, 31.7% of the participants) who expressed an undecided attitude regarding the appropriate educational strategies that preschool teachers should use in their work. Summarising the results in this dimension of the educational paradigm, we conclude that the examined Slovenian preschool teachers express a combination of traditional and modern attitudes about appropriate educational strategies, with a considerable percentage of those who do not have a firm opinion about it.

The last dimension of the educational paradigm that we examined among Slovenian preschool teachers is their understanding of appropriate social formation in educational work, which contributes to the creation of better conditions for living, learning, care, and education of children in institutions of early and preschool education. Descriptive data for this dimension are shown in Table 9.

Table 9. Educational paradigm – preschool teachers' views on appropriate social formation in educational work (in%)

Social formation	I fully disagree	I mostly disagree	I neither agree nor disagree	I mostly agree	I fully agree	n/a	M	sd
1. Mixed-age educational groups are better for the child because they have the opportunity to communicate with other children with different interests, abilities, and skills in them.	0.6	3.0	28.7	44.9	22.2	0.6	3.86	0.82
2. It is easier for the preschool teacher to work in same-age educational groups because they include children of approximately equal abilities and interests.	5.4	16.8	34.7	25.7	16.8	0.6	3.32	1.107

The modern understanding of appropriate social formation in the organisation of living, care, and education of children in preschool is based on the idea of the importance of age groups because children of the same chronological age can differ to a large extent in terms of their developmental possibilities and competencies. That is why competencies are encouraged and observed in the context of the developmental possibilities of each child rather than their chronological age (National Curriculum for Early and Preschool Education, 2014). Also, a mixed-age educational group can increase a preschool teacher's awareness of the developmental deviations of an individual child (Katz et al., 1991, according to Karabatić, 2006). While investigating relationships in the context of mixed-age educational groups, Lougee and Graziano (1986, according to Karabatić, 2006) observed an increase in children's self-regulation when following certain rules and pointed out that older children in a mixed-age educational group by reminding younger ones of certain rules, also contribute to personal self-regulation. By being concerned about following the rules, they learn to follow the rules themselves and control their own behaviour. They emphasise that taking over the care of following the rules can be useful precisely for children who have difficulties in following the rules (Lougee & Graziano, 1986, according to Karabatić, 2006).

Therefore, the participants' greater preference for the first item in Table 9 testifies to their modern attitude about appropriate social formation in educational work, based on the organisation of work by mixed-age educational groups of children, while a greater preference for the second item testifies to their traditional understanding of the appropriateness of social formation, based on the organisation of work by age-homogeneous educational groups of children.

As can be seen from Table 9, the surveyed preschool teachers to the greatest extent (M=3.86; sd=0.82) are inclined to the statement that mixed-age educational groups are more favourable for a child than same-age educational groups because the child can communicate with other children of different interests, abilities, and skills in them. If we look at the distribution of answers on a five-point scale, we can observe that significantly more than half of the participants (67.1%) mostly or fully agree with the benefits of mixed-age educational groups for the child, thereby expressing their modern attitude about appropriate social formation in educational work in preschool. A very small percentage of the participants (3.6%) do not agree at all or mostly that mixed-age educational groups are better for the child, thereby expressing their preference for the traditional approach of organising work according to homogenous-age educational groups. Again, as in the previous items of the other dimensions of preschool teachers' educational paradigm that we examined, it is evident that a larger number of the participants (about 28.7%) are undecided regarding this statement about the importance and benefits of mixed-age educational groups for children.

The item to which, in the context of the attitude about appropriate social formation in preschool, the participants are slightly less inclined than the previously mentioned is the traditionally oriented item that it is easier for preschool teachers to work in homogeneous-age educational groups because they contain children of approximately equal abilities and interests (M =3.32; sd=1.107). Two-fifths of the participants (42.5%) mostly or fully agree with the statement, thus supporting the view that it is easier for preschool teachers to work in homogeneous-age educational groups. In contrast, about one-fifth of the participants (22.2%) do not agree at all or mostly with this statement, thus expressing their preference for the modern approach to the organisation of work in preschool by age groups. On this point, it is also noticeable that a third of the participants (34.7%) are undecided about the appropriate social formation, specifically whether it is better and more useful to organise educational work by homogeneous or mixed-age educational groups of children.

As in the previous tables, Table 9 also shows a higher percentage of participants (on one statement, 28.7%, and on the other, 34.7% of participants) who expressed an undecided attitude regarding the appropriate social formation in educational work in preschool. Summarising everything mentioned above about the results in this dimension of the educational paradigm, we conclude that the surveyed Slovenian preschool teachers still lean somewhat more towards the modern approach in the social organisation of work in preschool by mixed-age educational groups.

5   Conclusion

An attempt to define the concept of culture of the institution of early and preschool education indicates that it is a layered, complex, multi-faceted concept that is difficult to define unambiguously. The culture of the institution of early and preschool education is influenced, among other things, by the preschool teacher's educational paradigm, which manifests itself through their personal beliefs about the child, their development, learning, care, and education. In the same way, the preschool teacher's educational paradigm is reflected in their personal paradigm, which consists of values and attitudes, and thus the perception and understanding of the educational process as a whole is shaped.

In order for the culture of the institution of early and preschool education to retain its authenticity, effectiveness, and professionalism, it is necessary to build structures that will promote joint relations and interactions and, in parallel, develop cultures that will support collegiality and individuality in the educational institution.

We wanted to investigate the state of the structural dimensions of culture in institutions of early and preschool education in Slovenia, specifically, the ways in which Slovenian preschool teachers shape the spatial-material environment in their institution. We also analysed the descriptive indicators of preschool teachers' educational paradigm, operationalised through eight dimensions (seven were analysed in this paper), in order to gain insight into their current attitudes about the care and education of children of early and preschool age, as a component of their educational paradigm.

Regarding the shaping of the structural dimensions of culture in institutions of early and preschool education in Slovenia, based on the analysis at the level of descriptive statistics, we conclude that a combination of

modern and traditional practices in the shaping of the spatial-material environment prevails in the examined Slovenian preschools. Of the modern approaches to the organisation of space, in Slovenian preschools, we recorded the organisation of the room into activity centres and the organisation of the entire space of the preschool in a way that encourages joint meetings and communication between children and adults in the institution. However, the traditional features of the design of the spatial-material environment in Slovenian preschools are visible in the use of free space in the middle of the room for the simultaneous activity of all or most children, the low possibility of children 'circulating' around the preschool premises, and the low supply of ambiguous and uncertain materials.

When discussing the image of the child as part of the preschool teacher's educational paradigm, we conclude from the sample of Slovenian preschool teachers that they share a combination of modern and traditional attitudes about the child and their abilities. Regarding the way in which preschool teachers understand knowledge, the descriptive indicators lead us to conclude that the surveyed preschool teachers are more inclined to the modern understanding of knowledge as a personal construction rather than the reproduction of a learner.

In the context of understanding the process of children's learning, the surveyed Slovenian preschool teachers express ambivalent attitudes, determining their role in children's learning between the traditional (teaching) and the modern (partner and motivator). Furthermore, it has been established that Slovenian preschool teachers, to a somewhat greater extent, adhere to the modern understanding of the purpose of early and preschool education and the goal of the early and preschool education curriculum in terms of creating quality conditions for children's lives 'here and now', and not for some future time, with a considerable percentage of those who do not have a firm opinion about it.

When it comes to understanding the way of creating the curriculum, the participants express a combination of traditional and modern attitudes, with a considerable percentage of those who do not have a firm opinion about it. The adherence to the traditional position is visible in their overwhelming agreement with the statement that it is necessary for the preschool teachers to carefully plan the educational work in advance and not to design it 'on the go', while their overwhelming adherence to the statement that it is necessary to include children in the process of

curriculum creation reflects a modern, (co)constructive approach to curriculum creation.

Summarising the results on appropriate educational strategies that preschool teachers should use in their work, as another dimension of preschool teachers' educational paradigm, we conclude that the examined Slovenian preschool teachers express a combination of traditional and modern attitudes, however, leaning somewhat more towards the traditional determination of their educational role as a teacher, demonstrator, and the one who controls the children so that they do not become hurt or make mischief.

Finally, the last dimension of preschool teachers' educational paradigm that we examined among Slovenian preschool teachers is their understanding of appropriate social formation in educational work, which contributes to the creation of better conditions for living, learning, care, and education of children in institutions of early and preschool education. The results show that Slovenian preschool teachers are slightly more inclined to the modern approach in the social organisation of work in preschool by mixed-age educational groups instead of by homogeneous-age educational groups of children.

What particularly stands out in the obtained results and what is important to emphasise is the fairly large percentage of participants who are undecided, meaning that they do not have a firm opinion about the various aspects of the educational process that they were asked about in the research. Of a total of eight dimensions that operationalise preschool teachers' educational paradigm (seven are analysed in this paper), a large number of items were observed in as many as five dimensions of the educational paradigm on which about one-third of the examined Slovenian preschool teachers expressed an undecided attitude.

In an attempt to clarify the obtained results, we will return briefly to the concluding remarks in the chapter on the official Curriculum of Early and Preschool Education in Slovenia (*Kurikulum za vrtce*, 1999), in which we discuss its basic philosophy and direction. There is no doubt that the official Slovenian Curriculum of Early and Preschool Education has its foundations in the humanistic image of the child and their overall development, that it starts from the child and highlights them as the starting point in designing and organising the educational process. The basics of goal orientations in the official Slovenian Curriculum imply a humanistic

orientation of the conception of the system of early and preschool education (Apostolović, 2013). However, in the attempt to operationalise these basic, humanistically oriented Curriculum Settings, it has fallen into the trap of traditional fragmentation of the educational process into areas of learning (activities), thereby ignoring the theses of modern learning theories about the complete and integrated nature of a child's learning. The mixture of concepts in the official Slovenian Curriculum is represented, on the one hand, by the modern understanding of the child and their learning (a child's learning occurs as a unified whole instead of being fragmented into areas), and, on the other hand, in the fourth part of the curriculum, knowledge is divided by educational areas (i.e., areas of activities). Perhaps it was this mixture of conceptions in the official curriculum that contributed to the mixture of traditional and contemporary attitudes observed in this research and perhaps to the confusion of the practitioners themselves regarding numerous issues related to various aspects of the educational process.

In any case, it would be interesting to conduct similar research again after a certain time and to record possible changes in the shaping of the structural dimensions of the preschool culture and in preschool teachers' views about various aspects of the educational process, which in turn make up their educational paradigm and shape their concrete educational practice.

References

Apostolović, D. (2013). Ciljne orijentacije predškolskih programa (kurikuluma) u R. Sloveniji, R. Hrvatskoj i R. Srbiji [Target orientation of preschool programs (curricula) in The Republic of Slovenia, The Republic of Croatia and the Republic of Serbia]. *Metodički obzori, 8(2)*, 118–127. https://doi.org/10.32728/mo.08.2.2013.09

Blanuša Trošelj, D. (2012). Profesionalci ranog i predškolskog odgoja i obrazovanja u Europskoj uniji [Early childhood and early childhood education professionals in the European Union]. *Dijete, vrtić i obitelj, 18(67)*, 16–19. https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=183113

Day, C. (2007). *Environment and Children: Passive Lessons from the Everyday Environment.* Architectural Press, Elsevier.

Fullan, M. (1993). *Change Forces.* The Falmer Press.

Fullan M. (2007). *The new meaning of educational change*. Teachers College Press.

Gardner, H. (1993). *Multiple Intelligences: The Theory in Practice*. Basic Book.

Hargreaves, D. (1999). Helping Practitioners Explore Their's Culture. In J. Prosser, *School Culture* (pp. 48–65.). Paul Chapman Publishing.

Hopkins, D. (2001). *School Improvement for Real*. Routedge Falmer.

Karabatić, Z. (2006). Socijalna interakcija djece u mješovitim skupinama vrtića [Social interaction of children in mixed groups of kindergartens]. *Dijete vrtić i obitelj, 12(43)*, 2–11. https://hrcak.srce.hr/177866

Kurikulum za vrtce. [Curriculum of Early and Preschool Education] (1999). Ljubljana. http://www.mizs.gov.si/fileadmin/mizs.gov.si/pageuploads/podrocje/vrtci/pdf/vrtci_kur.pdf

Miljak, A. (2007). Teorijski okvir sukonstrukcije kurikuluma ranog odgoja [The theoretical framework of the coconstruction of the curriculum of early childhood]. In V. Previšić, *Kurikulum teorije-metodologije-sadržaj-struktura*, p. 205–252. Zagreb: Školska knjiga.

Miljak, A. (2009). Življenje djece u vrtiću: Novi pristupi shvaćanju, istraživanju i organiziranju odgojno-obrazovnog procesa u dječjim vrtićima [Living children in kindergarten: New approaches to understanding, researching and organizing the educational process in kindergartens]. SM Naklada.

Miljak, A. (2015). *Razvojni kurikulum ranog odgoja: Model Izvor II [Early Childhood Development Curriculum: Model Source II]*. Mali profesor.

Nacionalni kurikulum za rani i predškolski odgoj i obrazovanje [National Curriculum for Preschool Education] (2014). Zagreb: Republika Hrvatska Ministarstvo obrazovanja, znanosti i sporta. https://mzo.gov.hr/UserDocsImages/dokumenti/Obrazovanje/Predskolski/Nacionalni%20kurikulum%20za%20rani%20i%20predskolski%20odgoj%20i%20obrazovanje%20NN%2005-2015.pdf

Petrović-Sočo, B. (2007). *Kontekst ustanove za rani odgoj i obrazovanje – holistički pristup [Context of early childhood education institutions – a holistic approach]*. Mali profesor.

Petrović-Sočo, B. (2009). Značajke suvremenog naspram tradicionalnog kurikuluma ranog odgoja [Features of the modern versus the traditional curriculum of early childhood education]. *Pedagogijska istraživanja, 6 (1-2)*, 123–138.

Prosser, J. (1999). *School Culture*. London: P.C.P.

Schein, E. (1998). Cultura d'azienda e leadership – Una prospettiva dinamica [Company leadership and leadership – A dynamic perspective]. Guerini e Associati.

Schein, E. (2004). *Organizational Culture and Leadership*. Jossey-Bass.

Schoen, L. T., & Teddlie, C. (2008). *A new model of school culture: a answer to call for conceptual clarity*, Vol.19. Routledge.

Stoll, L. (1999). Black Hole or Fertile Garden for School Improvement? In J. Prosser (Ed.), *School Culture*. P.C.P.

Stoll, L., & Fink, D. (2000). *Mijenjajmo naše škole: Kako unaprijediti djelotvornost i kvalitetu škola [Changing our schools: How to improve the effectiveness and quality of schools]*. Zagreb: Educa.

Vujičić, L. (2007). Kultura odgojno-obrazovne ustanove i stručno usavršavanje učitelja [Culture of educational institutions and professional development of teachers]. *Magistra ladertina, 2(1),* 91–106. https://hrcak.srce.hr/21161

Vujičić, L. (2008). Kultura odgojno-obrazovne ustanove i kvaliteta promjene odgojno-obrazovne ustanove [Culture of educational institutions and quality of change of educational institution]. *Pedagogijska istraživanja, 5(1)*, 7–21.

Vujičić, L. (2011). *Istraživanje kulture odgojno-obrazovne ustanove [Research of the culture of educational institutions]*. Mali profesor.

Vujičić, L. (2016). Kurikulum i kultura vrtića: od implementacije do istraživanja [Kindergarten curriculum and culture: from implementation to research]. U N. Tatković, N. Tatković, M. Radetić-Paić, & I. Blažević (ur.), *Kompetencijski pristup kvaliteti ranog i predškolskog odgoja i obrazovanja* (p. 76–89). Medulin: Sveučilište Jurja Dobrile u Puli, Fakultet za odgojne i

obrazovne znanosti, Dječji vrtić Medulin. https://www.bib.irb.hr/852597

Vujičić, L., & Čamber Tambolaš, A. (2019). Educational Paradigm and Professional Development: Dimensions of the Culture of Educational Institution. In J. Vodopivec Lepičnik, L. Jančec, & T. Štemberger (Eds.), *Implicit Pedagogy for Optimized Learning in Contemporary Education* (pp. 77–103). IGI Global.

Vujičić, L., & Čamber Tambolaš, A. (2019a). The Culture of Relations - a Challenge in the Research of Educational Practice in Early and preschool education Institutions. In V. Orlović Lovren, J. Peeters, & N. Matović (Eds.), *Quality of Education: Global Development Goals and Local Strategies* (pp. 137–153). Institute for Pedagogy and Andragogy Faculty of Philosophy of Belgrade, Serbia; Department of Social Work and Social Pedagogy Centre for Innovation in the Early Years Ghent University, Belgium.

Vujičić, L., Pejić Papak, P., & Valenčić Zuljan, M. (2020). *Okruženje za učenje i kultura ustanove [Learning environment and culture of the institution]*. Učiteljski fakultet

Vujičić, L. (Ed.) (2021). *Implementacija teorije u praksu ili nema dobre teorije bez dobre prakse [Implementation of theory into practice or no good theory without good practice]*. Rijeka: UFRI. https://www.ufri.uniri.hr/files/izdavacka_djelatnost/UFRI__Lidija_Vujii_ur_Implementacija_teorije_u_praksu_ili_nema_dobre_teorije_bez_dobre_prakse

CHALLENGES OF COOPERATION BETWEEN PARENTS AND SPECIAL AND REHABILITATION TEACHERS DURING REMOTE SCHOOLING

*Špela Mlakar[1], Romina Plešec Gasparič[*2], Milena Valenčič Zuljan[3]*

Abstract

Research shows that high-quality cooperation between school and home has a positive impact on the child and his/her development and that parents, teachers, and school operations are also positively influenced. Cooperation between schools and parents is even more important when it comes to children with special needs. School closures as a safety measure during the Covid-19 pandemic gave this cooperation even greater importance. This article presents research on the cooperation between parents and special and rehabilitation teachers during remote schooling. Results were obtained through a survey that used a non-standardised questionnaire, which was administered to a sample of special and rehabilitation teachers providing additional professional support (N = 43) and parents of children with special needs (N = 41). One of the findings of the survey was that cooperation with the special and rehabilitation teacher was more common in the case of parents who had younger children with special needs. Both special and rehabilitation teachers and parents were mostly satisfied with the frequency of contact and mutual cooperation during remote schooling. The results also showed that special and rehabilitation teachers did not differ by years of service on various aspects of cooperation with parents during remote schooling, while there were statistically significant differences by level of education attained among parents.

Keywords: cooperation; parents; remote schooling; special and rehabilitation teachers; students with special needs

....
1   Primary School Brinje Grosuplje, Ljubljanska cesta 40a, 1290 Grosuplje, Slovenia.
2   ***Corresponding Author. Faculty of Education, University of Ljubljana, Kardeljeva plo-**
    ščad 16, 1000 Ljubljana, Slovenia; romina.plesec@pef.uni-lj.si.
3   Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia.

1   Introduction

School represents a place where an important process of secondary socialisation takes place and where many relationships are established between children, teachers, management, parents, and others. It is also a space in which the individual needs of the students are revealed, and any problems that need to be solved within the essential triangle of the school, the parents, and the student (Mikelj, 2015). High-quality cooperation between school and home has been proven to have a positive effect on children and their development, motivation, school success, and related attitudes towards school. This positive influence is also reflected in parents, teachers, and the functioning of the school (Šteh & Gregorčič Mrvar, 2011). Within the framework of cooperation between school and family, we can also speak of a partnership relationship that is understood as a cooperative and mutually complementary relationship between the two partners, who are equal (Pšunder, 1998). Berčnik and Devjak (2015) emphasise that the responsibility of both parties, quality dialogic communication, and the search for an agreement on solving a problem should be at the forefront of such a relationship. The Elementary School Act (1996) highlights, among other things, cooperation with parents, which the school must include and define in the annual work plan and in the educational plan of the school. The Placement of Children with Special Needs Act (2011) also stipulates that the upbringing and education of children with special needs must be based on goals and principles; we highlight the principle of involving parents, adoptive parents, foster parents or guardians in guidance procedures and forms of assistance. The positive impact of the cooperation between the school and the parents is even more pronounced regarding cooperation between the school and the parents of children with special needs who need more help, support, and guidance. Therefore, the cooperation of special and rehabilitation teachers with parents is essential. Only through interaction, connection and mutual help can they contribute to the highest possible quality development of the child (Ernecl, 2018). In 2020, with the first wave of the Covid-19 pandemic, there was a watershed experience in the field of education, which was brought about by measures to prevent infections, such as the closure of schools and other educational institutions (Bogatec et al., 2021). With the introduction of remote schooling, the responsibility for learning and teaching was transferred to parents to a greater extent, and the mass use of digital technology has turned from an additional option into the first condition of education (Šimenc, 2021). During remote schooling, the partnership between school and parents

gained even greater importance, as parents represented an important bond between student and teacher, which was more demanding and limited due to physical distance (Rožman Krivec, 2021).

Baytiyeh (2018) also claims that cooperation between the school and parents is essential for the success of the online educational environment. In the period of remote schooling, changes occurred not only in the field of learning and teaching and cooperation between school and parents but also in the field of professional development of employees in education. Teachers were faced with many challenges, and the process of solving them could have a positive impact on their professional development. The extent to which teachers developed professionally in this stressful situation was certainly significantly influenced by their resilience.[4]

2 Cooperation of special and rehabilitation teachers and parents

Cooperation between the school and parents is a special communication bond that significantly contributes to the child's progress, which is true both for parents of children with and those without special needs. Of course, a child with special needs will need more help and support, both from the school and parents. When the knowledge and support of parents and schools intertwine and complement each other, we can expect greater progress for the child. Cooperation between the school and the parents of a child with special needs must be permanent, professional, and team-oriented, and the relationship must be based on open, positive, and correct communication (Trtnik, 2006). Opara (1993, in Trtnik, 2006) believes that the boundaries between the majority population of children and children with special needs are often unclear and undefinable, which is the reason that it is often difficult to determine the special educational needs of an individual child. In any case, it is clear that children with special needs need additional help for educational work. Data from the Statistical Office of the Republic of Slovenia (2021) show that in the 2020/21 school year, 12,950 students with special needs were included in the regular primary school program, which represents approximately 6.7% of all children included in the regular primary school programme. Primary schools must provide appropriate adaptations, including personnel, in

---

4   Resilience: The ability of an individual to respond positively or effectively to difficult and long-lasting problems, hardships, or dangers, or to adapt to them successfully or effectively (Masten & Obradović, 2006). The resilience of teachers during remote schooling was also expressed as their ability to adapt to difficult and different circumstances related to their professional activity.

order to implement the primary school program for children with special needs. This means that in order to help students with special needs, they must secure an adequate number of experts who will provide students with support for successful integration (Trtnik, 2006). In most cases, this role is taken over by a staff of special and rehabilitation teachers. These are specialists 'who study, develop and implement education and re-education, compensatory and rehabilitation work with children with special needs and youth and adults with deficits, obstacles or disorders in all stages of life' (Code of ethics of special and rehabilitation teachers of Slovenia, 2009, p. 1). The Code of ethics of special and rehabilitation teachers of Slovenia (2009) dictates that the work of special and rehabilitation teachers is collaborative, which means that they work as a team (with teachers, educators, parents and other individuals). In regard to parents, it is particularly highlighted that the special and rehabilitation teacher accepts parents as partners and builds a partnership relationship with them that is (above all) inclusive, confidential, and respectful. Jereb (2011) defines partnership between professionals and parents as 'a joint educational effort of both the student's parents (or guardians) and the student's teachers' and says that they are 'equal partners in offering the most comprehensive support to a student with learning difficulties' (p. 11). Special and rehabilitation teachers and parents of children with special needs, in the process of educating a child, encounter situations on a daily basis in which they have to cooperate and coordinate their expectations, wishes and goals with the aim of acting for the child's welfare. This is also stated by Bučar (2012), who asserts that a common desire for the child's progress and adequate mutual communication are prerequisites for successful and effective cooperation. As we have already pointed out, for students with special needs, the relationship between school and home is even more important and even more decisive than for their peers, so it is necessary to build a working relationship in which professionals and parents together discover and investigate problems and determine the necessary steps of adaptation and their solving. Together, they co-create the course of learning and support and good solutions for the child (Magajna et al., 2008). Trtnik (2006) also states that effective support for a child requires the cooperation of the school and parents, who will jointly identify problems, look for appropriate and acceptable forms of support, and set realistic goals. It should be emphasised here that both parents and children with special needs are different from each other, so it is crucial that professionals are aware of the differences between each of them and that they are capable of making appropriate professional adjustments in relationships with the aim of ensuring the

most effective treatment for a child with special needs. There is a strong correlation between children's results and the cooperation of parents and school professionals (Morrison, 2008). Such cooperation, like any other, must be constantly improved and, above all, preserved and maintained. It can often happen that the child is no longer able to work successfully because the teacher is no longer able to provide a stimulating environment or, vice versa, the parents do not know or are unable to help their child. At that time, the solution is most often found somewhere in between, and it turns out that many difficult situations can be solved when everyone involved in the problem starts working together (Čačinovič Vogrinčič, 1999). The child's success and progress in school are the main motivating factors for parents' cooperation with the school, and parents whose children are successful in school are also more motivated to cooperate with the school and have better contact with teachers. It often happens that when the child's academic performance and development deteriorate, parents lose confidence in the school and begin to distance themselves from it, which creates the exact opposite effect of what is desired (Kalin et al., 2008). In many cases, the described situation is typical for parents of children with special needs who experience poor academic performance or a lack of progress. The task of pedagogical workers, especially special and rehabilitation teachers, is thus even more important in the case of cooperation with parents of children with special needs, and it is necessary to be aware that these parents need even more support, help, and encouragement for mutual cooperation.

In the field of education of children with special needs, Slovenian legislation has followed the changes in other countries, which is also reflected in the Placement of Children with Special Needs Act (ZUOPP, 2000), which was adopted in 2000. Among other things, this brought about the need for professional support for children, which in Slovenia was called 'additional professional support' and placed in an educational program with adapted implementation and additional professional support. It has two functions, the first is rehabilitative and means support in overcoming an obstacle, disorder or deficit, and the second is a didactic function and means help in learning (Lep, 2006). The second article of the Rules on additional professional and physical assistance for children and adolescents with special needs (2006, amendments 2006, in Košir et al., 2011) describes additional professional support as support that 'includes activities to overcome deficits, obstacles or disorders and learning support, which is carried out individually or occasionally in a special group' (p. 299). It is implemented for children who are included in the programme

for preschool children with adapted implementation and additional professional support, in the educational programme of primary school with adapted implementation and additional professional support, and in the educational programmes of vocational and professional and general secondary education with adapted implementation and additional professional support. The Elementary School Act (1996) states that the education of students with special needs is carried out in accordance with the Placement of Children with Special Needs Act (ZUOPP), in which children are defined according to the type and degree of deficit, obstacles, or disturbances. In the latter, children with special needs are also classified as children with deficits in individual areas of learning. When working with such students in elementary school, we use five basic levels of support, specifically the so-called five-level model of helping students with learning difficulties in primary school. The fifth level of the model represents guidance in an educational programme with adapted implementation and additional professional support, in which cooperation with parents is key (Magajna et al., 2008).

The true importance of the partnership between the school and the parents of children with special needs only gained emphasis and true validity with the introduction of individualised programmes in which parents are also involved in the process who can contribute to the actual adaptation of the program to the child with their information about the latter. The purpose of their participation is also their familiarity with the way of work and adjustments, which enables them to adapt and coordinate their work at home with the child's work at school. A prerequisite is good communication among all members of the expert group (Lep, 2006).

3   Remote schooling

In the past, remote schooling was tied more to radio, television, and computers, but recently it has been mainly supported by the internet (Anderson, 2021). Encyclopedia Britannica (in Rupnik Vec et al., 2020) defines remote schooling as one of the forms of education with two main characteristics: 'Teacher and student are spatially separated during teaching, and communication between them and communication between the students themselves is facilitated by different types of technologies' (p. 10). Remote schooling is similarly defined by UNESCO as 'an educational process and system in which a significant part of the teaching is carried out by someone or something who is distant in time and space

from the student' (p. 10).[5] Bregar et al. (2013, p. 13, in Rupnik Vec et al., 2020) divide e-learning into three groups: traditional, combined, and integrated e-learning. The latter best corresponds to the form of remote schooling practised by the Slovenian education system during the closure of schools. The point here is that all elements of the educational process include technological support, which enables the implementation of the learning process despite the distance between the teacher and the student. Dhawan (2020) sees the advantages in physical and financial accessibility, adaptability, the possibility of lifelong learning, and the possibility of independent learning.

With the mentioned advantages, which can come to life to a greater extent with individual groups of students (e.g., with motivated students), it is necessary to be aware of the many limitations and shortcomings of remote schooling.

The use of modern information and communication technology at the time of the beginning of the Covid-19 pandemic gave the possibility of quickly establishing remote schooling and enabled students and teachers to continue their education, despite maintaining physical and social distance, but access to remote schooling did not come quickly for all the students. The problem was the financial and material capabilities of individual families, which meant that students did not have the same opportunities for an undisturbed education. With the help of the school, the parents had to organise themselves in a short time and secure at least the basic conditions for remote schooling, such as (adequate) internet and a computer. Many problems also arose in multi-member families, in which several children had to be present for remote schooling at the same time, and parents may have also needed a computer to work from home. All this contributed significantly to the differences between students, especially in the field of knowledge they acquired during remote schooling. Research confirms that the extent and quality of parental and family support during remote schooling are conditioned by the socio-economic status of the family and the level of education of the parents (Yazcayir & Gurgur, 2021). When educational institutions were closed, general digital access suddenly changed from being merely internet access to a condition of access to education. Anderson (2021) states three main problems or disadvantages of remote schooling: the digital divide, non-participation,

---

5   In addition to the terms 'remote schooling', 'remote learning' and 'remote education', terms such as 'distance education', 'distance learning', 'e-learning' and 'online learning' are also used.

and cheating. Lake and Makori (2020, in Anderson, 2021) note that, on average, two out of five surveyed students had to do their homework via mobile phone or used public wireless networks. As already mentioned, the digital divide not only means technological equipment or access to the internet but also differences in digital literacy, both in the students and the parents who helped children with remote schooling.

Korman et al. (2020, in Anderson, 2021) called the phenomenon of non-participation during the Covid-19 pandemic the attendance crisis, as several studies indicate a 15 to 20% increase in non-participation in the educational process. Here, it is important to emphasise that it was difficult to determine what it meant to be present or absent during remote schooling, as many students resorted to logging into the online environment and then leaving the computer or doing something else on the computer during lessons. Their presence in the educational process was, therefore, not reliable or efficient. All this was reflected in reduced learning abilities, lower grades, and increased dropout rates.

The third problem is cheating, which in the era of remote schooling with the use of many computer and online applications has become very simple, but proved negative for students' knowledge (Anderson, 2021). As a major drawback or disadvantage of remote schooling, the authors Radovan and Kristl (2020) state the problem of dropping out of education, which can occur due to the lack of personal contact in a virtual environment. In addition to the social and economic conditions of primary school pupils and high-school and university students, in recent years, the dropout rate has increasingly been influenced by the way education was carried out, mainly due to a lack of motivation as a consequence of the absence of personal contact.

3.1 Cooperation with parents of students with special needs during remote schooling

On 11 March 2020, the outbreak of the new Covid-19 disease caused by a coronavirus, called SARS-CoV-2, was declared a global pandemic (Zhu et al., 2020 and WHO, 2020, in Kapun et al., 2020). In order to prevent the spread of the aforementioned disease, in the first half of 2020, most countries around the world decided to temporarily close educational institutions. The learning process did not stop there but took place entirely online in the form of remote schooling. UNESCO data showed that in the first half of 2020, schools closed in 186 countries around the world, which means that approximately 74% of all students received knowledge through remote

schooling (Di Pietro et al., 2020). Due to the deterioration of the pandemic, on 16 March 2020, all educational institutions in Slovenia were also closed. The changes happened overnight, and it was impossible to prepare for them. With this, Slovenia entered an unpredictable period when around 260,000 students and around 25,500 teachers and other professionals had to switch to remote schooling in an extremely short time. The first complete closure of educational institutions lasted until 18 May 2020, followed by a combination of remote schooling and learning in school until the end of the 2019/20 school year (Kustec et al., 2020). This can be compared to the global average of 70 days of closure of educational institutions (Anderson, 2021). The shift of teaching from a physical to a digital, virtual space required a different knowledge and attitude from educators. There was no prior preparation for this form of teaching, and each school had to find its own way. This meant that differences quickly appeared between schools, both in the qualifications of teachers and in the material and technical equipment for the implementation of this type of teaching (Medveš, 2020). Looking at the beginnings of remote schooling and the changes that schooling has undergone, it makes sense to also mention the future, meaning the period after the Covid-19 pandemic. Fullan et al. (2020, in Anderson, 2021) divided all these periods into three phases. The first phase was marked by the closing of schools and a rapid switch to remote schooling. The second phase is called 'the transition phase', which was about planning for the future, the opening of schools and 'normal' circumstances in the time of uncertainty caused by the epidemic. The third phase was called 'reimagining', meaning thinking about the vision for upbringing and education in the future in such a way that all students can be successful and equipped with all the necessary skills.

The resolution of the European Parliament on the education of children in emergency situations and long-term crises (European Parliament, 2015) specifically emphasises that, even in extraordinary circumstances (which the closure of schools around the world certainly is), it is necessary to respect and take into account the rights of all children without discrimination, also according to the special needs of children. The closure of educational institutions particularly affected children and students with special needs, as it is a group of people who need even more support and help in the process of upbringing and education than the majority population (e.g., from special and rehabilitation teachers).[6]

6   Data from the Ministry of Education, Science and Sport show that in the 2020/21 school year, 14,224 children were directed to the elementary school program with adapted implementation and additional professional support, and 14,829 in the 2021/22 school year, which represents 7.45% and 7.68%, respectively, compared to all primary school students.

However, this type of professional help and support was prevented due to restrictions. Remote schooling especially affected those students with special needs, who otherwise receive additional professional help, as the latter was conducted remotely and in a reduced or modified form.[7] As for all students, social integration is also and especially important for students with special needs, which is most easily and effectively achieved precisely at school, in the company of peers. Remote schooling thus placed these students in a very limited position, as the only opportunity for additional professional support and social integration was the virtual space. In a survey (Rupnik Vec et al., 2020) carried out in June 2020, teachers reported that they adjusted lessons for students with learning difficulties during remote schooling in various ways. In particular, they adjusted the teaching methods, materials, time for solving and checking tasks, and assessment, and they constantly checked the understanding of the given instructions. They also pointed out that they included special teachers and teachers who worked with a certain child with special needs (learning difficulties). The above-mentioned individualised program is a legally prescribed document, which means that it had to be taken into account even during remote schooling. Rupnik Vec et al. (2020) advise additional professional help teachers to conduct additional professional support classes via videoconferences in small learning groups or in pairs, as this will maintain social contact between peers and individual involvement, which are important goals for children with special needs. The expert group for working with students with special needs is the one that should plan possible adjustments during remote schooling and add them to the child's individualised program.

In addition to the learning process, other activities had to be adjusted during remote schooling, including cooperation between the school and parents.

The topic of the cooperation of parents and professionals in education has already been well researched both abroad and in Slovenia, as has the specifics of the cooperation of parents of children with special needs and special and rehabilitation teachers. Henderson and Berla (in Soo-Yin, 2003) analysed 85 studies on the benefits of involving parents in the child's educational process, and it turned out that a well-planned and effective collaboration between the school and parents provides advantages and positive

....

7   In the 2020/21 school year, according to decisions on orientation, 53,961 hours of additional professional support were allocated, an average of 3.53 hours per individual student (Elementary education for children with special needs, s.d.).

consequences for everyone involved, both for the student, his parents, the teachers, and the school itself. Gonzalez-DeHass et al. (2005, in Kalin, 2009) found a significant connection between parental involvement and student motivation. It has been shown that with greater involvement of parents, students show greater effort, concentration, attendance at lessons, interest in learning and better competence. An active partnership between school and home is even more important and decisive in the education of children with special needs, as they need additional support in several areas of education for successful progress (Jereb, 2011). The involvement of parents in the educational process of children with special needs is also emphasised in the Placement of Children with Special Needs Act (ZUOPP-1, 2011). Partnership cooperation represents teachers and parents as equal partners, special and rehabilitation teachers as experts with specific knowledge and parents as experts for their children, since they are the ones who know their children and their special needs the most comprehensively. Bučar (2012), in her research in which 53 parents of children who are included in an educational programme with adapted implementation and additional professional support and 32 special and rehabilitation teachers who work in one or more elementary schools were involved, investigated their mutual cooperation. The research showed that both have a positive experience of mutual cooperation and are satisfied with its current course. However, it has been shown that, in general, special and rehabilitation teachers are on average less satisfied than parents. In the question concerning the perception of problems in mutual cooperation, 94.3% of parents stated that they have no problems, while 62.5% of special and rehabilitation teachers stated that they encounter problems in cooperation with parents. Among them, they most often listed the fact that parents do not comply with arrangements for work at home, as well as non-participation of parents in meetings, non-acceptance of deficits in the child, and lack of desire to participate. In contrast, there was a great desire among the parents for more frequent meetings with the special and rehabilitation teachers and vice versa. The results showed that, in most cases, special and rehabilitation teachers work with parents two to three times a year or as needed, often on a monthly or weekly basis. Mutual cooperation most often takes place within the framework of team meetings, parent-teacher meetings and via telephone conversations, and to a lesser extent with the help of a notebook or written instructions, e-mail, or other means (through the companion of the child with special needs, random meetings, parental visits, lectures, workshops). The most important thing we can point out is that in this research is that both parents and special rehabilitation teachers see the greatest advantage of mutual cooperation in influencing the child's progress.

4   Methodology

4.1   Research problem

The basic purpose of the research was to examine the cooperation of parents and special and rehabilitation teachers, to analyse their cooperation during remote schooling, and to compare it with their cooperation during education in schools.

4.2   Research questions

We posed three research questions:

RV1: How often and in what ways did special and rehabilitation teachers and parents cooperate during remote schooling compared to when students were educated in school?

RV2: How did special and rehabilitation teachers and parents experience mutual cooperation during remote schooling?

RV3: What challenges did special and rehabilitation teachers and parents face in mutual cooperation during remote schooling?

4.3   Method and research approach

In the research, we used a descriptive and causal non-experimental method of pedagogical research and a quantitative research approach.

4.4   Description of the range of instruments and data collection procedure

For the purposes of the research, we designed a survey questionnaire for special and rehabilitation teachers who provide additional professional support at one or more primary schools and for parents of children with special needs who are included in the educational programme with adapted implementation and additional professional support. The questionnaire for special and rehabilitation teachers was divided into ten parts, and the questionnaire for parents into nine parts.

The internal reliability of the instrument was checked with Cronbach's alpha. For the sample of special and rehabilitation teachers (N=43), it was 0.715, which indicates medium reliability of the instrument, while it was 0.806 for the sample of parents (N=41), which indicates good reliability of the instrument.

The research took place in April, May, and June 2021.

4.5   Sample description

Sampling was purposive and non-random. The research included 43 special and rehabilitation teachers (hereinafter SRTs) who provide additional professional support (hereinafter APS) at one or more primary schools and 41 parents of children with special needs who are included in the educational program with adapted implementations and APS. In the following, we present a more precise structure of the sample.

Table 1. Structure of the SRT sample

Variable		f	f%
Gender (N = 43)	Male	2	4.7
	Female	41	95.3
Years of service (N = 43)	Less than 1 year	2	4.7
	1–3 years	15	34.9
	4–6 years	8	18.6
	7–18 years	15	34.9
	19–30 years	3	7.0
Title (N = 43)	No title	23	53.5
	Mentor	15	34.9
	Counsellor	3	7.0
	Councillor	2	4.7
Number of locations where they carry out APS (N =43)	1	26	60.5
	2	6	14.0
	3	8	18.6
	5	3	7.0
Number of students they teach (N = 43)	1–5 students	2	4.7
	6–10 students	5	11.6
	11-15 students	24	55.8
	16-20 students	11	25.6
	21-25 students	1	2.3
Educational period of the students with the most APS (N = 43)	1st educational period	6	14.0
	2nd educational period	15	34.9
	3rd educational period	22	51.2

Of all participating SRTs, 95.3% were women, and 4.7% were men. Most SRTs (i.e., 34,9%) had 1–3 years of service, but there were also 34.9% of those with 7–8 years of service, 18–6% with 8 years of service, 7.0% with 19 to 30 years of service, and 4.7% with less than 1 year of service. Of all the participating SRTs, the largest number (i.e., 53,5%) have no title, 34.9% have the title of mentor, 7.0% of SRTs have the title of counsellor, and 4.7% have the title of councillor. According to the location where APS is carried out, the most numerous (i.e., 60.5%) were those who carry out APS in one location, 18.6% in three locations, 14.0% in two locations and 7.0% in five locations. Among all the participants, the largest number (i.e., 55.8%) had 11–15 students under consideration in the 2020/2021 school year, 25.6% had 16–20 students, 11.6% 6–10 students, 4.7% 1–5 students, and 2.3% 21–25 students. The majority of them (i.e., 51.2%) implement APS with students in the 3rd educational period, 34.9% with students in the 2nd educational period and 14.0% with students in the 1st educational period.

Table 2. Structure of the parent sample

Variable		f	f%
Gender (N = 41)	Male	0	0
	Female	41	100.0
Number of school-age children	1 child	19	46.3
	2 children	17	41.5
	3 children	4	9.8
	5 or more children	1	2.4
Degree of education	Vocational school	3	7.3
	Secondary vocational school	10	24.4
	Higher vocational school	7	17.1
	University degree	14	34.1
	Masters' degree	5	12.2
	Doctorate	2	4.9
Employment status during their child's remote schooling	Employed full-time/part-time	9	22.0
	Work from home	14	34.1
	Temporarily not working because of pandemic	11	26.8
	Unemployed	7	17.1

All participating parents were female (i.e., 100.0%). Of these, 46.3% have one school-age child, 41.5% two, 9.8% three, and 2.4% 5 or more school-age children. Regarding the education of the parents, 34.1% have

a university degree, 24.4% have finished a secondary vocational school, 17.1% a higher vocational school, 12.2% have a master's degree, 7.3% have finished vocational school, and only 4.9% of them indicated a doctorate as the highest level of education they achieved.

Table 3. Structure of the parents' sample according to the child's data

Variable		f	f%
	1st grade	3	7.3
	2nd grade	2	4.9
	3rd grade	8	19.5
	4th grade	3	7.3
Grade the child is in	5th grade	2	4.9
	6th grade	8	19.5
	7th grade	4	9.8
	8th grade	6	14.6
	9th grade	5	12.2
	Kindergarten	5	12.2
	1st grade	12	29.3
	2nd grade	9	22.0
Grade when the child got his/ her decision on orientation	3rd grade	7	17.1
	4th grade	4	9.8
	5th grade	2	4.9
	6th grade	1	2.4
	7th grade	1	2.4
	2 hours	17	41.5
How many hours of APS does the child receive per week?	3 hours	7	17.1
	4 hours	17	41.5

Equal numbers of parents (i.e., 19.5%) have a child in the 3rd grade or in the 6th grade, 14.6% in the 8th grade, 12.2% in the 9th grade, 9.8% in the 7th grade; equal numbers (i.e., 7.3%) have a child in the 4th grade or the 1st grade; equal numbers (i.e., 4.9%) have a child in the 5th grade or in the 2nd grade. Of these children, 29.3% received a decision on orientation in the 1st grade, 22.0% in the 2nd grade, 17.1% in the 3rd grade, 12.2% in the preschool period, 9.8% in the 4th grade, 4.9% in the 5th grade and the least (i.e., 2,4%) in either the 6th or 9th grade. Of these, 41.5% of children receive 2 hours of APS per week, another 41.5% receive 4 hours of APS per week, while 17.1% receive 3 hours of APS per week.

Participating parents reported that most children have several problems or a combination of several educational needs. Most children (i.e., 21) have attention and concentration disorders or attention deficit hyperactivity disorder; nine children have general learning difficulties; nine children also have emotional and behavioural disorders; eight children have a long-term illness; eight children have specific learning difficulties; six children have speech-language disorders; five children have autistic spectrum disorders, and one child is physically challenged.

5   Results and discussion

5.1   *Frequency and manners of cooperation between special and rehabilitation teachers and parents during remote schooling*

In the first research question, we were interested in how often and in what ways SRTs and parents cooperated during remote schooling (hereafter RS) compared to the time of education in school (hereafter EIS).

Table 4 shows the answers of SRTs and parents about the frequency of mutual cooperation during EIS.

Table 4. Frequency of cooperation during EIS

Frequency of cooperation during EIS	SRT		parents	
	f	f%	f	f%
Daily	5	11.6	4	9.8
Weekly	7	16.3	9	22.0
Monthly	16	37.2	5	12.2
Annually	1	2.3	5	12.2
As needed	14	32.6	18	43.9
Total	43	100.0	41	100.0

During EIS, 37.2% of SRTs cooperated with parents monthly, 32.6% as needed, 16.3% weekly, 11.6% daily, and 2.3% annually. During EIS, 43.9% of parents cooperated with their child's SRT as needed, 22.0% weekly, 12.2% monthly, also 12.2% annually, and 9.8% of parents cooperated with their child's SRT daily.

In the following, we were interested in the frequency of mutual cooperation during RS compared to EIS, which is shown in Table 5.

Table 5. Frequency of cooperation during RS compared to EIS

Frequency of cooperation during RS compared to EIS	SRT		parents	
	f	f%	f	f%
Less often	2	4.7	14	34.1
About the same	5	11.6	12	29.3
More often	36	83.7	15	36.6
Total	43	100.0	41	100.0

Compared to the time of EIS, during the RS, 83.7% of the surveyed SRTs participated with parents more often, 11.6% about the same, and 4.7% less often. Parents answered somewhat differently, wherein 36.6% of parents cooperated with their child's SRT more often during RS, 34.1% less often, and 29.3% about the same.

Parents and SRTs evaluated their satisfaction with the frequency of mutual contact during RS on a 5-point scale; 48.8% of SRTs were satisfied with the frequency of contact, 27.9% were neither satisfied nor dissatisfied, 14.0% were very satisfied, 7.0% were dissatisfied, and 2.3% were very dissatisfied. Similarly, 34.1% of the surveyed parents were very satisfied with the frequency of contact with SRTs during RS, 22.0% were satisfied, 19.5% were neither satisfied nor dissatisfied, 17.1% were dissatisfied, and 7.3% were very dissatisfied.

Both SRTs and parents mostly answered that they cooperated more often during RS compared to EIS, which is an important finding. Rožman Krivec (2021) states that during the RS period, strengthening the partnership between school and parents is even more important, since students learn at home, and parents are the ones who can help them to a much greater extent than teachers. They thus represent the main bond between student and teacher, especially for younger students. However, it is necessary to emphasise that mutual communication in such conditions is difficult due to physical absence, which makes face-to-face contact impossible. Thus, it is all the more important to observe communication principles and laws that can be observed and maintained even remotely.

We were also interested in the ways in which SRTs and parents cooperated during EIS and RS, which is shown in Table 6.

Table 6. Manners of cooperation

Manners of cooperation	SRT (f / f%)			Parents (f / f%)		
	EIS	RS	Did not use	EIS	RS	Did not use
Phone calls or texts	36	42	1	27	31	6
	84%	98%	2%	63%	72%	14%
e-mail	36	42	0	21	35	5
	84%	98%	0%	49%	81%	12%
Messages in a notebook	24	2	18	19	6	21
	56%	5%	42%	44%	14%	49%
Professional group meetings	41	29	1	28	12	11
	95%	67%	2%	65%	28%	26%
Conversation hours or parent-teacher meetings	39	29	3	30	24	8
	91%	67%	7%	70%	56%	19%
Cooperation through intermediaries (e.g., teachers, school counsellors, etc.)	30	24	10	24	24	9
	70%	56%	23%	56%	56%	21%
During the APS hours in the form of visits	12	15	21	8	7	32
	28%	35%	49%	19%	16%	74%
Random meetings at school	31	3	12	15	4	27
	72%	7%	28%	35%	9%	63%
Lectures and workshops for parents	19	7	21	11	2	32
	44%	16%	49%	26%	5%	74%

During EIS, SRTs most often used expert group meetings (41 SRTs or 95%), conversation hours or parent-teacher meetings (39 or 91%) and phone calls or messages (36 or 84%) and, to the same extent, also e-mails (36 or 84%), to cooperate with parents. This is followed by random meetings at school (31 or 72%), cooperation through intermediaries (30 or 70%), messages in a notebook (24 or 56%), lectures and workshops for parents (19 or 44%), and cooperation in the form of visits during APS hours (12 or 28%).

As expected, during the RS period, as much as 42 (i.e., 98%) of SRTs maintained cooperation with the help of phone calls or messages, and to the same extent also with the help of e-mails. Somewhat less often (29 or 67%), they used professional group meetings and conversation hours or parent-teacher meetings. This is followed by cooperation through intermediaries (24 or 56%) and, during the RS period, participation during

APS hours in the form of visits came to the fore (15 or 35%), from which we can conclude that parents were remotely present during the child's APS hours. To the smallest extent, during the RS, SRTs used lectures and workshops for parents (7 or 16%), random meetings at school (3 and 7%) and messages in notebooks (2 and 5%) to cooperate with parents.

Likewise, during EIS, parents most often used conversation hours or parent-teacher meetings (30 parents or 70%), professional group meetings (28 or 65%) and phone calls or messages (27 or 63%) to cooperate with their child's SRT. This is followed by cooperation through intermediaries (24 and 56%), e-mails (21 and 49%), notebook messages (19 and 44%), random meetings at school (15 and 35%) and lectures and workshops for parents (11 or 26%). Similarly to SRTs, during EIS, parents used the option to participate during the APS hours in the form of visits the least (8 or 19%).

Also, as expected, during the RS period, parents most often used e-mails (35 parents or 81%), phone calls or messages (31 or 72%) to cooperate with their child's SRT, as well as conversation hours or parent-teacher meetings and cooperation through intermediaries (24 or 56%). To a much lesser extent than SRTs, parents reported participation in expert group meetings (12 or 28%) and in the form of visits during APS hours (7 or 16%). In the fewest cases, during RS, parents used notebook messages (6 and 14%), random meetings at school (4 and 9%), and lectures and workshops for parents (2 and 5%) to cooperate with their child's SRT.

The results coincide with the results of the research by Rupnik Vec et al. (2020), who verified which communication channels or manners of cooperation and communication were used by headteachers during RS to communicate with parents. They also mainly used e-mails and the phone, while more than half of the headteachers communicated with parents using eAsistent (a web-based classroom management software), in some schools also via the online classroom, the school website, Facebook, Google Classroom, Skype, Jitsi Meet, by regular mail and also with door-to-door visits. In doing so, they emphasised that they chose those communication channels that suited the parents and their capabilities. As the most appropriate communication channel for cooperation with parents, the headteachers rated e-mail and telephone conversations, which are also the most accessible, practically tested, and familiar communication channels for parents.

In her research in which she included 50 Slovenian speech and language therapists and teachers of the deaf, Schmidt (2019) found that it would be necessary to strengthen the participation of parents in their hours of additional professional support and participation in conversation hours or parent-teacher meetings. This coincides with the results of our research, as 49% of SRTs and 74% of parents reported that they had never used such a manner of cooperation. In the case of conversation hours or parent-teacher meetings, the results of our research show the opposite, since this type of mutual cooperation was used by as many as 91% of SRTs and 70% of parents during EIS. Here, we also point out the finding that this proportion decreased both for SRTs and for parents during the RS period, for the former by 24%, for the latter by 14%.

As for the manners of mutual cooperation, visits during the APS hours and lectures and workshops for parents were implemented the least. To all the listed manners of cooperation, another could be added: various activities and events for parents, which are mostly the domain of class teachers but would also make sense for connecting SRTs and parents. Kalin et al. (2009, in Gregorčič Mrvar et al., 2016) found that parents see the biggest obstacle in cooperation with the school as poor mutual knowledge. This represents an important step on the way to high-quality mutual cooperation and partnership, the result of which will be the provision of optimal upbringing and education for children.

It should also be pointed out that both in the answers of SRTs and in the answers of parents, a decrease in the frequency of lectures and workshops for parents can be detected from the time of EIS compared to the time of RS. The period of RS represented an opportunity for this manner of cooperation, since time and space were not such important factors in online learning.

In the following, we were interested in whether the frequency of cooperation or of contacts during RS compared to EIS and various factors, such as age, level of independence, and special needs of children, show statistically significant differences.

Table 7. Chi-squared test – categories of APS provision periods and groups of parents with which SRTs most often cooperated during RS

The group of parents with which the SRTs cooperated the most during RS			Parents of students in the 1st educational period	Parents of students in the 2nd educational period	Parents of students in the 3rd educational period	Total
Educational period of the students with the most APS	1st educational period	f	6	0	0	6
		f%	100.0%	0.0%	0.0%	100.0%
	2nd educational period	f	7	8	0	15
		f%	46.7%	53.3%	0.0%	100.0%
	3rd educational period	f	7	9	6	22
		f%	31.8%	40.9%	27.3%	100.0%
Total		f	20	17	6	43
f%			46.5%	39.5%	14.0%	100.0%

$\chi^2=17.364$, p=**0.002**

Regarding the groups of parents with whom they cooperated during remote schooling, **there are statistically significant differences** ($p < 0.05$), at the significance level $\alpha = 0.05$, according to the categories of APS provision periods. The SRTs who conducted APS lessons to the greatest extent with students of the 1st educational period also cooperated more with their parents. SRTs who devote the most APS hours to students in the 2nd and 3rd educational periods also cooperated more with these parents.

5.2   *SRTs' and parents' perception of mutual cooperation during RS*

In the following, we present the experience of the importance of the cooperation of SRTs and parents, the general satisfaction with mutual cooperation during the RS, and the advantages and disadvantages that both of them perceived in the mutual cooperation during the RS.

The answers regarding the importance of cooperation are presented in Table 8.

Table 8. Perception of the importance of mutual cooperation

How do they perceive the importance of cooperation?	SRT		Parents	
	f	f%	f	f%
Important in most cases	12	27.9	12	29.3
Very important	31	72.1	29	70.7
Total	43	100.0	41	100.0

In general, 72.1% of SRTs perceive cooperation with parents as very important and 27.9% as important in most cases. None of the SRT respondents answered that they consider cooperation with parents to be unimportant or completely unimportant in most cases.

Similarly, 70.7% of surveyed parents perceive cooperation with SRTs as very important and 29.3% as important in most cases. Also, none of the parents answered that they consider cooperation with SRTs to be unimportant or completely unimportant in most cases.

We were also interested in the extent to which SRTs and parents are generally satisfied with mutual cooperation. The data are shown in Table 9.

Table 9. Overall satisfaction with mutual cooperation during RS

General satisfaction with mutual cooperation during RS	SRT		parents	
	f	f%	f	f%
Dissatisfied	1	2.3	6	14.6
Partially satisfied	9	20.9	9	22.0
Satisfied	27	62.8	11	26.8
Very satisfied	6	14.0	15	36.6
Total	43	100.0	41	100.0

A total of 62.8% of surveyed SRTs were satisfied with the cooperation with parents during RS, 20.9% were partially satisfied, 14.0% were very satisfied, and 2.3% (i.e., one SRT) were not satisfied with the cooperation with the parents during the RS.

Regarding cooperating with SRTs during the RS, 36.6% of parents were very satisfied, 26.8% were satisfied, 22.0% were partially satisfied, and 14.6% were dissatisfied.

The results of the research by Puklek Levpušček and Uršič (2021) also show the same result: the majority of Slovenian parents who participated in the research were satisfied with the support of teachers during remote schooling.

With two open-ended questions, we wanted to determine what SRTs and parents saw as advantages and disadvantages or shortcomings during RS compared to EIS. The majority of SRTs (i.e., 29) saw a great advantage in more frequent communication and cooperation with parents, as the feedback was immediate and real-time, for example, compared to writing in the student's notebook, and problems were solved simultaneously. They pointed out that the parents were more responsive and approachable; as a result, their relationships with each other were of a higher quality. Like the parents, they pointed out easier organisation and greater insight from parents into their work and the work of the child as an advantage: 'Parents saw what the student knows or doesn't know, how he communicates...' They also saw an advantage in more authentic and personal contacts, in greater insight into the functioning of the family and its dynamics and in the progress of children. They stated: 'We have become more flexible, receptive to different paths' and 'You enter the child's home through video conferencing, in a way we have become even more connected. The children were able to introduce me to their pets, sisters, brothers, etc. In a way, you enter their world and get to know them. Definitely an advantage in building and upgrading the relationship with the child'. Only three SRTs did not see an advantage in mutual cooperation during RS compared to EIS.

Most parents (i.e., 18) did not see any advantages in mutual cooperation during RS compared to EIS. Nevertheless, the other parents recognised some advantages during this period, specifically more cooperation with the SRTs and, as a result, better exchange of information and more contacts, as well as greater control of the child's work by the parents, since they could be present at the APS lessons. In addition, they highlighted the greater promptness of the SRT, easier organisation, and saving time, as it is easier to coordinate for an online meeting than for a live one; newly acquired knowledge: 'That I myself learned a lot with the help of the SRT', 'I was present at APS classes and saw how he responds to their guidance, where he has problems that I had not noticed before'; ongoing problem solving and greater independence of the child. One of the parents also pointed out the following: 'The child can participate without having to be absent and thus exposed to the attention of other students'.

The majority of SRTs (i.e., 11) see the shortcomings of mutual cooperation during RS, compared to EIS, in the lack of personal and authentic contact, as communication, counselling, and mutual assistance are much easier in person. The overload of the parents was also cited as a shortcoming by the SRTs, as a result of which some had no desire to communicate with SRTs. The other mentioned shortcomings were lack of knowledge to use digital technology, as 'Many parents are less skilled in the use of technology'; poor responsiveness or unresponsiveness of individual parents; in contrast, some mentioned too much supervision and control by parents and too high expectations and demands on their part; an excessive amount of work that brought with it a lot of time in front of the computer; they also mentioned that learning and teaching via video conferences are tiring and less effective. Several SRTs pointed out the lack of a boundary between private life and work, as they felt that they were at work all day. Thus, one SRT wrote: 'If you don't set a boundary, you can be in contact with the parents for days on end'.

We can summarise that cooperation with parents was different, which is also indicated by the following statement: 'When students are at school, it is easier to come in contact with the parents who do not respond to messages – when they come to pick up their children from school'. Despite all the listed shortcomings, 11 SRTs did not detect them in mutual cooperation during the RS.

In the same way as SRTs, the majority of parents (i.e., 15) saw the lack of personal contact as a shortcoming, mentioning the irreplaceability of personal contact. In addition to the aforementioned, they saw a deficiency in the need for greater involvement of parents, as they felt that they were on their own for everything and that 'reviewing notebooks and assignments, checking the dates of written tests and oral exams is only the obligation of the parents'; poor internet connection, which made it difficult to communicate with each other; unresponsiveness; motivating children, as they perceived staying at home as a vacation and not as remote schooling, and in the lack of adequate information, explanation, contact with peers, and other factors.

Similar to the SRTs, 10 parents did not see any shortcomings in mutual cooperation during the RS. On the contrary, one of the parents wrote: 'I had more contacts with APS providers via the remote access than usual'.

5.3   Challenges in mutual cooperation during remote schooling

With an open-ended question, we wanted to find out what the problems and obstacles in mutual cooperation were that SRTs and parents encountered during the RS.

Most SRTs (i.e., 14) did not encounter problems and obstacles in mutual cooperation during the RS. The biggest obstacle for the rest (i.e., 10 SRTs) was the unresponsiveness of parents and children. In addition, they also mentioned to a lesser extent the problems of the technical aspect, such as a poorer internet connection and insufficient digital literacy of parents, less feedback from parents, time constraints of parents, overload of both parents and SRTs, too high expectations of parents (e.g., 'Some parents expected constant preparedness and immediate response'), hardships of parents and children, lack of motivation, foreign-speaking parents or families, overlapping obligations and coordinating the schedule for all video conferences. They also mentioned that some parents did the work instead of their children.

As many as 27 parents did not encounter any obstacles or problems in their mutual cooperation during the RS. The rest of the parents, however, cited the incompetence of the school staff to a very small extent; non-cooperation with the school, wherein they felt like they were on their own for everything; the feeling of not knowing whom to turn to; unresponsiveness or poor responsiveness and poor internet connection. One of the parents wrote: 'The absence of a genuine connecting relationship on an emotional level between the teacher and the child'. Furthermore, one of the answers referred to the lack of time: 'Regarding the APS provider, no. The main problem was the lack of time. We really do a lot of work at home with the child. During remote schooling, I worked with the child for a couple of hours, in between I had meetings at work myself, then a walk, lunch and then (already completely tired) I had to work for my job again. The same was true for my husband. This works for a while, but not in the long run. We did the obligatory things with the child, but given the above, we ran out of time to refresh his knowledge. Children with problems, however, usually need more time to consolidate their knowledge.'

Puklek Levpušček and Uršič (2021) conducted a survey in which they included 495 Slovenian parents, of which 313 were parents of students in the 3rd educational period of primary school, 147 were parents of students from the first to third year of secondary school, and 35 were parents of

students in their final year of secondary school. In general, parents rated RS as more complex compared to the education they were used to before. To the greatest extent, they reported the problems they had with motivating their children for schoolwork and learning.

An American survey conducted in 2020 (Garbe et al., 2020), which included a sample of 122 parents of children of various ages, showed that during the RS, 54 parents were very satisfied, and 47 parents were satisfied with the amount of support they received from schools. Despite this, parents faced many obstacles and problems during the RS. The authors of the research divided them into five groups: a) coordination of obligations, b) lack of (learning) motivation, c) accessibility, d) learning success or results, and e) other. The research also showed that some parents reported an increased need for communication with the school or teachers, mainly due to unclear expectations and the need for direction and guidance when using online tools. They also reported a lack of knowledge and competence to teach their children, in which case they would also need the help of a teacher and consequently more mutual communication.

Di Pietro et al. (2020) state that regular and detailed communication between the school and parents is a fundamental element of a successful online learning strategy, so it is important to monitor and analyse it.

We were interested in whether parents differ in various aspects of cooperation with SRTs during RS, depending on the level of education. In the analysis, we included the frequency of participation during the RS compared to the time of EIS; satisfaction with the frequency of contact during the RS; the purpose of cooperation with the SRTs during the RS; the way of cooperation with SRTs that suited them better; the need for instructions and additional skills for the use of digital technology and online tools at the start of RS; and the frequency of participation during RS compared to EIS. Statistically significant differences ($p < 0.05$) at the characteristic level $\alpha = 0.05$ occur only in the item that refers to parents' need for instructions and additional skills for using digital technology and online tools at the start of RS, meaning their digital competence. At the start of the RS, parents with a higher level of education needed additional knowledge and instructions for the use of digital technology and online tools to a statistically significantly lesser extent than parents with a lower level of education.

Table 10. Chi-squared test – parents' level of education and instructions and additional skills for using digital technology and online tools at the start of RS

Instructions and additional skills for using digital technology and online tools at the start of RS			Yes	No	Total
Parents' level of education	Lower level of education	f	7	6	13
		f%	53.8%	46.2%	100,0%
	Higher level of education	f	6	22	28
		f%	21.4%	78.6%	100,0%
Total		f	13	28	41
f%			31,7%	68.3%	100.0%

$\chi 2= 4.179$, p=**0.041**

This can be linked to the results of the research by Nusser (2021), in which parents with a higher level of education, compared to parents with a lower level of education, reported to a lesser extent about problems, challenges and obstacles during school closures. Di Pietro et al. (2020) also point to a possible lack of digital skills in parents who come from less privileged backgrounds. There is a high probability that these parents find it difficult to help their children cope with the technical challenges that online learning or RS brings. At the same time, they themselves find it more difficult to use digital technology and online tools, for example, cooperation and communication with the school.

6   Conclusion

Previous research in the field of parental involvement and cooperation with parents referred to the time of education in school, but all this has changed with the Covid-19 pandemic and the move to the internet (i.e., with remote schooling). The global and sudden upheaval in education consequently calls for studying the experiences of parents and their needs during this time.

Regardless of age, level of independence, special needs of children or other characteristics, we can conclude that cooperation between school and family or, in our case, between the special and rehabilitation teachers and the parents is extremely important, which was also proven during the remote schooling.

Communication is the key element in building a relationship. Therefore, the research finding that special and rehabilitation teachers and parents mostly cooperated more frequently during remote schooling than before provides important information. During remote schooling, parents represented an important link between the student and the teacher, especially for younger children and children with special needs. Both parents and special and rehabilitation teachers most frequently used conversation hours or parent-teacher meetings, expert group meetings, and phone calls or messages during remote schooling. The results show that both parents and special and rehabilitation teachers considered the cooperation during remote schooling as important in most cases and that they were mostly satisfied or very satisfied with the frequency of cooperation during remote schooling. Most of them also expressed overall satisfaction with mutual cooperation during remote schooling. The results of the research by Puklek Levpušček and Uršič (2021) similarly show that the majority of the parents included in the research were satisfied with the support of teachers during remote schooling.

It is also interesting that, after experiencing cooperation both during remote schooling and during education in school, parents and special and rehabilitation teachers in our research expressed that, in most cases, both types of cooperation suited them equally. It was found that despite the overall satisfaction with cooperation during remote schooling, both parents and special and rehabilitation teachers perceived some problems and obstacles in mutual cooperation, with special and rehabilitation teachers indicating more of them. The latter mainly mentioned problems and obstacles in the area of mutual cooperation and unresponsiveness of parents and children. In contrast, parents mentioned the incompetence of school staff, non-cooperation with the school, and the feeling of not knowing whom to turn to, all to a very small extent. Gregorčič Mrvar et al. (2016) emphasise that it is necessary to identify possible obstacles in school and in cooperation in advance to attempt to understand them and also to eliminate them systematically. However, it is necessary to be aware that special and rehabilitation teachers and parents found themselves in such a situation for the first time and that problems and obstacles were hardly predictable or foreseeable. Analysing and exploring these types of cooperation problems certainly contributes significantly to anticipating challenges and obstacles to remote schooling and, consequently, to the professional learning of special and rehabilitation teachers and to their competent behaviour in similar situations.

It would be useful to examine how cooperation and various aspects of cooperation are expressed in the post-remote-schooling period and to what extent they differ from cooperation in the period before the outbreak of the Covid-19 pandemic. Anderson (2021) names parents as part of the solution for the future, as they are the ones who had the most detailed insight into the education of their children during remote schooling. School was no longer just an institution where children spent part of their day; parents might not exactly know what was going on there, but they could observe and follow the work of their child and their teacher or special and rehabilitation teacher every minute of the day. Through this, they were able to gain important insight into how they can best support their children during their education and what importance and influence teachers have on the lives of their children. Even in the future, after the Covid-19 pandemic, parents, teachers, and those in leading positions in education must be aware that it is their mutual cooperation and coordination that will reduce the negative impact or consequences of that period. We will have to extract good practices from the traditional approach, innovative approaches, and approaches used in remote schooling and combine and transform them into a new and flexible model of education and cooperation (Fullan et al., 2020, in Anderson, 2021).

References

Anderson, L. W. (2021). Schooling Interrupted: Educating Children and Youth in the Covid-19 Era. *Center for Educational Policy Studies Journal*, *1* (Sp.Issue). https://doi.org/10.26529/cepsj.11.sp.issue

Baytiyeh, H. (2018). Online learning during post-earthquake school closures. *Disaster Prevention and Management, 27*(2), 215–227. DOI: 27. 10.1108/DPM-07-2017-0173.

Berčnik, S. and Devjak, T. (2015). Aktivno vključevanje staršev v vzgojni proces v vrtcu [Active involvement of parents in the educational process in kindergarten]. In M. Mertljak (ed.), *Vpliv družbenih sprememb na vzgojo in izobraževanje: zbornik povzetkov*. Ljubljana: Pedagoška fakulteta Univerze v Ljubljani.

Bogatec, N., Brezigar, S. and Mezgec, M. (2021). Pouk na daljavo v osnovnih šolah s slovenskim učnim jezikom in slovensko-italijanskim dvojezičnim poukom v Italiji med epidemijo covid-19 [Distance instruction in primary schools with Slovenian language learning and Slovenian-Italian bilingual instruction in Italy during the covid-19 epidemic] [Special issue]. *Sodobna pedagogika, 72*(138), 44–68.

Bučar, K. (2012). *Sodelovanje med starši otrok s posebnimi vzgojno-izobraževalnimi potrebami in specialnimi pedagogi na osnovni šoli* [Cooperation between parents of children with special educational needs and special educators at primary school] [Bachelor's Thesis, Univerza v Ljubljani, Pedagoška fakulteta]. PeFprints. Retrieved from: http://pefprints.pef.uni-lj.si/851/

Čačinovič Vogrinčič, G. (1999). Svetovalno delo s starši, svetovalno delo z družinami [Counseling with parents, ounselling with families]. In M., Resman (ed.), Svetovalno *delo v vrtcih, osnovnih in srednjih šolah* (p. 175–191). Ljubljana: Zavod Republike Slovenije za šolstvo.

Dhawan, S. (2020). Online learning: A panacea in the time of covid-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5–22. https://doi.org/10.1177/0047239520934018

Di Pietro, G., Biagi, F., Coelho, P., Karpiński, Z. and Mazza, J. (2020). *Verjeten vpliv epidemije COVID-19 na izobraževanje: razmisleki, ki temeljijo na obstoječi literaturi in nedavnih mednarodnih zbirkah podatkov [Likely impact of the COVID-19 epidemic on education: reflections based on existing literature and recent international databases]*. Ljubljana: Pedagoški inštitut. DOI: https://www.doi.org/10.32320/978-961-270-326-4

Ernecl, T. (2018). *Sodelovanje med starši, specialnim pedagogom in vzgojitelji v vrtcu [Cooperation between parents, special educators and kindergarten educators]* [Master's Thesis, Univerza v Mariboru, Pedagoška fakulteta]. DKUM. Retrieved from: https://dk.um.si/IzpisGradiva.php?id=72895&lang=slv

Code of ethics of special and rehabilitation teachers of Slovenia (2009). Retrieved from: http://www.drustvo- srp.si/images/pdf/dokumenti/kodeks_etike_2009.pdf

European Parliament (2015). Izobraževanje otrok v izrednih razmerah in dolgotrajnih krizah. Resolucija Evropskega parlamenta z dne 26. Novembra 2015 o izobraževanju otrok v izrednih razmerah in dolgotrajnih krizah [Education of children in emergency situations and protracted crises. Resolution of the European Parliament of 26 June 2003 (not yet) on the european union's role in the November 2015 on the education of children in emergency situations and protracted crises]. Retrieved from: https://www.europarl.europa.eu/doceo/document/TA-8-2015-0418_SL.html

Garbe, A., Ogurlu, U., Logan, N. and Cook, P. (2020). COVID-19 and Remote Learning: Experiences of Parents with Children during the Pandemic. *American Journal of Qualitative Research, 4*(3), 45–65. DOI: https://doi.org/10.29333/ajqr/8471

Gregorčič Mrvar, P., Kalin, J., Mažgon, J., Muršak, J. and Šteh, B. (2016). *Skupnost in šola: vrata se odpirajo v obe smeri [Community and school: doors open in both directions]*. Znanstvena založba Filozofske fakultete Univerze v Ljubljani.

Jereb, A. (2011). Partnerstvo med starši in učitelji kot dejavnik pomoči učencem z učnimi težavami [Partnership between parents and teachers as a factor in helping pupils with learning difficulties]. In S. Pulec Lah in M. Velikonja (ed.), *Učenci z učnimi težavami – izbrane teme* (p. 110–125). Ljubljana: Univerza v Ljubljani, Pedagoška fakulteta.

Kalin, J. (2009). Pedagoški vidiki sodelovanja učiteljev in staršev – izzivi za učitelje, šolo, starše in družbeno skupnost [Pedagogical aspects of teacher and parent participation – challenges for teachers, school, parents and the community]. In F. Cankar in T. Deutsch (ed.), Šola kot stičišče partnerjev: sodelovanje šole, družine in lokalnega okolja pri vzgoji in izobraževanju otrok (p. 83–97). Ljubljana: Zavod Republike Slovenije za šolstvo.

Kalin, J., Govekar-Okoliš, M., Mažgon, J., Gregorčič Mrvar, P., Resman, M. and Šteh, B. (2008). *Vzvodi uspešnega sodelovanja med domom in šolo: sodobne rešitve in erspective: zaključno poročilo [Levers of successful home-school cooperation: modern solutions and perspectives: final report]*. Ljubljana: Univerza v Ljubljani, Filozofska fakulteta.

Kapun, M. M., Kavalir, M., Kustec, K. and Pušnik, N. (2020). Ostati ali oditi – doživljanja mednarodnih študentov v času epidemije bolezni covid-19 [Stay or go – experiencing international students during the covid-19 disease epidemic]. In M. Hočevar (ed.), *Družboslovne razprave, 36*(94/95), 75–100.

Košir, S., Bužan, V., Hafnar, M., Lipec Stopar, M., Macedoni Lukšič, M., Magajna, L. and Rovšek, M. (2011). Vzgoja in zobraževanje otrok s posebnimi potrebami [Education of children with special needs]. In J. Krek in M. Metljak (ed.). *Bela knjiga o vzgoji in izobraževanju v Republiki Sloveniji.* Ljubljana: Zavod RS za šolstvo.

Kustec, S., Logaj, V., Krek, M., Flogie, A., Truden-Dobrin, P. and Ivanuš-Grmek, M. (2020). *Vzgoja in izobraževanja v Republiki Sloveniji v razmerah, povezanih s covid-19: modeli in priporočila [Education in the Republic of Slovenia under covid-19 conditions: models and rec-*

ommendations]. Ljubljana: Ministrstvo za zobraževanje, znanost in šport ter Zavod Republike Slovenije za šolstvo. Retrieved from: https://www.zrss.si/digitalnaknjiznica/Covid_19/ https://www.zrss.si/strokovne-resitve/digitalna-bralnica/podrobno?publikacija=300

Lep, B. (2006). Zadovoljstvo staršev z nudenjem dodatne strokovne pomoči v šolah [Parental satisfaction with providing additional professional assistance in schools]. In M. Pšunder (ed.), *Razrednik@starši.oš* (p. 180-183). Ljubljana: Supra.

Magajna, L., Kavkler, M., Čačinovič Vogrinčič, G., Pečjak, S. and Bregar Golobič, K. (2008). *Koncept dela: učne težave v osnovni šoli [Concept of work: learning difficulties in primary school].* Ljubljana: Zavod Republike Slovenije za šolstvo.

Masten, A. S. and Obradović, J. (2006). Competence and resilience in development. *Annals: New York Academy of Sciences, 1094*(1), 13-27. DOI: 10.1196/annals.1376.003. PMID: 17347338

Medveš, Z. (2020). Šolanje na daljavo – zamujena priložnost [Distance training – a missed opportunity]. *Sodobna pedagogika, 71*(4), 14-26.

Mikelj, L. (2015). Svetovalno delo v osnovni, srednji in šoli s prilagojenim programom [Counseling work in primary, secondary and secondary school with a tailored programme]. In A. Kobolt (ed.), *Svetovanje v praksi* (p. 39-56). Ljubljana: Pedagoška fakulteta Univerze v Ljubljani.

Morrison, M. (2008). Vloga staršev pri izobraževanju otrok s posebnimi potrebami [Role of parents in educating children with special needs]. In M. Kavkler, A. Clement Morrison, M. Košak Babuder, S. Pulec Lah and S. Viola, *Razvoj inkluzivne vzgoje in izobraževanja – izbrana poglavja v pomoč šolskim timom* (pp. 197-204). Ljubljana: Zavod Republike Slovenije za šolstvo.

Nusser, L. (2021). Learning at home during COVID-19 school closures – How do German students with and without special educational needs manage? *European Journal of Special Needs Education, 36*(1), 51-64. DOI: https://doi.org/10.1080/08856257.2021.1872845

Pšunder, M. (1998). *Kaj bi učitelji in starši še lahko vedeli? [What else could teachers and parents know?]* Ljubljana: Zavod Republike Slovenije za šolstvo.

Puklek Levpušček, M. and Uršič, L. (2021). Slovenian parents' views on emergency remote schooling during the first wave of the COVID-19 pandemic. Center for Educational Policy Studies Journal, 11(Sp.Issue). https://doi.org/10.26529/cepsj.1127

Radovan, M. and Kristl, N. (2020). Učenje in poučevanje v virtualnem učnem okolju: pomen oblikovanja skupnosti in sodelovanja [Learning and teaching in a virtual learning environment: the importance of community building and collaboration]. *Sodobna pedagogika, 71*(2), 10-23.

Rožman Krivec, L. (2021). Delo z učenci z učnimi težavami v času učenja na daljavo [Working with pupils with learning difficulties during distance learning] [Special issue]. *Sodobna pedagogika, 72*(138), 204-216.

Rupnik Vec, T., Slivar, B., Zupanc Grom, R., Deutsch, T., Ivanuš Grmek, M., Mithans, M., Kregar, S., Holcar Brunauer, A., Preskar, S., Bevc, V., Logaj, V. and Musek Lešnik, K. (2020). *Analiza izobraževanja na daljavo v času prvega vala epidemije covida-19 v Sloveniji [Analysis of distance education during the first wave of the Covida-19 epidemic in Slovenia].* Ljubljana: Zavod Republike Slovenije za šolstvo. Retrieved from: https://www.dlib.si/stream/ URN:NBN:SI:DOC-X3BSQ9IN/d1f7defb-e0fa-4ad5-a9c5-975068de1020/PDF

Schmidt, T. (2019). *Sodelovanje mobilnih logopedov surdopedagogov s starši [Participation of mobile speech therapists surdopedagos with parents]* [Master's thesis, Univerza v Ljubljani, Pedagoška fakulteta]. Retrieved from: http://pefprints.pef.uni-lj.si/5754/

Soo-Yin, L. (2003). Parent Involvement in Education. In G. Olsen in M. L. Fuller (ed.), *Home-School Relations* (pp. 134-158). Allyn and Bacon.

Statistical Office of the Republic of Slovenia (28. 5. 2021). Učenci s posebnimi potrebami, vključeni v redne ali prilagojene osnovne šole, po vrsti motnje in vrsti programa, Slovenija [Pupils with special needs enrolled in regular or adapted primary schools, by type of disturbance and type of programme, Slovenia], letno. Retrieved from: https://pxweb.stat.si/SiStatData/pxweb/sl/Data/-/0952765S.px/table/tableViewLayout2/

Šimenc, M. (2021). Vloga tehnologije v vzgoji in izobraževanju ter enake možnosti učencev v obdobju pandemije [The role of technology in education and equal opportunities for pupils during the pandemic period] [Special issue]. *Sodobna pedagogika, 72*(138), 12‒26.

Šteh, B. and Gregorčič Mrvar, P. (2011). Stališča in pričakovanja učiteljev, svetovalnih delavcev in staršev drug do drugega v kontekstu sodelovanja med šolo in domom [Views and expectations of teachers, counsellors and parents towards each other in the context of school-to-home cooperation]. *Psihološka obzorja, 20*(1), 17‒41.

The Elementary School Act (ZOsn). (1996). Uradni list RS, št. 81/06, 102/07, 87/11, 40/12 – ZUJF, 63/13 in 46/16 – ZOFVI-K. Retrieved from http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO448

The Placement of Children with Special Needs Act (ZUOPP). (2000). Uradni list RS, št. 3/07, 52/20 in 58/11 – ZUOPP-1. Retrieved from: http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO2062

The Placement of Children with Special Needs Act (ZUOPP-1). (2011). Uradni list RS, št. 58/11, 40/12 – ZUJF, 90/12 in 41/17 – ZOPOPP. Retrieved from: http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO5896#

Trtnik, A. (2006). Sodelovanje med učiteljem in starši otroka s posebnimi potrebami [Cooperation between teacher and parents of child with special needs]. In M. Pšunder (ed.), *Razrednik@starši.oš* (pp. 52‒54). Ljubljana: Supra.

Yazcayir, G. and Gurgur, H. (2021). Students with Special Needs in Digital Classrooms during the COVID-19 Pandemic in Turkey. *Pedagogical Research*, *6*(1). DOI: https://doi.org/10.29333/pr/9356

FULL-DAY EDUCATIONAL WORK: ORGANISATION OF STUDENT-ORIENTED ACTIVITIES

Petra Pejić Papak[*1], *Tena Pejčić*[2], *Tatjana Bandera Mrakovčić*[3],
Jasna Vukonić Žunič[4]

Abstract

Full-day educational work is organised as the students' eight-hour stay at school, during which the process of integrated teaching and learning complements the quality of students' organised free time by involving them in projects and extra-curricular activities. The paper presents an example of good practice in the implementation of full-day educational work with student-oriented teaching activities in Nikola Tesla Elementary School in Rijeka, Croatia.

Through focus groups with female class teachers, we examined their opinions on the possibilities that full-day educational work provides in planning and implementing student-oriented activities and recorded their observed shortcomings and challenges for improving the quality of work in full-day educational work. The obtained results indicate that full-day educational work provides more time dedicated to the student and their individual characteristics, integrated learning, and project teaching. Particularly emphasised is the importance of students' inclusion in organised free-time activities through field classes, extracurricular teaching, and extracurricular activities in various educational areas of the curriculum. Satisfaction with the organisation and the specifics of full-day educational work is also indicated by the results of a survey questionnaire, which examined the attitudes of the parents (N= 235) of the students involved. The parents expressed their satisfaction with all organisational aspects of work, and a high percentage of them underscored they would recommend to other parents that they enrol their children in full-day educational work.

Keywords: full-day educational work; free time; students; teachers; parents

....
1   *Corresponding Author. Faculty of Teacher Education, Sveučilišna avenija 6, Croatia; petra.pejic.papak@uniri.hr
2   Faculty of Teacher Education, Sveučilišna avenija 6, Croatia.
3   Nikola Tesla Elementary School, Trg Ivana Klobučarića 1, Croatia.
4   Pećine Elementary School, Šetalište 13. divizije 25, Croatia.

1   Introduction

The modern school sets new challenges for the student but simultaneously also requires the organisation of teaching aimed at the student, their individual needs, and abilities in order to ensure their educational progress. The requirements are aimed at the development of competencies, a new type of knowledge, skills, abilities, values, and attitudes. Emphasis is placed on the development of 'innovation, creativity, problem-solving, development of critical thinking, entrepreneurship, IT literacy, social, and other competencies' (MZOS, 2011, p. 16) by means of teaching modern methods and forms of work. Prominence is given to experiential learning based on intrinsic motivation, self-evaluation, observation, and discovery, and teachers play the role of process moderators and collaborators. The goal is to help the child become a self-realised person, and that learning content, instead of a goal, becomes a means (Schiro, 2013). As Pažin-Ilakovac (2012, p. 31) observed, 'the school, as a pleasant educational and social community, should provide students with various opportunities for active and partner learning and the development of competencies necessary for the life of a humane, independent, responsible and creative person'. According to Andjić and Pejić Papak (2010), the importance of a stimulating class atmosphere is increasingly highlighted, which:

> favors good success in learning, satisfaction with work and socializing at school, a feeling of confirmation and acceptance in the class collective, and thus the self-esteem and self-confidence of each student, both individually and in the class department as a whole. (p.67)

Glasser (2005) noted that schools should be open throughout the day in order to achieve a quality school that provides quality education since it is the only answer to the problems of our schools. There is a need for full-day educational work. As Tucman (2011, p. 22) pointed out, 'in a full-day school, as opposed to a half-day school, you can find everything in one place: regular classes, individual work, learning and student free time'. The reasons for the organisation of full-day educational work in schools are numerous: there are greater opportunities to achieve the entirety of the educational tasks of the school, students at school perform almost all school duties in cooperation with the teacher and other students, and teachers spend more time with students and can additionally help those students who need practice and revision of topics or encourage additional research of topics depending on the interests and abilities of the students.

By fulfilling obligations and participating in activities, students develop work habits, learn to learn what is important for further education, and carry out the extracurricular activities and free-time activities planned by their teachers in accordance with subject curricula and expectations arising from cross-curricular topics. Therefore, educational work is organised so that a longer stay of students at school enables the student to participate in various teaching activities and organised free-time activities that will positively influence the development of competencies, the overall development of personality and individual potential, preparation for further education, and lifelong learning.

In the Strategic Framework for Full-Day Classes of the Ministry of Science, Education, and Sports (2020, p. 5), it is stated that the introduction of full-day classes 'would directly contribute to the improvement of students' educational achievements, thereby ensuring equal opportunities for all students for integral development, improving the well-being of students and their families, and increasing the autonomy and responsibility of schools and their founders' (Ministry of Science and Education, 2020, p. 5) and that the goal of introducing an experimental program of full-day classes is to strengthen basic competencies. Full-day classes are based on the idea of cooperation between the school and other institutions, because cooperation with the environment 'will provide students with a high-quality and varied offer of educational content, enable them to fully develop their potential and increase the well-being of students, their families and the local community' (MZOS, 2020, p. 43).

The following is an example of good practice in the implementation of full-day educational work (FEW) at Nikola Tesla Elementary School in Rijeka, where this form of work with student-oriented teaching activities has been carried out for more than forty years.

1.1   Presentation of Nikola Tesla Elementary School in Rijeka

In the 2022/23 school year, 570 students were enrolled in classes in Nikola Tesla Elementary School in Rijeka. Eight departments (two for each grade from the first to the fourth grade) work in full-day educational work. More than 70% of students do not reside in the school area. Parents enrol their children in school for various reasons, but in questionnaires about satisfaction with the implementation of full-day educational work, they most often state that the quality of teaching is essential to them and that they are carefree in the workplace knowing that their children are

well taken care of and that they participate in various activities during the organised free time at school. The school employs 61 teachers, 20 of whom are lower elementary teachers (16 teachers work full-time). In lower elementary teaching, three teachers have advanced to the position of mentor, one is a teacher-advisor, and one is a high-level advisor. One teacher is the head of the county expert council for lower elementary teaching, and another is the inter-county head of student cooperatives.

Nikola Tesla Elementary School is the designated training facility of the Faculty of Teacher Education, the Faculty of Humanities and Social Studies (for the departments of History, Croatian Language, and English Language), the Faculty of Mathematics, Informatics, and Polytechnic, Theology in Rijeka, and the Academy of Fine Arts. At the school, trainees in subjects of biology, English, and religion take professional exams. Students of the Integrated Undergraduate and Graduate University Study of Teacher Education of the Faculty of Teacher Education, University of Rijeka, regularly participate in professional practice at the school. Students have the opportunity to learn from excellent teachers, and they, like faculty professors, are provided with assistance in conducting pedagogical research for their graduate and doctoral theses. All teachers are familiarised with the feedback results of the research and thus gain insights that were insufficiently known, or the assumptions about the research topic are merely confirmed.

Recently, the school was involved in the experimental implementation of the 'School for Life' reform during the 2017/18 and 2018/19 school years. Through numerous professional education opportunities, webinars, and completed project tasks, teachers, professional associates, and the school principal acquired new knowledge for continuing the work. The school also conducted national exams and an experimental knowledge test for 5th- and 8th-grade students. The results of the 5th-grade students (the knowledge of the lower-grade students was tested) have not yet been obtained, but the results of the 8th-grade students in all subjects show above-average success in the Republic of Croatia, of which the teachers are extremely proud.

Parents of school students are partners in the process. Cooperation with parents takes place with the same goal: the well-being of their children/ school students. Parents' representatives in the Parents' Council are regularly informed about the life and work of the school; at the same time, they make suggestions for improving the work and are often actively

involved in activities and events at school. Thus far, a survey of parents' attitudes about full-time educational work has been conducted on several occasions, with the aim that the results provide an opportunity for possible improvements in work. The results of the latest survey of the parents' opinions about satisfaction with full-day educational work will be presented in the continuation of this paper.

2   Beginnings of the implementation of full-day educational work

Numerous educational reforms aim to improve the school system in order to provide students with the highest quality learning and teaching experience and develop each individual's competencies, skills, and abilities. Sablić and Blažević (2015, p. 252) emphasise that 'each student should be respected as an active participant in the educational process, as an individual and as an equal member of the community and society as a whole'.

In the 1970s, Markovac (1970) warned about the importance of students' individual differences and, accordingly, the individualisation of teaching in which the student will be an active subject of teaching; therefore, Lukaš and Munjiza (2010:485) point out that 'the goal of education is individual, and it is found in every student, and it is tailored to every student'. The traditional school paid special attention to the scope and schedule of educational content in classes, which students had to remember, and teaching was the dominant form of the organisation of education, which in many ways impoverished the educational potential of the school as a whole. Pivac (2006) states that the operation of a school, in which teaching is only one part of a branched educational structure, is a way of overcoming the traditional closed, isolated nature of the school and a way for its genuine integration into the social whole. Puževski (1981) underscores the vital role of lower elementary teachers, who should be fully free in modelling the working day and week for their class department, and emphasises how they need to be freed from the constraints of a fixed schedule. Therefore, the modernity and future of the educational process are reflected in the openness, connection of teaching and extracurricular work, school, and extracurricular activities, in the organisation, forms and methods of work, and its integration into a single system.

Changes in society, especially the employment of both parents, demanded and continue to demand from the school additional care for children of younger school age. Although the primary reason for the introduction

of an extended stay of students at school was to take care of children during the working hours of parents, the goal was to enable a more complete and proper development of children with a longer stay of students at school (Koraj, 1975). The beginnings of the extended stay of students at school were precisely the hours when students who lived in difficult social conditions voluntarily, under the guidance of the teacher, finished their school obligations. The phrase 'extended' stay refers to the organisation of work in groups of students from different classes who stay at school all day, during the parents' working hours. In those beginnings, the school was conceived as a centre of educational activity, a social-educational institution that enables the wholesome development of students. Previšić (2009) emphasises the importance of acquiring knowledge in a collaborative way. He considers the active process of acquiring knowledge as a fundamental principle in which the student is not a user who receives or is given and transferred knowledge but a participant who creates and realises knowledge. Focusing the teaching on the student is precisely 'an effort to enable the comprehensive development of all cognitive, social, emotional and physical abilities of the student, which also implies the student's self-activity' (Gazibara, 2013, p. 380). Emphasis is placed on teaching that encourages active learning that allows students a high level of autonomy and self-control and the application of various collaborative strategies and specific cognitive skills so that students can distinguish important from unimportant information, analyse and compare, build new knowledge on previous experiences, and think critically (Peko & Varga, 2014). It can be observed that the traditional half-day school schedule can no longer achieve all the tasks and goals of the educational process.

In 1978, with the aim of strengthening the educational component, specifically taking care of the quality of students' free time and developing a positive attitude towards the health, social, and cultural activities of students, as well as quality care for the children of working parents, the expert team of Nikola Tesla Elementary School started working on the introduction of a full-day educational work in the City of Rijeka. The school was the training room of the Pedagogical Academy in Rijeka, with which it shared a building, and with the professional and expert help of professors of pedagogical methodology, there were objective and subjective reasons that enabled the introduction of full-day educational work in the city. It was possible to meet the facility and personnel conditions, and as the school was an experimental elementary school, the teachers' interest and motivation to introduce new ways of working and teaching was at an enviable level. Two teachers, who started working in the class of the first grade, monitored and recorded

students' behaviour and achieved results. The entire team of experts participated in the introduction and implementation of this form of work. The team consisted of the school principal, teachers who worked in the department, a professional associate pedagogue, professors of pedagogical methodology from the Pedagogical Academy, and the school physician. They considered this kind of work a real social need, with the help of which a more intense, organised, sociological, economic and, above all, pedagogical influence on the care and education of students is realised. Once a week, at joint meetings, organisational, structural, financial, and other pedagogical topics related to the new approach to life and work at the school were discussed. Special attention was paid to the quality and possibilities of realising the planned activities so that the schedule of their development was harmonised with the pedagogical, psychological, and health requirements and that was age-appropriate for the students with whom the educational process is conducted.

At the end of the school year, an evaluation of educational work and student achievements was performed. The results of the students' work and achievements in the full-day education department were compared with the control department and recorded. In the realisation of the programme content, the students showed slightly more acquired knowledge than their peers who attended the traditional class department; however, their success in developing certain skills, for example, spoken and written expression, physical activities, collaborative work, and similar, was noticeable.

The school received significant support from the local municipality and from parents who, in large numbers (the first-grade class department comprised 24 students), decided to provide their children with a completely new approach to education and gave the school their support and trust. Therefore, parents' opinions were regularly sought, and the feedback indicated that the school provides students with a healthy, creative, and well-considered environment. This was followed by professional teacher trainers who worked on the project, because everyone was aware that the traditional organisation of work and the traditional schedule of classes no longer met the needs of students, modern teaching methods had to be introduced and intensive work, should be done on the application of collaborative forms and methods of work and creativity in teaching.

During the more than four decades since the introduction of FEW at Nikola Tesla Elementary School, several educational reforms have been implemented in the Republic of Croatia with the aim of improving the

school system and educational work with students. For this form of work, the most significant developments took place when great attention was paid to teaching students using modern strategies and different forms of work through collaborative, research, and experiential learning, as well as with the reform that shifted from program contents to a curricular approach and the achievement of curriculum outcomes with an emphasis and on the introduction of modern educational technology into the process. Focusing the process on the students, experiential and research learning, team and field teaching (i.e., 'learning for life') are precisely the work principles and goals that the school originally set for itself with the organisation of a full-day stay for lower-grades students and which it has been improving all these years.

3   Organisational structure of full-day educational work

The essential determinants of FEW have not changed since the very beginning. From 1978 to the beginning of the 1990s, educational work was carried out from 7:00 a.m. to 3:00 p.m., because, at the time, the period of stay at school corresponded to the working hours of the parents. In the early 1990s, the start of work was aligned with the change in the parents' working hours from 8:00 a.m. to 4:00 p.m., with the possibility of taking care of students until 4:30 p.m. Admission of students to the school is possible from 6:30 a.m. at the earliest, and teachers are in their classes from 7:30 a.m. Until the beginning of the teaching process, students spend their free time under supervision, talking with the teacher, reading, or playing. The teaching day begins at 8:00 a.m., with an agreement on daily activities and division of daily duties (morning meeting).

Given that students stay at school for a full eight hours, the teaching process does not take place the entire time the students are at school, but organised student free time (OFT) and/or student free time (FT) is planned daily. Both OFT and FT are integrated into the teaching working day. In their free time, students independently choose their activities, social games, communication, and recreation in an open space under the supervision of the teacher. However, in planned organised free time, designed activities, extracurricular teaching, cooperation with the community, extracurricular activities, and involvement in project activities, students realise the outcomes of cross-curricular topics, acquire skills and knowledge but also practice the acquired knowledge that students in the traditional class department would do at home for homework. Eating

at school is an integral part of the activity. All students, except for those with health problems, eat breakfast and lunch at school. They learn the rules of proper behaviour and manners at the table, acquire skills, and are encouraged to behave properly. The socialisation of each student, free and unfettered communication between students, but also communication between students and teachers is achieved through various activities in full-day educational work.

In full-day class departments, the teaching hour does not have to and, as a rule, does not last 45 minutes, because importance is attached to integrated teaching and learning by correlating teaching subjects and integrating content. Students are taught thematically throughout the school day. English language classes and the elective subjects of Computer Science and/or Religion last 45 minutes, because these subjects are taught by subject teachers; therefore, due to their schedule, it is necessary to respect the timetable for the duration of the school hour.

The teachers alternate daily in the morning or afternoon work, covering all subjects, and the distribution of teaching subjects is based on the teacher's selection criteria, depending on preferences for a certain educational field, and the mutual agreement of the two teachers who share class responsibilities. It is normal for one teacher to teach the Croatian language, Nature and Science, and Music (or Arts) and for the other to teach Mathematics, Physical Education, and Arts (or Music) according to prescribed subject curricula, curricula of cross-curricular topics, in accordance with the regulations on teachers' weekly responsibilities. Mutual communication and cooperation between teachers is vital for successful work. Daily shift handovers with the exchange of important information and team planning and coordination of extracurricular activities are a mandatory part of work and cooperation. Success at work, good cooperation with parents, and diverse planned activities during the school day largely depend on good teacher cooperation and teamwork, but also on the other teachers who teach in that grade (English language, the elective subjects Religion, Computer Science, or another foreign language in the 4th grade).

During the working week, all school supplies remain at school. Each student has their own locker. Students bring work supplies to school on Mondays and take them home on Fridays so that parents can see the work done during the previous week. Students independently arrange and take care of the orderliness of their lockers.

4   Organised student free time and cooperation with the environment

Special importance in full-day educational work is attached to planned, organised free time (OFT), which is integrated into the teaching day.

The planned, organised free-time activities are divided into several areas: educational tasks, cultural-artistic area, work-technical area, and sports-recreational area.

The area of educational tasks is directly related to the teaching process. During this organised time, according to the needs of individual students (individualisation) or the entire class department, additional or supplementary repetitions and exercises of thematic teaching content are realised. It is necessary to plan enough time for revision and practice since homework is not assigned in full-day education departments. Results are achieved at school under the professional guidance of teachers, but peer support is also encouraged. Such an approach develops students' independence and organisation, which leads to self-regulated learning.

The cultural and artistic area is part of organised free time that expands the students' general culture and education. It develops through frequent visits to exhibitions, theatre, and cinema performances, sightseeing and becoming familiar with cultural and artistic monuments. Nikola Tesla Elementary School is located in the very centre of the city of Rijeka, which makes it easy to choose a variety of activities. Students, accompanied by teachers, regularly attend the performances of the Rijeka City Puppet Theatre, visit the Children's House, where activities for children take place and the 'Stribor' Children's Library. Accompanied by a teacher, they borrow titles from the state-prescribed reading list (Cro. *lektira*) but also participate in workshops and meetings with writers. They are included in the '*School at the Cinema*' art-cinema project on the occasion of St. Vid Day (patron of the City of Rijeka), in traditional masquerade parades, and in other events organised by the City of Rijeka. Excellent cooperation is achieved with the Natural History Museum and the Maritime and History Museum of the Croatian Littoral, the Museum of the City of Rijeka, and other museums and gallery spaces where, in addition to sightseeing, students participate in various workshops.

The sports and recreation area is especially exciting for the students, so the activities are very well received, given that children have a great need

for movement. In addition to daily recreation in the open space, students of full-day educational work go on weekly visits to the Gymnastics Club, where they practice under the professional guidance of gymnastics coaches. All second-grade students attend the 'Rijeka pliva' swimming training project, which is carried out at Kantrida Swimming Pools (project developers are the City of Rijeka and the Primorje Swimming Club).

Cooperation with the Youth Centre, a city institution for organised free time for children, is superbly developed, where traffic lessons are often held at the traffic training ground, and fourth-grade students take their bicycle riding tests. Students follow current events in the environment, such as various fairs: nautical, floristry, ship modelling, domestic organic products, among others.

Students who attend full-day classes are actively involved in the implementation of many projects, both at the class and school levels. The school is proud to hold the *E-twinning* school designation for 2020/2021, which is awarded for two years and has already applied for a new designation. Some of the projects in which students are involved at the school level include: *100th day of school, Ready, steady, go!, Words grow with reading 1, Words grow with reading 2, I read to myself, I read to you, Super-readers 2, Apple Day 2020, In the World of Fine Artists 3, World Space Day 2, Memento of Friendship 7*, and others.

During the working day, students also attend various extracurricular activities that they have chosen according to their interests. The school offers drama, recitation, dance, art, creative and ecological groups, and a student cooperative in which, after the creation of various works, thematic sales exhibitions are organised, and the funds collected are used to buy raw materials for further work.

Cooperation with the local community occurs. The cooperation with the local board on the planning of the arrangement and activities on the square in front of the school, but also the involvement in all activities and events that can benefit the students, is excellent. The *Urbani separe* association is very active in that area, and the school is often involved in their actions.

The school also pays great attention to humanitarian activities. Several times a year, donations are collected for humanitarian purposes for the Home of St. Ana, Depaul, Social self-service. Bakery products and homemade spreads are delivered to the homeless on Thanksgiving Day for the

fruits of the earth. This develops humanity and empathy towards those who are in need.

There is excellent cooperation with the Police Department of Primorje-Gorski Kotar County, which carries out various appropriate activities aimed at student safety. The State Administration for Protection and Rescue Services organises various activities on the occasion of 112 Day or Disaster Protection Day. All the mentioned activities educate our students in an interesting and fun way.

The contents of organised free time are planned at the beginning of the school year as part of the School Curriculum, with the possibility of changing and supplementing activities depending on what is offered during the year or proves to be useful and interesting for students.

5   Parents' satisfaction with the elements of organisation and implementation of full-day educational work

5.1   Research methodology

The goal of the implementation of the questionnaire for the evaluation of work in full-day educational work was to determine the parents' reasons for choosing FEW as a form of schooling for their children and to examine satisfaction with the elements of the organisation and implementation of educational work.

Two-hundred and thirty-five parents of students who attend full-day educational work participated in the research. From the total number of participants, the following were included: 62 parents of 1st-grade students (26%), 49 parents of 2nd-grade students (21%), 60 parents of 3rd-grade students (26%) and 64 parents of 4th-grade students (27%).

The data was collected using the questionnaire for the evaluation of work in full-day educational work by the parents, which was constructed for the purposes of this research. Of the socio-demographic data, the only information collected from the parents was about the grade their child attends. Parents expressed the reasons for choosing FEW as a form of education for their child on three univariate dichotomous variables with yes/no answers. Parents expressed satisfaction with the elements of the FEW organisation on a multivariate scale of six items (high Cronbach's alpha type reliability, $\alpha = 0.879$) with a three-point Likert-type scale ranging from 1 - does not suit

us to 3 - fully suits us. On the second multivariate scale of 12 items (high Cronbach's alpha type reliability, α= 0.924), parents expressed their views on the implementation of educational work in FEW. A five-point Likert-type scale ranging from 1 - fully disagree to 5 - fully agree was offered, with room for possible additional comments below the items. In the final part of the questionnaire, parents were asked a question (univariate variable) about their willingness to recommend FEW to other parents with the answers 0 - we wouldn't, 1 - maybe, and 2 - certainly.

The data was collected among parents from the 1st to 4th grades of Nikola Tesla Elementary School in Rijeka in the 2021/22 school year in such a way that the questionnaires were distributed to the parents by the lower elementary teachers, and the completion of them was anonymous and voluntary. Descriptive statistics methods were used for data analysis.

5.2. *Research results*

The frequencies and the reasons for which the parents decided to include the child in full-day educational work are shown in Table 1. The participants had the option of choosing one or several answers. The largest percentage of responses in choosing the reason for which they decided to include their child in FEW (50%) is due to work obligations (i.e., working hours), considering that students participate in FEW every day from 8 a.m. to 4 p.m. A total of 26% of parents declared that they chose full-day educational work because of the child's independence, the fulfilment of all obligations at school, but also the importance of organised free-time activities alternating with teaching activities (20%). Only 3% of parents opted for the answer 'Something else' as the reason for including the child in full-day educational work, without specifying any reasons.

Table 1. Selection of parents' reasons for enrolling their child in FEW

Reasons for choosing full-day educational work	Freq.	%
Alternating teaching activities, but also organised free-time activities for children	82	20.247
Something else	14	3.457
Child's independence child (all obligations are carried out at the school)	105	25.926
Due to work obligations (working hours)	204	50.370
Total	405	100.000

Table 2 shows answers related to parents' (dis)satisfaction with elements of the FEW organisation. Given that the participants evaluated (dis)satisfaction on a three-point scale, the arithmetic means of the responses for all items show that parents are extremely satisfied with all elements of the organisation of full-day educational work. They expressed the greatest satisfaction (M=2.9) with the organisation of activities during educational work, alternations in teaching activities, and free-time activities. They also expressed a high level of satisfaction with the item 'Number of students in the class department' (M=2.71), 'Spatial conditions of the classroom' (M=2.69), 'Students' retention of school material during the week at school' (M=2.66), 'No assigned homework during the week' (M=2.64), as well as with the item 'Material equipment of the classroom (means and aids for work)' (M=2.59).

Table 2. Parents' satisfaction with the elements of the FEW organisation

Elements of FEW organisation	N	M	SD	Min.	Max.
Students' retention of school material during the week at school	235	2.677	0.495	1.000	3.000
No assigned homework during the week.	235	2.643	0.555	1.000	3.000
Alternations in teaching activities and free-time activities during educational work.	235	2.902	0.325	1.000	3.000
Spatial conditions of the classroom.	235	2.694	0.506	1.000	3.000
Material equipment of the classroom (means and aids for work).	235	2.598	0.517	1.000	3.000
Number of students in the class department.	235	2.711	0.508	1.000	3.000

Table 3 shows the results of the parents' views on the implementation of educational work, which, in the following discussion, are completed with the comments that the parents recorded in the additional comment space below the items. It is evident that parents attach great importance to communication with teachers and keeping them informed, so the highest arithmetic averages are obtained for the items 'Communication and cooperation between parents and teachers is good' (M=4.72), 'Teachers provide timely information about planned activities with students' (M=4.70), and 'The teacher provides regular feedback on student progress' (M=4.63). Parents emphasise 'We are very satisfied with the various additional and interesting information that the teachers provide, as well as with the realisation of creative ideas' or 'With the efforts of the teachers who transfer knowledge to my children with their imagination. Excellent and open communication with them and trying to find common ground.' They believe that the teachers

are motivated to work in FEW (M=4.54) and note that 'The teachers are professional, wonderful as people, and the child is completely satisfied with everything, so we as parents are satisfied.' Their assessments are focused on teaching activities: 'They take care of the proper distribution of educational activities and free-time activities within the daily educational work' (M=4.49), 'Knowledge tests are regularly announced' (M=4.48), 'Creativity and creative work are present in teaching' (M=4.45). They estimate that the teaching contents are successfully implemented (M=4.440) and that, in addition to processing the contents, there is enough practice and repetition (M=4.29). They point out 'The huge amount of material that is repeated and practised during the full-day's stay, as well as the teacher's effort to help each student if they need help.'

They also evaluate organised free-time activities with high mean values, so they are of the opinion that 'There is a diverse offer of extracurricular activities in which students are involved as part of organised free time at the school' (M=4.174) and 'Students are involved in organised school activities (actions, events)' (M=4.110). Parents rate the frequent organisation of field classes with mediocre values (M=3.840), although some have indicated 'The combination of field classes with educational work, creativity in classes, and the amount of content covered is excellent' or 'Children's behaviour outside the classroom is also important; children need to be taught things outside of school/classroom, and the teachers work on that.'

One parent's comment, which illustrates the results of parents' satisfaction with the implementation of educational work, stood out in particular: 'He goes to school with a smile and leaves it full of new knowledge.'

Table 3. Parents' views on the implementation of educational work

Implementation of educational work	N	M	SD	Min.	Max.
The teachers are motivated to work in FEW.	235	4.535	0.581	3.000	5.000
They take care of the proper distribution of educational activities and free-time activities within the daily educational work.	235	4.493	0.578	3.000	5.000
Creativity and creative work are present in teaching.	235	4.453	0.703	2.000	5.000
We estimate that the teaching contents are successfully implemented.	235	4.440	0.663	3.000	5.000
In addition to processing the contents, there is enough practice and repetition.	235	4.293	0.866	1.000	5.000

Implementation of educational work	N	M	SD	Min.	Max.
Knowledge tests are regularly announced.	235	4.480	0.742	2.000	5.000
The organisation of field classes (learning and socialising outside the school premises) is frequent.	235	3.840	1.027	1.000	5.000
There is a diverse offer of extracurricular activities in which students are involved as part of organised free time at the school.	235	4.174	0.974	1.000	5.000
Teachers provide timely information about planned activities with students.	235	4.702	0.567	2.000	5.000
The teacher provides regular feedback on student progress.	235	4.634	0.649	2.000	5.000
Communication and cooperation between parents and teachers are good.	235	4.715	0.531	2.000	5.000
Students are involved in organised school activities (actions, events).	235	4.110	1.035	1.000	5.000

Table 4 shows the results of the determined level of parents' willingness to recommend FEW to other parents of children who do not attend this form of work. Out of the total number of participants, as many as 211 participants (89.8%) would certainly recommend full-day educational work to other parents, while 24 participants (10.2%) declared that they might recommend this form of work.

Table 4. Parents' willingness to recommend FEW to other parents

If you had the opportunity, would you recommend to other parents to enrol their child in FEW:	Freq.	%
We wouldn't	0	0
Maybe	24	10.213
Certainly	211	89.787
Total	235	100.000

6   Teachers' opinions about the possibilities offered by full-day educational work

With the aim of examining teachers' opinions about the possibilities that full-day educational work provides, in the context of the organisation of a student-oriented teaching process, two focus groups were created that included first and second-grade teachers (N=8) of full-day educational work and third-grade teachers and fourth graders (N=8) of full-day educational work at Nikola Tesla Elementary School in Rijeka.

The participants were informed in advance about the research purpose, and the conversation in the focus groups was based on a structured form of open-ended questions. The first group of questions related to the organisational elements of full-day educational work. The second group of questions related to the possibilities that full-day work provides in the planning and implementation of teaching activities and students' free-time activities. Finally, the teachers presented the advantages and certain challenges that they observe in full-day educational work. Participants' answers were recorded and structured according to groups of questions and analysed; the answers of individual participants are presented below.

6.1   Teachers' opinions about the organisational elements of full-day educational work

In terms of the organisation of students' time at school, the teachers point out as an advantage that 'classes take place without restrictions to five-minute or fifteen-minute breaks, which enables students to work more spontaneously'. This also enables 'the organisation of classes and breaks independently of the school bell'.

They point out that the extended time students spend at school allows teachers 'a more flexible schedule of teaching subjects during the week', 'to adjust the structure of the working day to current activities and needs', 'more time to achieve educational outcomes', 'more thorough implementation of the activities provided for in the curriculum and cross-curricular topics', 'more time to repeat and revise the teaching material' or, as one teacher highlights, 'more time to devote to the students in every sense: developing their aptitudes and gifts, acquiring the content, practising and repeating' and 'more time for evaluation, self-evaluation, and peer evaluation of students'.

Teachers thus have the option of 'appropriately alternating between focused work and rest time when they sense a significant drop in student concentration' or, as one teacher points out, 'when necessary, I take a short break from work so that the students can stretch out'.

Among other things, the extended stay of students in school enables teachers to 'easily get to know individuals and their families and possible problems with students in different situations', but what should be especially highlighted is that it 'offers more room for creating better teacher-student and student-student relationships'. They also attach importance

to the collaborative relationship between two teachers, stating that 'cooperation between two lower elementary teachers is necessary', because the teachers have a common 'division of responsibilities and tasks'.

In general, all teachers emphasise the importance of cooperation, namely, 'parent-teacher cooperation', 'school-parent cooperation', 'cooperation between class departments', 'cooperation between teachers', 'intense cooperation with colleagues and experts', and 'teamwork'.

Teachers cite the importance of organised free time as an advantage of carrying out activities in full-day educational work, and they all agree that 'well-designed and organised free time allows opportunities for the realisation of cross-curricular topics within the framework of organised free time'. Consequently, teachers cite as advantages 'the possibility of quality and creative use of organised free time through activities in various educational areas', 'more time for extracurricular teaching', 'visits to various cultural and artistic institutions', 'participation in various sports events and activities', and they particularly emphasise that 'learning in the immediate environment is extremely important for student development.'

In addition to extracurricular classes and monitoring and involvement in community events, teachers believe that the students' organised free time, in addition to involvement in a greater number of extracurricular activities, provides time for better thematic work by including students in 'various workshops in groups or pair work', 'participation in projects, e.g., eTwinning projects', 'networking with students from other schools via video calls', 'meeting famous people', among others.

They particularly emphasise the educational component in the implementation of free-time activities and state: 'students develop different skills and competencies, learn through play, learn to listen to each other; they form habits by learning from each other with the guidance of teachers'; 'there is better socialisation among students', which enables 'the development of empathy for the community and the development of emotional competencies for community life and teamwork'. They believe that the meaningful connection of school learning with extracurricular experience contributes to the 'development of responsibility for one's own learning and progress' and 'student preparation for further education and lifelong learning'.

Although the majority of teachers agree that the advantage of full-day educational work is precisely the eight-hour stay of students at school,

several teachers consider that period to be a shortcoming for some children. Specifically, 'an eight-hour stay at school is sometimes too long for some students' for the reason that 'such a form of work, albeit flexible, is sometimes not a good solution for, for example, students with special needs'. In addition, they point out that 'students sometimes find it difficult to distinguish between class time and free time' and sometimes do not understand 'why now they cannot play or participate in some activity but have to write or count'.

Also, due to the fulfilment of all obligations at school during the week, teachers notice a 'lack of working habits at home' in some children, which can 'result in a more difficult adjustment at higher levels of education'. The adoption of work habits at home largely depends on the parents' support for the child as well as their cooperation with the teacher. Some teachers point out that 'some parents don't even take a look at what was done at school during the week' and 'they expect students to do everything at school, regardless of the fact that some children also need to work at home to learn or practice some skills'. One teacher is of the firm opinion that it is wrong for the parents to 'shift all the responsibility and success of students onto teachers', while another teacher believes that 'it is the parents' obligation to at least review the textbooks and notebooks, the products that were created during the weekly work at school and in this way show the child that they are interested in what was done at school and encourage them to revise, perform duties such as packing the school bag, sharpening the pencils, etc.'

This leads to the conclusion that the majority of teachers agree that the greatest advantage of full-day educational work is the time they have available for teaching and learning, in which the students' organised free time is integrated. An eight-hour stay at school enables teachers to distribute activities more efficiently over time and allows more time to achieve educational outcomes. Quality organised free time means, as the teachers say, more time for extracurricular and extracurricular activities where students learn in the immediate reality, which facilitates the learning process as a whole. They attach importance to cooperation, the adoption of habits, and responsibility in students.

6.2   *Teachers' opinions about the possibilities that full-day educational work provides when planning and implementing activities*

In relation to the possibilities that full-day educational work provides when planning the teaching process, most teachers mention the 'diversity of work content and work methods'. Oriented on results, through various thematic content and work methods, teachers are able to 'better access the achievement of goals and outcomes by correlation of teaching subjects' with the use of 'modern teaching strategies' and 'use of a variety of different learning sources, from those in reality to those in the virtual world'. In immediate educational practice, most teachers apply: 'integrated learning', 'team learning', 'research teaching', and 'project teaching'. They conclude that classes become more interesting for the students if they apply modern teaching methods and strategies, so one teacher states that 'classes become more interesting, which enables a comprehensive approach to the development of student competencies, and by following the students' lead, I include additional content in order to encourage students to achieve outcomes'.

With regard to the extended stay of the students at school, the teachers state that the learning is continuously 'accompanied by the teacher's suggestions' and 'the possibility of professional help and supervision during the stay at the school'. In addition, one teacher explains that 'subject teachers are very often happy to accept children attending full-day educational work who know a lot and learn in different ways' while another teacher believes that 'a big advantage of full-day educational work is that the children who enrol in the first grade find this form of work is more appropriate and easier to adapt to, especially if they come from a pre-school institution'.

As one teacher explains, 'different dynamics are important because the students' abilities are also different, and there is a greater possibility of committing more time to those students who have certain difficulties or are just a little slower', that is, as another teacher continues, 'there is a greater possibility of better quality work with a child who requires help, that is, learning is organised at school and under the supervision of teachers who can help students who do not understand something'.

The advantages that full-day work provides in the process of evaluating learning outcomes, as stated by the teachers, are more frequent

'self-evaluation and peer evaluation'. One teacher explains that the full-day educational work 'enables a more comprehensive approach to evaluation, and given that each teacher teaches three subjects, she can better devote herself to the evaluation and monitoring of each individual student, descriptive monitoring of progress'.

They highlight the student-oriented process as an advantage and emphasise that the mentioned activities 'encourage students to solve problems, research, and engage in creative work', thereby 'developing student potential'. The teachers agree on the position that all students are provided with equal opportunities for advancement, regardless of the conditions at home, so that 'every student can develop their individual abilities', and greater attention is paid to 'independent student work' and 'peer learning'. Several teachers mention 'the involvement of all students in school and extracurricular projects' and 'directing students to integrated learning, team learning, research teaching, project teaching' as an opportunity provided by the full-day educational work.

Several teachers emphasise 'micro-breaks between specific activities for better concentration and student results', including 'relaxed activities between teaching activities (digital content, reading, listening to music, exercise, free art creation, etc.)'. The majority of teachers emphasise the importance of extracurricular classes, and one teacher expresses a thought that meets with the approval of all teachers: 'students are encouraged to learn in the immediate environment, so it is specific, but also usual in full-day educational work, for teachers to go with students to real areas of the city and wider regions so that students could learn in field and extracurricular classes using the method of discovery, research, and experiential learning'.

The time spent in full-day educational work enables teachers to be more dedicated 'to the integration of teaching content, implementation of teaching in a natural environment, visits to workshops and museums, trips to the cinema, theatre, etc., i.e., more time to spend in the open air'. In the context of cooperation with the local community and the active involvement of students in the community, the teacher concludes that 'the learning process is enriched by motivation based on the child's natural curiosity and sense of wonder so that they are active in the learning process', while another teacher explains, 'one of the main goals and tasks during the organised free time of students is to satisfy and develop skills, interests, and inclinations for independent and constructive activity and creativity in all areas'.

'Learning through play and practice, learning for life' is significant. It is concluded, as one teacher points out, that 'the teaching becomes more interesting, which enables a comprehensive approach to the development of student competencies'.

The activities that teachers consider crucial for improving the quality of work in full-day educational work include 'encouraging students from an early age to think about and approach solving problems, and through various strategies and the application of modern technologies, enabling them to achieve educational outcomes' as well as 'facilities and equipment of the school that would provide a more pleasant atmosphere for everyone', specifically 'a school equipped with a sufficient number of educated and motivated teachers so that the school is a pleasant place where students learn, live, grow up, research, communicate, and create'.

To improve the quality of work in full-day educational work, the majority of teachers cite continuous professional education, specifically teachers' lifelong learning, as a development goal. Teachers attach importance to didactic competencies aimed at teaching, so they emphasise the importance of 'working with different sources of teaching' and 'using different media, i.e., applying collaborative forms and methods of work that include technology and media'. In particular, they emphasise the importance of 'knowledge and use of information and communication technology' in the context of 'finding different digital content, tools and platforms in order to achieve learning outcomes and encouraging cooperation, joint learning using online communities, tools, and platforms'.

They highlight the cooperation of all stakeholders in the school system and especially emphasise that 'teachers need cooperation, support, understanding, and education' or that 'we simply need to respect, support, advise, and be a real team'.

The possibilities that full-day educational work provides when planning and implementing a student-centred teaching process, as stated by most teachers, is precisely the variety of forms and methods of work in which teachers use different sources of learning, from those in reality to those in the virtual world, and, in addition to teaching activities, the time planned for students' organised free time plays a key role and opportunities.

In conclusion, one teacher observes that full-day educational work is explained by the letters of the abbreviation FEW (Cro. COOR), in which

the letter 'C stands for full-day learning, play, and various activities, the letter O stands for education, organised, and responsible, and the letter R stands for diverse and developmental.'

2   Conclusion

To achieve the overall educational tasks of the school and contribute to a higher quality, more creative, and humane student development, it is necessary to think intensively about the introduction of full-day educational work in today's schools., Considering the eight hours the students spend at school, full-day educational work allows the teacher to plan student-oriented activities. Organisationally, it implies the implementation of teaching activities aligned with the outcomes of subject curricula and organised free-time activities contributing to the realisation of the expectations of cross-curricular topics and extracurricular activities of different educational areas of the curriculum.

This paper presents an example of good practice in the implementation of full-day educational work at Nikola Tesla Elementary School in Rijeka, where full-day educational work with student-oriented teaching activities has been carried out for more than four decades. The information presented included facts about the school, the beginnings of the implementation of full-day educational work, and the organisational structure of the eight-hour educational work, with an emphasis on the specifics of students' organised free time, with an acknowledgement of the cooperation with the environment and the implementation of activities in the community.

Regarding the opinions about the organisational elements and the advantages of implementing full-day educational work, the research included parents of students who attend full-day educational work (administered survey questionnaire) and teachers who teach in full-day educational work (focus groups).

The goal of implementing the questionnaire for the evaluation of work in full-day educational work by the parents was to determine the parents' reasons for choosing full-time educational work and their satisfaction with its elements of organisation. According to the obtained results, parents mostly cited work obligations (working hours) as the reason for choosing full-day educational work, while they considered less important the other two reasons for inclusion: changes in teaching activities and children's organised free-time activities and the child's independence

(all obligations being completed at school). Regarding satisfaction with the elements of the organisation of the full-day educational work, they are almost fully satisfied with the organisation of teaching and extracurricular activities; they highly value creativity and creative production in teaching. They attach great importance to cooperation, communication with teachers, and regular feedback from teachers about student progress. They evaluated teacher professionalism as high, and the vast majority would certainly recommend full-day educational work as a form of schooling to other parents.

Based on the analysed teacher opinions that were obtained through focus groups concerning the advantages and possibilities of implementing student-oriented activities in full-day educational work, it is concluded that the majority of teachers agree that the greatest advantage of full-day educational work is the learning process into which the planned activities of students' free time are integrated. The eight-hour stay at school enables teachers to organise planned activities more efficiently, which contributes to the achievement of educational outcomes of the subject curriculum and the realisation of expected cross-curricular topics. Furthermore, the work is also more spontaneous, which directs students to self-regulated learning and cooperation with other students and the teacher. Quality organised free time implies, as the teachers state, more time for extra-curricular and extra-school activities in which students learn in the real world, follow events in the community, and participate in project activities. Students are encouraged to solve problems, carry out research and work independently, and express themselves creatively. The goal is to develop students' skills and abilities and to satisfy their interests in various educational fields and their inclinations for independent and constructive activity and creativity, with continuous teacher guidance and monitoring of the students. Also, teachers emphasise the importance of free-time activities between teaching activities when students, in a stimulating atmosphere, independently choose relaxation and leisure activities such as digital content, reading, listening to music, exercise, and free artistic creation, among others. The majority of teachers also agree that the improvement of quality in full-day educational work requires better school facilities and equipment, continuous professional development of teachers, and education of future teachers for full-day educational work, including adaptations to the needs of society.

Regarding quality work, teachers especially emphasise the importance of cooperation between all participants in the teaching process, students,

teachers, and parents, as well as the professional service and the community itself.

It is precisely this good practice of implementing full-day educational work at Nikola Tesla Elementary School in Rijeka 44 years after its implementation that speaks of the satisfaction expressed among students, teachers, and parents with this form of work. It also underscored that the students, when advancing to senior grades, perform excellently and are more ready for independent work and cooperation than students who attended traditional classes. They emphasise the importance of the professional competency and motivation of the teacher, who in their class department implement all the important determinants of full-day educational work, because, without a quality educational process, the school would not have such a large number of students and constant requests for the enrolment of new students. Therefore, the education and continuous training of teachers in different fields, the support of the collective, good cooperation with parents and the community, and, above all, the love for the teaching profession are vital. The long-standing practice of the Rijeka model of implementing full-day educational work is based on modern knowledge of integrated thematic teaching and learning through student-oriented curricular and extracurricular activities.

References

Andjić, D., Pejić Papak, P., & Vidulin-Orbanić, S. (2010). Stavovi studenata i učitelja o razrednom ozračju kao prediktoru kvalitete nastave u osnovnoj školi [Attitudes of students and teachers about the classroom atmosphere as a predictor of the quality of teaching in primary school]. *Pedagogijska istraživanja, 7*(1), 67–81.

Gazibara, S. (2013). Aktivno učenje: put prema uspješnom odgoju I obrazovanju [Active learning: the path to successful upbringing and education]. *Školski vjesnik, 62*(2–3), 375–389.

Glasser, W. (2001). Svaki učenik može uspjeti [Any student can succeed]. Zagreb: Alinea.

Koraj, Z. (1975). Osnovni pojam i distinkcija produženog i cjelodnevnog boravka učenika u osnovnoj školi [Basic concept and distinction of extended and full-day stay of students in elementary school]. *Pedagoški rad*, 5–6, 218–231.

Lukaš, M., & Munjiza, E. (2010). Povijesna retrospektiva suradničkih odnosa u nastavi između permanentne teorijske poželjnosti i praktične (ne) realiziranosti [Historical retrospective of collaborative relations in teaching between permanent theoretical desirability and practical (non)realization]. *Školski vjesnik, 59*(4), 479–494.

Markovac, J. (1970). *Nastava i individualne razlike učenika [Teaching and individual differences of students].* Školska knjiga.

Ministarstvo znanosti I obrazovanja (2020). Strateški okvir za uvođenje cjelodnevne nastave [Strategic framework for the introduction of full-day teaching]. Retrieved from https://mzo. gov.hr/UserDocsImages/dokumenti/Vijesti/2020/23-6-2020/Strateski%20okvir%20za%20 cjelodnevnu%20nastavu_final%2022_6.pdf (20th September, 2022)

Ministarstvo znanosti, obrazovanja i športa (2011). Nacionalni okvirni kurikulum [National Indicative Curriculum]. Zagreb: Ministarstvo znanosti, obrazovanja i športa RH. Retrieved from http://mzos.hr/datoteke/Nacionalni_okvirni_kurikulum.pdf (20th September, 2022)

Pažin-Ilakovac, R. (2012). Školski pedagog u kurikulumu usmjerenome prema učeniku [School pedagogue in a curriculum directed towards the student]. *Školski vjesnik, 61*(1–2), 27–40.

Peko, A., & Varga, R. (2014). Active learning in classrooms. *Život I škola, LX*(31), 59–73.

Pivac, J. (2006). *Izazovi školi [Challenges to school]*. Školska knjiga.

Previšić, V. (2009). Interkulturalna obzorja suvremene škole [Intercultural horizons of the modern school]. Puževski, V. (ed.), Strugar, V. (ed.). In: Škola danas za budućnost. Križevci, Bjelovar, 13–28.

Puževski, V. (1981). Mišljenja i stavovi o osnovnoj školi s cjelodnevnom organizacijom rada [Opinions and attitudes about elementary school with all-day work organization]. *Odgoj i samoupravljanje. 1*(1), 179–202.

Sablić, M., & Blažević, I. (2015). Stavovi učitelja prema vrijednostima kao temeljnim sastavnicama nacionalnog okvirnog kurikuluma [Attitudes of teachers towards values as fundamental components of the national framework curriculum]. *Školski vjesnik, 64*(2), 251–265.

Schiro, M. (2013). *Curriculum theory*. United States of America: SAGE.

Tucman, S. (2011). *Produženi boravak – potreba suvremene škole [Extended stay – the need of a modern school]*. Školska knjiga.

TEACHING PERFORMANCES OF STUDENTS – PREPARING FOR QUALITY CLASSROOM TEACHING

Tomaž Petek[1]

Abstract

During their studies, the performance of student teachers is one of the established forms of practical pedagogical training in order to become teachers. They usually form part of the special didactics courses in individual subject areas and often represent the first experience that students encounter in their future professional roles. We observed and analysed 247 teaching performances in their mother tongue (Slovene), which were undertaken by student teachers in various primary schools across Slovenia, teaching from the 1st to the 5th grades. Based on the established criteria, we assessed the following: 1) professional competence based on their teaching performance; 2) didactic competence during the teaching performance; 3) classroom guidance; 4) linguistic competence and oral presentation. Different statistical calculations showed, among other things, that students achieved significantly higher scores in professional competence and lower scores in linguistic competence and oral presentation. There is a difference in the average score between individual sets (1–4) (3.41–3.96 out of 5). We have noticed a correlation between classroom guidance 3) and linguistic competence and oral presentation 4): students who scored higher in Set 3 also scored higher in Set 4. This paper also presents the results regarding the correlation between different elements within each set. The results offer an insight into the (poor) quality of teaching performances of student teachers in a concrete situation. To influence pupils, teachers must be adequately empowered to teach. Experience relating to teaching performances and the findings of this research may hopefully contribute to that.

Keywords: Teaching performances of students; Quality classroom teaching; Practical pedagogical training; Professional competence; Didactic competence

....

1   University of Ljubljana, Faculty of Education, Kardeljeva ploščad 16, Slovenia; tomaz.petek@pef.uni-lj.si.

1   Introduction

Other than preschool teachers, primary school teachers are the first people who come into contact with pupils in the educational process (Petek, 2021), and these teachers play a crucial role in the teaching process (Rot Vrhovec, 2020). In the 21st-century school, teachers are expected to be experts in their field, as well as understanding and excellent educators (cf. Tomić, 2003).[2] It is certainly very important that a teacher be a good role model for the pupils as well as being familiar with their needs, a coordinator, a facilitator, and an organiser, as well as having the ability to create the best possible classroom learning environment. Using their knowledge and experience, teachers should create the right conditions that allow each pupil to make the best possible progress (Rot Vrhovec, 2020; Petek & Lazzarich, 2019; Tomić, 2003; Kunstelj, 2001) and to meet his/her needs (Rihter & Potočnik, 2021).

To ensure that teachers can meet these demands, the education system must provide them with appropriate education. At the Faculty of Education of the University of Ljubljana, which is the oldest and largest faculty of education in the Republic of Slovenia, prospective teachers are prepared for teaching at least two subjects, and some of them (e.g., primary teachers and special education and rehabilitation teachers) are even trained to teach seven or more subjects (cf. Magajna & Umek, 2019). Lesson planning can be undertaken at several levels.[3] During their professional development in the subject areas, special education didactics specialists develop various solutions (Magajna & Umek, 2019), which they pass on to the students in their teaching process, who, in turn, become increasingly empowered to teach independently. As part of their studies, in addition to a brief teaching practice, they also carry out teaching placements, which are one of the established forms of practical training to become a teacher. They are usually integrated into subject-specific courses and often represent the students' first experience of their future professional roles.

In this paper, we start from the assumption that in order to be able to teach in the classroom, primary school education student teachers must 1) acquire appropriate professional skills, 2) didactic skills, 3) be proficient in

---

2   Teachers need a broad and thorough knowledge base, so they need to update their knowledge all the time. Their decision to adopt role-modelling should be supported by a longer-term motive, i.e., so that the influence of their role-model does not stop when they hand over their pupils to another teacher in a higher grade (Petek, 2021; cf. Blažič, 2003).

3   For example, Kramar (2009) and Kubale (2016) refer to: 1) global planning, also referred to as long-term or annual planning; 2) stage planning, also referred to as thematic or didactic preparation; 3) micro-planning, which takes place in immediate, ongoing preparation, also referred to as hourly/ daily preparation.

classroom management, and 4) be supremely confident in public speaking. The theoretical part of the paper provides insight into the above-mentioned criteria for successful teaching performance, while the empirical part presents the survey results on the actual implementation of the performances of student teachers of primary school education in practice.

2   Professional relevance of the teaching performance/ lesson (Learning Strand A)

A teacher must be able to teach in accordance with the syllabus applicable to the particular school subject, which means that he or she must be well acquainted with its structure. A teacher must take into account: 1) general objectives, operational objectives and contents, standards of knowledge, and didactic recommendations. They must have a sound understanding of the subject matter in order to be able to undertake a professional teaching performance. As a professional, a teacher must be committed to the profession, which means, as Kneževič (2002) also states, they know their profession well, monitor and develop it, and communicate their knowledge to the pupils in an accessible way.

2.1   *Delivering relevant content (knowledge of the subject matter and appropriateness to the pupils' developmental level)*

The Slovenian national curriculum[4] (Primary school curriculum. The Slovenian language. Syllabus, 2018) envisaged or prescribed contents that would include text types and linguistic terms for the language part of the lesson as well as teaching topics with detailed content and literary science concepts for the literary part of the lesson, for each educational period separately (1st-3rd grades, 4th-6th grades, and 7th-9th grades). In addition to the objectives, the contents are defined by individual grades within the educational period. Teachers combine lesson objectives with content into learning strands (taking into account their pupils and learning contexts) and make them concrete through texts, questions, tasks, and examples. Linking operational objectives and contents into learning strands is a matter of teachers' professional autonomy, which makes it all the more important that the prescribed learning content is very familiar to the teacher so that he/she can deliver it to the pupils in an appropriate way, taking into account their developmental level (ibid.).

....

4   In this paper, we refer to this curriculum because the empirical part of the paper presents the results of research on the implementation of learning performances in the Slovenian language (mother tongue) of classroom education students.

2.2   *Use of appropriate technical terms (as appropriate to the curriculum)*

Existing curricula for all primary school subjects include terms that pupils are expected to understand, use, and illustrate in a given educational period or grade. Teachers should use these terms when designing questions, tasks, and instructions, and even during any testing and assessment (Rot Vrhovec, 2022). However, it is important to remember that general technical terms used in the syllabus are not intended for pupils but for teachers. Teachers should only use the linguistic and literary terms that are listed in the syllabus under grade level content (and, of course, any terms that the pupils have already been taught in previous grades). For competence development and assessment, it is important to consider the relationship between the individual competences and objectives and the taxonomic levels of knowledge set out in the syllabus (Primary school curriculum. The Slovenian language) in all learning strands. Curriculum, 2018).

2.3   *Appropriateness of vocabulary usage/instructions/activities to the developmental level of the pupils*

The foundations for vocabulary development in pupils need to be established from a very early age, then intensively expanded in the preschool period, and deepened at all levels of education and – most importantly – in all subject areas (cf. Voršič & Ropič Kop, 2020; Petek, 2022). As stated by Pečjak and Gradišar (2002), teachers need to be aware that vocabulary learning is the foundation for more complex strategies, and pupils cannot simply acquire new concepts and develop the ability to interpret them all by themselves. All this makes the teacher's use of appropriate vocabulary in the classroom particularly important. There are various recommendations in the literature on how to increase students' vocabulary, which can also be influenced by the teacher. The complexity of the tasks/activities should be adapted to the age and ability level of the pupils. Kramarič et al. (2000) note that there are various ways to stimulate students' vocabulary.[5]

---

5   1) Through direct teaching (curriculum approach); 2) through play (free, guided and directed play); 3) through explicit instruction (often while reading); 4) with a cognitive approach (clear definition, explanation and example, repetition of a new word and its application); 5) with the concept of print; 6) with picture storytelling (often three storytelling situations are available: using sequential illustrations, unrelated pictures, or one picture with more or fewer elements); 7) by listing words in a certain way (flexibility of words); 8) by assigning associations to words; 9) by completing/sequencing stories; 10) by creating an imaginary binomial; 11) by creating a partial imaginary binomial. For more, see Petek (2022).

When giving instructions, the teacher should also use only those linguistic and literary terms that are listed in the curriculum under grade level content (cf. Primary school curriculum. Syllabus. The Slovenian language, 2018). Instructions given by teachers to pupils must be precise, unambiguous, and uncomplicated. Throughout the teaching process, teachers should continuously check whether pupils actually understand them and provide further explanations if necessary (Gole, 2014). Žakelj (2013) further mentions that instructions should include clearly organised information and a precise sequence of steps. Depending on the objectives within each educational period (and by no means excluding them), teachers should also design activities that are appropriate to the pupils' developmental level.

2.4   *Asking questions (different levels)*

Teachers' questions during lessons are an essential and natural tool or aid and are an integral part onfthe path to knowledge. Kramar (2009) states that questions are asked with different purposes and that trigger thought processes, influence classroom attitudes, and play an important role in socialising and cognition. When planning lessons, teachers need to consider the difficulty, meaningfulness, depth, and complexity of the lesson content (Heacox, 2009). Pečjak (1995) notes that levels of understanding can be tested by asking various questions. These are classified according to the thought processes they trigger. In this respect, there are lower-level and higher-level questions. The former require only the reproduction of memorised information and facts, while the latter engage higher mental processes such as analysing, comparing and synthesising. However, as Petek (2014) points out, pupils need to think at higher levels, which motivates them to achieve better results. Marentič Požarnik (2000) notes that the most difficult task is to achieve an appropriate balance between lower and higher-level cognitive goals. In terms of memory knowledge, lower-level goals are easier to measure, which is why teachers tend to overuse so-called lower-level questions. He adds that it is a good idea to use some of the established taxonomies or classifications of goals

in order to improve the situation.[6] Petek (2014) points out that classroom teachers have to balance questions at all taxonomic levels.

3   Didactic relevance of teaching performance/lesson (Learning Strand B)

Teachers also need to be didactically empowered to teach, as didactics is the science that deals with the content, methods, and forms of work as well as the organisation of teaching in schools.

3.1   *Relevance of goals and their achievement*

Jank and Meyer (2002) define learning goals as the desired outcomes of teaching and learning processes or as representations of what someone is trying to achieve or what is supposed to happen to him/her. In the Slovenian national curriculum (Primary school curriculum. Syllabus. The Slovenian language, 2018), in addition to the general goals, operational goals are presented, which are either mandatory or optional. The objectives are presented according to the various educational periods for the Slovenian language and literature. Teachers should select and implement any goals on the basis of activities that are appropriate to the developmental level of the pupils they teach. These are the fundamental

....

6   The best-known and most appropriate for school use is Bloom's taxonomy. Its levels are as follows: 1) knowledge: the least complex way of thinking, where the pupil is expected to recall facts and other information that he/she has heard/read (the pupil has to say, list, identify, indicate something); 2) comprehension: the pupil is expected to demonstrate understanding of the text (explain, summarise, reconstruct or describe something); 3) application: the pupil is expected to make something out of what he/she has heard/read (illustrate, summarise, construct, illustrate, report on or otherwise apply the knowledge acquired); 4) analysis: the pupil is expected to take apart an idea and examine it critically (compare, look for similarities and differences, classify, judge); 5) evaluation: the pupil is expected to judge, determine the meaning or value of something on the basis of elaborated criteria; usually precedes the evaluation with an analysis (in order to evaluate something, the pupil has to look closely at all its features and components; at this stage, he/she makes judgements, predictions or forecasts and confirms, defends and evaluates with evidence); 6) synthesis: the pupil is expected to combine parts into a new whole in a distinctive, original and different way (this stage requires him/her to be a creative thinker). Bloom's classification helps the teacher design activities that are appropriately challenging, meaningful, curriculum-aligned, and sufficiently complex. At the same time, it allows activities to be classified according to their level of complexity and comprehensiveness. More gifted pupils will be quicker in acquiring information, concepts and ideas that are classified according to this taxonomy at the level of knowledge and understanding. Furthermore, pupils who need more time for learning and training also need to use higher-level thinking skills. All pupils should have the opportunity to work at all levels. However, it is important to realise that the very nature of Bloom's higher levels of thinking is such that they reiterate and, at the same time, reinforce the basic content (cf. Heacox, 2009).

goals that apply to teaching across the entire primary school vertical. There are six points that cover what, how, and why pupils develop in their lessons across all educational periods and at all grades. Operational goals are also included, which provide teachers with a record of activities set out in the syllabus in order to develop pupils' specific abilities.

3.2 Relevance of motivation (effectiveness in each phase)

Learning requires effort; to facilitate it, the teacher needs to implement so-called motivated learning, which must be present throughout the lesson. Based on this, we can distinguish between intrinsic (initial), procedural and extrinsic (final) motivation (Blažič et al., 2003).

Intrinsic motivation is useful at the introductory stage of the learning process. This is based primarily on the curiosity, interest, and experiences of pupils. Intrinsic motivation is greatly enhanced by the element of surprise about something that goes against pupils' expectations. Teachers pay too little attention to this phase, because they think there is no time for it, which is not true. It is necessary to allow enough time for this phase, but for a period of no longer than 10 minutes.

When presenting new learning material in the classroom, so-called process motivation should take place and encompass the whole learning process. In doing so, it is important to consider the relationship between the scientific relevance of a lesson topic and its importance to the pupils. Pupils can be motivated primarily by real-life topics and interpretations that are relevant to them, specifically the links between what they are interested in at the moment, what will be useful to them in their future lives, and what they are actually learning at school. The motivation to learn comes not only from the learning content but also from the direct processes of learning. Learning motivation is also influenced by interpersonal relationships and the working environment in the classroom, a teacher's personal characteristics, leadership style, teaching differentiation, and other factors.

It is also important for the teacher to motivate pupils at the end of the lesson (extrinsic or final motivation) in order to arouse their interest in the next lesson and their independent work.

3.3   Systematic coverage of the learning material (relevance of the lesson structure)

Teachers should plan the structure of the lesson accordingly in their lesson plans. Magajna and Umek (2019) state that in planning and recording a lesson, teachers can use various systems incorporating the expected components of the lesson. These are numerous and are usually divided into two groups. The first one includes components recorded in the introductory part or 'header' of the lesson plan, describing the lesson unit using administrative data (i.e., date, subject, teacher, grade, etc.), linking it to the annual teaching plan (e.g., lesson serial number, lesson topic, teaching unit), and summarising important didactical aspects of the lesson unit (i.e., learning goals, contents, teaching formats, teaching methods, etc.). The second group consists of core components of the lesson plan, such as the didactic structure of teaching performance and breaking down the stages of teaching. Prospective teachers need to develop not only the skill of designing lessons but also, and to an equal part, the skill of analysing and improving their own lesson plans as well as those acquired, and an ability to deliver them. Kubale (2021) points out that lesson planning should be realistic, theoretical, and transparent, a basis for teachers to be more successful, not self-directed, and have educational value.

By mastering this skill, teachers will ensure that the learning material is treated in a systematic way; as a result, each subsequent lesson will be of higher quality and more successful.

3.4   Implementation of teaching forms and methods (originality, relevance, variety, cooperative learning, and differentiation)

Teaching forms and methods constitute a basic or central didactic concept. While each method denotes a particular way of doing things, each way of doing things does not necessarily imply a method. Thus, it can be understood both as a form and as a means. The teaching method represents the form through which the learning content is transformed in the pupil's mind, affecting his/her personality, as well as the teacher's way of working with pupils in order to achieve the learning goals. It also emphasises planning and forethought, logic, and the systematicity of the process (Valenčič Zuljan & Kalin, 2020).

In all teaching forms, pupils can acquire new knowledge, revise, and consolidate what they have learnt, check solutions, complete specific tasks,

and then share the results with their classmates and teacher. There are several types of teaching forms: 1) frontal teaching, in which the teacher simultaneously instructs all the pupils and directly guides them in the same tasks, meaning describes, narrates, explains, rationalises, analyses, synthesises, demonstrates, asks questions and summarises; the pupil makes a speech in front of the whole class; the teacher stands in front of the pupils for the whole lesson, or a certain part of it, and instructs them, i.e. guides them in activities; 2) Individual teaching, in which each pupil works independently; pupils may have the same or different tasks; during independent work, the teacher helps those who need help (individualisation) or gives extra work to those pupils who can work faster; 3) group learning, in which pupils are divided into groups; the most effective groups have three to five members; they must cooperate with each other (cooperative learning);[7] each group member must contribute to the completion of the task, meaning be responsible for his/her work; the faster members of the group help the others; each member presents his/her solution to the other members of the group; this is followed by a discussion and assessment of its relevance, if there are any problems they talk about them and find solutions together; this is followed by a joint report and a report for other groups; 4) pair work, in which the pupils work in pairs; both pupils must have the same workload, for example, one pupil in the pair assumes the role of note-taker and designer, while the other acts as the reporter and deliverer; the work is similar to cooperative learning (Rot Vrhovec & Bešter Turk, 2022; Valenčič Zuljan & Kalin, 2020; Rot Vrhovec, 2020).

Teaching methods represent a way of working or a planned process for achieving set goals (Rot Vrhovec, Bešter Turk, 2022; Rot Vrhovec, 2020). Teachers must ensure individualisation and differentiation in their working methods. They have to manage and supervise pupils' work in the classroom and help those who need help. We can characterise the various following methods: 1) language teaching methods, which include the explanation and conversation methods; 2) operational teaching methods, which are based on a practical product, which include: the laboratory-experimental method, practical work method (practical product method, writing work method, oral work method and graphic design method; the improvisational acting method, i.e., role-play method; didactic game method; 3) the demonstration teaching method; 4) text work method; and 5) work with educational-communication technology (Rot Vrhovec & Bešter Turk, 2022; Valenčič Zuljan & Kalin, 2020; Rot Vrhovec, 2020).

---

7   For more on collaborative learning, see Rot Vrhovec (2015).

When using teaching forms and methods, teachers must be judicious, carefully plan activities, be unique and innovative in their implementation, and also apply the principles of individualisation and differentiation.[8]

3.5   Use of teaching resources, i.e., teaching aids and materials (relevance of choice, quantity, originality, reasonableness of use, relevance of size, e.g., of pictorial material)

Teachers must carefully plan the use of didactic resources in the classroom, such as teaching materials and teaching aids, among others. Kramar (2009) states that teachers should only record in their lesson plans those didactic resources that they and their pupils need for a lesson rather than those that a teacher has used in his/her own lesson planning. Some teachers also record these but under the heading of 'Resources and Literature'. The purpose of these resources is to support, improve, and rationalise the use of activities in the classroom. Their use also has a motivational function, engaging pupils in the classroom and stimulating their interest and attention.

Depending on the pupils' developmental level, the teacher must select appropriate didactic resources (in terms of quality, quantity, originality, volume, and size) and use them in a meaningful way in the classroom.

3.6   Teaching material presentation (use of a whiteboard/projection or notebooks)

A whiteboard is a short and clear record of what is being taught during a lesson. Trškan (2011) defines it as a didactic term for written-abbreviated learning material on the whiteboard for students to copy into their notebooks. With the arrival of the computer and LCD projectors, the teacher can create a whiteboard image in Microsoft Word or Microsoft PowerPoint and project it onto a screen or whiteboard using an LCD projector. Today, all kinds of teaching materials, or so-called whiteboard images, can be used. In the 21st century, teachers also use electronic whiteboards, which allow them to project a wide variety of multimedia material, although they should not forget how to present the whiteboard image properly.

The whiteboard image must be legible, easy to understand, large enough, comprehensible, and linguistically appropriate. The text should not be

....

8   For more about this, see Valenčič Zuljan and Kalin (2020); Tomlinson (2008); Strmčnik (2001).

too long but should contain essential information that the pupil is expected to remember. It is used to illustrate the teaching material in a variety of ways to facilitate pupils' engagement with the content of the lesson.

3.7   Timing parts of the lesson/activity

When planning classroom activities, each teacher needs to plan the time he or she will spend on each part of the lesson so that he/she does not run out of time for certain activities at the end, thus making it easier for a teacher to manage the lesson. The lesson is the basic unit of teaching. According to current regulations and school traditions in the Republic of Slovenia, a lesson lasts 45 minutes. Whatever the teaching aims, it is useful to divide the lesson into an *introductory section*, a *main section*, and a *conclusion*. Teachers usually spend up to 15 minutes on the introductory section (depending on the developmental level of the pupils). It is intended to prepare pupils for work, specifically to focus their attention on a new subject, to activate the knowledge needed for further work and to motivate them to continue with their work. Teachers often use this time to review previous teaching material, but this may not be effective if not directly linked to the objectives of the new lesson. The main part of the lesson is focused on achieving the objectives of the lesson. This can be a matter of learning new content, revision or for solving problems. Teachers usually spend between 25 and 30 minutes on this section. The last five to ten minutes of the lesson are devoted to conclusions, revision, consolidation exercises, and assigning homework.

4   Classroom management in teaching/lessons (Learning Strand C)

Classroom management is much more complex than simply dealing with pupils' misbehaviour. It refers closely to the strategies a teacher uses to create a positive, productive, inclusive, supportive, caring, and harmonious learning environment. Such a learning environment prevents disruption in the teaching process, promotes learning and learning achievement, and fosters positive socio-emotional experiences (Pšunder, 2011).

4.1   Classroom management style (authoritarian, democratic, permissive)

Teachers face a challenging teaching task and, as they are increasingly confronted with different kinds of pupil behaviour, it is important

that they are familiar with the characteristics of different classroom management styles so that they can maintain order and discipline in the classroom.

The authoritarian style of classroom management means that the teacher makes decisions without consulting the pupils. An authoritarian teacher more or less decides what and how pupils will work and how their performance will be evaluated. This style is characterised by centralised authority, dictatorial working methods, and one-sided decision-making.

The democratic style of classroom management means that the teacher involves the pupils in the decision-making process. The teacher and the pupils plan activities together, agree together on the rules of behaviour, and monitor the learning process and achievement. Pupils also assume their share of responsibility for implementing the decisions they make. This style is characterised by involving pupils in the decision-making process, shared authority, and the teacher using feedback in situations in which it is considered that he/she has not made an improvement on the pupils' work.

In a permissive style of classroom management, the teacher allows pupils to make their own decisions, even though the teacher is responsible for the result achieved. The teacher gives full freedom to the pupils and avoids positive or negative evaluations of their work. This style of classroom management works when pupils are able and motivated to make their own decisions, and there is no need for central coordination. It is effective with highly motivated and self-aware students. Characteristics of this style include pupils having the freedom to make their own decisions, the way they work is up to them, and the teacher providing the necessary teaching materials and answers to any questions (Žagar, 2009).

4.2   *Attitude towards pupils (emotionally warm, tolerant, cool, distant, etc.)*

A good relationship between the teacher and pupils must be established in the classroom, as this is essential for a successful educational process. To be successful and considerate, a teacher must also meet his/her pupils' emotional needs.

A teacher is one of the key people in a child's life. According to Bratanić (1991), education and upbringing are closely linked and also depend on

the quality of relationships between teachers and pupils; education takes place in the pupil-teacher relationship. According to Marentič Požarnik (2000), research shows that pupil-teacher interaction is one of the direct factors of learning success. Pečjak and Košir (2002) state that a positive teacher-pupil relationship also has a positive impact on the pupil's acceptance by his/her peers. Improving the quality of teacher-pupil relationships is associated with reducing behavioural problems throughout primary school (Maldonado Carren & Votruba Drza, 2011).

4.3   *Involving pupils in work/communication (e.g., giving instructions and talking)*

Involving students in the learning process is essential and necessary. It is the teacher's job to guide pupils, who are usually quite different from each other, on the path to achieving curriculum goals and objectives. They have different abilities and interests, different backgrounds and experiences, and may be driven by different values, expectations, and other factors (Zupančič, 2018).

Every day, teachers face the challenges of how to capture their pupils' attention and then sustain it, and also how to encourage them to persevere when more effort is required. Motivating a pupil to try again after continuously making a mistake often proves to be a real pedagogical challenge. The fact that a child is present in an educational institution is no guarantee that he or she will be able to acquire knowledge. It is crucial that the pupil is involved and cooperates with the teacher and his/her classmates in the delivery of the learning content. The dynamics of inclusion also vary from pupil to pupil and depend on a number of variables. West-Burnham and Harris (2016) state that there are five levels of pupil engagement in the classroom.

Actively engaged pupils delve deeper into the content because they are interested in it. It is crucial that the teacher identifies the pupils' areas of interest and reinforces their engagement by integrating specific elements into the curriculum content. We call it 'ritual obedience' when the pupil does not recognise the importance of learning and is not intrinsically committed to it but rather becomes engaged because of the benefits it brings elsewhere. Such a pupil will be cooperative, without being committed, yet will follow instructions and fulfil his/her obligations diligently. With the right feedback, the teacher can also take the pupil to a level of genuine engagement. It can happen that a pupil participates in

a particular subject only to avoid negative consequences. The reason for this may be that he/she does not want to work on an assignment in the afternoon or attend extra lessons. He/she does not want to stay in the classroom after the lesson is over, preferring to spend the break in the corridor with his/her peers. The pupil definitely does not want the teacher to write an unfavourable comment in the school e-diary, which his/her parents will then read even before the family meets at home. Naturally, the teacher may expect the task to be done with the minimum possible effort, because the pupil's priorities lie elsewhere. However, the teacher can still tactfully plan the sequencing of activities during a lesson.

It may happen that some of the pupils go unnoticed. They do not take part in an activity but also do not disturb others. It is important for the teacher to get to know the pupil and find out the reason for his or her reticence, as well as what motivates him/her. Resentment is particularly characteristic of teenagers, yet it can feature at any stage of a child's development. While a teacher can plan a lesson perfectly, there will always be an individual or a group of pupils who will disrupt what has been planned. Regardless of a pupil's current level of engagement, the aim of the teacher should be to get more and more pupils to reach the first level and engage authentically (West-Burnham & Harris, 2016).

We can agree that the common thread that binds the school days together is dynamism. Pupils differ greatly in every way. It is up to the school and the teacher to decide where they stand on this diversity. If diversity is recognised as an opportunity and a resource, and if the teacher focuses the learning process on the pupil, enhancing individuality and group cohesion, his or her work will take a lot of effort but is more likely to be rewarded by quality achievements and positive relationships. Unfortunately, success cannot be predicted with certainty, as the teaching process involves certain risks (Čačinovič Vogrinčič, 2008).

4.4 Pupil management: monitoring/observation of pupils and appropriateness of response (e.g., consistency of response and response to inappropriate behaviour)

Drawing on findings from previous studies, Pšunder (2011) states that discipline is a system of rules that is necessary for schools. He establishes the relationship between discipline and classroom management. Teachers use disciplinary strategies when responding to behavioural problems and a management system when trying to prevent them. They

are often confronted with inappropriate behaviour from pupils, so the management of pupils must be appropriate and consistent. They need to be aware of their influence but also how they themselves can encourage or discourage such behaviour. Teachers themselves can encourage inappropriate behaviour in pupils by being too strict or too lenient, by being inconsistent, by over-emphasising the importance of pupils' performance, by making lessons uninteresting and by ignoring pupils' needs, among other factors.

At all times, teachers need to monitor and manage their pupils and respond appropriately to any situations that arise in the classroom.

4.5   *Flexibility (resourcefulness in unforeseen situations)*

In today's increasingly indirect teaching, teachers are required to have a broader and more in-depth perspective. In addition to being innovative, creative, and critical intellectuals, able to outgrow traditional teaching concepts and strategies with more contemporary learning choices and activities, teachers also need to be flexible and respond in real time to unforeseen situations (both learning and behavioural) in the classroom (Blažič et al., 2003). This will allow them to solve problems, improve the learning process and influence the quality of teaching.

5   Linguistic appropriateness and speaking performance in teaching/lessons (Learning strand C)

Language is the basis for all other subjects in the field, so it is essential that the teacher is linguistically proficient. He/she sets an example for the pupils and must be aware of this fact. A teacher must take care not to make linguistic errors (spelling, grammar, style, or orthographic, etc.) and to be linguistically proficient.

5.1   *Use of the spoken standard language*

Language is the primary means by which a teacher communicates with pupils, and teachers' speech activity in the classroom is referred to as 'pedagogical talk' (Podbevšek, 1996).

In Slovenian linguistics, social genres of language are divided into two parts: literary and non-literary language (Toporišič, 2000). Literary language is intended for communication in general throughout the

Slovenian territory with a nation-wide and nation-representative role, which also applies to the school environment (cf. Petek, 2019). It is divided into standard and general colloquial language (Toporišič, 2000). Non-literary language is divided into so-called geographical dialects and provincial colloquial languages. Teachers' speech in the classroom, especially cognitive speech, is an obligatory colloquial expression. In addition to social genres of language, especially literary language, we should also pay attention to functional genres. If we consider the characteristics of these genres from the point of view of the speaker, where the chosen speaking situation is public speaking, we find that, as a communicator, the speaker's activity is aimed at influencing the addressee (the listener) and at achieving something with him/her; his/her activity has to be directed towards a goal. The speaker needs to be aware of the interaction established with the addressee (Petek, 2019). Vogel (2017) mentions that, despite all the changes, literary language in its written and spoken versions remains the genre that enables individuals to participate adequately in education (as well as in society in general), and goes on to say that literary colloquial language is perceived as the only social genre that can be realised in all functional genres, while the use of the remaining social varieties of literary colloquial language is limited to the practical-understanding genre only. Teachers need to be proficient in the strictest version of the literary language, meaning the general colloquial language but, at the same time, they need to be able to identify the speaking situations in which the use of this social genre is necessary. In fact, teachers are (also) setting a spoken example for their pupils.

5.2   *Linguistic appropriateness of the written presentation*

Lesson preparation represents the part of lesson planning that focuses on the concretisation and preparation of the direct implementation of, in most cases, one unit of learning, which most often coincides with one class lesson (Magajna & Umek, 2019). Kramar (2009) states that teaching units represent a didactically grounded and articulated, problem-, content- and time-based unit of the educational process in which the operational educational goals are realised. Lesson preparations must be precise, technically (content-wise) and didactically appropriate, as well as linguistically correct. Petek (2021) notes that classroom teachers directly and indirectly influence pupils' orthographic competence and, consequently, their subsequent functional literacy, which is one of the key elements for personal and professional success in 21st-century society.

Valenčič Zuljan and Kalin (2020) point out that the ability to express one-self appropriately (including writing) in one's mother tongue is an important skill for pupils in the 21ˢᵗ century. They further note that in addition to a deeper understanding of the content, which can be accessed through different routes, the example set by the teacher is also important for its acquisition. In some parts, they even state that it is the teacher's responsibility to set an example. Petek (2021) states that in order to influence pupils on their path to higher literacy through example, teachers need to have adequate spelling awareness themselves, which means that they need to have a well-developed spelling ability[9].

5.3   Use of appropriate non-verbal communication aids

Adler and Rodman (2003) define non-verbal communication as verbal and nonverbal messages that have communicative value for others. According to Ule (2005), non-verbal messages are never transmitted or received in a single way or through a single channel. In her opinion, non-verbal communication consists of a combination of numerous signs in different modalities. Thus, a harsh voice or a frowning facial expression can have a negative impact on listeners, as they need a motivated speaker to motivate them. An uninteresting and boring recitation of facts also creates an unpleasant emotional feeling in listeners (cf. Petek, 2014).

Auditory non-verbal communication aids in enlivening and making speech more dynamic, interesting, and more enjoyable to listen to. They also have a significant impact on the speaker's comprehension of the one-way communicated message. When speaking, teachers need to take into account intonation, stress and intensity, as well as the volume, speed, pauses, register, and colour of the voice. In that case, we consider two groups of auditory non-verbal communication aids, some of which are more or less agreed upon and have a generally accepted meaning (e.g., intonation and accents), while others are individually or situationally determined (e.g., register and tone of the voice) (Petek, 2014). In addition to auditory non-verbal communication aids, visual non-verbal communication aids are also important. Podbevšek (2006) states that, in addition to sound, gestures are an obligatory component of communication. Visual non-verbal communication aids include facial expressions and eye contact, as well as hand gestures and moving around the room/classroom (cf. Petek, 2014).

....

9   For more details, see Bešter Turk (2011).

By using non-verbal communication aids appropriately, teachers make lessons more interesting, show their affection for the pupils and the teaching material, motivate pupils to listen and follow the lesson, and help them remember the teaching material better.

5.4   Scope of teachers' and pupils' talk

Teachers' and pupils' dialogue[10] can be discussed based on observations of classroom interaction. In pedagogical communication, teachers take turns when speaking to their pupils. Therefore, it is also possible to describe the characteristics of the teachers' dialogue in the classroom by comparing them with the characteristics of the pupils' dialogue (Petek, 2019).

Kunst Gnamuš (1992) states that the speaker's position and intention in communication determine the choice of means of expression, and it is generally accepted that teachers at school should use literary language. The author also claims that this task is associated with several difficulties, as the choice of literary expressions reinforces formal status and increases the social distance between the teacher and the pupil.[11] However, expressing oneself in a literary language also presents the pupil with a number of emotional, grammatical, and orthographic barriers, which make it difficult for him or her to express him or herself in a relaxed and direct way. As the author explains, the pupil needs to become aware of the correlation between the speaking position and the social genre; thus, the requirement to use the literary language will become more natural. Kunst Gnamuš (1992) states that it is a common linguistic belief that pedagogical speech primarily performs a presentational and metalinguistic role, meaning that it explains the content of teaching, presents actual

---

10   For more details, see Petek (2019).

11   Kunst Gnamuš (1992) states that in informal situations pupils tend to speak in dialect or provincial colloquialisms, while they speak in slang with peers. It should also be borne in mind that dialectal and provincial colloquial language increases the closeness between speakers of the same dialect but also the distance from those who use a different dialect or a different provincial language. The use of literary language must therefore be justified because it reduces dialectal differences. Tivadar (2009b) point out that literary language represents a barrier to relaxed communication. He states that in his lecturing exercises and seminars, the fact that the literary language is perceived as the highest linguistic genre, the most complete and complex, was often problematised, as indicated by Toporišič in the *Slovenian Language Encyclopaedia* (1992). In this regard, it is important to underline the emphasis on prestige as the basic criterion of 'bookishness' and, above all, the emphasis on 'bookishness' as the ultimate criterion. While prestige is one of the important criteria, it is by no means the only one, and above all, literary language is also a language that has a norm and usually lives in (literary) texts.

situations and facts, and proves and explains concepts and denotations. However, as the author points out, a closer analysis shows that pedagogical speech is functionally structured and includes all types of roles; particularly frequent is the influencing role, but also the expressive, embellishing and connecting roles. At the same time, the author also notes that – unfortunately – there is a large functional disparity between a teacher's way of talking and that of his or her pupils; as teachers express themselves more fully, their speech is composed of all roles, while the pupils' way of talking is functionally depleted and narrowed down to the presentational and meta-linguistic roles.

There have been many observations of classroom interaction Marentič Požarnik (2000) summarises the data according to Flanders, who in 1967 found that during a typical lesson, the teacher speaks on average two-thirds of the time, while the pupils, taken as a whole, speak for one-third of the time, which is called the 'rule of two-thirds'. Pirih Svetina (1997) also reports several results of some class interaction observations. Common to all of them is that the proportion of teachers' dialogue is far greater than that of the pupils and that pupils mostly just respond to the teachers' questions and suggestions. This was also found by Kunst Gnamuš (1992), whose research involved the analysis of three lessons. The results showed that the teacher's dialogue is quantitatively more extensive in terms of the number of words and sentences used than that of the pupils. In the first case, the teacher accounted for 70% of the dialogue, in the second case 89%, and 96% in the third case. As most of these findings date back to the 1990s, we decided to look for more recent data. For example, Kolar (2009), observing classroom interaction in the 2nd year of secondary school, found that the teacher's dialogue accounted for 62% of the total class time, 18% for the students, while the remaining 20% of the time was silent. She observed a similar situation in the second year of economics secondary school: teachers' dialogue accounted for 63% of the total teaching time, while 19% of the communication was conveyed by the pupils, and 18% was silent. It follows that the teacher's dialogue is still dominant in the classroom and that attention still needs to be paid to how much the pupils talk in class.

6   Empirical part

6.1   *Purpose and objectives of the study*

The aim of this empirical research was to gain insight into the appropriateness of students' performances based on the subject of the Slovenian language (mother tongue), undertaken by 3rd-year student teachers as part of their studies in their preparation for the teaching profession. The aim was to find out how well they are meeting the criteria[12] on their path to a successful teaching performance.[13] Here we were interested in: 1) whether there is a difference in the average score between the different sets of criteria (Learning Strands A-C); 2) whether[14] there is a difference in the average score between the different elements within Learning Strand A; 3) whether there is a difference in the average score between the different elements within Learning Strand B; 4) whether there is a difference in the average score between the different elements within Learning Strand C; 5) whether there is a difference in the average score between the different elements within Learning Strand C; 6) whether there is a correlation between the different learning strands (A-C); 7) whether there is a correlation between the different elements within Learning strand A;

....

12   The students prepared for the teaching performance according to pre-known criteria, which we analysed and assessed: learning **Strand A: professional relevance** (delivery of relevant teaching content (knowledge of the subject matter, appropriateness to the developmental level of the pupils); use of appropriate professional terms (appropriate to the curriculum); appropriateness of the vocabulary/instructions/activities to the developmental level of the pupils; posing questions (different levels); learning **Strand B: didactic** relevance (relevance of objectives and their achievement; relevance of motivation - effectiveness at each stage; systematic treatment of the teaching material - relevance of the lesson structure; implementation of teaching forms and methods - originality, relevance, variety, cooperative learning, differentiation; use of teaching aids, i.e. appropriateness of the choice, quantity, originality, reasonableness of use, appropriateness of size, e.g.; learning **Strand C:** leadership (**leadership** style - authoritarian, democratic, permissive, consistent; attitude towards pupils - emotionally warm, tolerant, cool, distant, etc.; involvement of pupils in the work/comprehension; e.g., giving instructions, conversation; pupil management: monitoring/perceiving pupils and appropriateness of response, e.g., consistency of response, response to inappropriate behaviour; flexibility (resourcefulness in unforeseen situations); learning **strand C: linguistic appropriateness and speaking performance** (use of standard literary language; linguistic appropriateness of written lesson preparations; use of appropriate non-verbal communication aids scope of teacher's and pupil's talk).

13   The criteria for the evaluation of a student's teaching performances in the course Didactics of the Slovenian language at the Faculty of Education of the University of Ljubljana were developed by Dr Alenka Rot Vrhovec and Dr Tomaž Petek. In the first part of this paper, the author presents and justifies them theoretically on the basis of domestic and foreign scientific literature, while in the second part of the paper, the relevance of their implementation for students is tested in practice. Theoretically, students encounter these criteria in the 2nd year of their studies, while in the 3rd year they independently learn from them when carrying out their teaching performances.

14   See footnote No. 13.

8) whether there is a correlation between the different elements within Learning strand B; 9) whether there is a correlation between the different elements within Learning strand C; and 10) whether there is a correlation between the different elements within Learning strand C.

6.2   Research method and sample

We used a descriptive and causal-non-experimental method of pedagogical research. We analysed the teaching performances of third-year student teachers at the Faculty of Education, University of Ljubljana, in one of the grades from 1 to 6 in a public primary school using Slovene (mother tongue); in accordance with the national curriculum, the students are also taught Slovene (i.e., their mother tongue) (in addition to mathematics and other compulsory subjects), as part of the subject didactics of the Slovenian language.

Each of the learning strands and sub-strands was rated from 1 to 5, where 1 indicated very poor, 2 poor, 3 good, 4 very good and 5 excellent. The sample consisted of 247 classroom students/pupils who were taught in Slovene (mother tongue) in three consecutive academic years (2019/20, 2020/21, 2021/22).

6.3   Hypotheses, processing and displaying the data

In line with the research purpose and objectives, we set out ten hypotheses: 1) there is a difference in the average score between the different learning strands (A-C); 2) there is a difference in the average score between the different elements of Learning Strand A; 3) there is a difference in the average score between the different elements of Learning Strand B; 4) there is a difference in the average score between the different elements of Learning Strand C; 5) there is a difference in the average score between the different elements of Learning Strand C; 6) there is a correlation between the different learning strands; 7) there is a correlation between the different elements of Learning Strand A; 8) there is a correlation between the different elements of Learning Strand B; 9) there is a correlation between the different elements of Learning Strand C; and 10) there is a correlation between the different elements of Learning Strand D.

To analyse the data, we used the IBM SPSS Statistics 26 software tool. Since all variables are ordinal, we have used non-parametric tests to test our hypotheses. We used Spearman's correlation coefficient to test for the correlation between variables and the Friedman test for differences

between individual learning strands and different elements of each learning strand. For individual comparisons, we subsequently applied the Wilcoxon signed ranks test with Holm-Bonferroni correction for multiple comparisons. The results are presented in tabular and narrative formats.

6.4   Results with interpretation and verification of hypothesis

H1:   There is a difference in the average score between the different learning strands.

As can be seen from Table 1, the average score for Learning Strand A was 3.96, for Learning Strand B 3.72, for Learning Strand C 3.74 and for Learning Strand D 3.41. The result of the Friedman test is statistically significant ($\chi2 = 212.865$; p < 0.001), so we can say that there is a difference in the average score between the different learning strands. Thus, Hypothesis 1 can be confirmed.

Individual comparisons showed that there was a statistically significant difference between the highest scores of students in Learning Strand A and the lowest scores in Learning Strand C. The difference between Learning Strands B and C is not statistically significant.

Table 1. Differences in average scores between the different learning strands

	N	Average	No. deviation	Mediana	Friedman test χ^2	p
Learning Strand A	247	3.96	0.349	4.00[a]		
Learning Strand C	247	3.74	0.346	3.80[b]	212.865	<0.001
Learning Strand B	247	3.72	0.313	3.71[b]		
Learning Strand D	247	3.41	0.364	3.50[c]		

Note: Median values with the same superscript letter do not differ; median values without the same superscript letter do.
Source: the author.

H2:   There is a difference in the average score between the different elements of Learning Strand A.

As can be seen in Table 2, the average score was 4.16 for the delivery of relevant content, 3.82 for the use of appropriate technical terms, 3.86 for the appropriateness of vocabulary/instructions/activities to the developmental

level of the pupils, and 4.02 for asking questions. The result of the Friedman test is statistically significant ($\chi 2 = 119.738$; $p < 0.001$), so we can say that there is a difference in the average score between the different elements of Learning Strand A. Thus, Hypothesis 2 can be confirmed.

Individual comparisons showed that there was a statistically significant increase in students› scores for delivering relevant teaching content, with students asking questions coming in second place. The worst results were in the appropriateness of vocabulary/instructions/activities to the developmental level of the pupils and in the use of appropriate technical terms, but the difference between the two are not statistically significant.

Table 2. Differences in average scores between the different elements of Learning Strand A

	N	Average	No. deviation	Mediana	Friedman test χ^2	P
delivering relevant teaching content (knowledge of the subject matter, appropriateness to the pupils' developmental level)	247	4.16	0.500	4.00[a]		
asking questions (different levels)	247	4.02	0.459	4.00[b]	119.738	<0.001
appropriateness of vocabulary usage/ instructions/activities to the developmental level of the pupils	247	3.86	0.410	4.00[c]		
use of appropriate technical terms (as appropriate to the curriculum)	247	3.82	0.513	4.00[c]		

Note: Median values with the same superscript letter do not differ; median values without the same superscript letter do.
Source: the author.

H3: **There is a difference in the average score between the different elements of Learning Strand B.**

As shown in Table 3, the average score was 3.95 for the appropriateness of objectives and their achievement, 3.95 for the systematic treatment of the teaching material, 3.92 for the use of teaching aids, 3.87 for the

appropriateness of motivation, 3.85 for the implementation of teaching forms and methods, 3.40 for the timing of the lesson/activities and 3.05 for the recording of the teaching material. The result of the Friedman test is statistically significant (χ^2 = 570.138; p < 0.001), so we can confirm that there is a difference in the average score between the different elements of Learning Strand B. Thus, Hypothesis 3 can be confirmed.

Individual comparisons showed that there was a statistically significant decrease in students' scores in the recording of teaching material, with the timing of the lessons/activities in second to last place. All the other elements were better than the two mentioned above, but there are no statistically significant differences between them.

Table 3. Differences in average scores between the different elements of Learning Strand B

	N	Average	No. deviation	Mediana	Friedman test χ^2	P
relevance of goals and their achievement	237	3.99	0.350	4.00[a]		
systematic coverage of the teaching material (relevance of the lesson structure)	237	3.95	0.365	4.00[a]		
use of teaching resources, i.e., teaching aids and materials (relevance of choice, quantity, originality, ease of use, relevance of size, e.g., of pictorial material)	237	3.92	0.439	4.00[a]		
relevance of motivation (effectiveness in each phase)	237	3.84	0.495	4.00[a]	570.138	<0.001
implementation of teaching forms and methods (originality, relevance, variety, cooperative learning, differentiation)	237	3.82	0.584	4.00[a]		
timing of parts of the lesson/activity	237	3.42	0.588	3.00[b]		
teaching material record (on board/projection, in notebooks)	237	3.05	0.697	3.00[c]		

Note: Median values with the same superscript letter do not differ; median values without the same superscript letter do.
Source: the author.

H4:   There is a difference in the average score between the different elements of Learning Strand C.

As shown in Table 4, the average score for management style was 4.00, for attitude towards pupils 3.98, for flexibility 3.67, for pupil involvement/understanding 3.59, and for pupil management-monitoring/observing pupils and appropriate responsiveness 3.47. The result of the Friedman test is statistically significant $(x2 = 235.707; p < 0.001)$, so we can say that there is a difference in the average score between the different elements of Learning Strand C. Thus, Hypothesis 4 can be confirmed.

Individual comparisons showed that students scored statistically significantly higher for management style and attitude towards pupils than for the other elements, but the difference between the two was not statistically significant. In contrast, students statistically achieved the lowest scores in pupil management. In the middle of the scale are flexibility and pupils› engagement in work/communication, but the difference between the two is not statistically significant.

Table 4. Differences in average scores between the different elements of Learning Strand C

	N	Average	No. deviation	Mediana	Friedman test	
					χ^2	P
classroom management style (authoritarian, democratic, permissive, consistent)	247	4.00	0.337	4.00[a]		
attitude towards pupils (warm personality, tolerant, cool, distant, etc.)	247	3.98	0.533	4.00[a]		
flexibility (resourcefulness in unforeseen situations)	247	3.67	0.646	4.00[b]		
involving pupils in work/communication (e.g., giving instructions, talking)	247	3.59	0.493	4.00[b]	235.707	<0.001
pupil management: monitoring/observation of pupils and appropriateness of response (e.g., consistency of response, response to inappropriate behaviour)	247	3.47	0.547	3.00[c]		

Note: Median values with the same superscript letter do not differ; median values without the same superscript letter do.
Source: the author.

H5:   There is a difference in the average score between the different elements Learning Strand D.

As shown in Table 5, the average score for linguistic appropriateness of written lesson preparation was 3.51, for the use of appropriate non-verbal communication aids 3.42, for the use of standard literary language 3.40, and for the scope of the teacher's and pupils' talk 3.32. The result of the Friedman test is statistically significant ($\chi^2 = 27.284$; $p < 0.001$), so we can confirm that there is a difference in the average score between the different elements of Learning Strand D. Thus, Hypothesis 5 can be confirmed.

Individual comparisons showed statistically higher scores for the linguistic appropriateness of their written lesson preparations than for the other elements. In the use of appropriate non-verbal communication aids, they achieved statistically higher scores than in the scope of teachers' and pupils' speech, while the use of standard literary language did not significantly differ from either of them.

Table 5. Differences in average scores between the different elements of Learning Strand D

	N	Average	No. deviation	Mediana	Friedman test χ^2	P
linguistic appropriateness of the written lesson preparation	247	3.51	0.501	4.00[a]		
use of appropriate non-verbal communication aids	247	3.42	0.599	3.00[b]	27.284	<0.001
use of the spoken standard language	247	3.40	0.590	3.00[bc]		
scope of teachers' and pupils' talk	247	3.32	0.569	3.00[c]		

Note: Median values with the same superscript letter do not differ; median values without the same superscript letter do.
Source: the author.

H6:   There is a correlation between the different learning strands.

As shown in Table 6, Spearman correlation coefficients between the scores of the learning strands are very low in absolute terms, and most of them are not statistically significant. However, there is an exception in the

correlation coefficient between C and D (0.187), which represents a positive but weak correlation, which is statistically significant (p = 0.002). It can therefore be said that students who scored higher in Learning Strand C also scored higher in Learning Strand D. Hypothesis 6 can only be confirmed for the correlation between Learning Strands C and D.

Table 6. Correlation between different learning strands (A-D)

		Learning Strand B	Learning Strand C	Learning Strand D
Learning Strand A	Spearman's corr. coeff.	0.029	–0.007	0.089
	p	0.325	0.459	0.085
	N	247	247	247
Learning Strand B	Spearman's corr. coeff.		–0.016	0.053
	p		0.400	0.204
	N		247	247
Learning Strand C	Spearman's corr. coeff.			0.187
	p			0.002
	N			247

Source: the author.

H7:   There is a correlation between the different elements of Learning Strand A.

As shown in Table 7, all the Spearman correlation coefficients between the scores of Learning Strand A elements are positive and also statistically significant. The correlation between delivery of relevant teaching content and the appropriateness of use of vocabulary/instructions/activities according to pupils' developmental level and between the appropriateness of use of vocabulary/instructions/activities according to pupils' developmental level and asking questions is weak, while the correlation between all other elements is medium. Therefore, it can be said that students who scored higher in one element also scored higher in another element. Hypothesis 7 can be confirmed for the correlation between all the elements of Learning Strand A.

Table 7. Correlation between the different elements of Learning Strand A

		A2	A3	A4
	Spearman's corr. coeff.	0.401	0.207	0.586
A1	p	<0.001	0.001	<0.001
	N	247	247	247
	Spearman's corr. coeff.		0.444	0.439
A2	p		<0.001	<0.001
	N		247	247
	Spearman's corr. coeff.			0.185
A3	p			0.002
	N			247

Note: A1 - delivering relevant teaching content (knowledge of the subject matter, appropriateness to the pupils' developmental level)
A2 - use of appropriate technical terms (appropriate according to the curriculum)
A3 - appropriateness of vocabulary usage/instructions/activities to the developmental level of the pupils
A4 - asking questions (different levels)
Source: the author.

H8:   There is a correlation between the different elements of Learning Strand B.

As can be seen from Table 8, only slightly more than half of the Spearman correlation coefficients between the scores of Learning Strand B elements are statistically significant. All of them are positive, except for the correlation between the appropriateness of motivation and the systematic treatment of teaching material. The strongest correlation is between the implementation of teaching forms and methods and the use of teaching resources, specifically teaching aids and teaching materials. Hypothesis 8 can only be confirmed for the correlation between certain elements of Learning Strand B.

Table 8. Correlation between the different elements of Learning Strand B

		B2	B3	B4	B5	B6	B7
B1	Spearman's corr. coeff.	**0.201**	−0.024	0.039	0.020	**0.229**	0.051
	p	0.001	0.356	0.273	0.377	<0.001	0.214
	N	247	247	247	247	237	247
B2	Spearman's corr. coeff.		−0.275	0.554	**0.630**	**0.531**	0.094
	p		<0.001	<0.001	<0.001	<0.001	0.071
	N		247	247	247	237	247
B3	Spearman's corr. coeff.			**0.123**	0.059	-0.063	**0.337**
	p			0.027	0.178	0.166	<0.001
	N			247	247	237	247
B4	Spearman's corr. coeff.				0.650	0.445	0.404
	p				<0.001	<0.001	<0.001
	N				247	237	247
B5	Spearman's corr. coeff.					0.582	0.240
	p					<0.001	<0.001
	N					237	247
B6	Spearman's corr. coeff.						0.402
	p						<0.001
	N						237

Note: B1 - appropriateness of objectives and their realisation
B2 - relevance of motivation (effectiveness in each phase)
B3 - systematic coverage of the teaching material (relevance of the lesson structure)
B4 - implementation of teaching forms and methods (originality, relevance, variety, cooperative learning, differentiation)
B5 - use of teaching resources, i.e., teaching aids and materials (relevance of choice, quantity, originality, ease of use, relevance of size, e.g., of pictorial material)
B6 - teaching material record (on board/projection, notebooks)
B7 - timing of parts of the lesson/activity
Source: the author.

H9: There is a correlation between the different elements of Learning Strand C.

As shown in Table 9, all the Spearman correlation coefficients between the scores of Learning Strand C elements are positive and also statistically

significant. Most of the correlations are medium, but some are weak. Therefore, it can be stated that students who scored higher in one element also scored higher in another element. Hypothesis 9 can be confirmed for the correlation between all the elements of Learning Strand C.

Table 9. Correlation between different elements of Learning Strand C

		C2	C3	C4	C5
C1	Spearman's corr. coeff.	0.454	0.342	0.325	0.180
	P	<0.001	<0.001	<0.001	0.002
	N	247	247	247	247
C2	Spearman's corr. coeff.		0.224	0.203	0.181
	p		<0.001	0.001	0.002
	N		247	247	247
C3	Spearman's corr. coeff.			0.659	0.371
	p			<0.001	<0.001
	N			247	247
C4	Spearman's corr. coeff.				0.329
	p				<0.001
	N				247

Note: C1 - classroom management style (authoritarian, democratic, permissive, consistent)
C2 - attitude towards pupils (emotionally warm, tolerant, cool, distant etc.)
C3 - involving pupils in work/communication (e.g., giving instructions, talking)
C4 - pupil management: monitoring/observation of pupils and appropriateness of response (e.g., consistency of response, response to inappropriate behaviour)
C5 - flexibility (resourcefulness in unforeseen situations)
Source: the author.

H10: There is a correlation between the different elements of Learning Strand D.

As shown in Table 10, all the Spearman correlation coefficients between the scores of the elements of Learning Strand C are statistically significant, except for the correlation between the use of standard literary language and the use of the corresponding non-verbal communication aids. All of the statistically significant correlations are also positive, except for

the correlation between the use of standard literary language and the scope of the teacher's and pupils' dialogue, which is negative and also the weakest. The strongest correlation is between the use of standard literary language and the linguistic appropriateness of the written lesson preparation. Hypothesis 10 can be confirmed for the correlation between all the elements of Learning Strand C, except for the correlation between the use of the standard literary language and the use of appropriate non-verbal communication aids.

Table 10. Correlation between different elements of Learning Strand D

		D2	D3	T4
D1	Spearman's corr. coeff.	**0.632**	0.043	**−0.111**
	p	<0.001	0.250	0.041
	N	247	247	247
D2	Spearman's corr. coeff.		0.371	0.212
	p		<0.001	<0.001
	N		247	247
D3	Spearman's corr. coeff.			0.428
	p			<0.001
	N			247

Note: D1 – use of the standard literary language
D2 - linguistic appropriateness of the written lesson preparation
D3 - use of appropriate non-verbal communication aids
D4 - scope of teachers' and pupils' talk
Source: the author.

7   Conclusion

Through practical teaching during their studies, students gain important teaching experience. In the 3ʳᵈ year of classroom teaching, they are teaching independently for the first time, so we wanted to know how successful they were in meeting the benchmarks on their path to successful teaching performance.[15] We tested their professional and didactic relevance, as well as their management and linguistic competence/speaking performance. The best results were achieved in the area of professional relevance, which we attribute to the good pedagogical work of the professors and proper preparation for teaching tasks. The students performed least well in linguistic correctness and their speaking performance, which we attribute to a lack of experience, but it is also a warning that we need to encourage students in this area even more and that all teaching staff need to set an example and encourage them to gain as much experience as possible, as this is one of the basic conditions to provide the best possible linguistic image and speaking performance of an individual. We also found that there is a difference in the average score between the different elements of Learning Strands A, B, C, and D, while there is a correlation only between Learning Strands C and D. In fact, students who scored higher in Learning Strand C also scored higher in Learning Strand D. For Learning Strand B, we can confirm the correlation between only some of the elements, for Learning Strand C, we can confirm the correlation between all elements of Learning Strand C, and for Learning Strand D, we can confirm the correlation between all elements of Learning Strand D, except for the correlation between the use of the standard literary language and the use of the corresponding non-verbal communication aids.

By the end of the 4ᵗʰ year, students have teaching experience in all the

---

15   Each year, after completing their obligations, students at the faculty complete a questionnaire in which they are asked how they assess themselves: 1) in terms of developing skills in planning for teaching in individual specialised areas; 2) in terms of developing skills in implementing different teaching methods for teaching in individual specialised areas; 3) in terms of developing skills to acquire expertise in respect of professional content in individual specialised areas; 4) in terms of developing skills in acquiring expertise in respect of professional content for individual specialised areas. The scores of the students, who are also the sample of our study (academic years 2019/20, 2020/21, 2021/22), show that the area that performed best was that of developing skills in lesson planning in the Slovene language (compared to the other specialised subject areas, i.e., mathematics, social sciences, sports, natural sciences, music education and art education); developing skills for implementing different teaching methods in lessons is ranked second in the case of teaching Slovenian (with mathematics in the lead), and the same applies to developing skills to gain expertise in professional content (source: Internal materials of the Department of Classroom Education of the Faculty of Education, University of Ljubljana).

specialised didactic areas, so the Slovenian (mother tongue) teaching performances provide a basis and experience for them to gain an insight into their own lesson teaching, as well as to identify areas where they need to improve their teaching so that they can teach as well as they possibly can over time.

References

Adler, R. B. and Rodman, G. (2003). *Understanding Human Communication*. Oxford University Press.

Bešter Turk, M. (2011). Sporazumevalna zmožnost – eden izmed temeljnih ciljev pouka slovenščine [Communication capacity – one of the fundamental objectives of Slovenian teaching]. *Jezik in slovstvo*, 56(3–4), 111–130.

Blažič, M., Ivanuš Grmek, M., Kramar, M. and Strmčnik, F. (2003). *Didaktika [Didactics]*. Visokošolsko središče Novo mesto, Inštitut za raziskovalno in razvojno delo.

Bratanić, M. (1991). *Mikropedagogija: interakcijsko-komunikacijski spect odgoja [Micropedagogy: interaction-communication aspect of upbringing]*. Školska knjiga.

Čačinovič Vogrinčič, G. (2008). *Soustvarjanje v šoli: učenje kot pogovor [Co-creating at school: learning as a conversation]*. Zavod Republike Slovenije za šolstvo.

Gole, I. (2014). Reševanje učnih težav pri matematiki [Solving learning difficulties in mathematics]. V A. Žakelj (ur.), *Učne težave pri matematiki in slovenščini – izzivi za učitelje in učence* (pp. 111–114). Zavod Republike Slovenije za šolstvo.

Heacox, D. (2009). *Diferenciacija za uspeh vseh. Predlogi za uspešno delo z učenci različnih zmožnosti. Preizkušeni nasveti in zamisli za učinkovito poučevanje [Differentiation for everyone's success. Suggestions for successful work with students of different abilities. Proven tips and ideas for effective teaching]*. Rokus Klett.

Kneževič, V. (2002). Učitelj – uspešen moderator pouka tretjega tisočletja [Teacher – successful moderator of the third millennium class]. V T. Zidar Gale (ur.), *Učitelj – govornik in moderator: kako do kakovostnejšega poučevanja* (pp. 125–134). Zavod RS za šolstvo.

Kolar, I. (2009). *Odnosni govor in njegova vloga pri pouku slovenskega jezika v srednji šoli [Attitude speech and its role in language classes in high school]*. Diplomsko delo. Filozofska fakulteta.

Kramar, M. (2009). *Pouk [Lesson]*. Educa.

Kramarič, M., Ropič, M. and Urbančič Jelovšek, M. (2000). *Na vrtiljaku črk 2. Priročnik za učitelje [On the carousel of letters 2. Teacher's Guide]*. Rokus.

Kubale, V. (2016). *Priročnik za sodobno oblikovanje ali artikulacijo učnega procesa [Guide to modern design or articulation of the learning process]*. Samozaložba.

Kubale, V. (2021). *Priročnik za sodobno letno pripravljanje učiteljev na pouk ter pripravo učnih tem in učnih enot*. 2., dopolnjena izdaja [*A guide to modern annual preparation of teachers for instruction and preparation of learning topics and learning units*. 2nd updated edition]. Samozaložba.

Kunst Gnamuš, O. (1992). *Sporazumevanje in spoznavanje jezika [Communicating and learning about the language]*. DZS.

Kunstelj, A. (2001) Naloge razrednika [Duties of the class teacher]. Žagar, Drago idr. (ur.), *Razrednik: Vloga, delo in odgovornost*. Založništvo Jutro. (pp. 157–199).

Magajna, Z. and Umek, M. (2019). Učne priprave na nastope bodočih učiteljev [Learning preparation for the performances of future teachers]. *Revija za elementarno izobraževanje*, *12*(3), 325–350.

Maldonado-Carreño, C., & Votruba-Drzal, E. (2011). Teacher-child relationships and the development of academic and behavioral skills during elementary school: A within- and between-child analysis. *Child Development*, *82*(2), 601–616. https://doi.org/10.1111/j.1467-8624.2010.01533.x

Marentič Požarnik, B. (2000). *Psihologija učenja in pouka [Psychology of learning and teaching]*. DZS.

Pečjak, S. (1995). *Ravni razumevanja in strategije branja [Levels of understanding and reading strategy]*. Different.

Pečjak, S. and Gradišar, A. (2002). *Bralne učne strategije [Reading learning strategies]*. Zavod Republike Slovenije za šolstvo.

Pečjak, S. and Košir, K. (2002). *Poglavja iz pedagoške psihologije: izbrane teme [Chapters in pedagogical psychology: selected topics]*. Filozofska fakulteta.

Petek, T. (2014). Didaktični model razvijanja javnega govornega nastopanja [Didactic model for developing public speaking performance]. *Jezikoslovni zapiski*, *20*(2), 143–161.

Petek, T. (2014). Sodobno načrtovanje pouka književnosti v 1. in 2. triletju osnovne šole [Modern planning of literature lessons in the 1st and 2nd trimesters of primary school]. *Razredni pouk*, 2–3 (2014), 46–51.

Petek, T. (2019). *Govorno nastopanje v pedagoškem procesu [Speaking in the pedagogical process]*. fakulteta.

Petek, T. (2021). Pravopisna ozaveščenost učiteljev razrednega pouka – zgled na poti do višje pismenosti vseh učencev (pedagoško-kodifikacijski vidik) [Orthodox awareness of classroom teachers – an example of a path to higher literacy for all pupils (pedagogical-codification aspect)]. *Jezik in slovstvo*, 66(2–3), 37–53.

Petek, T. (2022). Vpogled v besedišče učencev osmega razreda. V T. Petek (ur.), *Bralno razumevanje na preizkušnji [Reading comprehension on the test]* (pp. 97–128). Pedagoška fakulteta Univerze v Ljubljani, Zavod Republike Slovenije za šolstvo.

Petek, T. and Lazzarich, M. (2019). The attitudes of Slovenian and Croatian students of primary education towards spoken performance in the pedagogical process. *XLinguae*, *12*(1), 3–20.

Pirih Svetina, N. (1997). *Govorno izražanje pri interpretaciji literarnih del v osnovni šoli [Speech expression in the interpretation of literary works in primary school]*. Magistrsko delo. Filozofska fakulteta.

Podbevšek, K. (1996). Glasno interpretativno branje Kettejeve pesmi Na trgu (učiteljeva priprav) [Loud interpretive reading of Kette's Poem In the Square (teacher's preparations)]. *Jezik in slovstvo*, *44*(1–2), 19–28.

Podbevšek, K. (2006). *Govorna interpretacija literarnih besedil v pedagoški in umetniški praksi [Speech interpretation of literary texts in pedagogical and artistic practice]*. Ljubljana: Slavistično društvo Slovenije.

Program osnovna šola. Slovenščina. Učni načrt [Elementary school program. Slovenian. Curriculum]. (2018). Ljubljana: Ministrstvo za izobraževanje, znanost in šport; Zavod RS za šolstvo.

Pšunder, M. (2011). *Vodenje razreda [Class leadership]*. Mednarodna založba Oddelka za slovanske jezike in književnosti, Filozofska fakulteta Univerze v Mariboru.

Rihter, J., & Potočnik, R. (2020). Preservice teachers' beliefs about teaching pupils with spe-

cial educational needs in visual art education. *European Journal of Special Needs Education*, *37*(2), 235–248. https://doi.org/10.1080/08856257.2020.1862340

Rot Vrhovec, A. (2015). Forms of cooperative learning in language teaching in Slovenian language classes at the primary school level. *CEPS journal*, *5*(3), 129–156.

Rot Vrhovec, A (2020). *Poučevanje učencev, katerih prvi jezik ni slovenski [Teaching pupils whose first language is not Slovenian]*. Pedagoška fakulteta.

Rot Vrhovec, A. (2022). Besedišče učencev petega razreda [Vocabulary of fifth-grade students]. V T. Petek (ur.), *Bralno razumevanje na preizkušnji* (pp. 69–96). Pedagoška fakulteta Univerze v Ljubljani, Zavod Republike Slovenije za šolstvo.

Rot Vrhovec, A. and Bešter Turk, M. (2022). *Učne oblike in metode dela pri slovenščini [Teaching forms and methods of working in Slovenian]*. Interno gradivo za študente.

Strmčnik, F. (2001). *Didaktika. Osrednje teoretične teme [Didactics. Central theoretical themes]*. Znanstveni inštitut Filozofske fakultete.

Tivadar, H. (2009). Pomen glasoslovja in pravorečja pri učenju slovenščine (s poudarkom na porabskem primeru) [The importance of glasology and orthodoxy in learning Slovene (with emphasis on the consumer case)]. *Slovenski miktokozmosi – medetični in medkulturni odnosi* (pp. 41–51).

Tomič, A. (2003). *Izbrana poglavja iz didaktike [Selected chapters from didactics]*. Filozofska fakulteta.

Tomlinson, C. A. (2008). The goals of differentiation. *Educational Leadership, 66*(3), 26–30

Toporišič, J. (1992). *Enciklopedija slovenskega jezika [Encyclopedia of The Slovene Language]*. Cankarjeva založba.

Toporišič, J. (2000). *Slovenska slovnica [Slovenian grammar]*. Založba Obzorja.

Trškan, D. (2011). Tabelska slika in različni zapisi učne snovi pri zgodovini [Table image and various records of the learning material in history]. V D. Trškan (ur.), *Trojarjev zbornik* (pp. 323–334). Znanstvena založba Filozofske fakultete.

Ule, M. (2005). *Psihologija komuniciranja [*The psychology of communication]. Fakulteta za družbene vede Univerze v Ljubljani.

Valenčič Zuljan, M. and Kalin, J. (2020). *Učne metode in razvoj učiteljeve metodične kompetence*. Pedagoška fakulteta.

Vogel, J. (2017). Poimenovanje jezikovne zvrstnosti pri pouku slovenščine med teorijo in prakso [Naming linguistic genre in Slovenian instruction during theory and practice]. *Jezik in slovstvo*, *62*(4), 17–30.

Voršič, I. and Ropič Kop, M. (2020). Besedišče: 5. Gradnik [Vocabulary: 5th building block]. In: D. Haramija (ur.), *Gradniki bralne pismenosti: teoretična izhodišča* (pp. 139–157). Univerzitetna založba Univerze: Pedagoška fakulteta; Zavod Republike Slovenije za šolstvo.

West-Burnham, J. and Harris, D. (2016). *Komunikacija – ključ do uspeha [Communication – the key to success]*. Rokus Klett

Zupančič, J. (2018). *Vključevanje učencev v učni proces [*Engaging pupils in the learning process]. Web source:https://rokusova-centrifuga.si, 29. 10. 2022

Žagar, D. (2009). *Psihologija za učitelje [Psychology for teachers]*. Znanstvena založba Filozofske fakultete.

Žakelj, A. (2013). Pristopi učiteljev pri oblikah pomoči učencem z učnimi težavami pri matematiki [Teacher approaches in forms of support for pupils with learning difficulties in maths]. *Revija za elementarno izobraževanje, 6*(1), 5–25.

TEACHERS' PERCEPTIONS OF FLIPPED LEARNING AND TEACHING: PLANNING, IMPLEMENTATION AND EVALUATION

Romina Plešec Gasparič*¹, Petra Pejić Papak², Milena Valenčič Zuljan³

Abstract

Teachers currently face many professional challenges, so their didactic innovativeness is of great importance. This contribution deals with the definition and the meaning of didactical innovation of instruction, with a focus on so-called flipped learning and teaching.

The paper presents a qualitative study that illustrates the views, perceptions, and experiences of seven Slovenian and two Croatian teachers who have experience with flipped learning and teaching. We posed three research questions regarding the planning, implementation, and evaluation of this innovation. The participants identified factors that affect their decision for innovation, including their inclination for different, meaningful, and effective instruction, their qualifications, collegial support, and other factors. The results also showed that teachers mostly use flipped learning and teaching for content that is challenging to their students. According to these teachers, the main advantage of flipped learning and teaching is that students are able to watch the video at home several times, while the limitations are mainly connected to the accessibility of computers and the internet, students' responsibility in the process, and work overload for students and teachers when it comes to implementing innovation.

It is important to realise that different teachers need different forms of support in planning flipped learning and teaching, encourage them to present it thoroughly and thoughtfully to students and parents, and rely on teachers' professional judgment and autonomy throughout the process.

Keywords: didactic innovation; flipped learning and teaching; planning, implementation, evaluation of innovation/ flipped learning and teaching

1   *Corresponding Author. Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia; romina.plesec@pef.uni-lj.si.
2   Faculty of Teacher Education, Sveučilišna avenija 6, 51 000 Rijeka, Croatia.
3   Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia.

1   Didactic innovation of instruction

Change is the only constant in today's fast-paced world, which presents several challenges to teachers and schools. The pressure on schools stems from attempts to ensure and demonstrate better achievement of all students in all schools. The second pressure is to respond to the ever-growing range of needs and demands arising from students' social and cultural diversity (Bentley, 2010, p. 32).

Consequently, teachers are often challenged to adapt and innovate their instruction. 'The demands of modern education cannot be met in an educational process that overemphasizes the teaching process and does not sufficiently take into account learning in class. In that context, the processes of students' active learning and the learning outcomes are key' (Pejić Papak, 2022, p. 269). Activities aimed at research and collaborative work, specifically the discovery of knowledge and the productive application of knowledge, ensure an approach to learning and teaching during which students create, discover, independently plan, give initiative, ask questions, and do research. The key is to focus on thematic teaching and learning, an approach that, according to Davies and Shankar-Brown (2011), is suitable for educational development in the 21st century. The reason lies in the fact that thematic teaching allows teachers to set challenges for students so that they think about a specific topic before learning. Students should then learn to connect that topic with previous experiences, and it will then become appealing and interesting for them (Retnawati et al., 2017).

Through active learning, students are required to understand and express their own positions on certain phenomena, think critically, and have a creative approach to solving problems, and not just reproduce the content. Such an approach to learning achieves a high degree of independence and self-regulation of learning. Lalović (2009) connects active learning with contemporary learning in which students are builders of their own knowledge, while Bezinović et al. (2012, p. 40) especially emphasise the importance of 'connecting knowledge with personal experiences and knowledge, experiences from everyday life, and knowledge from other subjects and areas'. The goal of student-centred learning, according to Pejić Papak et al. (2021), should be:

> […] continuous improvement of the teaching process, which includes the implementation of continuous professional learning even during the teaching and solving of collaborative problems

> to further improve professional development activities, providing opportunities to gain an understanding of theories aimed at improving student learning. (p. 514)

Pedagogical and didactic innovations are necessary in a contemporary school because of numerous research findings about instruction and learning (differentiation and individualization of learning, multiple intelligences theory, etc.), different, diverse, and increasingly 'demanding' students and their needs, as well as more demanding educational aims, and because of the speed at which information changes and becomes obsolete (Jorgenson, 2006). Differentiation and individualisation in teaching require the teacher to be sensitive to the recognition of differences between students in their prior knowledge, abilities, interests, motivation, learning styles, and beliefs about their own motivation (Pejić Papak, 2021, p. 15). The teacher's ability to react to changes and changes to their own teaching, as well as preparing students for lifelong learning and altered circumstances, are some of the teacher's basic professional competencies.

Teacher's professional abilities are required to harmonise the planned outcomes with the manner of teaching and to manage instructional time and routines so that students have the maximum opportunity to learn using strategies to promote students' thinking and understanding of the content at a deeper and more complex level and modelling (Martin & Rimm Kaufman, 2015). A pedagogically competent teacher is an initiator and organizer of the educational process, a coordinator, a team associate, and a facilitator. Their task is to provide and prepare the students' environment, encourage cooperation, teach students how to learn, and develop mutual trust (Dević, 2016).

Innovations tend to be introduced into teaching because they meet the needs better than current practices (Fullan, 2016), whether at the level of the individual teacher and their teaching or at the national level. Dužević et al. (2019) state that a vast number of studies highlighted the need for more research in optimising the organisational design to support innovations and to analyse effective and innovative methods that can be used for training students.

Mandič (1983) defines innovation of instruction as a consistent system of:

> [...] pedagogical, social, organizational, and economical measures, deliberately based on pedagogical and other sciences that aim

> to improve the quality of educational work while rationally using staff, time and means; to democratize school relations, develop inventiveness, originality, and creativity of teachers and students to a maximum, realize the conditions for appropriate pedagogical assessment, programming, norming and grading of pedagogical work: to find the most appropriate material factors to motivate students and teachers for their work […] (p. 192)

Most researchers perceive pedagogical innovation as a process that happens in three broader phases: deciding to design and accept innovation (initiation), implementation of innovation, and institutionalization of innovation (Fullan, 1982, 1992, 2016; Miles et al., 1989; Vandenberghe, 1991a, 1991b).

We define the process of didactic innovation as a process of designing theoretically deliberate and practically justifiable changes in instruction that are the result of the conscious, planned, and creative work of teachers and/or researchers and that are expected to contribute to the improvement of the current educational practice (Valenčič Zuljan & Kalin, 2007; Valenčič Zuljan & Vogrinc, 2010).

The starting point for innovation can either be the teacher's realisation of a problem situation, their feeling that the existing condition needs to change, their feeling of discontent with the existing circumstances, or the presentation of certain research novelties and practical experiments (Valenčič Zuljan, 1996a; Valenčič Zuljan & Kalin, 2007). Teaching innovation also implies the teacher's use of multi-faceted and lively teaching methods, as well as diversified and rich content to stimulate students' interest in learning (Wu, 2002).

Fullan (2001) introduces two types of innovations: the first are already existing innovations that the teacher must implement exactly as they are, while the other type includes innovations that are constantly being changed and improved.

Fullan (2001) also speaks of the multidimensionality of innovation since three dimensions of instruction are subject to change when innovations are implemented: a) change at the level of resources and materials, e.g., curricula or technology: at this level, the changes are most concrete and evident; b) change at the level of teaching approaches, e. g., new teaching strategies or activities: this change is more difficult to achieve because the

teacher must acquire new teaching skills; c) change at the level of opinions and conceptions, and teacher's subjective instructional theories: this change is the most difficult to achieve because it challenges the teacher's conceptions and values.

If we wish to create the conditions for the implementation of innovations, we need to consider all these aspects (Fullan, 2001).

When innovating, two questions need to be answered: what to innovate and how. The first question is addressed by educational theories, and the second by theories of change. It is essential that the theories from both fields connect in order for innovation to be successful (Fullan, 2001). Fullan (2001) observes that the two biggest challenges schools face when innovating are the division of innovations and the large number of them. In addition, schools always feel somewhat forced to implement innovations. When implementing innovations, it is important to consider the context of each school and each teacher, as they ascribe their personal meaning to the innovation based on their own past experiences, regardless of what meaning this innovation has for other people.

For the innovation to be successful and for the teacher to feel satisfied, the question of who initiates the innovation process and with what aim is vital. It is crucial that the teacher is familiar with the theory of innovation, has the opportunity to solve their dilemmas in implementing the innovation, and receives constructive feedback and support (Valenčič Zuljan, 1997). Continuous professional development of teachers is also significant, so Tischler (2007) states:

> […] the professional development of teachers stems from the social need for a competent teacher, who will constantly adapt their educational activities through professional development to the changes and demands of modern life and thus maintain the necessary level of quality of educational activity as a guarantee of social development, but it is also a reflection of the personal need of each individual teacher to self-determine, develop, and improve in educational communication, which is in accordance with the nature of the educational process as a way of learning the truth. (p. 294)

A Slovenian study shows that innovations are more often implemented in schools where colleagues and school administration are more supportive of innovation (Valenčič Zuljan et al., 2010), with the role of the school

principal as a supporter of the innovation process and as the main actor in creating a school atmosphere being crucial (Valenčič Zuljan, 1996b). Creating an interesting and challenging learning environment that emphasises collaboration and encourages students to actively participate and supports their natural desire to explore should become a continuous challenge for teachers.

2   Flipped learning and teaching

Flipped learning is a didactic innovation that can greatly contribute to facilitating students' cognitive activity and individualisation of learning, cooperative learning, innovativeness and openness, metacognition and learning of learning, and students' independence. It is important to emphasise that it is a didactic innovation developed 'from the bottom up', which means it originated from 'the teachers and instructional practice'. It is an innovation that refers to different didactic elements (instructional stages, forms of student grouping, instructional methods, etc.).

As for the occurrence of the concept and the term 'flipped learning', researchers do not share a common opinion. Baker (2000) writes of the 'classroom flip', while Lage et al. (2000) use the term 'inverted classroom'. The first academic definition of the inverted classroom comes from Strayer's (2007) doctoral dissertation. The focus of all terminological and conceptual discussions was on the temporal and spatial components: the events that used to take place at school now took place at home, and what used to take place at home now took place at school. At the time, students' cognitive activity, autonomy, and student-centred instruction were not at the forefront of these discussions. Today's best-known concept emerged in 2006 as the 'flipped classroom' and was based primarily on the use of video as a medium for higher-quality content delivery. The authors point out that the model of 'flipped learning' or 'flipped classroom', as it was first called, has changed qualitatively. Originally, it focused primarily on the high-quality delivery of content by the teacher via video, while instruction was teacher-centred. In the next phase of development, the model still focused on the teacher's instruction, but the student's pace of learning was taken into account (e.g., by allowing the video to be paused, inserting tasks to check for understanding, etc.). Gradually, the concept put the student at the centre of instruction by emphasising that higher levels of learning goals should be achieved according to Bloom's Taxonomy. Consequently, a new term was coined: 'flipped learning'. Thus, the flipped classroom became a space of flipped learning: the student is the focus of instruction, while the teaching

and learning strategies used contribute to deep and lasting student understanding (Bergmann & Sams, 2012; Bormann, 2014). We would include both student and teacher activity in instruction and therefore propose the term 'flipped learning and teaching' (FLT).

Based on some authors' definitions, flipped learning and teaching is defined as:

- a pedagogical approach in which direct instruction is shifted from the group learning environment (classroom) to the individual learning environment (home). Instead of listening to the teacher's explanation in the classroom, students watch a video of the teacher's explanation at home. The teacher can use the saved time with the students for cooperative activities, problem-based learning, individualised exercises, project work, etc. (Hamdan et al, 2013);
- a process of replacing events that traditionally take place in the classroom with events that traditionally happen outside the classroom and vice versa (Lage et al., 2000);
- a combination of learning approaches that consists of two main components: certain learning activities before and/or after classroom instruction (e.g., watching a video of the teacher's explanation) and in-class learning activities that require cognitive activity and social interaction (Abeysekera & Dawson, 2015; Bergmann & Sams, 2012, 2014; Bishop & Verleger, 2013);
- a combination of learning approaches that remove informative transmissive teaching from the classroom; teachers use classroom time for learning activities that require cognitive activity and social interaction, and they expect students to engage in activities before and/or after class for classroom learning to be effective. The authors note that their definition does not include:
  a) the assumption that flipped learning is effective;
  b) critiques of current teaching and learning models;
  c) assumptions about student motivation in the process of flipped learning; and
  d) specifying what technology (if any) should be used for flipped learning (Abeysekera & Dawson, 2015);
- a unique combination of approaches that once seemed incompatible: problem-based learning tasks that require cognitive activity based on constructivist theories and direct instruction based on behaviourist principles (Bishop & Verleger, 2013).

Flipped learning comes in different forms, but all definitions have some common points (Abeysekera & Dawson, 2015):

a)   altered use of learning time in the classroom;
b)   altered use of learning time outside the classroom;
c)   performance of activities traditionally referred to as homework in school;
d)   performance of traditional school activities at home;
e)   school-based activities that promote active learning, peer learning and teaching, and problem-based learning;
f)   activities that take place before the lesson;
g)   activities that take place after the lesson; and
h)   the use of ICT, especially video.

The teacher plays an important role in planning, implementing, and assessing flipped learning and teaching, providing regular feedback on student learning and reflecting on the implementation of the innovation with students (Plešec Gasparič & Valenčič Zuljan, 2019).

Overmyer (2014) suggests some guidelines for teachers who wish to implement flipped learning. When preparing the video, teachers should also plan an accompanying task (e.g., a web homework assignment, note-taking, or a quiz). Today, technology allows the teacher to check whether or not students have watched the video, how long it took them to watch it, and how many times they watched it. Teachers can include interactive learning tasks in the video and check students' answers. It is very important that teachers make the most of the time they have with their students. Therefore, lessons should be dynamic and provide many opportunities for students to collaborate on problem-based tasks. The classroom becomes a dynamic, interactive, and innovative learning environment where the teacher guides students to try new concepts and engage in active and creative dialogue with the learning content. Flipped learning and teaching can contribute to student self-regulation, cognitive activity, improved academic performance, and more appropriate time management. It can also improve students' knowledge retention and collaboration skills.

A collaborative professional environment is central to the effectiveness of the innovation (Fullan, 2001), which Fulton (2014) confirms, pointing to collaboration and collegial support in the context of flipped learning and teaching and adding that this innovation can be a good opportunity

for professional development, as teachers also flip their own professional learning by flipping their teaching.

3   Methodology

Due to rapidly changing social and educational circumstances, teachers face many challenges. Ambitious and creative teachers who are aware of these challenges are looking for ways to be innovative in their instruction to make it more effective. The main study objective is to examine the process of innovation from the teachers' perspective: planning, implementation, and evaluation. We were particularly interested in the didactic innovation referred to as flipped learning and teaching (hereafter FLT) and posed three research questions:

RQ1:   Planning: How did teachers become familiar with and qualified to implement FLT? What influenced their decision to innovate instruction? What do teachers believe are the prerequisites for innovation?

RQ2:   Implementation: How did teachers implement FLT?

RQ3:   Evaluation: How do teachers perceive FLT, its impact, and its effectiveness? What advantages, disadvantages, and obstacles do they observe?

We conducted a qualitative study. We interviewed five class teachers and four subject teachers, all of whom had experience with FLT. Table 1 shows their demographics.

Table 1. Interviewed teachers' demographical data

	Years of service	Country
Class teacher 1	No information	Slovenia
Class teacher 2	21 years	Slovenia
Class teacher 3	40 years, retired	Slovenia
Class teacher 4	23 years	Croatia
Class teacher 5	20 years	Croatia
Subject teacher 1 (Math and Computer Science)	3 years, 6 months	Slovenia
Subject teacher 2 (English)	10 years	Slovenia
Subject teacher 3 (Music)	39 years	Slovenia
Subject teacher 4	No information	Slovenia

Teachers who had experience with FLT and agreed to participate in the research were contacted and informed of the research objectives. We conducted semi-structured interviews. We were interested in how teachers became familiar with FLT, how they implemented it in their classrooms, what advantages and disadvantages they noted, and what kind of support they received from colleagues, school administrators, and students' parents. Teachers were informed of the purpose of the study, and responses were recorded with their consent (Cencič, 2009). The responses were later transcribed and analysed.

4   Results and discussion

4.1   Planning flipped learning and teaching

When researching the didactical innovation of flipped learning and teaching, we initially focused on the phase of planning and preparation: the introduction of the innovation. We asked the teachers how they became familiar with and qualified to do flipped learning and teaching, what influenced their decision to innovate instruction, and what, in their opinion, were the conditions for innovating.

First, we were interested in when and where teachers who use FLT became familiar with it.

Teachers who teach in Slovenian elementary schools became familiar with the innovation of FLT in different ways. Two class teachers (1, 2) said that they were introduced to it in 2013 by a more experienced colleague who prepares teacher training. Class Teacher 3 came across the concept of flipped learning by chance in 2013 while surfing the web. Subject Teacher 1 said that he became acquainted with FLT with the help of a mentor and co-mentor while writing his master's thesis. After familiarisation, he read the book by Bergmann and Sams (2012) entitled *Flip Your Classroom: Reach Every Student in Every Class Every Day,* which helped him understand the basics of the approach. After that, he reviewed some professional articles and examples of FLT. Once he was familiar with the basics, he prepared step by step the material for introducing the innovation. Three subject teachers (2, 3, and 4), who work in the same school in Slovenia, learned about flipped learning in 2015 at an educational seminar organised by the school for all teachers before the start of the new school year. At this school, teachers were free to choose to incorporate flipped learning into their lessons. At the end of the school year, those who decided to

introduce the innovation presented their experience and findings to their colleagues at an international conference at the end of the project.

Teachers from Croatian schools highlighted that they encountered this type of teaching during professional education, which motivated them to make their first attempts with it two years ago. However, they emphasized the importance of internal motivation for finding information about approaches to learning ('While reading professional articles or published experiences of other teachers, I decided to give this way of teaching a try.') and introducing innovations in teaching.

'I encountered such a teaching approach as the highest level of active and self-regulating learning during professional training. The desire to test how my students would manage in such an activity and how ready and capable I would be to offer such a form of learning has led me to use flipped learning and teaching in some forms in the work with my students.' (Class Teacher 4)

Plešec Gasparič (2019) studied the familiarity and experience with FLT on a large sample of 422 Slovenian class and subject teachers. She found that FLT is well recognised among Slovenian teachers, as almost 60% of teachers are familiar with it. However, only 6% of them have practical experience with this didactic innovation. In the research, she also found that Slovenian teachers have extremely positive views regarding FLT (around 80% of teachers agreed or fully agreed with the statements regarding the interesting and useful nature of FLT) and that the vast majority of them (fully) agreed that they would like to receive training on this didactic innovation (78.9%).

Research examining teacher familiarity with FLT has also been conducted in the United States since 2012, naturally, on a correspondingly larger sample. Yarbro et al. (2014) report on a survey conducted within the Flipped Learning Network (n.d.), in which they determined how many teachers recognise the FLT concept. The survey was conducted in two steps: the first in 2012 and the second in 2014. Two separate surveys were conducted in 2012 (one involving more than 56,000 teachers and the other involving 450 teachers). The results of the two surveys were later combined and weighted, and, in 2014, a survey was carried out that allowed comparison with the research findings from 2012. In 2014, 2,358 teachers participated in the survey and answered 36 questions. In 2012, the concept was recognised by 74% and in 2014 by 96% of surveyed teachers. When

the teachers were asked about concrete experiences with the implementation of FLT, they were told that in 2012, 48% of the surveyed teachers had experience with the implementation of FLT, and in 2014, 78% had experience with the implementation of FLT. Of these, 96% responded that they would recommend FLT to their colleagues. Considering that the didactic innovation of FLT originated in the USA and received a lot of attention and (media) promotion there, it is understandable that knowledge of the innovation spreads much faster in the USA than here. As knowledge increases and the advantages of FLT are presented (and perhaps somewhat fewer dilemmas, limitations, and pitfalls), the circle of teachers who test this innovation more or less consistently, meaningfully, and effectively in their practice also expands.

The decision to accept innovation or its introduction is influenced by various internal and external factors (Fullan, 2016; Valenčič Zuljan, 1996a), and teachers' assessment of the conditions necessary for effective implementation of innovation also plays an important role (Valenčič Zuljan, 1997). We asked the teachers about both aspects.

When asked what the teachers consider to be the condition for the effective introduction of innovation in FLT, the teachers emphasised the meaning of the teacher's curiosity, the internal need to innovate: 'I think the most important thing is the teacher's desire for a different, non-traditional way of teaching – that this is their desire and not that they are forced to do it...' (Subject Teacher 1)

The importance of intrinsic motivation is highlighted by this class teacher: 'In search of active learning activities and following novelties in learning approaches on the Internet, I came up with the idea of implementing flipped learning and teaching with the desire to offer my students a way of working that will be of interest to them, and on the other hand, effective.' (Class Teacher 5)

In addition to their openness to change, the teacher's competency is also important, which is significantly related to ICT competency in the case of FLT. In this context, Subject Teacher 1 underscored 'the teacher's qualification for good implementation of flipped learning and teaching and some technical computer knowledge. Of course, the subject itself is also a condition in the lessons – it is not appropriate or even possible to treat all content with flipped learning and teaching.'

Most class teachers also agreed that it is important for the teacher to be skilled in the use of ICT during teaching and that they know how to use it to prepare a professionally relevant recording or other types of material. Class Teacher 4 observed: 'My IT literacy and use of digital tools are important for the application of flipped learning and teaching. I mostly record video lessons or video materials on my own. I use Screenomatic, Adobe Express, PowerPoint presentations, Sway, YouTube, and Teams. Sometimes I also use selected video materials from publishing houses.'

Subject Teachers 2, 3, and 4 also emphasised students' familiarization with the purpose of FLT and motivation for watching the video. All three subject teachers pointed out that students must be aware of their part of the responsibility because only this can ensure success in FLT.

In the same way, Class Teacher 4 pointed out: 'The teacher's will and desire for this kind of teaching, a lot of preparation and materials, and the creation of detailed instructions for students is part of the job, but a significant part of taking responsibility for independent learning belongs to the student, which is important to encourage motivation, but also responsibility.'

All interviewed class teachers believe that it is appropriate for the parents to be informed about this organisation of work, so they present it more precisely to the parents at the parent-teacher meetings, where they explain their role in the process.

'Before the first attempts with flipped learning and teaching, I held a thematic workshop with the parents so that we could come to a joint conclusion about the benefits for the students if we persisted in using flipped teaching. We agreed that the parents would additionally motivate their children for quality work at home, but also allow them space for independent work in order to adopt the habit of following the material.' (Class Teacher 4)

'It is extremely important to continuously introduce parents at parent-teacher meetings to the approaches of working in the flipped manner and to the benefits of taking responsibility for their children's independent learning because some parents felt that I was shifting the teaching part onto them and that, instead, the children should do all of the work at school. They pointed out that their children's obligations at times become their responsibilities because the child cannot do the work independently.' (Class Teacher 5)

The teachers clearly indicated: 'Students who have more parental support in their work at home are able to more easily and successfully complete the preparatory part of flipped learning and teaching.'

In this case, additional care must be taken to ensure that the students' homework obligations are designed in such a way that the students can perform them independently.

Throughout the entire process of introducing and implementing innovation, all the interviewees felt that they received technical support from the school (the necessary technical equipment was available to them), and the school management also expressed their support and encouraged them. The final conference at the school, where they were able to present their experiences with FLT, had a motivational effect on Subject Teachers 2, 3, and 4.

The significance of receiving support from their surroundings, specifically that of their school in the implementation of flipped learning and teaching is highlighted by Class Teacher 4, who believes that it is necessary at the school level to 'organisationally ensure a more flexible teaching schedule, ensure sufficiently spacious classrooms with IT equipment, and a quality internet connection, motivate teachers with training and examples of good practice but also to educate parents. I haven't heard of any of the teachers at my school other than me implementing this kind of work.'

Regarding the reasons for introducing FLT, Class teachers 1 and 2, who are colleagues and decided to introduce FLT together, said during the interview that they were looking for innovations to introduce into their lessons. In FLT, they were convinced by the fact that, with this type of teaching, students can be more mentally active. Even the class teacher with a lot of work experience (Class Teacher 3) was striving to improve the pedagogical process throughout her teaching career, and she discovered FLT by chance when she was looking online for new opportunities to update her teaching.

These teachers decided to introduce innovation because they like to try out new things. Subject Teacher 1 also expressed a similar personal preference for innovation: 'Current instruction is too traditional and frontal, and there are not enough innovations. Since I'm interested in different and non-traditional ways of implementing instruction, I was immediately drawn to flipped learning and teaching. Teaching in school relies

too much on traditional approaches. I think that teachers have a lot of different approaches and so-called innovations at their disposal. It is increasingly difficult to attract today's students with traditional approaches. That's why I think that both schools and teachers need to keep up with the times and use different teaching methods that would attract and motivate students for work. One of them is definitely FLT. With the increasingly rapid development of ICT, new innovations and teaching forms present themselves.'

For Subject Teachers 4, 5, and 6, one of the reasons for FLT was their preference for ICT in teaching, as one class teacher also points out:

'When implementing flipped learning and teaching, the teacher must skilfully use ICT to prepare the material. What helped me a lot was the professional training I attended on the application of digital programs and tools in educational settings, which was carried out as part of the GLAT project at the Faculty of Teacher Education.' (Class Teacher 5)

FLT is an innovation closely related to the articulation of the learning process. The extensive stage of dealing with new learning material, which is usually dominated by frontal teaching, as also shown by the Plešec Gasparič (2019) research (chosen most often by 64.8% of teachers), is moved from the classroom to the home environment in FLT, which within the stages of practice, repetition, and evaluation provides the teacher at school with the space and time for the implementation of individual learning, pair work, and group learning. FLT makes it possible to reduce the scope of direct teaching and increase the scope and depth of independent learning, the combination of different instructional methods and didactic strategies, especially problem-based learning, and other didactical strategies of open instruction (Valenčič Zuljan & Kalin, 2020).

Some subject teachers also pointed out the possibility of a deliberate combination of different forms and instructional methods in FLT. Subject Teacher 1 said: 'There is a lot more group work and work with different learning aids. Therefore, as a result, the tables are often grouped together, and, in the classroom, we also have a lot of different learning aids, which we don't have in traditional learning.'

Other teachers come to similar conclusions when comparing FLT with traditional instruction: 'The introduction of flipped learning and teaching is significant. The fundamental difference from traditional teaching is

in the work methods, the complete activity of students who are focused on problem solving, they are more motivated to engage in work and are more satisfied at the end, and they are not focused on the assessment because their satisfaction with what they have done exceeds the need for obtaining a grade and external evaluation.' (Class Teacher 4)

Class Teacher (5) observed: 'I carefully combine different methods, like in flipped learning and teaching, so that the process of independent learning does not become monotonous but also to direct the students to prepare for classes with the tasks in the video presentations, so that, in flipped learning and teaching, my students read, write, draw, work on the text, solve problem-based assignments…'

'My task is to offer the students a work method that will be interesting to them but, on the other hand, effective. In addition to my motivation, it is important for learning to become part of their intrinsic motivation – looking for methods that will effectively contribute to a motivated approach to learning. (Class Teacher 4)'

From the teachers' answers about the reasons to introduce flipped learning and teaching, we can identify their internal wish to change their own teaching practice (curiosity), which is connected to looking for ways to activate students on the cognitive and emotional levels. According to the interviewed teachers, introducing the didactic innovation of flipped learning and teaching contributes to greater effectiveness of instruction for different groups of students. The didactical principles of activity in the function of students' development and learning differentiation and individualization (Strmčnik, 2001; Valenčič Zuljan & Plešec Gasparič, 2021) come to the forefront. Therefore, the teacher's competence is key to deliberately complementing and combining instructional methods and forms of grouping, which was specifically addressed by some of the interviewed teachers.

4.2   *The process of implementing flipped learning and teaching*

In the context of this question, we were interested in which subjects, according to the teachers, are suitable for implementing FLT, how they prepared the classroom, and how they prepared the necessary materials.

We were also interested in what problems teachers encountered in the process of implementing FLT and what kind of support they received.

The teachers we interviewed have a similar opinion regarding which subjects are suitable for implementing FLT.

'I think that the flipped learning and teaching can be implemented in all subjects, but I most often implement it in Nature and Society classes, and I correlate it with the Croatian language subject.' (Class Teacher 4)

'I apply flipped learning and teaching to a thematic activity that I do not tie exclusively to one subject but treat the topic in an interdisciplinary manner, and then, in the lesson, I connect it with the art field, so I also include the subjects of Art and Music.' (Class Teacher 5)

Subject Teacher 1 observed that, in his opinion, there are contents within each school subject that could be flipped and those which are not appropriate for that kind of instruction. He believes that content that includes practical work or experiments is not suitable for FLT.

Other teachers are also of the opinion that all school subjects are suitable, but they point out that the teacher's ability to judge which content within each subject is suitable for this type of work is important.

It is interesting that some interviewees decided to use FLT to teach more demanding learning content, so the students have the opportunity to watch the recording of the teaching content several times at home and, therefore, memorise the study material better while there is more time at school to do problem-based tasks and other strategies of open instruction (Valenčič Zuljan & Kalin, 2020).

Regarding the subject areas in which FLT is implemented, a comparative study (Yarbro et al., 2014) shows that the number of subject areas in which teachers implement FLT increased between 2012 and 2014. FLT was being implemented by more English teachers, and a 2014 survey also found that FLT began to appear in social studies, technology and computing, foreign languages and, to a lesser extent, in art, music, and sports. However, in 2012 and 2014, mathematics and physics teachers dominated in terms of their experience with the implementation of FLT.

We asked the interviewed teachers to describe some examples of how they implemented FLT.

Class Teacher (4) used one example to describe the students' approach to

materials in flipped learning and teaching.

'I used the flipped learning and teaching model while teaching fourth-grade students in the subject Nature and Society. The students were asked to watch a recorded video lesson at home and independently follow the instructions for the assigned tasks, which at home directed them to conduct additional research on a certain web page that they needed to search, extract important information, write down the information, and create questions in the form of a quiz for the other students. The class would start the next day by filling out a table with the headings *What I already knew – What I have learned – What remains unclear to me*. Then we would share the experiences of watching the video material and searching the web pages. In groups, they took part in prepared quizzes in which they had to show or check how much of the assigned material they independently managed to master. Special attention was paid to the additional explanation of what the students wrote down on the board – *What I still don't understand*. The students filled out a self-evaluation sheet. Part of the students prepared very well for the lesson, but part of the students did it very superficially, while one student did not prepare at all and did not know what content would be discussed that day in class.

The students who prepared very well for the lesson were highly motivated and active during the workshop. For some activities, students who were partially prepared accepted peer teaching from students who were better prepared. A student who did not prepare had difficulty in their work but adapted to the situation and learned from other students or did not actively participate. The activities that the students engaged in during the lesson were ranked according to their knowledge levels. This was followed by work on prepared teaching materials – the creation of a picture book that includes living communities: forests, grasslands, seas, and inland waters.

The final part comprised the presentation of the activity results, i.e., the presentation of the picture book and systematization by extracting key concepts and creating a class thematic mind map. The students were evaluated by their peers.'

Subject Teacher 1 shared that he conducted FLT as a pedagogical experiment that lasted for three weeks. Later, he also used FLT when some of the groups of students were quarantined. He mostly used videos he recorded himself and that showed his face so that the students could also see him,

not just hear his voice. He used YouTube and the school e-Classroom to upload the videos. During the videos, he often asked questions for the students to answer.

Reflecting on what is the essential difference between regular school lessons and FLT, Subject Teacher 1 said: 'At home, students get a video to watch on their home computers at a time of their own choosing. In school, however, there is much more group work with interesting and life-useful tasks. In general, the classes are also more relaxed and, as a result, a little louder, because this way of working is mostly more interesting for the students. It seems to me that the essential difference lies primarily in the fact that the students are much more involved in the lesson itself than in traditional lessons.'

The teachers already highlighted the importance of management support when considering the conditions that are important in their decision-making for innovation. It is necessary to be aware that different teachers need different forms of support: from direct forms of encouragement, supervision, and feedback to more indirect forms of teacher reporting on their own work and results. In all cases, the principal's support of the teacher's deliberate introduction of innovations and trust in the teacher's professional judgment and autonomy are important (Valenčič Zuljan, 1996b)

Regarding the support of the school management, Subject Teacher 1 said: 'As a teacher, they allow me autonomy in my work. But computer support is also important because, as a school, we can provide them to students who don't have their own.'

Class teachers also expect support at the school level, and they point out: 'To support me as a teacher in implementing flipped learning and teaching, the school should better equip the classrooms, i.e., ensure sufficiently spacious classrooms with IT equipment and a quality Internet connection.' (Class Teacher 4)

'The school provided tablets for all my students and thus helped to support the implementation of flipped learning and teaching' (Class Teacher 4)

Yarbro et al. (2014) reported that as many as 93% of teachers who practice innovation-oriented learning and teaching introduced it on their own initiative, while 74% of them expressed that they also had the support of the school leadership.

Regarding the need for additional organised training, teachers involved in the research have different needs and wishes, which can be seen from their statements below: 'At the school level, it would be desirable to ensure quality education in flipped learning and teaching for all teachers, to motivate teachers, or to educate parents at parent-teacher meetings at the school level, and then the teacher will motivate and invite the parents from his class to cooperate.' (Class Teacher 5)

'Maybe not so much additional training. However, I think it makes a lot of sense to connect teachers who practice flipped learning and teaching into a network. Here we could exchange ideas, share experiences, and generally talk about flipped learning and teaching, maybe even generally about innovations in teaching.' (Subject Teacher 1)

Other teachers involved in the research also highlighted various aspects of collegial support, critical friendship, and support between teachers of the same subject, other teachers, and colleagues. The direct exchange of experience and obtained results between colleagues is particularly valuable. In this regard, one teacher emphasises: 'My colleague was curious to see how I apply flipped learning and observed what I was doing with the students in class. She was delighted with the way in which the students discussed in a prepared manner and said that she too would start to slowly implement the elements of flipped learning and teaching with her students.' (Class Teacher 5)

Another class teacher highlighted that the suggestions of the teacher with whom she often collaborates and who was present in her classroom work on several occasions and collegially observed the process is significant to her in approaching the work with flipped learning and teaching.

'A colleague from the neighbouring classroom visited my class in several situations and observed the work process in the classroom, and with her suggestions about the difficulty of the questions I ask the students, she suggested that I differentiate the teaching because it was focused on monitoring the students' reactions.' (Class Teacher 4)

It is clear from the teachers' answers that a teacher who is enthusiastic about a particular change and is successful in innovating can also influence other teachers with their enthusiasm.

'During the writing of my master's thesis, I introduced flipped learning

and teaching to some teachers. At least partially, I also prepared them to try flipped learning and teaching, not with my own, but with someone else's already published video.' (Subject Teacher 1)

Various studies (Krajnc Dular & Valenčič Zuljan, 2016; Valenčič Zuljan, 2018) underscore that the successful professional development of teachers can be best achieved in a positive atmosphere of collegiality and mutual support in the collective. Bezinović et al. (2012) point out that the collegial observation of teaching refers to the mutual observation of the teaching of fellow teachers who observe each other, initiate discussions about teaching, provide each other with opportunities for personal and mutual reflection and, in the context of a collaborative-developmental approach, improve the quality of teaching.

As already mentioned, flipped learning and teaching were put into practice according to the 'bottom up' model because the initiators of the innovation process were the teachers themselves, and innovation is thus an extremely subjective experience for them, which not only leads to changes in action but also in attitudes and concepts of learning and teaching (Sentočnik, 2006) and one's own professional development (Valenčič Zuljan, 1997). In the case of innovations that are introduced from the 'bottom up', teachers start from their own interests and needs; that is why they feel more motivated during the process of introduction and implementation. At the same time, it is very important for them not to feel pressured to introduce the change at the request of the school leadership or the entire state. That is why it is unsurprising that teachers find the innovation of FLT interesting to such a large extent; they want to become better familiarised with it and even try it out in their own practice.

4.3   Evaluation of flipped learning and teaching

We were also interested in the final phase of the innovation process – the evaluation. We wanted to know about teachers' perceptions of flipped learning and teaching: its influence and efficiency, as well as the identification of advantages, disadvantages, and obstacles.

In our study, we wanted to determine the advantages and disadvantages of FLT as perceived by the teachers involved. We strongly believe that this contributes to the teachers' evaluation of the innovation process and has implications for future implementation.

One of the teachers interviewed (Subject Teacher 1) acknowledged that the benefits of FLT for students are flexibility in dealing with subject content and increased student motivation. Class Teacher 4 also emphasised: 'Teaching with flipped learning motivated me greatly because there are visible changes in the students' willingness to learn; the students understand the meaning of learning. Through active and cooperative learning, I also influenced their better relationships and greater respect among them.'

According to the interviewed Subject Teacher 1 and his students, the disadvantage lies in the fact that students do not have direct communication with the teacher during the individual treatment of video content. He said that the advantages of FLT for the teachers are to present the content in a different way and to better reach the students through a different way of working in the classroom. The disadvantages for teachers are the additional time and effort they must spend in planning such a lesson. As for the parents, the teacher believes that the advantage is that parents can, in a way, 'force' their children to pay attention to the content and take notes, thus benefiting more from the lesson than in school. Three interviewed class teachers said that the advantage of FLT is the explanation, which is given professionally and in an interesting way for the students, and the time in school is dedicated to intensive and active solving of learning tasks while simultaneously enabling them to carry out collaborative learning.

Class Teacher 5 notes: 'Working in the flipped learning and teaching has motivated me a lot this year in the fourth grade because the students learned cooperatively and actively and were motivated. Flipped learning and teaching and active learning will definitely be a part of my teaching from the first grade on, ranging from smaller assignments to the implementation of the full form of flipped learning and teaching in the fourth grade.'

The subject teachers agreed that the main advantage lies in the possibility to re-watch the video with provided explanations, as the student can thus improve their understanding and watch the video even before the knowledge test. They consider this to be particularly important for those students who are absent from class when new material is introduced; otherwise, they would not have the opportunity to hear the teacher's explanation. Class Teachers 1 and 2 believe that students are less time-burdened during FLT at home, as the videos are short and infrequent, while Subject Teacher 4 believes that watching a video and solving the accompanying tasks takes more time than traditional homework. Class Teacher 3, who did not use videos for FLT but rather PowerPoint presentations and

written and pictorial materials, made it easier for the students to work at home with very precise, clear, and systematic instructions. The teacher also proposed a schedule for the students to fulfil their obligations and divided them by day. That teacher believes that well-structured instructions, with which the teacher guides the students through the assigned tasks in the most personal way possible, are especially helpful for students who struggle with their learning.

As we already emphasized in chapter *The process of implementing flipped learning and teaching*, teachers also note here as an advantage that time is saved during lessons, which reflects the didactic principles of rationality and economics, learning differentiation and individualisation and activity in the function of students' development (Gough et al., 2017; Strmčnik, 2001; Valenčič Zuljan & Plešec Gasparič, 2021). Considering the latter, other aspects of instruction besides the academic are notable (learning to cooperate and help each other, learning to learn, e.g., look for information, synthesise it, take notes, organize time and activities, etc.).

'Students are forced to work as a team, they help each other and are much more active because they are given tasks, there is a lot of individual work. I cannot say with certainty if there have been any changes in their learning and behaviour but, in any case, the students are actively involved in the process for the entire lesson, and I can say that that material is well consolidated and memorized by the students.' (Class Teacher 2)

'The results observed in their presentations are significantly better than in traditional teaching. The students are more confident in their knowledge; they know how to make arguments and indicate the sources from which they drew information.' (Class Teacher 4)

One of the class teachers summed up the advantage of FLT for students as follows: "Students find it an advantage to be able to plan and schedule their own time for learning, and at the same time feel comfortable in their home environment." (Class Teacher 3)

Gough et al. (2017, p. 390) confirm, in their study in which they collected data with a questionnaire from 44 middle school and high school teachers, that the participants value flipped learning and teaching as an approach that 'creates time for varied instructional techniques, including active learning and higher order thinking, along with increased student-to-teacher interaction.' They determined that flipped learning and

teaching largely benefits absent and struggling students, which is similar to the findings of Bergmann and Sams (2012), who again stress the effects of differentiation and individualisation that this innovation enables to a greater extent than traditional instruction.

When implementing FLT, the interviewed teachers may encounter various obstacles. Contrary to Gough et al. (2017), they find that the inaccessibility of a computer and the Internet is mostly not a major obstacle, as the students have the opportunity to watch the videos with their classmates or at school when there are no classes. It is important, they point out, that the teacher checks in advance whether each student has the opportunity to watch the videos.

'Most students do the video work and independent tasks at home, or some students who attend extended school programs watch the video together at school. It is important to be informed before the implementation of flipped learning whether all students have the opportunity to watch video exercises at home in order to prepare for the class.' (Class Teacher 5)

Class Teacher 4 stated: 'I have a student who does not prepare at home and who has difficulty working in class because he cannot keep up with the others. I motivate him when I give him an additional task to be the activity leader, for which, as a leader, he has to prepare.'

The teachers pointed out the issue of students' not fulfilling their obligations. Most of the students watch the video at home, but the teachers take different measures for the students who do not. Three teachers (Class Teachers 1 and 2 and Subject Teacher 2) engage the students in the work without watching the video and do not repeat their explanations. Class Teachers 1 and 2 said that sometimes they allow these students to watch the video during the break so that they can more easily follow the work during the lesson. Class Teacher 3 said that she always gives the students enough time to work on the material at home, so she is not faced with missed assignments.

Subject Teachers 3 and 4 repeat the explanations in class since they believe that, otherwise, academically weaker students would find it difficult to follow the lesson. Subject Teacher 1 recalled that a group of five students had not watched the prepared video at home despite several reminders. However, because the teacher wanted all students to watch the video before the scheduled flipped lesson, he used a free period to go to

the computer science room and watch the video. Since the video was only 10 minutes long, even these students were able to watch it multiple times and at their own pace.

'They have several days to view the footage. I also check with the help of the online classroom if they have watched the recording. In the event that the student does not have a computer or tablet at home on which to view the recording, the school provides a computer.' (Subject Teacher 1)

Subject Teacher 1 also mentioned the students' conceptions of instruction; they are so used to and comfortable with traditional instruction that they are reluctant to try something new.

Besides familiarising the students with the innovation, it is of crucial importance to introduce the innovation to the students' parents in order to secure their support (Gough et al., 2017). Parental support is extremely important for a teacher's motivation and persistence in introducing an innovation. The authors of the manual on the introduction of FLT, Bogan and Ogles (2014), describe their own experience of working with parents who expressed their satisfaction with the introduction of FLT, as they had a better overview of the learning content that the child had to learn. Among other dimensions, Abuhmaid (2020) also addressed challenges that teachers encounter when implementing flipped learning and teaching. The participants in this research were 126 teachers who had previous experience with flipped learning and teaching and completed a questionnaire about it. The two main challenges for teachers, as indicated by the results, were parents' role and awareness. Drawing from the results, the author accentuates the need to clarify the innovation to the parents and thus gain their support.

We also asked the teachers about the disadvantages of flipped learning and teaching. The disadvantage that all the teachers indicated is the difficulty and length of the teacher's preparation, especially when they are faced with such a way of working for the first time: 'The beginning is very demanding because it takes a lot of effort and time to prepare a technically and professionally good recording.' (Class Teacher 1)

They also pointed out the necessary consideration regarding the appropriateness and amount of learning content that is addressed in such a way. Subject Teacher 1 (Math and Computer Science) also mentioned the lack of communication between students and teachers in the phase of

exposure to new content, which can lead to inadequate or even incorrect explanations by the parents. He mentioned time as the main obstacle for teachers in using FLT, as the planning phase is even more extensive than normal lesson planning. Class Teacher 5 also indicated that her preparation for flipped learning and teaching takes a significant amount of time and is much more demanding than the preparation for regular teaching in the classroom: 'Although flipped learning and teaching makes me happy and motivates me to create more, and I am aware of the benefits for the students, I also have to plan things properly in certain periods because I have to set aside a lot of time for preparing the material and the making video recordings.'

Another obstacle is digital literacy. FLT largely depends on videos that need to be recorded, edited, and uploaded. The entire process requires a certain level of knowledge that not all teachers have. In addition, according to Subject Teacher 1, some more senior teachers are not willing to learn new things and innovate in their teaching. In this context, teacher education on the use of digital tools in teaching is also important. Class Teacher 4 points out: 'For several years now, I have been researching the possibilities of ICT to improve the teaching process. In my classes, I use digital tools, the application of which I learned during the training I registered for, and I believe that there should be more of such training. Without it, I would not have been skilled in preparing videos for flipped learning and teaching.'

Mezak and Pejić Papak (2019, p. 749) underscore that the teacher's adaptation to contemporary trends in education and the application of digital technology in teaching 'depends on their digital competency, systemic support, and motivating individuals for continuous professional development'.

The shortcomings of FLT, cited by the interviewed teachers, are mainly related to the student's isolation at the stage of dealing with new learning material, when they cannot ask the teacher for additional explanation, nor can the teacher provide the student with feedback regarding the understanding of the material content.

Many authors who implement and study FLT (Bergmann & Sams, 2012, 2014; Bogan & Ogles, 2014) deal with the dilemmas raised by the interviewees in relation to FLT. Our interviewed teachers, as well as many other teachers involved in various research studies, most often express

concern about the following areas (Bogan & Ogles, 2014):

a)   accessibility of computers and the Internet for students;
b)   the student's failure to complete homework obligations (e.g., watching a video);
c)   overloading the students with homework;
d)   the teacher's overload with the preparation of videos and interesting collaborative learning activities for 'live' lessons;
e)   the student's loss of contact with reality due to spending too much time at the computer.

When implementing and analysing each didactic innovation, it is also necessary to critically consider the entire context of its introduction (Fullan, 2016; Valenčič Zuljan, 1996b; Valenčič Zuljan & Kalin, 2007). If only one subject teacher decided on the didactic innovation of FLT at school, or if it was occasionally implemented by a small number of teachers, this would be a welcome change for students that would not represent a major time burden at home. However, if many teachers taught in this way often, the student's workload at home would increase significantly. It should also be taken into account that, in the afternoon, students also have other assignments at home or interesting activities, which may prevent some of them from watching the video and, consequently, hinder them from understanding and using the new learning content during future lessons at school. Given that this didactic innovation is tied to technology, students may also have technical obstacles: they may not have a computer at home or an Internet connection and therefore are not able to complete their assignments.

Regarding the teacher's workload, Bogan and Ogles (2014) advise teachers to introduce FLT 'on the go' in only a few lessons each year, which they call 'hybrid flip'. Gradual introduction is also strongly advocated by Bergmann and Sams (2012, 2014).

When implementing the didactic innovation of FLT, teachers may be hindered by their poor ICT skills as well as their conceptions of lessons. Of utmost importance is the teacher's awareness that it is not only the quality of the video that they prepare for the students that is important but, above, all the high-quality 'live' lessons, where a special place is occupied by the teacher's consideration of the combination of forms of student grouping and instructional methods, which to the greatest extent allows following the didactic principle of learning differentiation and individualisation.

5   Conclusion

Pedagogical and didactical innovations are necessary in a contemporary school because of numerous research findings about instruction and learning. Flipped learning and teaching is a didactical innovation that can greatly contribute to facilitating students' cognitive activity and individualisation of learning, cooperative learning, and innovativeness of learning. The teacher plays an important role in planning, implementing, and evaluating flipped learning and teaching, providing regular feedback on student learning and reflecting on the implementation of the innovation with students (Valenčič Zuljan & Plešec Gasparič, 2018).

The results of a qualitative study that illustrates the views, perceptions, and experiences of teachers with flipped learning and teaching showed that teachers became familiarised with this innovation in different ways: through a more experienced colleague, at professional teacher training, during their studies at the university (during the preparation of their graduation thesis), at vocational training, or by chance.

The teacher's decision to introduce an innovation is influenced by different internal and external factors (Fullan, 2016; Valenčič Zuljan, 1996a; Valenčič Zuljan & Kalin, 2007). In order to facilitate the process of introduction and later implementation of an innovation, it is important to be aware of these factors. We were interested in which factors teachers find important when introducing flipped learning and teaching. The research showed that in the implementation of this innovation, technical training and support are vital for teachers, but so is the support of the environment: the school administration, colleagues, parents, and, last but not least, the students (Abuhmaid, 2020; Gough et al., 2017; Plešec Gasparič, 2019; Valenčič Zuljan & Plešec Gasparič, 2018). It is especially important for the students that the teacher presents the innovation well and highlights its advantages, motivates them to work, and monitors whether they have completed it.

It is also important that the teacher evaluates the process together with the students and continuously upgrades and improves it according to the students' needs, thereby contributing to a better implementation of flipped learning and teaching and to their own professional development. We learned that the interviewed teachers believe that establishing a network of teachers who practice flipped learning and teaching in order to share examples of good practice and to not feel isolated when it comes to challenges in the process could also contribute to their professional

development. Another significant observation is the fact that these teachers see themselves as promoters of this innovation and as motivators and inspirers for their colleagues when they share their enthusiasm and receive positive feedback from their work surroundings.

We consider flipped learning and teaching to be a didactic innovation that enables students and teachers to carry out learning activities in a spatial, temporal, and qualitatively different way than in the traditional learning process. Similarly to Gough et al. (2017), the results showed that the interviewed teachers recognised its effectiveness both from the point of view of learning achievements and from the students' time burden and the possibility to participate in different, more meaningful and interactive forms of learning, where communication takes place both vertically (between the teacher and the students) and horizontally (among students). Based on this analysis, we have found that one of the main qualities of flipped learning and teaching is that the teacher can make instruction more flexible and innovative, which consequently brings many advantages when it comes to achieving conative (e.g., students' responsibility, better relationships, increased student learning autonomy, etc.) and cognitive (e.g., in-depth and lasting knowledge) learning goals. The results are consistent with the findings of other studies that also report generally positive teacher perceptions of flipped learning and teaching (Abuhmaid, 2020; Plešec Gasparič, 2019).

The interviewed teachers gave us valuable insight into their first-hand experience with a relatively new didactic innovation: flipped learning and teaching. Despite facing different challenges throughout the process, the teachers relied on their professional competence and autonomy, their willingness and motivation for change as well as the support from their environment following their goal to improve the quality and effectiveness of their instruction.

References

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research & Development*, *34*(1), 1–14.

Abuhmaid, A. (2020). Teachers' perceptions on the impact of flipped learning on student learning and teacher's role in Jordanian Schools. *Universal Journal of Educational Research*, *8*(3), 1007–1016.

Baker, J. (2000) The "classroom flip": Using web course management tools to become the guide on the side. In 11th International Conference on College Teaching and Learning. Re-

trieved from https://upcea.edu/wp-content/uploads/2020/09/The-Classroom-Flip-Baker.pdf (2nd September 2022).

Bentley, T. (2010). Innovation and diffusion as a theory of change. In A. Hargreaves (ed.), A. Lieberman (ed.), M. Fullan (ed.), & D. Hopkins (ed.), *Second international handbook of educational change* (pp. 29–46). Springer Science & Business Media.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. International Society for Technology in Education.

Bergmann, J., & Sams, A. (2014). *Flipped learning: gateway to student engagement.* International Society for Technology in Education.

Bezinović P., Marušić I., & Ristić Dedić Z. (2012). *Opažanja i unaprjeđivanje školske nastave [Observations and improvement of school teaching]*. Agencija za odgoj I obrazovanje.

Bishop, J. L., & Verleger, M. A. (2013). *The flipped classroom: A survey of the research*. Conference contribution at the 120th American Society for Engineering Education (ASEE) Annual Conference & Exposition. Retrieved from https://www.asee.org/public/conferences/20/papers/6219/view (25th September 2022).

Bogan, B., & Ogles, M. (2014). *Flipping the Classroom: A comprehensive guide to constructing the classroom of the future*. Unconventional Classroom.

Bormann, J. (2014). *Affordances of flipped learning and its effects on student engagement and achievement* (Doctoral dissertation). University of Northern Iowa.

Cencič, M. (2009). *Kako poteka pedagoško raziskovanje: Primer kvantitativne empirične neeksperimentalne raziskave [How pedagogical research is conducted: An example of quantitative empirical non-experimental research]*. Zavod Republike Slovenije za šolstvo.

Davies, M., & Shankar-Brown, R. (2011). A programmatic approach to teaming and thematic instruction. *North Carolina Middle School Association Journal, 26*(1), 1−17.

Dević, I. (2016). *Poželjne osobine nastavnika u osnovnoj školi [Desirable qualities of a teacher in elementary school]*. Odjel za pedagogiju, Učiteljski fakultet, Zagreb.

Duževič, I., Baković T., & Delić, M. (2019). Stimulating teaching and learning innovations to enhance higher education quality. *Poslovna izvrsnost*, *8*(1)13−31.

Fullan, M. (1982). *The Meaning of Educational Change*. Teachers College Press.

Fullan, M. (1992). *The Meaning of Educational Change*. Teachers College Press.

Fullan, M. (2001). *The new meaning of educational change*. Teachers College Press, Routledge.

Fullan, M. (2016). *The New Meaning of Educational Change*. Teachers College Press.

Fulton, K. P. (2014). *Time for learning: Top 10 reasons why flipping the classroom can change education*. SAGE.

Gough, E., DeJong, D., Grundmeyer, T., & Baron, M. (2017). K-12 teacher perceptions regarding the flipped classroom model for teaching and learning. *Journal of Educational Technology Systems*, *45*(3), 390−423.

Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). *A review of flipped learning.* Flipped Learning Network. Retrieved from https://flippedlearning.org/wp-content/uploads/2016/07/LitReview_FlippedLearning.pdf (15th September 2022).

Jorgenson, O. (2006). Why curricular change is difficult – and necessary. *Independent School*, *65*(4), 3–10.

Krajnc Dular, S., & Valenčič Zuljan, M. (2016). Suradnja odgojitelja različitih vrtića kao oblik kolegijalnog učenja [Cooperation of educators of different kindergartens as a form of collegiate learning]. In N. Tatković (ed.), M. Radetić Paić (ed.), & I. Blažević (ed.). *Kompetencijski pristup kvaliteti ranog i predškolskog odgoja i obrazovanja*. Dječji vrtić Medulin; Sveučilište

Jurija Dobrile, 265–279.

Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education*, *31*(1), 30–43.

Lalović, Z. (2009). *Naša škola: Metode učenja/nastave u školi [School: Learning/Teaching Methods in School]*. Zavod za školstvo.

Mandič, P. (1983). *Inovacije pri pouku*. DZS.

Martin, D. P., & Rimm-Kaufman, S. E. (2015). Do student self-efficacy and teacher-student interaction quality contribute to emotional and social engagement in fifth grade math? *Journal of school psychology*, 53(5), 359–373. Retrieved from https://doi.org/10.1016/j.jsp.2015.07.001 (25th September 2022)

Mezak, J., & Pejić Papak, P. (2020). *Project Based Teaching with Digital Tools in Primary Education.* 43rd International Convention on Information, Communication and Electronic Technology(MIPRO) /Skala, Karolj (ed.). Croatian Society for Information, Communication and Electronic Technology – MIPRO, (pp. 749–753).

Miles, M. B., Ekholm, M., & Vandenberghe, R. (1989). *Lasting school improvement: exploring the process of institutionalization*. ACCO.

Overmyer, G. R. (2014). *The flipped classroom model for college algebra: effects on student achievement* (Doctoral dissertation). Colorado State University.

Pejić Papak, P. (2022). Učitelj-kreator poticajnog okruženja za suradničko učenje [Teacher-creator of an enabling environment for collaborative learning]. In: Suvremeni pristupi obrazovanju učitelja, Strugar, V. (ed.), & Rajić, V. (ed.). Hrvatska akademija znanosti i umjetnosti (pp. 261–284).

Pejić Papak, P. (2021). Kreiranje poticajnog okruženje za učenje i kompetencije studenata [Creating an enabling learning environment and student competences]. In: *Poticajno okruženje za učenje i poučavanje: razvoj kompetencija studenata*, Pejić Papak, P. (ed.), Zuljan, D. (ed.), & Vujičić, L. (ed.), Učiteljski fakultet u Rijeci.

Pejić Papak, P., Valenčič Zuljan, M., & Zuljan D. (2021). Centred instruction in science and technology: a model of factors at organizational and individual levels student. *Journal of Elementary Education, 14*(4), 501–517.

Plešec Gasparič, R. (2019). *Učne oblike v tradicionalnem učnem procesu in pri didaktični inovaciji obrnjeno učenje in poučevanje* [Learning forms in the traditional learning process and in didactic innovation reverse learning and teaching]. (Doctoral dissertation). Retrieved from http://pefprints.pef.uni-lj.si/5781/ (27th September, 2022)

Plešec Gasparič, R., & Valenčič Zuljan, M. (2019). Učne oblike v osnovni šoli in obrnjeno učenje in poučevanje [Basic school learning and inverted learning and teaching]. *Revija za elementarno zobraževanje, 12*(3), 267–290.

Retnawati, H., Munadi, S., Arlinwibowo, J., & Wulandari, N.F. (2017). *Teachers' Difficulties in Implementing Thematic Teaching and Learning in Elementary Schools.* http://www.education-alrev.us.edu.pl/e48/a16.pdf (15th September 2022)

Sentočnik, S. (2006). Vpeljevanje sprememb v šole – izziv za spodbujevalce sprememb [Changing schools – a challenge for change promoters]. In M. Turk Škraba (ed.), *Vpeljevanje sprememb v šole: konceptualni vidiki* (pp. 119–132). Zavod Republike Slovenije za šolstvo.

Strayer, J. F. (2007). *The effects of the classroom flip on the learning environment: a comparison of learning activity in a traditional classroom and a flip classroom that used an intelligent tutoring system* (Doctoral dissertation). The Ohio State University.

Strmčnik, F. (2001). *Didaktika: osrednje teoretične teme [Didactics: central theoretical themes]*. Znanstveni inštitut Filozofske fakultete.

Tischler, D. (2007). Autonomija učitelja i njihov profesionalni razvoj [The autonomy of teachers and their professional development]. *Pedagogijska istraživanja, 4*(2), 293–299.

Valenčič Zuljan, M. (1996a). Dejavniki učiteljevega inoviranja lastne pedagoške prakse [Factors influencing teachers' innovation in their own teaching practice]. *Sodobna pedagogika*, *47*(9/10), 438–451.

Valenčič Zuljan, M. (1996b). Ravnatelj in učiteljevo inoviranje učne prakse [Headteacher and teacher's in-place learning practice]. *Pedagoška obzorja*, *11*(5-6), 216–225.

Valenčič Zuljan, M. (1997). Kaj imajo v mislih učitelji, ko razmišljajo o inoviranju lastne učne prakse [What teachers have in mind when they think about innovating their own teaching practice]. *Pedagoška obzorja*, *12*(5-6), 228–240.

Valenčič Zuljan, M., & Kalin, J. (2007). Učitelj - temeljni dejavnik v procesu inoviranja pedagoške prakse [Teacher – a fundamental factor in the process of inouving pedagogical practice]. *Sodobna pedagogika*, *58*(2), 162–179.

Valenčič Zuljan, M., & Kalin, J. (2020). *Učne metode in razvoj učiteljeve metodične competence [Learning methods and development of the teacher's methodical competence]*. Univerza v Ljubljani, Pedagoška fakulteta.

Valenčič Zuljan, M., & Plešec Gasparič, R. (2018). Flipped learning as a way of designing innovative learning environment: the importance of thorough introduction, gradual implementation and in-depth evaluation of innovation. *Odgojno-obrazovne teme*, *1*(1/2), 79–98. Retrieved from https://hrcak.srce.hr/clanak/309099 (2nd September 2022)

Valenčič Zuljan, M., & Plešec Gasparič, R. (2021). Didaktična načela : most med raziskavami pouka in učiteljevim pedagoškim delovanjem [Didactic principles: a bridge between teaching research and teacher's pedagogical performance]. *Sodobna pedagogika*, *72 = 138*(4), 30–47.

Valenčič Zuljan, M., & Vogrinc, J. (2010). The factors of encouraging teacher innovation from the perspective of teachers and headmasters. In M. Valenčič Zuljan (ed.), & Vogrinc, J. (ed.). *Facilitating effective student learning through teacher research and innovation*. Faculty of Education.

Valenčič Zuljan, M., Vogrinc, J., Glažar, S., Juriševič, M., Devetak, I., Krek, J., … Hus, V. (2010). *Spodbujanje kulture raziskovanja in inoviranja pri pouku skozi proces vseživljenjskega učenja učiteljev: projekt: V5-0440 [Promoting a culture of research and innovation in instruction through the process of lifelong teacher learning: project: V5-0440]*. Poročilo o projektu. Univerza v Ljubljani, Pedagoška fakulteta.

Vandenberghe, R. (1991a). Kako izboljšati šolo – z evropske perspective [How to improve school - from a European perspective]. *Vzgoja in izobraževanje*, *22*(4), 3–8.

Vandenberghe, R. (1991b). Teorija sprememb: Kaj lahko pomaga ravnateljem pri uvajanju novosti v šolo [Change theory: What can help principals introduce innovations to school]. *Vzgoja in izobraževanje*, *22*(6), 16-17.

Wu, C.S. (2002). Important concept and implementation strategy of creative teaching. *Taiwan Education*, 614, 2–8.

Yarbro, J., Afrstrom, K., McKnight, K., & McKnight, P. (2014). *Extension of a Review of Flipped Learning*. Retrieved from https://flippedlearning.org/wp-content/uploads/2016/07/Extension-of-FLipped-Learning-LIt-Review-June-2014.pdf (12th September 2022)

A RESEARCH-BASED CURRICULUM FOR MASTERS STUDENTS IN PRESCHOOL EDUCATION

Vesna Podgornik[1], *Janez Vogrinc*[2]

Abstract

In educational theory, it has long been known and accepted that educational professionals (e.g., teachers, principals, school counsellors) cannot only be users of research findings and bring decisions to educational practice but must also be partners in its development. Educational professionals must participate in the study of their own practice and develop pedagogical theories that reflect immediate pedagogical practice. To achieve this, it is necessary to develop students' (future educational professionals') research literacy, defined as the ability to seek, understand, discuss, and evaluate different types of research, communicate accurately about it, and use the results for scientific and professional purposes. The purpose of this paper is to present approaches that can be used to develop research literacy in master's students in preschool education as part of a research-based curriculum. An empirical study based on a quantitative and qualitative research approach was conducted. The sample consists of master students of preschool education at the Faculty of Education, University Ljubljana. We wanted to discover what attitudes master students of preschool education have towards research and what importance research literacy has for the quality of preschool education, in their opinion. We were also interested in their opinions about a research-based curriculum.

Keywords: research, research literacy, research competencies, preschool education, research-based curriculum

....

1   *Corresponding Author. Assistant professor, Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia; vesna.podgornik@ff.uni-lj.si.

2   Professor, Faculty of Education, University of Ljubljana, Kardeljeva ploščad 16, 1000 Ljubljana, Slovenia.

1   Introduction

When the responsibility and care for the quality of pedagogical activities are transferred to individual kindergartens, the tasks of kindergarten teachers and the role of kindergarten principals also begin to change. Not only are employees (principals and teachers) taking on more and more responsibility for the quality implementation of pedagogical practice, but they are also taking on more and more complex tasks related to the development of the individual child, the professional development of kindergarten staff, and the progress of the kindergarten as an institution. During their studies, future pedagogical workers can acquire the knowledge and develop the skills they need at the beginning of their professional careers; however, in order to successfully continue their professional careers, it is imperative that they supplement and expand their knowledge. They can supplement their knowledge through organised training (e.g., professional development programmes), but they can also study literature and explore their pedagogical practice independently. Critical reflection and research on pedagogical practice are becoming increasingly important factors in ensuring quality in an educational institution, which requires educators to have at least some basic research skills (Vogrinc & Podgornik, 2012). Schön (1983) emphasised that educators can improve their work and their practice by reflecting on what they do and the attitudes, beliefs, and values they hold. Critical reflection is not limited to teaching methods but also includes attitudes, values, behaviours, beliefs, and other factors.

Many researchers (e.g., Berger et al., 2005; Ermenc Skubic & Mažgon, 2015; Grimmett, 2007; Moore, 2007; Smith & Sela, 2005; Turner et al., 2008; Vogrinc & Valenčič Zuljan, 2009; Wilson, 2000) have established that teachers' research work is a significant factor in their professional development, and of achieving quality educational work. According to them, research work enables teachers to become more familiar with children, the institution and themselves as teachers, resulting in changes in their teaching practice in line with research findings. Teachers consequently feel more competent and advance professionally; they are able to better reflect on their work; they gain a deeper insight into the process of teaching and educating, and their research work facilitates the transfer of their theoretical knowledge into practice.

It is unrealistic to expect kindergarten teachers to automatically become reflecting practitioners. In order to reflect on and explore their practice and to be prepared to expose their work to critique and discussion by

their colleagues or even the broader professional community (by reporting and publishing the results of their research), kindergarten teachers need to be trained to explore and reflect on their own practice while still in graduate school. Future kindergarten teachers should become research literate during their studies.

2   Theoretical background

Research literacy is 'the ability to locate, understand, discuss, and evaluate different types of research, to communicate accurately about them, and to use findings for academic and professional purposes' (Beaudry & Miller, 2016, p. 8). According to Beaudry and Miller (2016), research literacy is a combination of literacies that, taken together, empower teachers to access, understand, and apply the research to both their academic and professional work. Research literacy combines information/technological literacy (the ability to use resources such as electronic media and databases to locate and retrieve research articles), verbal literacy (the ability to understand, discuss, and critique written texts and to communicate about them), numeracy (the ability to understand and apply mathematical calculations and symbols, ability to understand statistics and statistical reasoning and know how to apply this knowledge to research and practice) and visual literacy (the ability to read and construct nonverbal texts, like tables, charts, and other displays of data, how to use concepts maps, graphic organizers, etc.). Instead of research literacy, Swank and Lambie (2016) use the term 'research competency', and they identified four research competencies domains:

a)   research inquiry/literature review (it focuses on competency related to critically thinking about a research topic through engagement in the literature review process),
b)   research methodology/processes (it encompasses methodological procedures, i.e., design, sampling, data collection, and data analysis and interpretation processes; this domain includes qualitative and quantitative research paradigms),
c)   research ethics (this domain focuses on knowledge about research ethics and the application of ethical research practices),
d)   dissemination of research/scholarly writing (it encompasses the scholarly distribution of research in written and oral form).

Developing teacher research literacy starts from the stage of pre-service training. The development of student teacher research literacy thus needs

to be examined in light of the context of pre-service teacher education provision. Literature speaks about the importance of developing teacher identity and the connections with developing research literacy of student teachers (see Saqipi & Vogrinc, 2016). Therefore, the question is how can the best research courses help student teachers master the necessary skills and develop the right attitudes towards research work?

Visser-Wijnveen et al. (2015) call for looking at developing teacher research literacy from a broader perspective. It can be viewed from the perspective of research products and from the perspective of the research process. The former relates to the processes of delivering pre-service teacher education programmes in which instruction is based on the outcomes of relevant academic research while students are engaged in critiquing and processing ideas deriving from those research products. The latter concept (i.e., focus on the research process) implies the need to engage students in the research process; this can be addressed both through general courses, but it can be primarily addressed in a more focused way by research methods courses. Such courses can expose students to all the necessary steps of conceptualising and implementing a research project.

Various studies (see Visser-Wijnveen et al., 2015) have demonstrated that students perceived benefits as well as challenges when links between research and teaching were emphasised. Perceived benefits included increased motivation and interest in the subject because of the teacher enthusiasm and greater credibility. Furthermore, classes were considered more challenging and intellectually stimulating, especially when research assignments were given to students; moreover, interactions with teachers and researchers were especially valued.

There are also important disciplinary and interdisciplinary variations in teaching-research relations. These are shaped by how disciplinary communities conceive the nature of knowledge, research and teaching and the nature of research activity (Buckley, 2011). Inquiry-based approaches have been used to encourage student research. Spronken Smith and Harland (2009) identify three modes of inquiry: structured, in which lecturers provide an outline for considering a problem; guided, in which students are self-directed, but tutors provide questions to stimulate inquiry; and open, in which students are expected to go through the full inquiry cycle and formulate the questions themselves.

Trowler and Wareham (2008) argue that there are multiple sorts of

linkages and relationships between research and teaching. They identified seven different categories of relationship (they called them 'dimensions') between teaching and research with different practices.

1. Learners do research (Research-based learning approach; research community practices);

2. Teachers do research (Teaching cutting-edge material; teaching about their research);

3. Teachers and learners research together (students as research assistants; co-operative planning and implementation of research projects; development of 'inclusive scholarly knowledge-building communities of practice');

4. Research embedded in the curriculum; research influences the what and the how of curriculum design (research-based learning approach used; cutting-edge research and knowledge incorporated in curriculum design; students' research skills foregrounded; students' cognitive skills of enquiry foregrounded; pedagogic theory and enquiry-based practice inform curriculum);

5. Research culture influences teaching and learning (teachers and students discuss research together; research culture permeates practices in teaching and learning);

6. The 'nexus' of the university and its environment (both teaching and research are linked to the commercial environment and local communities, addressing needs and solving problems);

7. Teaching and learning influence research (research projects refined and developed as a result of discussion with students, particularly in areas of preparation for professional practice); pedagogical research conducted in the context of teaching students).

At the University College London, a framework to make closer connections between research and student education has been developed. It highlights six important dimensions of good research practice based on education philosophy (UCL Connected Curriculum, 2017):

1. Students connect with researchers and have an opportunity to learn about the institution´s research; they may investigate the work of one or more academics in more detail; personal tutors provide support and guidance by taking an overview of students´ progress and may have an advisory role with research-based activities.

2. Students experience a connected sequence of learning activities that help them to become more able to undertake research; which

can be achieved, for example, by building in a longitudinal module that runs across years.

3. Students have opportunities to make conceptual connections between their own subject and other disciplines.

4. Programmes give students the chance to connect academic learning with wider learning and skills; for example, teamwork, project management, creativity, enterprise, and leadership.

5. Students are aware of and can connect with external audiences through opportunities to produce assessment outputs, for example, journal articles, blogs, presentations, exhibitions, or videos.

6. Students should develop a sense of being part of a learning community. This sense can be enhanced through team-based activities or group projects.

The core principle of a university study should be learning through research and enquiry.

3   Research problem and the context of the study

In Slovenia, little research has been conducted on the development of research literacy among prospective pedagogical workers; however, at the same time, there is a modest opinion about the importance of a research-based curriculum for the quality of education of graduates, who acquire the knowledge and develop the skills they need during their pre-service education for continuous reflection on pedagogical practice to ensure the quality of their work and professional development. Therefore, in this paper, we focus on the development of research literacy among master's students of preschool education.

For a better understanding of the context of the conducted research, a brief description of the master's program Preschool Education of the Faculty of Education University Ljubljana (Preschool Education) in which the interviewed students are enrolled follows. The aim of the master's program of the second level of preschool education is to professionalise preschool education or to increase the level and quality of professional training of kindergarten workers. Among the various aims of the two-year program, the qualification of graduates for research work is emphasised; this includes the development of the capacity for research and transfer of knowledge into practice, reflection and evaluation of existing pedagogical practice and identification of unused opportunities for increasing its quality, competence for research, management and quality

development of kindergartens, and competence for research and development in specific didactic areas and for linking curricular areas.

Even among the general competencies of the programme, there are many that are directly related to the research literacy of master's students. Among these are the knowledge and application of appropriate methods of research and development of their own practice; the ability to conduct research and transfer knowledge into practice; reflection and evaluation of existing pedagogical practice, and recognition of untapped opportunities to enhance its quality.

The study programme includes three courses directly related to the acquisition of knowledge in the field of research: Research in Pedagogical Practice (30 hours of lectures and 30 hours of seminars), Methodology of Scientific Research (30 hours of lectures, 15 hours of seminars and 15 hours of exercises) and Master's Seminar (30 hours of lectures and 30 seminars). The programme concludes with the completion of a master's thesis, in which students are expected to demonstrate the ability to combine theoretical knowledge and research skills in the study of research problems.

In the courses Research in Pedagogical Practice and Methodology of Scientific Research, students learn some statistical procedures that can be used when researching education. Also emphasised are the basic characteristics of the qualitative and quantitative approaches, the role of the researcher in qualitative research, and the relationship between the researcher and the person being studied. The student learns about some of the types of educational research (case study, action research, evaluation research, etc.) and also about ethical aspects of research work (protection of personal data, rights of participants in the research process). Students become familiar with the characteristics of innovation and the steps of the innovation process and learn the importance of innovation for the quality of the implementation of educational processes. They learn about the right organisational culture for quality research work and become familiar with criteria for determining the quality of research results of qualitative and quantitative research and different ways or strategies for quality assurance of scientific results.

In the Master's seminar, the student prepares and presents his/her master's thesis proposal to the other students and their mentors. With the help of the mentor, the student formulates the research problem and the

research plan: She/he divides the research problem into research questions, formulates hypotheses and objectives, and considers the most appropriate technique for data collection, processing, and presentation. The student's ability to integrate theoretical knowledge, research and methodological knowledge, and practical experience acquired in the study process is demonstrated by the research plan. The student is able to write a report on empirical research, for example, in the form of a scientific article, and to prepare for the presentation of the research results at national and/or international conferences.

3.1   Research questions

1.   What are the attitudes of master's students in preschool education toward research, and what do they think is the importance of research literacy for the quality of preschool education?
2.   Why do preschool education master's students think kindergarten teachers should engage in research?
3.   How do master's students in preschool education evaluate their research knowledge, in what areas do they think they have good knowledge, and in what areas do they perceive deficiencies?
4.   What do master's students in preschool education think about a research-based curriculum?

3.2   Basic Research Method

The basic research method is the descriptive method of pedagogical research. The study is based on the quantitative and qualitative research paradigms.

3.3   Sample

The basic research method is the descriptive method of pedagogical research. The study is based on the quantitative and qualitative research paradigms.

3.4   Data Collection and Instrument

Considering the small number of students enrolled in the first year of the master's program in preschool education in the 2022/23 academic year, we chose to use a different method of data collection for first- and second-year students. First-year students answered open-ended

questions, and second-year students completed an electronic question-
naire. First-year students answered four open-ended questions: What is
research? What are the characteristics of research? Whether and why is it
important for kindergarten teachers to engage in research? What is your
knowledge of research? The written answers to the questions were given
during the first session in the course Research in Pedagogical Practice.
The electronic questionnaire completed by second-year students includ-
ed three content sections: students' attitudes toward research, their opin-
ions about research knowledge, and their opinions about the research-
based curriculum. The questionnaire, which students completed at the
first session of the master's seminar, included a five-point Likert scale.
Data collection took place in November and December 2022.

3.5   Data Processing

Data from the questionnaires were processed using descriptive sta-
tistics: Frequency distribution of attributive variables and basic descrip-
tive statistics of numerical variables (mean, standard deviation). The re-
sponses to the open-ended questions were analysed qualitatively. Codes
were determined from the records and classified into categories. The data
are presented in tabular form.

3.6   Results and interpretation

First, we were interested in how first-year master's students under-
stand research.

Responses to the open-ended question indicated that all equated research
with the process of collecting data on a chosen topic using a variety of
techniques (observation, interview, questionnaire were mentioned), with
data analysis (with statistical analysis predominating), and with present-
ing the results of that analysis. Two added that the data collected should
be used to answer research questions. Two respondents stated that re-
search is a process that involves various stages: from selecting and defin-
ing a research problem, research planning, reviewing existing literature,
and comparing the results obtained with the findings of related research.

We were interested in students' opinions about whether kindergarten
teachers should engage in research and why they should do so. The 1st-
year students answered the open-ended question in this regard, while
the 2nd-year students expressed their agreement or disagreement with

some statements related to their attitudes toward research in preschool education.

Table 1. What are the benefits of research for preschool education practice - opinion of first-year master's students

Yes. Research is important (6)
Evaluation of own pedagogical work, reflection (4)
Development of pedagogical practice (3)
Professional development of kindergarten teachers (2)
Important findings
Identification of examples of good practice
Improvement of practice, better insight into my practice

All respondents agree that it is important for kindergarten teachers to engage in research. They see the impact of research work primarily in improving pedagogical practice, specifically that they can gain better insight into what is happening in a children's group or kindergarten through research work, conduct an evaluation of their work (this was stated by four respondents), and introduce innovations on this basis. They can also use research to identify examples of good practice. Two respondents also mentioned the professional development of the kindergarten teachers as one of the reasons for conducting research: 'A kindergarten teacher who does research also develops professionally.'

Second-year master's students responded to four statements about how interested they are in research, how important it is for a successful kindergarten teacher to conduct research, how much research can help them solve problems in their daily pedagogical practice, and how much knowing about research helps students with academic performance.

Table 2. What are the attitudes of second-year master's students in pre-school education toward research?

	Strongly Agree	Agree	Somewhat Medium	Disagree	Strongly Disagree	Total
I am interested in research in the field of education.	4	4	3	1	0	12
If you want to be a successful kindergarten teacher, you have to conduct research.	5	2	3	2	0	12
Conducting research can help kindergarten teachers solve the problems they face in their daily practice.	5	5	2	0	0	12
Knowledge of research in education helps students succeed in their studies	2	4	2	2	1	11

Master's students in the 2nd year of preschool education are interested in research in the field of education (specifically, eight of them affirmed this statement, three rated their interest in research as rather average, and one answered that he was not interested in research in the field of education). Master's students differed somewhat more in their assessment of the ex-tent to which knowledge of research in the field of education helped them in their academic success: six of them answered that knowledge of re-search helps them in their academic success, two think that it helps them somewhat, and three students do not think that knowledge of research in education would help them in their academic success. The positive attitude of master's students towards research work is also reflected in the responses to the statements related to the research work of kindergar-ten teachers. Almost all of them (ten) agree that kindergarten teachers' research helps in solving problems of daily practice (only two students moderately agree with this statement). Seven master's students also agree that anyone who wants to be a good kindergarten teacher must also do research (three moderately agree with this statement, while two master's students believe that it is not necessary for a good kindergarten teacher to also do research).

We were interested in how master's students in preschool education evaluate their knowledge of research. First-year students indicated the areas in which they felt they should have good knowledge and the areas in which they perceived a lack of knowledge. Second-year students rated their knowledge on a five-point scale.

Table 3. In what areas do first-year master's students in preschool education believe they have good research knowledge, and in what areas do they perceive deficiencies?

What they know well	Where do they see weaknesses
Analysis of literature	Drawing tables and graphs
Analysis of statistical data (3)	Reading graphs
Formulating research questions	Summarising results
Formulating hypotheses	Developing rating scales
Comparing results with results from other research	Statistical processing (3)
Writing a research report (3)	Planning research
Data collection (2)	Analysis of statistical data (2)
Interviewing	Developing questionnaires
Presentation of results to others	
Planning the research	

From the responses to the open-ended question, it appears that the respondents had different perceptions of their knowledge of research. One respondent answered that she estimates that she has basic knowledge in all areas of research but did not name a specific area. Three respondents estimate that they are well qualified to write a research report and two that they are well qualified to collect data. Obviously, the area of interpreting statistical data is the one that most respondents associate with research work, as it was mentioned in the responses of almost all respondents, but at the same time, it is also an area in which respondents estimate their knowledge differently; three respondents estimate that they are well qualified, and two mentioned it among the areas in which they would need more knowledge. At the same time, three respondents indicated that they would like more knowledge in the area of statistical data processing. Research design is also an area that falls between the areas in which respondents should have good knowledge (one response) and also among the areas in which they should have deficient knowledge (one response). Individual respondents also indicated that they know how to analyse literature well, pose research questions and hypotheses, compare results with those of other research, conduct an interview, and present

results to others. Drawing tables and graphs, reading graphs, summarizing results, and developing rating scales and questionnaires were all aspects for which respondents would like to have more knowledge.

The 2nd-year master's students rated on a five-point scale how qualified they felt for the various phases of the research process, with a score of 5 indicating that they felt very qualified and a score of 1 indicating that they did not feel at all qualified for this phase of research.

Table 4. How do second-year master's students in preschool education evaluate their research knowledge?

	Mean	Standard deviation
Design various data collection instruments (e.g., questionnaire, knowledge test)	4.25	0.75
Presenting the results and findings of your research to the public (e.g., at a conference)	4.17	1.03
Formulation of research questions	3.85	0.69
Report on the empirical research conducted	3.83	1.27
Statistical interpretation of the statistical methods used	3.83	1.03
Designing a research plan	3.75	1.29
Sampling or selecting individuals appropriate for the research	3.62	0.65
Formulation of hypotheses	3.54	0.78
Qualitative data analysis	3.54	0.78

From the average scores provided, it appears that their knowledge of how to conduct the research or the different stages of the research process is rated as good on average, as the average overall score for all stages is 3.82. Master's students believe that they are best at developing various data collection instruments and presenting the results and findings of their research to the public. They rate themselves as being least able to formulate hypotheses and analyse data qualitatively. The greatest difference in self-assessed knowledge (based on standard deviations) between students occurred in writing a research plan (standard deviation of 1.29) and writing a report on the empirical research conducted (standard deviation of 1.27).

The 2nd-year master's students, who had already completed the 1st year and thus two research courses, also gave their opinions on the research-based curriculum. We were interested in how knowledgeable they were about the research work of their teachers and assistants, how important they

felt it was that teachers and assistants used examples from their own re-
search in their lectures, and whether they felt part of the faculty research
community.

Table 5. Second-year master's students in preschool education opinions
about a research-based curriculum

	Strongly Agree	Agree	Somewhat Medium	Disagree	Strongly Disagree	Total
I think it is important that the teacher/assistant uses examples from his research in his lectures.	6	3	2	1	0	12
I am aware of the research done by my teachers and assistants.	1	3	4	3	1	12
I feel I belong to the faculty research community	1	3	3	2	3	12

Students think it is important that teachers and teaching assistants use
examples from their research in lectures (nine students answered this
way; two think it is moderately important, and one does not think it is
important that teachers and teaching assistants use examples from their
research in lectures). Unfortunately, students are quite poorly aware of
their teachers' and teaching assistants' research; only four responded
that they know their teachers' and teaching assistants' research, four re-
sponded that they know it moderately well, and four that they do not.
Similarly, few master's students feel they belong to the faculty research
community: four responded that they felt they belonged to the faculty
research community, three responded 'something in the middle' to this
statement, and five of them disagreed that they belonged to the faculty
research community.

4   Conclusion

Developing research literacy in prospective kindergarten teachers
is a long-term process that must start at the beginning of the undergradu-
ate program and continue at the master's level. Students can develop re-
search literacy only within a program of study that has a research-based

curriculum. This means that it is not enough for students to have a course in which they learn the main features of quantitative (including statistical analysis) and qualitative research; they must also be exposed to research in other subjects in the program. The research-based curriculum symbolises a shift in the way we think about student education and its relationship to research. It promotes an education that is intellectually challenging and enables all students to become part of an inclusive learning and research community (UCL Connected Curriculum, 2017). To develop research literacy, it is important that students acquire knowledge and skills about research and develop a positive attitude toward research work. It is important that they recognise while they are still students that research work is useful for improving pedagogical practice and also for their professional development. Our study, conducted on a small sample, showed that master's students of preschool education have a positive attitude toward research. They agree that it is important for kindergarten teachers to engage in research. They see the impact of research primarily in improving pedagogical practice. On average, students rate their knowledge of how to conduct research or the various stages of the research process as good; however, it appears that respondents vary in their assessment of their knowledge of research. Master's students rate themselves as best able to develop various data collection instruments and present the results and findings of their research to the public. They rate themselves as least able to formulate hypotheses and analyse data qualitatively. Unfortunately, students know quite little about the research of their teachers and teaching assistants; and similarly, few master's students feel a sense of belonging to the faculty research community. The findings support the conclusion of Turner et al. (2008) that while there is clear evidence that students value learning in research-based environments, institutions are not necessarily providing students with appropriate research-based experiences to enhance learning, despite the level of research at the institution.

There are many opportunities for students to develop their research literacy through various activities. It is important that students recognise the connections between academic training, in-service training, research work and lifelong learning. During their studies, students should be exposed to research topics in their field, and they should have formal and informal opportunities to interact with research staff (teachers and teaching assistants) and discuss their research with them. Students should be informed about the impact research has on the curriculum and learning environment. They should have the opportunity to participate in research

and research-based activities throughout the study programme, and they should be evaluated for their own research. During their studies, they must have the opportunity to present their research findings to a wide audience (e.g., at a scientific or professional conference or a student research conference). Students should be integrated into a faculty research community, and academic staff play a key role in the effective integration of research, teaching, and learning.

One of the main goals of the master's degree in preschool education should be that students become research literate and able to incorporate the findings of empirical research into their pedagogical work and explore their own pedagogical practice throughout their professional careers. This goal can only be achieved if the entire program is designed as a research-based curriculum and if all faculty members develop a culture of research and contribute through their teaching and research to making students also feel part of the faculty research community.

References

Beaudry, J. S., & Miller, L. (2016). *Research literacy. A primer for understanding and using research*. The Guilford Press.

Berger, J. G., Boles, K. C., & Troen, V. (2005). Teacher research and school change: paradoxes, problems, and possibilities. *Teaching and Teacher Education*, *21*(1), 93–105.

Buckley, C. A. (2011): Student and staff perceptions of the research-teaching nexus. Innovations in Education and Teaching International, *48*(3), 313–322.

Ermenc Skubic, K., & Mažgon, J. (2015). Bureaucratisation of the teaching profession in decentralised vocational education: the case of Slovenia, Europe. *International Education Studies*, *8*(5), 12–20.

Grimmett, P. P. (2007). Mentoring teachers in Anglophone Canada: Building learning communities. In M. Valenčič Zuljan, & J. Vogrinc (Eds.), *Professional inductions of teachers in Europe and elsewhere* (pp. 137–154). Faculty of Education, University of Ljubljana.

Moore, A. (2007). Beyond reflection: contingency, idiosyncrasy and reflexivity in initial teacher education. In M. Hammersley (Ed.), *Educational research and evidence-based practice* (pp. 121–138). Sage Publications.

Preschool Education [Predšolska vzgoja] https://www.pef.uni-lj.si/studij/studijski-programi-druge-stopnje/predsolska-vzgoja/

Saqipi, B., & Vogrinc, J. (2016). Developing research competence at pre–service teacher education. *Didactica Slovenica*, *31*(2), 101–117.

Schön, D. A. (1983). *The reflective practitioner*. Basic Books.

Smith, K., & Sela, O. (2005). Action Research as a bridge between pre–service teacher education and in–service professional development for students and teacher educators. *European Journal of Teacher Education*, *28*(3), 293–310.

Spronken-Smith, R., & Harland, T. (2009). Learning to teach with problem-based learning.

Active Learning in Higher Education, *10*(2), 138–153.

Swank, J., M., & Lambie, G., W. (2016). Development of the research competencies scale. *Measurement and Evaluation in Counseling and Development*, *49*(2), 91–108.

Trowler, P. & Wareham, T. (2008): Tribes, territories, research and teaching. Enhancing the teaching-research nexus. https://www.researchgate.net/publication/251594982_Re-conceptualising_the_%27teaching-research_nexus

Turner, N., Wuetherick, B. & Healey, M. (2008). International perspectives on student awareness, experiences and perceptions of research: implications for academic developers in implementing research-based teaching and learning. *International Journal for Academic Development*, *13*(3), 199–211.

UCL Connected Curriculum (2017): https://www.ucl.ac.uk/teaching-learning/sites/teaching-learning/files/connected_curriculum_brochure_oct_2017.pdf

Visser-Wijnveen, G. J., van der Rijst, R. M., & van Driel, J. H. (2015). A questionnaire to capture students' perceptions of research integration in their courses. *Higher Education*, *71*(4), 473–488. https://doi.org/10.1007/s10734-015-9918-2

Vogrinc, J. & Podgornik, V. (2012). Samoevalvacija na področju predšolske vzgoje [Self-evaluation in the field of pre-school education]. Faculty of Education, University of Ljubljana.

Vogrinc, J., & Valenčič Zuljan, M. (2009). Action research in schools - an important factor in teachers' professional development. *Educational Studies*, *35*(1), 53–63.

Wilson, C. (2000). Developing and disseminating teacher knowledge. *Research in Science Education*, *30*(3), 301–315.

EMOTIONS AND MENTAL HEALTH IN PRIMARY SCHOOL TEACHERS: WHAT DO THEY TELL US ABOUT TEACHERS' WORK?

Simona Prosen*¹, Helena Smrtnik Vitulić²

Abstract

Teachers' emotions have become an important topic in educational research as they are frequently present in the school context. However, there is still a lack of research on teachers' specific emotions. As teaching is described as a demanding profession with many stressors, teachers' mental health is also an important topic of research, especially its connection to teachers' emotional experiences. Therefore, our research tried to address the mentioned research gaps: we analysed specific emotions experienced by Slovenian teachers in the primary school context, their self-assessed mental health, and the connections between them. There were 114 teachers participating in the research, aged from 23 to 64 years (M = 46.01; SD = 10.99). They were asked to complete a questionnaire that evaluated their emotions, including joy, pride, love, anger, fatigue/exhaustion, and hopelessness. Additionally, they were also asked to fill out a questionnaire that monitored their mental health. The results indicated that pleasant emotions were more present in teachers' experiences than unpleasant ones. As for mental health, the majority of teachers reported having mild mental health difficulties (54.4%). Unpleasant emotions' experience was significantly connected with mental health difficulties. The results were interpreted in relation to teachers' work.

Keywords: emotional experience; mental health, primary education, specific emotions, teacher

1   *Corresponding Author. Assist. Prof., Faculty of Education University of Ljubljana, Slovenia; simona.prosen@pef.uni-lj.si.

2   Assoc. Prof., Faculty of Education University of Ljubljana, Slovenia.

1   Introduction

During their work, teachers constantly interact with their students, colleagues, parents, and school leaders (Cross & Hong, 2012) and have to handle various situations, including discipline problems, time pressure, low student motivation, high workload, large classes, and changes in the educational system (Bellingrath et al., 2009; Guglielmi & Tatrow, 1998; Macuka &, 2017; Mahan et al., 2010; Montgomery & Rupp, 2005; Skaalvik & Skaalvik, 2017). Efficient responses to these challenges lead towards pleasant emotional experiences and good mental health, while an inefficient response may be connected to unpleasant emotions and mental health difficulties. Therefore, teachers' ability to know and manage their own emotional world and mental health is of great importance. There is, however, a lack of research on these topics that will be addressed in our research: teachers' specific emotions, mental health, and their connections.

1.1   *Emotions and teachers' work*

As emotions are involved in every aspect of teachers' work, understanding them within the school context is essential. Surprisingly, there is insufficient research on this topic as before recently it was not well accepted among researchers, who tended to emphasise teaching as primarily a cognitive activity (Zembylas, 2005). In recent decades, however, the interest in the role of emotions in teaching has increased (Chang, 2009; Chen, Yin & Frenzel, 2000; Fredrickson, 2004, 2005, 2008; Hargreaves, 2005; Hosotani & Imai-Matsumura, 2011; Kelchtermans, 1996; Macuka et al., 2017; Smrtnik Vitulić & Prosen, 2022; Sutton, 2004; Sutton, Mudrey-Camino & Knight, 2009; Sutton & Wheatley, 2003). The role of teachers' emotions has been recognised in many areas: teacher behaviour (Becker et al., 2014; Hagenauer & Volet, 2014; Sutton & Wheatley, 2003), teaching (Gong et al., 2013), teachers' lives (Hargreaves, 2005; Prosen et al., 2013; Schutz et al., 2007; Smrtnik Vitulić & Prosen, 2022; Zembylas, 2009), and student behaviour and learning (Chang, 2009).

To understand teachers' emotions, however, a broader picture of them should be portrayed. There are three main views on emotions: the neuro-biological view (e.g., Izard, 1991; Izard et al., 2009; LeDoux, 1989; Panksepp, 1994), a socio-constructivistic view (e.g., Hochschild, 2008; Mesquita & Albert, 2009), and a cognitive one (e.g., Frijda, 1988; Lazarus, 1991). From the neuro-biological point of view, emotions are a result of

a specific brain circuit shown as a coordinated experience, autonomic and neuro-endocrine responses, usually concluding in observable be-haviours (Ekman & Davidson, 1994; Gross & Barrett, 2011; Izard et al., 2009; LeDoux, 1989; Panksepp, 1994). The socio-constructivistic view emphasises the importance of the context in which emotions appear. Emotions are regarded as socially structured (e.g., Bronfenbrenner, 1986, in Schutz et al., 2007; Hargreaves, 2005; Hochschild, 2008; Kelchtermans, 2005; Zembylas, 2005) by the social factors from individual's micro- (i.e., family, friends) to macrosystems (cultural worldviews, ideologies, values, historical influences). Thus, emotions become adjusted to social expecta-tions in a specific cultural environment (e.g., Hargreaves, 2005; Hoch-schild, 2008; Matsumoto, 2006). In the cognitive view of emotions, they are defined as a sequence of different processes, usually beginning with the individual's conscious or unconscious assessment of personal mean-ing (appraisal) of some subjectively important situation (Frijda, 1988; Lazarus, 1991) and continuing by experiential, physiological, or behav-ioural responses (Gross & Barrett, 2011; Oatley & Jenkins, 1996; Prosen et al., 2013; Smrtnik Vitulić, 2009). The mentioned individual appraisals are greatly influenced by internal characteristics, such as temperament, expectations, or personal resources (e.g., Izard, 1991; Lazarus, 1991).

In our research on teachers' emotions, the described views will be inte-grated, with an emphasis on the cognitive and socio-constructivistic ones. In other words, emotions will be regarded as a consequence of teachers' appraisals of school situations as important for them and connected to their individual goals and expectations, personal resources, and previous experience (Sutton, 2007) and embedded within the socio-cultural envi-ronment. Moreover, emotions will be understood as a relational phenom-enon (Lazarus, 1991; Schutz et al., 2007; Spilt et al., 2011), as emotional experiences do not exist solely within an individual or solely within an environment but instead involve the interaction between the two.

Research on emotions can focus on specific aspects of the emotional process, such as emotional experience, expression, or regulation (e.g., Gross & Thompson, 2007; Harris, 1996; Siegel, 1999; Smrtnik Vitulić, 2009). Emotional experiences take place 'from within' or introspectively. As such, it is difficult to observe and measure them objectively from the outside (Frijda, 1988); therefore, they more accessible via individuals' self-reports or via physiological measurements (e.g., breathing rate, pulse rate, skin colour).

In contrast, emotional expression involves an 'external' process of the individual, including one's facial expressions or body movements that are more suitable for observation but may also be misleading due to one's hiding of emotional experience (Moors et al., 2013).

Emotion regulation is defined as the process by which individuals influence which emotions they have, when they have them, and how they experience and express them (Gross, 1998). Emotion regulation processes serve to monitor, evaluate, modulate, inhibit, and enhance emotional experience and expression in order to accomplish one's goals (Eisenberg et al., 2007; Gross & Thompson, 2007; Thompson & Meyer, 2007). The most important developmental changes in emotion regulation occur in childhood and adolescence, even though further adaptations can also be observed in adulthood. Developmental trajectories include becoming more responsible for managing one's own emotions, and using more sophisticated and flexible emotion regulation strategies that take into account socio-cultural and personal goals (Thompson & Meyer, 2007). However, it should be noted that emotion regulation 'is not a developmental task to be mastered at a certain age […], but rather a 'moving target' that is continually sensitive to changing goals and contexts' (Diamond & Aspinwall, 2003, p. 149).

Various strategies are used to regulate emotions, which may be more or less efficient. The efficiency can be determined by various criteria, such as functionality defined as goal accomplishment, adaptability representing alignment with the individual's specific contexts, and flexibility as the possibility to use different emotional responses (Scherer, 2011; Thompson, 2011; Westphal et al., 2010). Some emotional regulation strategies are considered less efficient and are significantly associated with more symptoms of psychopathology, whereas other strategies are considered more efficient and are associated with fewer symptoms of psychopathology (Aldao et al., 2010).

Reappraisal and suppression are two of the most studied emotion regulation strategies. Reappraisal involves changing the meaning or the importance of the situation (Evers et al., 2010; Gross, 1998) with the purpose of changing the experience of the emotion. Suppression involves the reducing or non-expressing of emotions by which external signs of emotion are inhibited (Evers et al., 2010; Gross, 1998; Gross & John, 2003; Gross & Thompson, 2007; Matsumoto, 2006). Research results indicated that the frequent use of reappraisal is significantly positively related to well-being

(Gross & John, 2003; John & Gross, 2007), self-esteem (Gross & John, 2003), secure attachment and social support (Gross & John, 2003). In contrast, the frequent use of suppression is negatively associated with well-being (Gross & John, 2003; John & Gross, 2007) and with social functioning (Gross & John, 2003; Martini & Busseri, 2012). In mental health research, suppression was also found to lead to increased comfort food intake (i.e., chocolate) (Evers et al., 2010) and was connected to depression (Flynn et al., 2010).

As we can conclude from the aforementioned studies, reappraisal is generally considered to be a more efficient emotion regulation strategy, whereas suppression is considered a less efficient emotion regulation strategy (Gross, 1998). Nevertheless, sometimes suppression may also have positive consequences, and reappraisal may have negative ones, for example, when its use is too wide and considered defensive (John & Gross, 2007). Also, other factors, such as socio-cultural ones, may play a role in the use of reappraisal and suppression. Matsumoto (2006) found North Americans use reappraisal more often, whereas the Japanese were more likely to use suppression.

Emotions can be described along several different dimensions, such as valence, intensity, or complexity. Regarding valence, the majority of authors (e.g., Fredrickson, 2004; Lamovec, 1991; Oatley & Jenkins, 1996) categorise emotions as 'positive' and 'negative'. Positive emotions (e.g., joy, pride, love) are experienced when a subjectively important goal or expectation is accomplished or fulfilled, while negative emotions (e.g., anger, hopelessness) are triggered when a subjectively important goal is not accomplished or an expectation is not fulfilled. As both positive and negative emotions may enhance an individual's adaptive response to a serious situation (e.g., Lazarus, 1991), the mentioned categories of emotions' valence should not be confused with emotions' usefulness. To avoid possible confusion between the valence and usefulness of emotions, the pleasant-unpleasant categorisation was used in the present research.

Regarding emotions' intensity, the appraisal of a situation as more important leads to a more intense experience of the emotion (Sonnemans & Frijda, 1994). The emotions may be weak, medium, strong, and very strong (Milivojević, 2008). Thinking processes are stimulated mainly by weak emotions, which increase the speed of thinking, creativity and initiative (Lamovec, 1991). High intensity of emotions can lead to excessive arousal and thus have a negative impact on our functioning.

Regarding complexity, basic and complex emotions exist. Basic ones emerge in the first months of an individual's life and include typical brain activity patterns and facial expressions serving a specific adjustment function (Ekman & Davidson, 1994; Plutchik, 1980). Basic emotions are easily recognised, with joy, anger, fear, and sadness being among them (Lewis, 2002 in Santrock, 2005). Complex emotions (i.e., shame, guilt, pride, love, hopelessness) begin to develop later in development, have a less typical expression, and are, therefore, more difficult to recognise (Papalia et al., 2009).

In the continuation, we summarise findings regarding specific emotions included in the questionnaire used in our research: joy, pride, love, anger, hopelessness, and fatigue/exhaustion. These emotions were selected by the authors of the questionnaire as those reported by teachers with regard to their students (Burić et al., 2018; Macuka et al., 2017).

Joy is a pleasant basic emotion experienced when an individual achieves an important personal goal or fulfils an important desire (Lazarus, 1991). The function of joy is to reinforce the behaviour that contributed to this achievement/fulfilment (Smrtnik Vitulić, 2007). Joy involves changes in visual perception, such as the perception of colours as brighter; motor behaviour, such as easier movement; changes in cognition, such as broadened attention (Fredrickson, 2005). When joyful, one is more receptive to receiving new information and experiences, to feeling secure, and to being more flexible and creative in their behaviour (Cvetek, 2014; Johnson, 2020). This contributes to ever-greater development, expansion of knowledge, and personal growth. People who feel joy also prefer to help others, connect with them and, in this way, deepen their positive relationships with others (Smrtnik Vitulić, 2007).

As for teachers' joy, they talk about it in connection to their work. One major source of teachers' joy occurs when students are responsive, when they learn and make progress (e.g., Hargreaves, 1998; Sutton & Wheatley, 2003), especially if these students struggled initially. Teachers also experience pleasant emotions such as joy when they complete their tasks, when their colleagues are supportive, or when they believe that parents are responsible, support teachers' efforts, and respect teachers' judgment (Lasky, 2000; Sutton & Wheatley, 2003). In Hosotani and Imai-Matsumura's (2011) study based on interviews with Japanese teachers, joy was the most frequently reported emotion. Teachers experienced joy because of students' achievement or autonomy, followed by pleasant

daily interactions with them. Empathetic joy was experienced by teachers because of the students' own joy or their amusement. Some teachers reported experiencing joy as a consequence of having taught successfully. In a study including Slovenian primary teachers (Prosen et al., 2013) and using an observational approach, joy was the second most frequently detected emotion. Teachers' joy was aroused in various situations: students' achievement, funny events, relaxation, students' following instructions, and novelty.

Pride is a pleasant complex emotion that usually occurs when an individual achieves success and believes that his or her actions contribute to a positive view an important person has of him or her (Lazarus, 1991). Pride is considered a 'social' emotion as it is based on internalised social norms and rules that represent a basis for an individual's judgement of his or her own actions (Oatley & Jenkins, 1996). Experiencing pride encourages an individual to be more efficient at work: the individual wants to repeat the action and puts more effort into it. Pride also encourages individuals to engage in socially desirable behaviours and helps them develop and maintain positive self-esteem (Cvetek, 2014). Despite pride's positive consequences, there are, to the best of our knowledge, only a few studies focusing on teachers' pride. In teachers' work, research (e.g., Hargreaves, 1998; Sutton & Wheatley, 2003) showed that it was triggered when their former students came back to talk to them or when students cooperated with no major disruptions.

Love is a pleasant complex emotion that appears in a relationship involving affection, care, and respect towards someone (Musek, 2005). The function of love in interpersonal relationships is to connect someone or something, bring them together, and establish a strong bond between them (Lamovec, 1991). When hearing the word 'love', the first association may be with romance, but other kinds of love exist as well, for example, love of teachers for their students (Cvetek, 2014). Teachers' love for the students involves affection and compassionate concern for their needs and (compared to romantic relationships) includes less intimacy and bonding.

Sutton and Wheatley (2003) claimed that the pleasant emotions most often discussed in the literature on teachers are love and caring. Laypersons use the term 'caring' to mean an emotion in the same category as love and affection (e.g., Lazarus, 1991) and so have researchers (e.g., Hargreaves, 1998). The importance of teachers' love for their students has

been documented in many studies (e.g., Hargreaves, 1998; Woods & Jeffrey, 1996). In an interview study of middle school teachers in the United States, only 10% of the teachers spontaneously mentioned love, but 70% agreed that love was relevant when given a list of emotions (Sutton & Wheatley, 2003).

Anger is an unpleasant basic emotion triggered by an individual's appraisal that someone or something is obstructing his or her important goals, leading towards a negative outcome (Lazarus, 1991). The intensity of anger can range from a weak dissatisfaction to an extreme experience of wrath that belongs among so-called affects (very intensive short-term emotions). The main purpose of one's anger expression is usually to convey a message to others to change their behaviour in accordance with one's expectations. By expressing anger, we also set boundaries with others and let them know what we find acceptable and what is not. Anger is usually expressed when a person feels strong enough to change others' behaviours or circumstances and is therefore connected to one's feeling of self-value (Milivojević, 2008). Anger is connected to quick body changes, such as accelerated blood pressure and breathing, which enable a person to become more active in order to remove obstacles (Milivojević, 2008).

In several studies addressing all teachers' emotions, anger was the most frequently experienced unpleasant emotion (Frenzel et al., 2016; Prosen et al., 2013; Sutton, 2007), while some other studies found it to be less frequent (Hosotani & Imai-Matsumura, 2011). Hosotani and Imai-Matsumura (2011) reported, based on interviews, that Japanese teachers felt angry when they thought that students were not following instructions, not doing their best, were not motivated, and in other similar situations. Interviewing teachers in England, Farouk (2010) found that they experienced anger because of goal inconsistency/goal blockage (e.g., the teacher was not able to teach due to students' misbehaviour), an unfair/unjust outcome (e.g., teachers appraised themselves as being mistreated by students), a threat to self (e.g., the teacher's status in the school was questioned), and the irresponsibility of others (e.g., the teacher believed students were personally responsible for a negative outcome). In the United States, interviews with teachers revealed that their anger was triggered by their appraisal of students' misbehaviour and by goal blockage, as well as by their appraisal of parents' and colleagues' behaviours bringing about an unfair outcome (Sutton, 2004, 2007). In a study including Slovenian primary teachers (Prosen et al., 2013) and using an observational approach in the classroom, it was found that anger was triggered by students' lack of discipline, fighting with each other, not

following instructions, inattention, poor academic performance, danger-ous behaviour, and in a few other situations.

When examining teachers' anger more specifically, using self-reports, Smrtnik Vitulić and Prosen (2022) found that the teachers reported rarely experiencing anger at work and at home. In the majority of cases, anger was triggered in circumstances involving students: when they did not re-spect school rules, did not respect the teacher's authority, were aggressive towards other students, did not perform well academically or lacked dis-cipline. Also, parents, school leaders and other teachers were recognised as specific sources of the teachers' anger: parents because of their un-derestimating attitudes towards the school or the teachers' work, school leaders because of their lack of understanding of the teacher's work and other teachers because of their disrespectful behaviours. Burić and Fren-zel (2019) similarly found in their multi-method approach that teachers' anger was evoked by contextual triggers that go beyond teaching and in-teracting with students, such as by a wide variety of situations and events related to parents, the behaviour of colleagues, and encounters in the staff room, as well as by features of educational system and policy.

One interesting question arising regarding teachers' anger, especially its expression, is its authenticity. As has been reported by some authors (e.g., Taxer & Frenzel, 2015; Woods & Jeffrey, 1996), some teachers consciously use 'fake anger' to manage their students.

Fatigue/exhaustion is an unpleasant complex emotion that occurs when an individual appraises situations as pushing him or her to the limits of effective functioning, usually over longer periods of time (Arens & Mor-in, 2016; Maslach et al., 2001). Emotional exhaustion is often considered the first component in the development of burnout, which in turn leads to a lower sense of personal fulfilment (e.g., Maslach et al., 2001). Exhaus-tion negatively affects an individual's work efficiency, health, and well-being (Maslach et al., 2001).

Macuka, Burić, and Slišković (2017) emphasised the meaning of emo-tional exhaustion in teachers, which resulted from daily stressors and pressures at work, in explaining psychopathological outcomes in the teaching profession.

Hopelessness is an unpleasant complex emotion, defined by Milivojević (2008) as occurring because of a loss of hope for the future: when an

individual has assessed that it will not be possible to fulfil his or her important wishes or achieve important goals. Hopelessness is usually triggered when an individual believes that there is no one who can help them in a particular situation (Bregar, 2012). Hopelessness means withdrawing from desires and important events and is a sign of existential crisis. Persistent hopelessness can lead to indifference and passive submission to fate. It is often associated with various psychosomatic and somatic problems or disorders (Milivojević, 2008).

Studies aiming specifically at teachers' hopelessness are rather difficult to find in scientific literature. In one study involving hopelessness, teachers' levels of burnout, hopelessness and procrastination had significant negative effects on their job satisfaction (Kumcagiz et al., 2014). The somewhat similar emotion of helplessness had been reported as a part of teachers' emotional world by Kelchtermans (1996), caused by limitations to teachers' efficacy posed by the system or parents.

As mentioned previously, teachers experience emotions that are based on their appraisal of the school circumstances as important (Burić et al., 2018). These appraisals are influenced by many factors outlined previously, such as individual goals and expectations regarding their work (Sutton, 2007). Often, however, these expectations may be unrealistically high, such as the expectation that they should solve every disciplinary issue, control, and act justly in every situation, be able to motivate all students regardless of their interest in the subject, should take full responsibility for students' academic achievement, etc. (Gordon, 1997; Smrtnik Vitulić & Lesar, 2017). Also influencing teachers' emotions, especially their emotional expression, are two 'ideal teacher' images identified by Hosotani and Imai-Matsumura (2011), the so-called 'calm' and 'emotionally expressive' teachers. The 'calm' teacher believes that expressing any unpleasant emotion in the classroom is inappropriate and therefore suppresses their expression, which can become a source of subsequent unpleasant emotions, for example, feeling guilty because of experiencing anger. In contrast, the 'emotionally expressive' teacher always tries to express all emotions and also uses them to evoke emotions in students. However, also this ideal image can be a source of unpleasant emotions, since the ideal criteria cannot always be reached.

When discussing teachers' expectations' influence on their emotional experience and expression, it is important to mention emotional rules as well. These rules delineate a zone within which certain emotions are

permitted and others are not and are a reflection of the (power) relations within schools. Schutz et al. (2006, in Chen, Yin and Frenzel, 2020) emphasised that teachers' emotions are related to the environment, which is inevitably linked to a variety of cultural, social and political norms. The emotional rules may be conveyed through inscribing and recording 'appropriate' and 'inappropriate' emotions, managing and utilising emotions according to these inscriptions, and classifying emotional expressions as 'deviant' or 'normal'. Such 'ideal teacher' images and emotional rules are connected to expectations conveyed by teachers' colleagues, school management, students' parents, school politics, and similar factors. (e.g., Hosotani & Imai-Matsumura, 2011; Zembylas, 2004, 2005).

When examining teachers' emotions, authors apply various research approaches (e.g., Chang, 2009; Cowie, 2011; Day & Leitch, 2001; Hosotani & Imai-Matsumura, 2011; Kelchtermans, 2005; Moè, Pazzaglia & Ronconi, 2010; Zembylas, 2004) from qualitative approach via interviews to quantitative approach using self-reports or observations. Two examples of studies using the mentioned approaches will be presented in continuation.

Hosotani and Imai-Matsumura (2011) interviewed 24 Japanese teachers from primary schools and investigated their emotional experience, expression, and regulation while they interacted with children. The results of this qualitative study confirmed the presence of various emotions in teachers; according to their frequency, they were joy, love, surprise, sadness, anger, disgust, and fear. Teachers mostly reported experiencing joy because of students' achievement or autonomy, followed by pleasant daily interactions with them. Empathetic joy was experienced when teachers felt happy because of the students' own joy or their amusement. Some teachers reported experiencing joy as a consequence of having taught successfully. The authors did not analyse the emotions of love or surprise. Regarding sadness, teachers were sad when students displayed unfavourable behaviours or attitudes, as empathy for students' own sadness and when they sensed that they had not fully educated children. Interestingly, some teachers also felt sad after they felt anger because of students' poor behaviour. Teachers reported experiencing anger because of students' not caring for peers, not following instructions, not doing their best, or because of their dangerous actions. Anger was also identified by some teachers because they thought it was their fault that the students were insufficiently motivated. The experience of disgust was relatively infrequent and mostly connected to students' unfavourable behaviours or attitudes, including bad manners. As for fear, teachers also infrequently reported

experiencing it, in situations where teachers noticed students' misbe-haviour or physically dangerous acts, but also due to acknowledging a teacher's heavy responsibilities, such as the teacher's strong influence on students.

In a study by Prosen, Smrtnik Vitulić and Poljšak-Škraban (2013), an observational approach was applied to identify teachers' emotions. Us-ing the observational schema, nine different emotions were recorded. By their frequency of expression, they were anger, joy, disappointment, pleasant surprise, fear, pride, sadness, shame, and guilt. Teachers ex-pressed anger when students lacked discipline, did not follow instruc-tions, were inattentive, did not perform well academically or were in danger. The situations that triggered joy included students' achievement, funny or relaxing events, following instructions, novelty, and a few other situations. Disappointment was expressed by teachers when students did not follow instructions or did not perform well academically. Pleasant surprise occurred in teachers' expression when students achieved un-expectedly, did something new, were highly motivated for schoolwork and offered creative solutions. Fear was triggered in situations when the teacher was concerned about students' health and when students did not perform well academically. Teachers expressed pride when students ex-celled academically. Sadness was expressed by teachers when students did not follow instructions, did not perform well academically, or when a student was scorned at home because of bad grades. Shame was observed in situations when a teacher did not know the answers to the students' questions and when students did not perform well academically, while guilt occurred when teachers forgot to give sufficient instructions and, as a result, the students did not do their homework and, in one case when the teacher had to tell the students about an unnecessary absence. From these results, it can be seen that there are two triggering situations that are common for different unpleasant and pleasant emotions in teachers: students' achievement and their following instructions.

Comparing the described two studies, differences can be observed re-garding the variety of described emotions and their frequency. There are several possible reasons for that. Firstly, the research approach differs in these two studies: in the first one, interviews with teachers were used, and the collected data focused on teachers' emotional experience while in the second study data were collected using an observational schema and were therefore more focused on teachers' emotion expression. This shows the importance of collecting data in various ways, since they have their

strengths and weaknesses. Reports on emotional experience can be biased since individuals may be prone to giving the more socially appropriate descriptions (i.e., interviewed teachers reported experiencing pleasant emotions more frequently, while the observed teachers expressed more unpleasant emotions). In contrast, the observation of emotional expression depends on the observer's sensibility and knowledge about emotions as well as on the observant's emotional expressiveness (including the suppression of certain emotional experiences). Secondly, cultural differences between the teachers participating in each study also may have played a role in finding differences in data on teachers' emotions.

To conclude the overview of the research on teachers' emotions, it is important to consider Fredrickson's (2008) recommendation of a 3:1 ratio between pleasant and unpleasant emotions in favour of pleasant ones. Such a ratio is favourable due to the fact that unpleasant emotions influence the emotional balance more powerfully; thus, an individual needs to compensate for unpleasant emotions with three times the amount of pleasant emotions in order to maintain an overall positive ratio between the emotions. If this is not the case, mental health issues may start to appear.

1.2   *Mental health and teachers' work*

The World Health Organization (WHO, n. d.) defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. When an individual is healthy, they are able to successfully cope with the normal stressors in life, be productive, and contribute to overall well-being (Bajt et al., 2015). An individual is considered mentally healthy when he or she feels good, has a sense of accomplishment, and can use his or her full potential. When assessing an individual's health, the following categories are considered: appearance, behaviour, thinking, emotions, mental well-being, and general mood.

As emphasised in the introduction, teaching is one of the most stressful professions (Hinz et al., 2014; Johnson et al., 2005). Teachers around the world face stress at work. A study by Whitaker et al. (2013) conducted on a sample of 2122 teachers from the United States showed that teachers had poorer mental health compared to the rest of the population. Also, teachers in European countries (England, France, Ireland, Italy, Netherlands, etc.) have problems related to stress and mental health (Seibt et al., 2013; Seibt et al., 2016), which may lead to their poorer general health (Van

Droogenbroeck & Spruyt, 2015). The percentage of German teachers reaching the normal retirement age is markedly lower than the percentage of other employees in public services (Unterbrink et al., 2007), and about 50% of the cases of premature retirement of teachers is caused by mental health problems (Weber et al., 2004, in Hinz et al., 2014). Between 30% and 50% of teachers leave teaching in the first five years in the United States (e.g., Borman & Dowling, 2008, in McLean et al., 2017).

The results of studies point to various stressors connected to teachers' work. Brotheridge and Grandey (2002) and Chang (2009) outline stressors such as working with people and putting much effort into achieving their goals (e.g., being a support for students, successfully managing the learning process, and successfully resolving conflicts). One of the stressors in the teaching profession is the unpredictability of the work (Van Droogenbroeck & Spruyt, 2015). For example, teachers cannot prepare for all situations that arise in school. They also do not know how students, colleagues, or parents will react in a given situation (e.g., aggressive behaviour of students, misunderstanding parents). Burić, Slišković, and Macuka (2018) argue that high professional expectations are a source of teachers' stress that can lead to emotional exhaustion and burnout. Feldon (2007) explains the occurrence of stress in teachers by their work demands, including balancing planning and organisation, instructing students, and encouraging quality classroom interactions.

'Understanding teachers' mental health is important not only for the objective of supporting teachers, but also because these symptoms have implications for students' (McLean et al., 2017, p. 231). Teachers' mental health is also related to their efficiency at work, better and more organised school functioning, and the educational system in general (Hascher & Waber, 2021). Teachers with good mental health are more efficient and successful in their work while, in contrast, poorer general health of teachers hinders the optimal course of the educational process (Hascher & Waber, 2021).

Previous studies on teachers' mental health have focused more on psychological states such as depression, anxiety, and burnout. Such problems may be caused by the long-term experience of unpleasant emotions (e.g., Chang, 2009; Macuka et al., 2017), which are triggered by teachers' appraisal of various situations in the school context. As stated previously, these appraisals are connected to teachers' characteristics, such as expectations regarding students or themselves, emotion regulation efficiency, and similar factors. (Mérida-López & Extremera, 2017). Macuka, Burić, and

Slišković (2017) examined the role of emotions in explaining symptoms of anxiety, depression, and somatisation among 1149 teachers in Croatia. The results showed that certain emotions (exhaustion, love, anger, and hopelessness experienced in relation to students; anxiety experienced in relation to parents; and disappointment with the educational system) significantly explained teachers' symptoms of anxiety, depression, and somatisation. Chan's (2006) study of secondary school teachers in Hong Kong exposed emotional exhaustion as a significant predictor of depersonalisation, which in turn predicted lower levels of personal accomplishment. Also, emotional exhaustion has been linked to lower motivation for teaching (e.g., Schaufeli & Salanova, 2007, in Grayson & Alvarez, 2008) and greater doubts about the ability to teach efficiently (e.g., Dicke et al., 2015, in Grayson & Alvarez, 2008). A large study of 949 teachers by Maslach, Schaufeli, and Leiter (2001) found high degrees of emotional exhaustion, depersonalisation, and low personal accomplishment.

2   Research problem

Even though teachers' emotions and mental health are becoming an increasingly studied phenomenon (Chang, 2009; Hargreaves, 2005; Hosotani & Imai-Matsumura, 2011; Prosen, Smrtnik Vitulić & Poljšak-Škraban, 2013; Schutz et al., 2007; Sutton, 2004; Sutton et al., 2009; Sutton & Wheatley, 2003; Zembylas, 2009), there is still a lack of research on teachers' specific emotions and on their connection to mental health, especially in Slovenia. Hence, our research attempted to address the mentioned research gaps: we analysed specific emotions experienced by Slovenian teachers in the primary school context, their mental health, and the connections between them.

3   Methodology

3.1   Participants

There were 114 primary education teachers participating in the research: 110 women and 4 men from various Slovenian regions. Their age ranged from 23 to 64 years (M = 46.01; SD = 10.99), while their work experience ranged from one to 42 years (M = 21.82, SD = 12.67). The majority of teachers worked in the first grade (22.8%), followed by third-grade teachers (19.3%), and those in the second (16.7%), fourth (16.7%) and fifth grades (7.9%). There were also some teachers working in combined classes (16.7%).

3.2   *Instruments*

Teachers were first asked to answer some questions on their characteristics (gender, age, work experience, region of work, grade they are teaching in). Then, they completed two questionnaires, described below. Firstly, they completed the Teacher Emotions Questionnaire (TEQ) (Burić et al., 2018), which includes 36 items describing their experience of joy (e.g., I am happy when I manage to motivate students to learn.), pride (e.g., I am filled with pride when I make a student interested in my subject.), love (e.g., I feel affection towards my students.), anger (e.g., Some students make me so angry that my face goes red.), fatigue/exhaustion (e.g., At the end of my working day, I just want to rest.) and hopelessness (e.g., I feel hopeless when I think about the achievement of some students.). Teachers responded to the items by indicating their level of agreement on a 5-point scale: 1 – strongly disagree, 2 – disagree, 3 – neither disagree nor agree, 4 – agree, and 5 – strongly agree. Cronbach's α for each emotion is joy 0.74, pride 0.78, love 0.78, anger 0.76, fatigue/exhaustion 0.87, and hopelessness 0.80.

Then, teachers completed General Health Questionnaire-12 (GHQ-12) (Goldberg & Williams, 1988), which monitors their mental health. The GHQ-12 is a reliable and valid internationally used screening instrument for measuring psychological well-being or minor psychiatric morbidity (Goldberg & Williams, 1988). It includes 12 items, for example, 'Have you recently felt constantly under strain?' For each of the included items, the teachers self-assessed the momentary presence of certain mental health difficulties in comparison to their usual presence on a four-point scale (0 – better than usual, 1 – same as usual, 2 – less than usual, and 3 – much less than usual). The psychometric properties of the questionnaire have been tested and found adequate in various studies (Goldberg & Williams, 1988; Pevalin, 2000). In the present study, the internal reliability of the GHQ-12 was satisfactory (Cronbach's α = 0.80).

3.3   *Procedure*

The teachers, whose participation was voluntary and anonymous, were informed about the content of the research at the beginning of the online survey distributed via the online platform 1ka. Parametric statistical procedures were used to analyse the data from the TEQ and the GHQ-12. Descriptive statistics were performed, including minimal and maximal values, means and standard deviations. Also, to analyse the connections between emotional experience and mental health difficulties, Pearson's

correlations were calculated. The study was reviewed and approved by the local university ethics review board (No. 13/2022).

4   Results

In the results section, teachers' experience of specific emotions in interaction with their students is presented first, followed by teachers' mental health characteristics and then the connection between the two is outlined.

4.1   Emotional experience in teachers

The results regarding teachers' experience of specific emotions are presented in Table 1. When analysing the presence of each emotional experience, we applied the criteria: low if $M \leq 2.50$, moderate if $2.5 \leq M \leq 3.49$, high if $3.5 \leq M \leq 4.49$ and very high if $M \geq 4.50$ (adapted from Milivojević, 2008).

Table 1. Teacher's experience of specific emotions

Emotion experience	Min	Max	M	SD	Presence level
Joy	4.00	5.00	4.81	0.29	Very high
Pride	3.17	5.00	4.39	0.45	High
Love	1.83	5.00	4.31	0.53	High
Fatigue/exhaustion	1.14	4.86	2.75	0.75	Moderate
Hopelessness	1.00	4.50	2.44	0.66	Moderate
Anger	1.00	4.40	2.18	0.69	Low

Teachers experienced joy in their interactions with students on a very high level. Then, also highly present, they experienced the other two pleasant emotions: pride and love. Unpleasant emotions were experienced by teachers as follows: fatigue/exhaustion and hopelessness on a moderate level and anger on a low level.

4.2   Mental health in teachers

The results regarding teachers' mental health are presented in Table 2, for each mental health difficulty and as an overall result. When analysing the intensity of difficulties, we applied the following criteria (Obradović et al., 2017): normal if $0 \leq M \leq 1.25$, mild if $1.26 \leq M \leq 2.07$, and major if $2.08 \leq M \leq 3$.

Table 2. Teacher's mental health difficulties

	Mental health difficulties	*Min*	*Max*	*M*	*SD*	Intensity level
1.	Ability to concentrate	0	3	1.89	0.78	Mild
2.	Lost sleep over worry	0	3	1.22	0.74	Normal
3.	Feeling useful	0	3	1.63	0.78	Mild
4.	Capability of decision making	0	3	1.77	0.68	Mild
5.	Feeling under strain	0	3	1.63	0.86	Mild
6.	Overcoming the difficulties	0	3	1.13	0.63	Normal
7.	Enjoying daily activities	0	3	1.96	0.76	Mild
8.	Facing up problems	0	3	1.87	0.59	Mild
9.	Feeling unhappy and depressed	0	3	0.84	0.72	Normal
10.	Losing self-confidence	0	3	0.77	0.68	Normal
11.	Feeling unworthy	0	3	0.71	0.69	Normal
12.	Feeling reasonably happy	0	3	1.75	0.79	Mild
13.	Overall mental health	0.42	2.75	1.43	0.41	Mild

Note: the scoring of items 1, 3, 4, 7, 8, and 12 has been reversed.

Teachers self-assessed they do not have mental health difficulties (normal intensity) in the areas of lost sleep over worry, overcoming difficulties, feeling unhappy and depressed, losing self-confidence, and feeling unworthy. They reported having mild difficulties with all the rest mental health areas: ability to concentrate, feeling useful, capability of decision making, feeling under strain, enjoying daily activities, facing up problems and feeling reasonably happy. Also, their overall mental health difficulties' level can be regarded as mild.

Looking at the percentages, the majority of teachers reported having mild mental health difficulties (54.4%), followed by teachers reporting having normal mental health (37.7%) and those reporting major mental health difficulties (7.9%).

4.3   *Connection between mental health and emotion experience in teachers*

In continuation, correlations between the experience of specific emotions and mental health (for each mental health difficulty and for an overall score) in teachers are presented in Table 3.

Table 3. Pearson's correlations between mental health difficulties and experience of specific emotions in teachers

No.	Mental health difficulties	Joy	Pride	Love	Anger	Fatigue/ Exhaustion	Hopelessness
1.	Ability to concentrate	-.06	-.16	.04	.13	.14	.11
2.	Lost sleep over worry	.21*	.10	.17	.36**	.35**	.26**
3.	Feeling useful	-.11	-.04	-.10	.23*	.19*	.23*
4.	Capability of decision making	-.11	-.17	-.08	.12	.15	.13
5.	Feeling under strain	.06	.01	20*	.25**	.28**	.08
6.	Overcoming the difficulties	-.05	-.01	.08	.45**	.39**	.26**
7.	Enjoying daily activities	-.01	.07	.07	.21*	.16	.09
8.	Facing up problems	-.05	-.01	.01	.19*	.24*	.14
9.	Feeling unhappy and depressed	.05	.08	.07	.20*	.15	.07
10.	Losing self-confidence	.08	.08	.03	.45**	.34**	.29**
11.	Feeling unworthy	-.02	.03	.03	.30**	.28*	.17
12.	Feeling reasonably happy	.17	.03	.09	.23*	.19*	.05
13.	Overall mental health	.03	.00	.09	.46**	.42**	.27**

*Note: *p < 0.05; **p < 0.01.*

The correlation analysis indicated that teachers' mental health difficulties and pleasant emotions (joy, pride, and love) are mostly non-associated: there are only two significant but small positive correlations: between joy and lost sleep over worry, and love and feeling under strain.

In contrast, the unpleasant emotions (anger, fatigue/exhaustion, and hopelessness) are significantly positively associated with many areas of mental health. Anger, fatigue/exhaustion, and hopelessness are associated with lost sleep over worry, with feeling useful, with overcoming difficulties and with losing self-confidence. Anger and fatigue/exhaustion are associated with feeling under strain, with facing problems, with feeling unworthy and with feeling reasonably happy. Only anger is also associated with enjoying daily activities and with feeling unhappy and depressed. The majority of these correlations are small, but some of them are moderately high. There are, however, two mental health areas that are not significantly correlated to emotional experience: the ability to concentrate and the capability for decision making.

The experience of all three unpleasant emotions is also positively associated with teachers' overall mental health scores.

5   Discussion

Teachers experience six specific emotions in interactions with their students (i.e., joy, pride, love, fatigue/exhaustion, hopelessness, and anger), which have been examined more thoroughly in the present research. Teachers reported experiencing all three pleasant emotions on a high or very high level, with joy being the most present emotion. It is experienced when an individual achieves an important personal goal or fulfils an important desire (Lazarus, 1991), which seems to be true for the teachers in our study in their interactions with students. In other studies addressing joy (e.g., Hargreaves, 1998; Sutton & Wheatley, 2003), teachers talked about it in connection to their work, for example, when students learn and make progress. Similar to our results, Hosotani and Imai-Matsumura (2011) found joy to be the most frequently reported emotion in interviews with Japanese teachers. In the observational study including Slovenian primary teachers, Prosen, Smrtnik Vitulić, and Poljšak-Škraban (2013) confirmed joy as the second most frequently detected emotion. As the experience of joy contributes to an individual's personal development, expansion of knowledge, and connections with others (Smrtnik Vitulić, 2007), our results are encouraging.

The other two pleasant emotions, pride and love, were also experienced by teachers participating in our study on a high level. Furthermore, in a study by Burić, Slišković, and Macuka (2018), pride was the second most experienced emotion amomg Croatian teachers. As pride occurs when an individual achieves success and believes that his or her actions contribute to a positive view an important person has of him or her (Lazarus, 1991) and experiencing pride encourages an individual to be more efficient at work, the results of our research are favourable.

The same can be said for the third most present emotion in teachers in our research: love. In a study by Burić, Slišković, and Macuka (2018), love took the third place in its presence in Croatian teachers. As the function of love in interpersonal relationships is an establishment of a strong bond between individuals (Lamovec, 1991), it can be concluded that teachers are striving to establish such bonds with their students. The importance of this bond has been confirmed in many studies (e.g., Hargreaves, 1998; Woods & Jeffrey, 1996).

Teachers also reported experiencing unpleasant emotions, yet on a lesser level compared to pleasant ones. Fatigue/exhaustion was experienced

moderately by our teachers, as well as by Croatian teachers (Burić et al., 2018). It occurs when an individual appraises a situation as pushing him- or herself to the limits of effective functioning, usually over longer periods of time (Arens & Morin, 2016; Maslach et al., 2001). As exhaustion may be the consequence of stressors and pressures at work and negatively affects an individual's work efficiency, health, and well-being (Maslach et al., 2001), it is important to encourage teachers to address this emotion by using some of the more adequate regulation strategies, for example, reappraising the meaning of situations.

Similarly, it is also important to address hopelessness, occurring when an individual thinks it will not be possible to fulfil his or her important wishes or achieve important goals (Milivojević, 2008) and there is no one who can help (Bregar, 2012). Teachers in our research experienced hopelessness at a moderate level, which is still a concerning result. Teachers in Croatia also reported the presence of hopelessness as the fifth in line of analysed emotions (Burić et al., 2018).

The emotion reported by teachers as experienced at a low level was anger. Similar results were found in Croatian teachers (Burić et al., 2018). Anger is triggered by a person's appraisal that someone or something is obstructing his or her important goals (Lazarus, 1991). As its main purpose is conveying a message to the others to change their behaviour in accordance with one's expectations and set boundaries, it is rather odd that teachers reported such low levels of the presence of anger. Looking at their work with students, it would perhaps be expected there were many situations provoking this emotion. One way of interpreting our results regarding anger would be to conclude that teachers are appraising the situations at work in a way that does not trigger anger or that they themselves do not feel strong enough to change others' behaviours or circumstances (Milivojević, 2008). However, results may be observed from another angle. A low occurrence of anger was found by Hosotani and Imai-Matsumura (2011) in their interviews with Japanese teachers, while in a study by Prosen, Smrtnik Vitulić, and Poljšak-Škraban (2013), based on the observations of teachers' emotional expressions in interaction with students, anger was the most frequently expressed emotion. It might be concluded that the methodology of data collection plays an important role when looking at emotions, perhaps even more so with anger, since teachers might be unaware of it or anger might be considered a less socially desired emotion. This explanation may be supported by the fact that almost all of the teachers participating in the research were female,

for whom anger expression can be even less socially accepted (Chaplin & Aldao, 2013). Also, the experience of anger may not be in line with the 'ideal teacher' images (Gordon, 1997; Hosotani & Imai-Matsumura, 2011; Smrtnik Vitulić & Lesar, 2017). For example, the ideal teacher should remain calm as he or she believes that expressing any unpleasant emotion in the classroom is inappropriate and therefore suppresses their expression.

When examining the results regarding all six analysed emotions, it can be observed that teachers reported experiencing pleasant emotions much more than unpleasant ones. This is an encouraging result. However, the experience of unpleasant emotions, even though on a lesser level, is still worth addressing, especially bringing into awareness a notion of the existence of the emotional rules influencing teachers' expectations and, consequently, their emotional experience. These rules delineate a zone within which certain emotions are permitted and others are not permitted; this is a reflection of the (power) relations within schools (Schutz et al., 2006, in Chen et al., 2020). Emotional rules are tightly linked to a variety of cultural, social, and political circumstances, which may be recognised in similarities between our and Croatian (Burić et al., 2018) results regarding teachers' emotional experiences since we share many cultural and social norms.

In addition to emotions, teachers' mental health was analysed in our research as teaching is one of the most demanding professions (Hinz et al., 2014; Johnson et al., 2005). The majority of teachers participating in our research reported having mild mental health difficulties (54.4%), followed by teachers reporting having normal mental health (37.7%) and those reporting major mental health difficulties (7.9%). The percentage of Slovenian teachers with mild or major mental health issues is concerning and in line with other studies involving teachers in the United States (Whitaker et al., 2013). They showed poorer mental health compared to the rest of the population. Also, in several European countries, teachers reported having problems related to (mental) health (Seibt et al., 2013; Seibt et al., 2016; Van Droogenbroeck & Spruyt, 2015).

There were several areas of mental health difficulties included in the General Health Questionnaire-12 (Goldberg & Williams, 1988) used in our study. That is why, besides the overall mental health score, we also looked at each of the twelve measured mental health difficulties. There were five areas where teachers did not report experiencing difficulties (lost sleep over worry, overcoming difficulties, feeling unhappy and depressed,

losing self-confidence, and feeling unworthy) and seven areas where mild difficulties were reported (ability to concentrate, feeling useful, the capability to make decisions, feeling under strain, enjoying daily activities, facing up problems and feeling reasonably happy). Even though the difficulties were reported on a mild level, they should be taken seriously as these areas represent a basis of teachers' work and overall well-being. For example, teachers' ability to concentrate is of great importance in order for him or her to be able to lecture, prepare material, give instructions, and do similar activities. The reasons for mental health difficulties were not addressed in our study, yet other authors (Brotheridge & Grandey, 2002; Chang, 2009; Van Droogenbroeck & Spruyt, 2015) report about various stressors connected to teachers' work that may influence these difficulties, such as being a support for students, successfully managing the learning process, successfully resolving conflicts, and dealing with the unpredictability of their work. Knowing these stressors is important in endeavours to tackle teachers' mental health difficulties, which is necessary not only because of teachers themselves but also because of the students and other people they are involved with (McLean et al., 2017) as well as because of school functioning and the educational system in general (Hascher & Waber, 2021).

One of the reasons often associated with various mental health problems is the experience of (unpleasant) emotions and their consequent regulation, which is a topic that remains under-researched, especially when considering specific emotions and their connection to mental health or when involving teachers, even more so in Slovenia. That is why we addressed the association between teachers' emotional experience and their mental health in our research. In line with our expectations, teachers' mental health was rather un-associated with the experience of all three pleasant emotions. The unpleasant emotions, however, were on a small or moderately high level and positively associated with many areas of teachers' mental health. Anger, fatigue/exhaustion, and hopelessness were associated with lost sleep over worry, with feeling useful, with overcoming difficulties and with losing self-confidence. Anger and fatigue/exhaustion are associated with feeling under strain, with facing the problems, with feeling unworthy and with feeling reasonably happy. Only anger is associated also with enjoying daily activities and with feeling unhappy and depressed.

From the results, it can be observed that it was anger that was connected to the highest number of mental health difficulties (ten out of twelve). Also, Macuka, Burić, and Slišković (2017) found anger's connection to

the symptoms of anxiety, depression, and somatisation among teachers in Croatia. Bringing to mind that teachers reported experiencing anger at a low level, it is important to note that it was still very connected to mental health. That is why focusing on anger is of great importance when encouraging mental health. Special attention should be put on teachers' regulation strategies that may help them to deal with anger efficiently.

The second number of associations with mental health difficulties (six out of twelve) was received by fatigue/exhaustion. Macuka, Burić, and Slišković (2017) also found its connection to the symptoms of anxiety, depression, and somatisation among Croatian teachers. Other authors have reported on exhaustion's associations with depersonalisation (Chan, 2006; Maslach et al., 2001), lower motivation (e.g., Schaufeli & Salanova, 2007, in Grayson & Alvarez, 2008) and greater doubts about the ability to teach effectively (e.g., Dicke et al., 2015, in Grayson & Alvarez, 2008). As for hopelessness, it was connected to four mental health difficulties in our research. Hopelessness' connection to anxiety, depression, and somatisation was also confirmed by Macuka, Burić, and Slišković (2017) in Croatian teachers.

There are, interestingly, two mental health areas that were not significantly correlated to emotional experience: the ability to concentrate and the capability for decision making. The reasons for these results remain open to further research.

6   Conclusion

Academic knowledge and good teaching skills are important for teachers' work, yet they are not the only prerequisites of their professional excellence. The cognitive 'scaffolding' is held together with emotional bonds (Woods & Jeffrey, 1996). Therefore, it is also important for teachers to have emotional knowledge and skills for their effective work with students. Emotions influence teacher-student interactions and shape the classroom atmosphere (Meyer & Turner, 2007). Emotions, however, may also become a demanding area to address and may contribute to the notion that the teaching profession is one of the most stressful ones (Hinz et al., 2014; Johnson et al., 2005), which may be reflected in teachers' difficulties in mental health. Despite the growing body of evidence on the importance of teachers' emotions and mental health for their daily life and work, our research paper is one of the rare ones that focuses on teachers' specific emotions and on their connection to mental health, especially in

Slovenia. The analysed emotions were present in teachers' experiences at various levels, with the pleasant emotions of joy, pride and love prevailing over the unpleasant emotions of fatigue/exhaustion, hopelessness, and anger. This is a favourable result, in line with Fredrickson's (2008) recommendation that pleasant emotions should prevail over unpleasant ones in order to maintain an overall positive ratio between the emotions and prevent mental health issues from appearing. Since pleasant emotions in teacher-student interactions may contribute to a pleasant atmosphere, supporting students' competence and autonomy (Meyer & Turner, 2007), teachers should be encouraged to also express the pleasant emotions they are experiencing with their sensitive placement. As for unpleasant emotions, teachers should be encouraged in their regulation, for example, by using different strategies, including changes in emotion valence, intensity or time course. However, teachers may also need support in this process throughout their pre-service education and when they are already employed. This represents an opportunity for study programmes at the university to further encourage the development of knowledge on emotions, perhaps by offering courses designed to teach efficient emotion regulation strategies.

In our research, results on teachers' mental health showed that the majority of teachers reported having mild mental health difficulties, followed by teachers reporting having normal mental health, and the minority of those reporting major mental health difficulties. It is important to address mental health difficulties, whether they are mild or major, since they have an impact on the functioning of teachers, their students, and other people they are involved with (McLean et al., 2017).

Future studies should address the sources of mental health issues and add Slovenian specificities to existing data gathered by other authors (e.g., Brotheridge & Grandey, 2002; Chang, 2009; Lever et al., 2017; Van Droogenbroeck & Spruyt, 2015). Knowing these sources may be the basis for coping with mental health issues.

One of the sources of mental health difficulties may be unpleasant emotional experiences, and our results reflected this connection. All three unpleasant emotions included in our research had several significant connections to teachers' mental health difficulties, with anger having the most such connections. That is why focusing on unpleasant emotions, especially anger, is of great importance when encouraging mental health.

Applying the self-assessment approach in our research has its strengths, as some of the aspects of emotions can only be reached in this way. However, this approach has its weaknesses as well, as the data gathered through self-assessment may be more subjective, for example, because of giving socially favourable answers or because of unawareness of certain aspects of our functioning. Further research could combine the self-assessment approach with some other ones, for example, with observations. Further research could also focus on the emotional experience of teachers when triggered in other interactions at school (i.e., with parents and colleagues) and not only with students, as was the case in our research.

The obtained results have many implications for teachers and for the professionals working with them. As mentioned previously, teacher-oriented educational programmes should include different emotion- and mental health-related contents. By encouraging teachers to become aware of the appraisals they give to certain students' behaviour that underlie their emotions, we may enhance their emotional understanding and stimulate the change of their 'emotional rules' if necessary (Chang, 2009; Zembylas, 2004). In teacher-oriented educational programmes, the development of emotion regulation strategies could also be promoted, especially that of unpleasant emotions. That could, consequently, also tackle teachers' mental health. Another way of addressing the emotions and mental health of teachers could be by providing supervision where teachers could talk about and reflect on these issues and search for ways of handling them.

Acknowledgements

References

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217–237. https://doi.org/10.1016/j.cpr.2009.11.004

Arens, A. K., & Morin, A. J. S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology, 108*(6), 800–813. https://doi.org/10.1037/edu0000105

Bajt, M., Jeriček Klanšček, H., & Biritovšek, K. (2015). *Duševno zdravje na delovnem mestu [Mental health in the workplace].* Nacionalni inštitut za javno zdravje. https://www.nijz.si/files/publikacije-datoteke/dz_na_delovnem_mestu.pdf

Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions: An experience sampling analysis. *Teaching and Teacher Education*, *43*, 15–26. https://doi.org/10.1016/j.tate.2014.05.002

Bellingrath, S., Weigl, T., & Kudielka, B. M. (2009). Chronic work stress and exhaustion is associated with higher allostastic load in female school teachers. *Stress*, *12*(1), 37–48. https://doi: 10.1080/10253890802042041

Bregar, B. (2012). Obravnava samomorilno ogroženega pacienta [Treatment of a suicidal patient]. *Obzornik zdravstvene nege*, *46*(1), 67–74.

Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior*, *60*(1), 17–39. https://doi.org/10.1006/jvbe.2001.1815

Burić, I., & Frenzel, A. C. (2019). Teacher anger: New empirical insights using a multi-method approach. *Teaching and Teacher Education*, *86*. https://doi.org/10.1016/j.tate.2019.102895

Burić, I., Slišković, A., & Macuka, I. (2018). A mixed-method approach to the assessment of teachers' emotions: Development and validation of the Teacher Emotion Questionnaire. *Educational Psychology*, *38*(3), 325–349. https://doi.org/10.1080/01443410.2017.1382682

Chan, D. W. (2006). Emotional intelligence and components of burnout among Chinese secondary school teachers in Hong Kong. *Teaching & Teacher Education*, *22*(8), 1042–1054. https://doi.org/10.1016/j.tate.2006.04.005

Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, *21*(3), 193–218. http://dx.doi.org/10.1007/s10648-009-9106-y

Chaplin, T. M., & Aldao, A. (2013). Gender differences in emotion expression in children: A meta-analytic review. *Psychological Bulletin, 139*(4), 735–765. https://doi.org/10.1037/a0030737

Chen, J., Y, & Frenzel, A. C. (2020) Editorial: Teacher emotions matter: Nature, antecedents, and effects. Frontiers in Psychology, *11*. https://doi.org/10.3389/fpsyg.2020.605389

Cross, D. I., & Hong, J. Y. (2012). An ecological examination of teachers' emotions in the school context. *Teaching and Teacher Education, 28*(7), 957–967. https://doi.org/10.1016/j.tate.2012.05.001

Cvetek, M. (2014). *Živeti s čustvi: čustva, čustveno procesiranje in vseživljenjski čustveni razvoj [To live with emotion: emotion, emotional processing and lifelong emotional development]*. Teološka fakulteta, Univerza v Ljubljani.

Diamond, L. M., & Aspinwall, L. G. (2003). Emotion regulation across the life span: An integrative perspective emphasizing self-regulation, positive affect, and dyadic process. *Motivation and Emotion*, 27(2), 125–156. https://doi.org/10.1023/A:1024521920068

Diamond, L. M., & Fagundes, C. P. (2010). Psychobiological research on attachment. *Journal of Social and Personal Relationships*, *27*(2), 218–225. https://doi.org/10.1177/0265407509360906

Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education*, *51*(1), 88–100. https://doi.org/10.1016/j.tate.2015.06.006

Eisenberg, N., Hofer, C., & Vaughan, J. (2007). Effortful control and its socioemotional consequences. In J. J. Gross, & R. A. Thompson (Eds.), *Handbook of emotion regulation* (pp. 287–306). The Guilford Press.

Ekman, P., & Davidson, R. J. (Eds.). (1994). *The nature of emotion: Fundamental questions*. Oxford University Press.

Evers, C., Stok, F. M., & de Ridder, D. T. D. (2010). Feeding your feelings: Emotion regulation strategies and emotional eating. *Personality and Social Psychology Bulletin*, *36*(6), 792–804. https://doi.org/10.1177/0146167210371383

Farouk, S. (2010). Primary school teachers' restricted and elaborated anger. *Cambridge Jour-*

nal of Education, *40*(4), 353–368. https://doi.org/10.1080/0305764X.2010.526592

Feldon, D. F. (2007). Cognitive load and classroom teaching: The double-edged sword of automaticity. *Educational Psychologist*, *42*(3), 123–137. https://doi.org/10.1080/00461520701416173

Flynn, J. J., Hollenstein, T., & Mackey, A. (2010). The effect of suppressing and not accepting emotions on depressive symptoms: Is suppression different for men and women? *Personality and Individual Differences*, *49*(6), 582–586. https://doi.org/10.1016/j.paid.2010.05.022

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society B, 359*(1449), 1367–1378. https://doi.org/10.1098/rstb.2004.1512

Fredrickson, B. L. (2005). Positive emotions. In C. R. Snyder & S. J. Lopez (Eds.). *Handbook of Positive Psychology* (pp. 120–134). Oxford University Press.

Fredrickson, B. (2008). Promoting positive affect. In M. Eid & R. J. Larsen (Eds.). *The science of subjective well-being* (pp. 449–468). The Guilford Press.

Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durksen, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemporary Educational Psychology*, *46*, 148–163. https://doi.org/10.1016/j.cedpsych.2016.05.003

Frijda, N. H. (1988). The laws of emotion. *American Psychologist*, *43*(5), 349–358. https://doi.org/10.1037/0003-066X.43.5.349

Gong, S., Chai, X., Duan, T., Zhong, L., & Jiao, Y. (2013). Chinese teachers' emotion regulation goals and strategies. *Psychology*, *4*(11), 870–877. https://doi.org/10.4236/psych.2013.411125

Gordon, T. (1997). *Trening večje učinkovitosti za učitelje [Performance training for teachers]*. Svetovalni center za otroke, mladostnike in starše.

Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, *24*, 1349–1363. https://doi.org/10.1016/j.tate.2007.06.005

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Gross, J. J., & Barrett, L. F. (2011). Emotion generation and emotion regulation: One or two depends on your point of view. *Emotion Review*, *3*(1), 8–16. https://doi.org/10.1177/1754073910380974

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *55*(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348

Gross, J. J., & Levenson, R. W. (1997). Hiding feelings: The acute effects of inhibiting negative and positive emotion. *Journal of Abnormal Psychology*, *106*(1), 95–103. http://dx.doi.org/10.1037/0021-843X.106.1.95

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation – conceptual findings. In J. J. Gross (Ed.), *Handbook of emotion regulation*, 3–24. The Guilford Press. http://researchgate.net/publication/288957486

Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research*, *68*(1), 61–99. https://doi.org/10.2307/1170690

Hagenauer, G., & Volet, S. E. (2014). Teacher-student relationship at University: An important yet under-researched field. *Oxford Review of Education*, *40*(3), 370–388. https://doi.org/10.1080/03054985.2014.921613

Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*,

14(8), 835–854. https://doi.org/10.1016/S0742-051X(98)00025-0

Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education*, *16*(8), 811–826. https://doi.org/10.1016/S0742-051X(00)00028-7

Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. *Teaching and Teacher Education*, *21*(8), 967–983. http://dx.doi.org/10.1016/j.tate.2005.06.007

Harris, P. (1996). *Children and emotion: The development of psychological understanding*. Blackwell Publishers.

Hascher, T., & Waber, J. (2021). Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educational Research Review*, *34*(8), 2–5. https://doi.org/10.1016/j.edurev.2021.100411

Hinz, A., Zenger M., Brähler E., Spitzer S., Scheuch K., & Seibt R. (2014). Effort-reward imbalance and mental health problems in 1074 German teachers, compared with those in the general population. *Stress and Health*, *32*(3), 224–230. https://doi.org/10.1002/smi.2596

Hochschild, A. R. (2008). Emotion work, feeling rules, and social structure. In M. Greco, & P. Stenner (Eds.), *Emotions: A social science reader* (pp. 121–126). London, Routledge.

Hosotani, R., & Imai-Matsumura, K. (2011). Emotional experience, expression, and regulation of high-quality Japanese elementary school teachers. *Teaching and Teacher Education, 27*(6), 1039–1048. https://doi.org/10.1016/j.tate.2011.03.010

Izard, C. E. (1991). *The psychology of emotion*. Plenum Press.

Izard, C. E., Woodburn, E. M., Finlon, K. J., Krauthamer-Ewing, E. S., Grossman, S. R., & Seidenfeld, A. (2009). Emotion knowledge, emotion utilization, and emotion regulation. *Emotion Review*, *3*(1), 44–52. https://doi.org/10.1177/17540739103809

John, O. P., & Gross, J. J. (2007). Individual differences in emotion regulation. In J. J. Gross, & R. A. Thompson (Eds.), *Handbook of emotion regulation* (pp. 351–372). The Guilford Press.

Johnson, M. K. (2020). Joy: A review of the literature and suggestions for future directions. *The Journal of Positive Psychology*, *15*(1), 5–24. https://doi.org/10.1080/17439760.2019.1685581

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, *20*(2), 178–187. https://doi.org/10.1108/02683940510579803

Kelchtermans, G. (1996). Teacher vulnerability: Understanding its moral and political roots. *Cambridge Journal of Education*, *26*(3), 307–323.

Kelchtermans, G. (2005). Teachers' emotions in educational reforms: Self understanding, vulnerable commitment, and micropolitical literacy. *Teaching and Teacher Education*, *21*(8), 995–1006. https://www.learntechlib.org/p/196827/

Kumcagiz, H., Ersanlı, E., & Alakuş, K. (2014). Hopelessness, procrastination and burnout in predicting job satisfaction: A reality among public school teachers. *International Journal of Approximate Reasoning*, *6*(1), 333–339. https://doi.org/10.7813/2075-4124.2014/6-1/B.45

Lamovec, T. (1991). *Emocije [Emotions]*. Filozofska fakulteta, Univerza v Ljubljani.

Lasky, S. (2000). The cultural and emotional politics of teacher–parent interactions. *Teaching and Teacher Education*, *16*(8), 843–860. https://doi.org/10.1016/S0742-051X(00)00030-5

Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.

LeDoux, J. E. (1989). Cognitive-emotional interactions in the brain. In C. E. Izard (Ed.), *Development of emotion-cognition relations* (pp. 267–291). Erlbaum Associates.

Lever, N., Mathis, E., & Mayworm, A. (2017). School mental health is not just for students:

Why teacher and school staff wellness matters. *Report on Emotional & Behavioral Disorders in Youth, 17*(1),6–12. PMID: 30705611; PMCID: PMC6350815.

Macuka, I., Burić, I., & Slišković, A. (2017). Emocionalna iskustva učitelja kao prediktori njihova mentalnoga zdravlja [Emotional experiences of teachers as predictors of their mental health]. *Psihologijske teme*, *26*(2), 355–375.

Mahan, P. L., Mahan, M. P., Park, N. J., Shelton, C., Brown, K. C., & Weaver, M. T. (2010). Work environment stressors, social support, anxiety, and depression among secondary school teachers. *AAOHN Journal*, *58*(5), 197–205. https://doi.org/10.3928/08910162-20100416-01

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397–422. https://doi.org/doi/abs/10.1146/annurev.psych.52.1.397

Matsumoto, D. (2006). Are cultural differences in emotion regulation mediated by personality traits? *Journal of Cross-Cultural Psychology*, *37*(4), 421–437. https://doi.org/10.1177/0022022106288478

McLean, L., Arby, T., Michelle, Taylor, M., Jimenez, M., & Granger, K. (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. *Teaching and Teacher Education*, *65*, 230–240 https://doi.org/10.1016/j.tate.2017.03.018

Mérida-López, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, *85*, 121–130. https://doi.org/10.1016/j.ijer.2017.07.006

Mesquita, B., & Albert, D. (2007). The cultural regulation of emotions. In J. J. Gross, & R. A. Thompson (Eds.), *Handbook of emotion regulation* (pp. 486–503). The Guilford Press.

Meyer, D. K. & Turner, J. C. (2007). Scaffolding emotions in classroom. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 243–258). Elsevier Inc.

Milivojević, Z. (2008). *Emocije: razumevanje čustev v psihoterapiji [Emotion: understanding emotions in psychotherapy]*. Psihopolis institut.

Moè, A., Pazzaglia, F., & Ronconi, L. (2010). When being able is not enough: The combined value of positive affect and self-efficacy for job satisfaction in teaching. *Teaching and Teacher Education*, *26*(5), 1145–1153. https://doi.org/10.1016/j.tate.2010.02.010

Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education*, *28*(3), 458–486. https://doi.org/10.2307/4126479

Moors, A., Ellsworth, P. C., Scherer, K. R., & Frijda, N. H. (2013). Appraisal theories of emotion: State of the art and future development. *Emotion Review*, *5*(2), 119–124. https://doi.org/10.1177/1754073912468165

Musek, J. (2005). *Psihologija življenja [The psychology of life]*. Inštitut za psihologijo osebnosti.

Oatley, K., & Jenkins, J. M. (1996). *Understanding Emotions*. Blackwell Publishers.

Obradović, M., Gluvić, Z., Petrović, N., Obradović, M., Tomašević, R., Dugalić, P., & Isenović, E. R. (2017). A quality of life assessment and the correlation between generic and disease-specific questionnaires scores in outpatients with chronic liver disease-pilot study. *Romanian Journal of Internal Medicine*, *55*(3), 129–137. https://doi.org/10.1515/rjim-2017-0014

Panksepp, J. (1994). The basics of basic emotions. In P. Ekman, & R. J. Davidson (Eds.), *The nature of emotion* (pp. 20–24). Oxford University Press.

Papalia, D. E., Wendkos Olds, S., & Duskin Feldman, R. (2009). *A child's world: Infancy through adolescence*. McGraw-Hill.

Plutchik, R. (1980). *Emotion: A psychoevolutionary synthesis*. Harper & Row.

Prosen, S., Smrtnik Vitulić, H., & Poljšak-Škraban, O. (2013). Observing teachers' emotional

expression in their interaction with students. *The New Educational Review, 31*(1), 75–85.

Santrock, J. W. (2006). *Life-span development*, 10th ed. McGraw-Hill.

Scherer, K. R. (2011). On the rationality of emotions: Or, when are emotions rational? *Social Science Information*, *50*(3–4), 330–350. https://doi.org/10.1177/0539018411411018

Schutz, P. A., Cross, D. I., Hong, J. Y., & Osborn, J. N. (2007). Teacher identities, beliefs, and goals related to emotions in the classroom. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 223–241). Elsevier Inc.

Seibt, R., Spitzer, S., Druschke, D., Scheuch, K., & Hinz, A. (2013). Predictors of mental health in female teachers. *International Journal of Occupational Medicine and Environmental Health*, *26*(6), 856–869.

Seibt, R., Spitzer, S., Druschke, D., Scheuch, K., & Hinz, A. (2016). Effort–reward imbalance and mental health problems in 1074 German teachers, compared with those in the general population. *Stress and Health*, *32*(3), 224–230. https://doi.org/10.1002/smi.2596

Siegel, D. J. (1999). *The developing mind*. Guilford Press.

Skaalvik, E. M., & Skaalvik, S. (2017). Dimensions of teacher burnout: Relations with potential stressors at school. *Social Psychology of Education: An International Journal, 20*(4), 775–790. https://doi.org/10.1007/s11218-017-9391-0

Smrtnik Vitulić, H., & Lesar, I. (2017). Changes in beliefs regarding good teachers and the characteristics of child development of primary education students. *CEPS Journal*, *7*(4), 185–205.

Smrtnik Vitulić, H. (2007). *Čustva in razvoj čustev [Emotions and the development of emotions]*. Pedagoška fakulteta, Univerza v Ljubljani.

Smrtnik Vitulić, H. (2009). The development of understanding of basic emotions from middle childhood to adolescence. *Studia Psychologica*, *51*(1), 3–20.

Smrtnik Vitulić, H., & Prosen, S. (2022). Teachers' experience and regulation of anger and fear in the school context. *Educational Psychology*, *42*(6), 714–729. https://doi.org/10.1080/01443410.2021.2024514

Sonnemans, J., & Frijda, N. H. (1994). The structure of subjective emotional intensity. *Cognition and Emotion*, *8*(4), 329–350. https://doi.org/10.1080/02699939408408945

Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, *23*(4), 457–477 (2011). https://doi.org/10.1007/s10648-011-9170-y

Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology of Education: An International Journal, 7*(4), 379–398. https://doi.org/10.1007/s11218-004-4229-y

Sutton, R. E. (2007). Teachers' anger, frustration and self-regulation. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 259–274). Elsevier Inc.

Sutton, R. E., Mudrey-Camino, R., & Knight, C. C. (2009). Teachers' emotion regulation and classroom management. *Theory into Practice*, *48*(2), 130–137. https://doi.org/10.1080/00405840902776418

Sutton, R. E., & Wheatley, K. F. (2003). Teachers' Emotions and Teaching: A Review of the Literature and Directions for Future Research. *Educational Psychology Review*, *15*(4), 327–358. https://doi.org/10.1023/A:1026131715856

Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and Teacher Education*, *49*, 78–88. https://doi.org/10.1016/j.tate.2015.03.003

Thompson, R. A. (2011). Emotion and emotion regulation: Two sides of the developing coin.

Emotion Review, 3(1), 53–61. https://doi.org/10.1177/1754073910380969

Thompson, R. A., & Meyer, S. (2007). Socialization of emotion regulation in the family. In J. J. Gross, & R. A. Thompson (Eds.), *Handbook of emotion regulation* (pp. 249–268). The Guilford Press.

Van Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education. 51*, 88–100. http://dx.doi.org/10.1016/j.tate.2015.06.006

Westphal, M., Seivert, N. H., & Bonanno, G. A. (2010). Expressive flexibility. *Emotion*, *10*(1), 92–100. https://doi.org/10.1037/a0018420

Whitaker, R. C., Becker, B. D., Herman, A. N., & Gooze, R. A. (2013). The physical and mental health of head start staff: The Pennsylvania Head Start staff wellness survey. *Preventing Chronic Disease*, *10*, 130e171. http://dx.doi.org/10.5888/ pcd10.130171ž

Woods, P., & Jeffrey, B. (1996). *Teachable moments*. Open University Press.

World Health Organisation (WHO) (n.d.). *WHO remains firmly committed to the principles set out in the preamble to the Constitution*. https://www.who.int/about/governance/constitution

Zembylas, M. (2004). The emotional characteristics of teaching: an ethnographic study of one teacher. *Teaching and Teacher Education*, *20*(2), 185–201. https://doi.org/. 10.1016/j.tate.2014.05.002

Zembylas, M. (2005). Discursive practices, genealogies, and emotional rules: A poststructuralist view on emotion and identity in teaching. *Teaching and Teacher Education, 21*(8), 935–948. https://doi.org/10.1016/j.tate.2005.06.005

Zembylas, M. (2009). Affect, citizenship, politics: implications for education. *Pedagogy, Culture & Society*, *17*(3), 369–383. https://doi.org/10.1080/14681360903194376

THE INSTITUTIONAL CONTEXT OF EARLY CHILDHOOD EDUCATION AND INTEGRATED LEARNING: RESEARCH, TRACKING, EVALUATION

Lidija Vujičić[1], Martina Jularić[2], Daniela Car Mohač[3], Vilko Petrić*[4]

Abstract

Regarding the starting points of modern research in early and preschool education, special emphasis is placed on creating a high-quality stimulating environment for learning and comprehensive development of the child. The fact that a child learns integrally, integrated into different physical and social relationships, encourages research and determination of the starting point for the integrated learning of children in an institutional context. For these reasons, the goal of this qualitative research is to determine the starting points of integrated learning in educational work with children of early and preschool age and to propose possible ways of monitoring and evaluating them in everyday work with children.

The result of our research is the definition of components for integrated learning, which we have described in detail and presented in the paper. We determined five categories: monitoring and evaluating the organization of space (with 22 sub-dimensions); educational strategies of educators (with 18 sub-dimensions); pictures of children (with 14 sub-dimensions); resources, materials, and toys (with 10 sub-dimensions); and atmosphere in the educational group (with 13 sub-dimensions).

Keywords: institutional context, early education, integrated learning, research, tracking, evaluation

....
1   Faculty of Teacher Education, Centre for Childhood Research, University of Rijeka, Croatia.
2   Kindergarten Potjeh, Slavonski Brod, Croatia.
3   Kindergarten Radost, Crikvenica, Croatia.
4   *Corresponding Author. Faculty of Teacher Education, Centre for Childhood Research, University of Rijeka, Croatia; vilko.petric@uniri.hr.

1   Introductory postulates

The new paradigm of early and preschool education, which has its roots in the social-constructivist approach to the education process and the theory of ecological system, has led to a changed image of the child and the redefinition of the notion of quality in early and preschool education as discussed by numerous authors (Dahlberb et al., 2007; Rinaldi, 2006; Pavlović Breneselović & Krnjaja, 2018; Johansson & White, 2011; Maleš, 2011; Miljak, 2015, etc.). In other words, the quality of the experience children participate in becomes the basic aspect (of assessment) of the institutional education quality. Both theories (the social-constructivist approach to the educational process and the theory of ecological system) emphasise the importance of context and social interaction, as well as the respect for the child as the subject of the education process.

The contemporary educational paradigm emphasises the importance of children's overall development and the creation of conditions for the achievement of children's potentials through integrated learning instead of segmenting the areas and fragmenting knowledge. The discourse researchers adopt when they talk about this topic indicates the fact that, as pointed out by Carlina Rinaldi (1993), children's potential is jeopardised when the ending point of their learning is predefined. Contemporary approaches directed toward the child support the humanistic-developmental concept (Mlinarević, 2004; Petrović Sočo, 2009; Miljak, 2015), emphasising the significance of the stimulating environment on the overall children's development, while integration is considered a feature of the early education curriculum. Contrary to the isolated, disconnected, and unusable knowledge of the behaviouristic approach, which is directed toward the educator who offers the prescribed information in a prescribed way, the child's natural learning affects all aspects of their development in a natural way. In this sense, the basic purpose of integration is to furnish children with 'topics or concepts inside their domain of experience, which enables them to explore, interpret and engage in learning activities' (Bredekamp & Rosegrant, 1995, 168, according to Petrović-Sočo, 2009). It is important not to offer any topic but the ones that make sense to them.

In the constructivist paradigm and the curriculum based on it, the basic postulate is that knowledge and understanding are built, constructed, acquired, and developed by children's active participation, directly acquiring experience by interacting with their physical and social environment, not by direct teaching, as pointed out by Miljak (2000). According to the

social-constructivist theory, the education process is seen as a dialogue and interaction between the preschool teacher, child, and environment. In this process, children are active: they construct and reconstruct their knowledge, changing themselves and the environment. A view of the child as an active, social, competent, whole being, intrinsically motivated to learn and understand the world around themselves, as protagonists in the creation of their own knowledge, necessitates a holistic (integrated) approach to shaping the curriculum, as well as the assurance of a stimulating environment and a variety of choices in the acquisition of different material and social experiences (Vujičić et al., 2016, 2021). The social-constructivist approach implies a more complex but also responsible role of the preschool teacher: a reflexive practitioner (Vujičić, 2021a). Their role is significantly changed. They become active individuals who are able to think critically, ensure the preconditions for the development of each child, encourage and support children in the learning process, and become researchers of actual processes of learning and creating knowledge. They are those who determine the overall quality and perspective of knowledge and experience of kindergarten children. In such a context, learning as a dynamic and complex process comes to the fore.

Early and preschool children's learning is integrated, interwoven with the whole context of daily life in the kindergarten, and is the result of their actions and collaboration with others (Vujičić et al., 2016). It is not fragmented or divided by areas or content. The children's learning quality can be achieved only by respecting the wholeness of the conditions in which children live every day (MacNaughton, 2012; Vujičić & Petrić, 2021). Integrated learning presupposes the interweaving of play and learning, a view 'where play is an activity which at the same time supports different aspects of a child's holistic development and unites the manifold areas of their learning' (Šagud, 2015, as cited in Vujičić & Petrić, 2021, p 13), while every situation is seen as a situation of learning. Integrated learning is based on the creation of possibilities/opportunities in a stimulating environment encouraging children to question and explore their assumptions and innate curiosity for learning by interacting with the physical and social environment, and cooperating with peers and other adults. The physical and social-pedagogic environment are the two key dimensions in the context of early education institutions in the realisation of integrated learning.

The context of the early education institution (Petrović-Sočo, 2007), which is so complex and dynamic that it is sometimes defined as a 'living

organism', should enable the overall development of children's potentials with its interaction. A well-designed and pedagogically formed environment offers more complete and varied opportunities for children's learning. Besides children's learning, the organisation of the spatial-material environment in the kindergarten also affects the quality of their social interactions. The institutional context mostly depends on the way a preschool teacher sees a child, what kind of relationships with the children and among the children they cherish, specifically what kind of environment they can ensure (Vujičić & Petrić, 2021).

The social environment is a special dimension of the kindergarten environment that is interwoven with the physical kindergarten environment, defining the direction and quality of activities children are engaged in. The quality of the children's environment is of key significance due to the fact that, in their environment, children construct and co-construct their knowledge in cooperation with other children and adults, which makes the good organisation of the institutional context extremely important. Special attention has been paid to the social and physical environment of the child in the last twenty years, and the question of the institutional context quality has become more current.

The early child lives and gets educated in an institutional context; they shape their being with all its human characteristics, they form their personality, adapt to the written and unwritten rules of the social environment, and conduct self-actualisation through a valid system of social values; they get educated, i.e. develop their cognitive abilities and learning in a systematic and organised way thus progressively changing through time (Petrović-Sočo, 2007, 3).

Different, interconnected structures in the institutional context determine the quality of learning conditions, and relate to the way the space is organised, how many learning materials there are at their disposal and their quality, what their everyday interactions with the child are, what is the relationship between adults and children, the way adults communicate, and how the time structure is arranged. The described organisation requires a research approach of the preschool teacher in the organisation of space (Vujičić & Petrić, 2021).

2   Methods

The basic starting point for this research was the creation of a model for monitoring, determining, and understanding integrated learning in the institutional context. This model questions the organisation of space, how preschool teachers apply educational strategies, what they are, the available aids, materials and toys, the preschool teacher's image of the child, and what the atmosphere in the educational group says about the educational process. The aforementioned forms a frame in the methodology of creating an instrument for monitoring and evaluating the representation of integrated learning in an early and preschool education institution.

The variables have been operationalised; the researchers have grouped the items which detected a certain category. In determining the basic postulates, a consensus was reached that those needed to be key elements, indicators that integrated learning is in question. Due to its exact and factual nature, as well as measurability, this research is different from other existing scales assessing the quality of the learning environment; integrated learning could not previously be measured in this way.

2.1   Research aim

The aim of the research was to determine the postulates of integrated learning in the educational process and give a suggestion for their monitoring and evaluation during direct work with children in early education institutions.

2.2   Research method

Miljak (2015) emphasises that the sole understanding of the educational practice (critical ethnography with critical dialogue) does not necessarily ensure a change in the educational context. Ethnographic research is only the first step in action research, and its, in its practical end, a very important segment is a common introduction of changes or transformations of practice based on observing and understanding it, as well as a critical dialogue (discussion) before and after the implemented changes. Senge (2007) is of a similar opinion. He emphasises the question of reflexive openness inside the group as people's ability to constantly question their own settings:

> In many ways the experimental group represents a microcosmos in which the whole organisation is reflected, even if the group

members are not aware of that. It is key not to strive to attempt for all the members of the experimental team to have the same view of the world, but to learn how to productively work with different views of the world in the experimental team. Can team members learn how to perceive different points of view as a possibility which could be used to expand their way of thinking instead of assuming a defensive stance? If they can, then it is possible that they will be able to face the doubts and questions of people outside the team showing curiosity before friendship. (p. 269)

Therefore, we are herein especially emphasising the importance of the researcher's reflexive discourse as a method in our research, which was the starting point for children's integrated learning in the institutional context of the kindergarten. The study of the literature led to the use of the content analysis method, which enabled the research to be objective and systematic.

Based on content analysis and detailed, multiple analyses of video footage of the educational process, the following starting postulates for monitoring and evaluation of integrated learning have been separated: spatial organisation, preschool teacher and the application of educational strategies, images of the child, aids, materials and toys, and the atmosphere in the educational group. Each constituent was analysed in detail, worked on, shortened, and changed in order to be described as clearly and concretely as possible.

The first step in the research was to separate and study the relevant literature, after which the postulates were extracted and the constituents of each arranged. The next step consisted in grouping similar constituents and eliminating those which were 'unmeasurable' (i.e., difficult to objectify). Joint consideration led to the conclusion that variables could be summarised only if it were clearly described what the meaning of the variable assumed. That was the first step in making the variables concrete. In this phase, the aim was to reach maximal objectification, which presupposes brilliant clarity. The question of which postulates the variables belonged to was thought over, and their position was changed.

The second research phase brought on a larger number of variables, but by multiple inspections of the video footage of the direct education process, the variables were filtered. As many as 20 video recordings were checked for the purposes of this research, and they were about the direct

educational work with children during different parts of the day, about different activities, with different educational groups. Researchers described the variables in detail to see what the larger picture and the focus were. The operationalisation of the variables led to a clear picture. Literature was analysed again, and the categories/constituents explained more extensively; they were described, made concrete, and the items were separated (i.e., they were made independent from one another). In order to see the width, the obtained variables were checked a few times and then narrowed down so as to be right, clear, defined and recognised. The aim was for all those studying the variables 'to see' (they had to see and express their agreement) the same thing. This is the contribution of the research process; it took a year of intensive work to complete.

A serious problem in the construction of the instrument was the interweaving of constituents through more different postulates, which only confirms 'the fluidity' of the education process as a 'living organism', the holistic approach to the child, and the education process. Led by the contemporary paradigm of early education, the research focus was clearly defined, through numerous discussions, considerations, and reflections with professionals, in order to generate a hypothesis through it. The macro- and micro-levels (i.e., the general and specific parts) were shown. In the third phase, it was established that the basic postulates, or domains set, made one whole. Why those variables were chosen and what they defined was thought over and clearly defined. A scale estimating the representation of integrated learning in the institutional context was obtained.

3   Results and discussion

As stated in the previous chapter, five postulates of children's integrated learning in the institutional context were separated: spatial organisation, preschool teacher and the application of educational strategies, image of the child, aids, materials and toys, and the atmosphere in the educational group. What follows is the description of the results for each of them.

The constituents for monitoring and evaluation of spatial organisation (Table 1) relate to all visible and measurable elements that describe the space of the kindergarten, possibilities of children's interaction with the space and its elements, as well as the level of integrated learning that the spatial organisation offers to children. Space has a significant role in children's learning because whether and how children will communicate and construct their knowledge depends on it. Children are not able to predefine what and how

they will play, so the space needs to suggest, by its functionality, materials and aesthetics, what will be researched or played.

Table 1. The presentation of constituents for monitoring and evaluation of spatial organisation

The space is divided into activity centres.
Desks and chairs function with the purpose of children's learning.
The space is organised, adapted, and changed by children in line with their needs and interests.
Availability of movable equipment for the stimulation of movement.
The space offers various stimuli.
The stimuli offer learning challenges.
There is a precondition for the interaction with other children and adults.
The organisation of stimuli and materials enables self-learning situations.
Children can use all the kindergarten spaces independently.
The use and conversion of different kindergarten spaces – challenges for movement and physical activity.
The space gives the image of satisfying children's needs.
The space offers a constant source of opportunities for research and creative creation.
Spatial organisation encourages/enables rich social relationships/interactions among children of different ages, as well as children and adults.
Choice of different sources of knowledge, spaces, playing partners.
The spatial and material conditions enable the actualisation of different learning styles.
The space satisfies children's need for movement, independence, and interaction.
The space is structured to stimulate children's creativity and wish to experiment and solve problems.
The space enables children's free movement and quality of their common relations.
Different places in the space are filled with contents that attract children's attention and stimulate sensorimotor skills.
The environment stimulates movement.
The space displays children's works, which offer them an insight into their previous activities but also tell them that their work is appreciated.
The preschool teacher creates the context in which children's curiosity and their theories will be checked, noted down and listened to.
The spatial organisation stimulates learning by construction and co-construction, with a rich supply of materials and by enabling children, as well as children and adults, to meet, hang out and interact.

Malaguzzi (as cited in Petrović-Sočo, 2007) points out that the space has to meet three requirements: movement, independence, and interaction. Petrić et al. (2021) emphasise that the spatial organisation in the kindergarten is directly connected to the development of motor achievements

and learning processes in children. Integrated learning encouraged by the spatial environment in the early education institution can significantly contribute to the overall motor development of the child (Petrić, 2022). Petrović-Sočo (2007) thinks that in well-organised institutional conditions children should have the advantage of a wide space to move, while different places in the rooms should be filled with objects attracting children's attention and stimulating the development of sensorimotor skills and prosocial relationships, giving them an amplitude of new information. According to Croatia's national curriculum for early and preschool education (2015), a stimulating spatial and material environment promotes children's autonomy and holistic development, and it is rich in stimuli which support children's exploratory nature. In the Reggio Emilia pedagogy, the space plays the role of the third educator: it is challenging, enables movement and invites children to participate in activities. A stimulating spatial-material environment motivates children to question and explore assumptions, thus satisfying their innate curiosity.

In the organisation of the space, priority is given to the partitioning of spaces since a space divided into smaller units (activity centres) invites children to form groups and contributes to their interaction, communication and, in general, cooperation, whereas the division of space enables to design the content more easily. The spatial and material environment highly determine the quality of learning, but also the atmosphere in the group. Walls should be rich in children's works and send the message that their work is appreciated. It is extremely important to include children in the shaping, planning, and maintenance of the environment (the child as the co-creator of the environment). The physical organisation of the space stimulates social development through the spatial organisation and abundance of materials, and it influences the type of peer interaction. The space in which children spend a large portion of their time should have areas where they will be able to retreat and isolate themselves when they feel tired. When children have the opportunity to interact with other children in a safe, attractive environment, they can build confidence in their own abilities in play, as well as in real life. Some corners are naturally more social than others. For instance, drama, family games, doll games, and board games stimulate social interaction more than puzzle games, drawing, or playing with clay.

Those constituents enable objective monitoring and evaluation of spatial organisation in the kindergarten, organised so that it supports integrated learning.

The application of preschool teachers' educational strategies (Table 2) describes the preschool teachers' implicit pedagogy, which is reflected in their interventions and approach to children in different situations of the educational process. The preschool teachers' implicit pedagogy reflects the values which clearly show what kind of image the preschool teacher has of a child, as well as their expectations from children (Vujičić, 2011). Pavičić Vukičević (2013) emphasises that how preschool teachers see children and which learning theory they support influences what kind of environment they will ensure, how they will structure time, encourage social relationships in the group, the institution, with parents and the wider community. Preschool teachers make daily efforts to question the modalities of supporting children's growth and development, as well as the creation of the most suitable conditions for the achievement of their potentials. This is in accordance with the image of the preschool teacher who is not a transferor of knowledge but has the role of a facilitator in the children's learning process through mediation and in-directionality, as required by the constituents of this postulate of children's integrated learning in an institutional context.

Table 2. The presentation of constituents for monitoring and evaluation of the application of preschool teachers' educational strategies

Preschool teacher's non-intrusiveness (indirect support).
Preschool teacher's accessibility.
The preschool teacher cherishes a democratic relationship with the children.
The preschool teacher offers children the freedom of choice, and independence in learning and autonomy.
The respect for children's autonomy is recognised (respect for independence and initiative).
The correlation of different contents can be observed (the holistic approach).
The preschool teacher respects different ways in which children learn.
The preschool teacher documents the educational process.
The preschool teacher recognises different ways in which children learn.
The preschool teacher encourages research and questioning.
The preschool teacher encourages collaborative learning.
The preschool teacher encourages skills of reflection and self-reflection through photo/video documentation.
The preschool teacher enables deeper knowledge (children are allowed to learn through play, exploration and speech).
Trust is established among preschool teachers and children.
The preschool teacher reacts to children's actions – need, interest, activity.

> The preschool teacher serves as a model to children and questions his/her own actions retrospectively.
>
> The preschool teacher encourages children to explore and question their own possibilities.
>
> The preschool teacher supports children's risky play.

Hence, these preschool teachers' strategies mostly relate to their social competencies, as described by Romstein and Staković (2017) who point out that the aimed competencies are inseparable parts of the curriculum at all educational levels. The results of their research are in line with the constituents for monitoring and assessing the application of preschool teachers' educational strategies in this research.

The preschool teachers' role is to create a context in which children's curiosity and their theories will be assessed, noted down, listened to and heard; a context in which children will feel trust, freedom, motivation and respect for their existential and cognitive processes. The trust between preschool teachers and children is a reciprocal relationship and a long-lasting process achieved by contemplation about and awareness of the image or theory of a child. It is important to encourage preschool teachers to investigate playing materials and to explore the organisation of the context that supports a rich and wholesome social game among children enabling them to play individually and parallelly. An important element in supporting children's development is the time they spend with other children. To hear and listen to others and have one's own ideas is a challenge for general evaluation and reconsideration. Social interaction with peers is a natural source of contradiction and agitation which stimulates children's growth. The systematic lack of experience in interaction with peers can be a source of difficulties or disadvantages in the child's development. If adults are constantly present and control children, the children become resigned to adults' authority too early and become used to heteronomy instead of autonomy (Vujičić, 2011).

Previous research dealing with the topic of integrated learning shows that children who participated in integrated learning instead of directly conducted didactic principles achieved better results than a control group (Bulunuz, 2013). Moreover, the results of the research conducted by Vujičić, Peić, and Petrić (2020), in which the aim was to determine the differences between children's standard integrated learning and integrated learning based on movement, indicate a strong influence of integrated learning based on movement on the quality of the education process.

One of the postulates of integrated learning is also the monitoring and evaluation of the image of a child (Table 3). It contains constituents that provide a picture of the education process quality, which is reflected in the preschool teacher's view of the child who is active, competent, creative, autonomous, full of potentials, who knows and creates, understands, is not a passive receiver of knowledge, has a 'hundred languages' (Giudici & Rinaldi, 2002), which he/she uses to express their understanding of the world. Such is a preschool teacher's image of the child, in line with the Reggio Emilia pedagogy and constructivist paradigm, in which the irreplaceable features are attentive listening, observation of children during activities, exploration of the educational practice, documentation, interpretation and redefinition of hypotheses, which all necessitates interaction in the education process.

From the social-constructivist perspective, the education process in the institutional context offers children the possibility to produce different hypotheses or theories that they can check in an environment which we call stimulating due to those opportunities. They can confront them with other theories, create their own meanings, and make their own choices. 'To be clear, this is a learning process not only for the child, but also preschool teachers if they are able to make notes about children's ideas, theories and hypotheses with respect, consideration and amazement' (Dahlberg et al., 2003, p. 55). In other words, with the environment, preschool teachers send the message to children about what they think of their learning and what they expect of them, thus making their theory visible and implementing it in practice.

Table 3. Presentation of constituents for monitoring and evaluation of the image of a child

Children determine the course of activities. / Offering autonomy to children.
Preschool teachers show respect for each child and interest in their feelings, ideas, and experience.
Each child has the freedom to choose contents and activities.
The preschool teacher encourages children to self-assess activities and procedures.
By the organisation and supply of materials in the environment, preschool teachers directly communicate to children what they expect of them, and what image or theory they have about them and their learning.
The view of children who are not passive consumers of knowledge nor weak beings full of limitations, but prudent beings full of potentials.
The quality of social interaction: preschool teacher-child and child-child.

Preschool teachers support and enhance children's abilities and learning.

Preschool teachers design and arrange stimulating material and spatial environments.

Preschool teachers enable spatial, time and social flexibility.

Preschool teachers support individual and group learning.

Preschool teachers observe children's play and activities.

Preschool teachers listen to children ('the pedagogy of listening').

Children are active creators of their own socialisation and construction of knowledge in collaboration with other children and (supportive) adults.

The contemporary, post-modernist theory of children's development puts the social-constructivist theory to the front. It sees the child as a social being from their birth, and in their joint activities with other children and adults, they co-construct, reflect, and reconstruct their knowledge. Therefore, children are not passive consumers of knowledge, and neither are they weak beings full of limitations but prudent beings full of potential. How these potentials and abilities will develop and to what extent depends on the quality of the environment in which they live, are educated, and learn. Hence, the idea of the importance of the social context on the children's overall development is introduced as part of the social constructivist paradigm.

The preschool teachers' beliefs and expectations of children influence the formation of the environment and communication with children, specifically on the overall educational approach. By the organisation and supply of materials in the environment, preschool teachers directly communicate to children what they expect of them, and what image or theory they have about them and their learning. When a preschool teacher understands children, what they do and what sense that makes for them, they can organise the environment better to continue exploration and learning. An important role played by the preschool teacher is the introduction of changes into the environment, which means that the preschool teacher may not allow for the space and stimuli in it to be always the same.

In the analysis of constituents for monitoring and evaluation of the aids, materials, and toys (Table 4), it is important to direct attention to the fact that a thoughtful choice of materials, their diversity, and accessibility fulfil the role of children's integrated learning. They are especially important because they offer children the meaning of the environment they are in since children learn by exploring the world around them (Vujičić & Petrić, 2021). The amplitude of materials encourages children to explore, reveal and solve problems. In this context, aids, materials, and toys serve

the function of learning and enable children's participation and innovation in their own process of learning and exploration.

Ensuring numerous materials, the possibility of free movement in space, choice of materials, choice of playing and action partners represent an important contribution to the more comprehensive development of children at the cognitive – intellectual, speech, practical – active level, along with the belief in their own strengths and a positive attitude to their own possibilities. […] A flexible organisation of space which is rich in the supply of material encouragements supports, on the one hand, concentration, perseverance and interest, and on the other diminishes unwanted behaviour among children. (Sindik, 2008, 144).

Moreover, it is advisable to keep the materials always accessible to children so that they can use them without too many interventions by preschool teachers and that they are interesting and stimulate manipulation and exploration so that children can satisfy their own interests (Miljak, 2015).

Table 4. Presentation of constituents for monitoring and evaluation of aids, materials and toys

All materials are accessible to children.
There is a variety of materials.
The aids, materials, and toys are adapted to the developmental phases of children in the group.
Availability of natural, pedagogically not-shaped materials.
Each activity centre ensures stimuli which include movement and motivate children to learn through movement.
Materials support exploration, play and learning.
The offered materials enable the engagement of children's different abilities, interests, and intelligences.
Materials support problem-solving situations.
Materials are maintained.
Materials are placed on open shelves.

It is necessary that all kindergarten spaces, not only the 'living room', offer an amplitude of materials, aids, and tools that children can freely choose and manipulate, in a range from simpler to more complex ones. Peterson and Deal (2009, as cited by Pavlović Breneselović & Krnjaja, 2018, p. 33) hold that 'the architecture and artefacts (equipment and materials) represent elements of physical space by which cultural and programme values,

norms and assumptions about preschool education, children, their learning and the role of adults are manifested'.

Each child is different and has different needs, interests, knowledge and abilities, so it is necessary to ensure a variety of materials, as well as a sufficient quantity of materials, but also adapt the environment so as to satisfy children's individual needs. When it comes to materials, researchers emphasise the importance of accessibility of natural, pedagogically not-shaped materials, which stimulate exploration, play and learning. According to Petrović-Sočo (2007), materials that are maintained and placed on open shelves tell children that they deserve their attention and that they can make individual use of them.

When the stimuli and materials are well-supplied, and the preschool teacher offers indirect support, children can have a high level of independence in the learning process, and their overall growth and development, as well as education, are influenced. The supply of various materials enables children to explore their own ideas, satisfy their interests, and develop creativity, in that way enhancing their active learning.

The atmosphere in the educational group is described (Table 5) by constituents that show measurable predictors of a pleasant and positive atmosphere in the educational group. A good atmosphere is derived from the application of contemporary knowledge about education and the humanistic curriculum based on accepting and understanding children.

Table 5. Presentation of constituents for monitoring and evaluation of the atmosphere in the educational group

Atmosphere encouraging participation in activities.
Atmosphere encouraging teamwork.
Atmosphere in which children can be free to express themselves.
The context enables dialogue among children, preschool teachers and the environment.
The context has relationships child-child, adults-child, child-space-materials, and it is dynamic.
Preschool teachers express warmth through verbal and non-verbal signs by which they create a psychologically healthy climate in their mutual relationship and the feeling that the other person is accepted as a personality.
Preschool teachers create a warm and cheerful atmosphere.

Preschool teachers have a positive attitude to children and all stakeholders in the education process.

Children's and adults' laughter is present in the educational group (predictor of relaxation).

Children's active engagement.

Children are highly motivated for learning and exploring the environment.

A pleasant murmur is heard in the educational group.

Children feel comfortable, relaxed, happy, and participate in play and other activities.

The creation of a positive atmosphere in the group, in which each child feels accepted and welcome, is extremely important for the quality of learning and the education process. Tatalović Vorkapić and Jelić Puhalo (2015) emphasise that the behaviour of preschool teachers affects the atmosphere in the educational group making it either positive or negative. This is highly significant since the quality of children's life inside the preschool institution depends on the atmosphere. Tatalović Vorkapić (2012) emphasises that the interaction of preschool teachers and children, and the whole atmosphere in the kindergarten group, directly depend on the preschool teachers' personalities, which makes them an important component of the education process.

Ensuring a stimulating, pleasant and cheerful atmosphere in the educational group encourages children's participation and motivates and engages them, while in a warm and cheerful atmosphere, children feel safe, and it has been confirmed by other research on this topic. It is extremely significant that preschool teachers create an atmosphere which contributes to pleasant feelings, feelings of acceptance, closeness and affection, where children can freely express themselves, solve problems in different ways, where individuality, difference and spontaneity are respected, and where children are encouraged to take risks and accept both success and failure.

For the overall development of children, it is important to create a relaxing and supporting atmosphere in the educational group of the early and preschool education institution. It is important to enable them to choose activities and contents which they will be fully absorbed in and make them find better solutions to certain problems. This is especially achievable when working on common projects. Furthermore, it is important to give children the opportunity to discuss what they have learnt and their ideas with other children, preschool teachers and also parents. In the Reggio pedagogy (Vujičić, 2021), the problem is not asking ourselves how to teach children, but it is more about what and how children can

learn from a certain situation, construct situations together with children to make them find out that they understand a specific topic, but also their own learning style leading to a deeper understanding of the self.

4   Conclusion

Via content analysis and detailed analysis of video footage of the education process, the following postulates for monitoring and assessing integrated learning have been defined: spatial organisation, preschool teacher and the application of educational strategies, image of the child, aids, materials and toys, and the atmosphere in the educational group.

By applying the content analysis method, the relevant literature with examples of scales for the assessment of good learning environments in different pedagogical approaches has been separated. At the same time, the video reflexive methodology was used to film the education process with children. After checking the content of the filmed materials many times, the important constituents of integrated learning were noted, and then discussed by researchers in their reflexive discourse in which they tried to reach a consensus on the definition of basic postulates.

To assess the defined postulates, the authors suggest using the five-point Likert scale by which researchers would assess the extent to which a certain constituent of integrated learning is represented in the educational group. The elements of integrated learning in the kindergarten, which is understood as a living organism, and where the learning process is very dynamic and complex, cannot be assessed as merely present or not present. If integrated learning were so assessed, it would be considered outside reality, because between being present or not there is a whole space for evaluation and assessment.

References

Bulunuz, M. (2013). Teaching science through play in kindergarten: does integrated play and sience instruction build understanding?. *European Early Childhood Education Research Journal*, 21 (2), 226-250.

Dahlberg, G., Moss, P., Pence, A. (2007). Beyond Quality in Early Childhood Education and Care. Falmer Press.

Dahlberg, G., Moss, P., Pence, A. (2007). Beyond Quality in Early Childhood Education and Care: Languages of evaluation, 2nd ed. London and New York: Routledge Falmer.

Giudicci, C.; Rinaldi, C. (ed.) (2002). Making Learning Visible, Children as Individual and Group Learners. Reggio Emilia: Reggio Children.

Johansson, E., White, E. J. (ed.) (2011). Educational Research with Our Youngest. Voices of Infants and Toddlers. Springer.

MacNaughton, G. (2012). Shaping Early Childhood Learners, Curriculum and Contexts. Open University Press.

Maleš, D. (ur.), Nove paradigme ranog odgoja: studija. Filozofski fakultet Sveučilišta u Zagrebu, Zavod za pedagogiju

Miljak, A. (2000). Zašto su okruženje i ozračje važni u dječjem vrtiću? [Why are environment and atmosphere important in kindergarten?]. *Dijete, vrtić, obitelj, 6(22),* 4-8.

Miljak, A. (2015). Razvojni kurikulum ranog odgoja. Model Izvor II [childhood development curriculum. Model Source II]. Mali profesor.

Mlinarević, V. (2004). Vrtićko okruženje usmjereno na dijete [Kindergarten environment focused on the child]. *Škola i život,11* (1), 112-119. https://bib.irb.hr/datoteka/183458.Vrtino_okruzenje_usmjereno_na_dijete.pdf

MZOS. (2015). *Nacionalni kurikulum za rani i predškolski odgoj i obrazovanje [National Curriculum for Early and Preschool Education].* Ministarstvo znanosti, obrazovanja i sporta.

Pavičić Vukičević, J. (2013). Uloga implicitne teorije nastavnika u skrivenom kurikulumu suvremene škole [The role of implicit teacher theory in the hidden curriculum of the modern school]. *Pedagogijska istraživanja, 10*(1), 119-131.

Pavlović Breneselović, D., Krnjaja, Ž. (2018). Građenje kvalitete u praksi vrtića [Building quality in kindergarten practice]. *Odgojno-obrazovne teme, 1*(1-2), 25-46.

Petrić, V. (2022). Kineziološke aktivnosti djece rane i predškolske dobi – postignuća kineziološke metodike [Kinesiological activities of children of early and preschool age – achievements of kinesiological methodology]. Sveučilište u Rijeci, Učiteljski fakultet.

Petrić, V., Vujičić, L., Peić, M. (2021). The Correlation of Different Physical Environment in Early education institutions with the Level of Children's Motor Development. *9th International Scientific Conference on Kinesiology,* 419–422.

Petrović-Sočo, B. (2007). Kontekst ustanove za rani odgoj i obrazovanje–holistički pristup [Context of the institution for early education–holistic approach]. Mali profesor.

Petrović-Sočo, B. (2009). Značajke suvremenog naspram tradicionalnog kurikuluma ranog odgoja [Features of the modern versus the traditional curriculum of early childhood education]. *Pedagogijska istraživanja*, 6(1-2), 123–36.

Rinaldi, C. (1993). The emergent curriculum and social constructivism. In: Edwards C, Gandini L, Forman G (eds) *The Hundred Languages of Children: The Reggio Emilia Approach to Early Childhood Education.* Ablex (p. 101–111).

Rinaldi, C. (2006). In dialogue with Reggio Emilia- Listening, researching i Learning. Routledge.

Romstein, K., Staković, L. (2017). Value System, Implicit Pedagogy, and Competencies of a Contemporary Preschool Teacher. *Pannoniana: Časopis za humanističke znanosti,* 1(2), 32–43.

Sindik, J. (2008). Poticajno okruženje i osobni prostor djece u dječjem vrtiću [Stimulating environment and personal space of children in kindergarten]. *Metodički obzori, 3(2008)1(5),* 143–154.

Senge, P. M. (2007). Peta disciplina – principi i praksa učeće organizacije [The fifth discipline – principles and practice of the learning organization]. Mozaik knjiga.

Tatalović Vorkapić, S. (2012). The significance of preschool teacher's personality in early childhood education: Analysis of Eysenck's and Big Five dimensions of personality. *International Journal of Psychology and Behavioral Sciences*, *2*(2), 28-37.

Tatalović Vorkapić, S. i Jelić Puhalo, J. (2015). Povezanost osobina ličnosti, nade, optimizma i zadovoljstva životom odgojitelja predškolske djece [The connection between personality traits, hope, optimism and life satisfaction of preschool educators]. *Napredak*, *157*(1-2), 205-220.

Vujičić, L. (2008). Kultura odgojno - obrazovne ustanove i kvaliteta promjena odgojno - obrazovne prakse [Culture educational institutions and quality of changes educational practice]. *Pedagogijska istraživanja, 5*(1), 7-20.

Vujičić, L. (2011). *Istraživanje kulture odgojno - obrazovne ustanove [Research of culture educational institutions]*. Mali profesor.

Vujičić, L. (2011). Novi pristup istraživanju kulture vrtića. In: D. Maleš (ed.) Nove paradigme ranoga odgoja. Filozofski fakultet Sveučilišta u Zagrebu, Zavod za pedagogiju (p. 209–236).

Vujičić, L. i sur. (2016). Razvoj znanstvene pismenosti u ustanovama ranog odgoja [Development of scientific literacy in early childhood education institutions]. Učiteljski fakultet u Rijeci.

Vujičić, L., Peić, M., Petrić, V. (2020). Representation of Movement-based Integrated Learning in Different Physical Environments of an Early Education Institution. *Revija za elementarno izobraževanje/Journal of Elementary Education*, *13*(4), 453–474.

Vujičić, L. (ur.) (2021). *Implementacija teorije u praksu ili nema dobre teorije bez dobre prakse [Implementing theory into practice or there is no good theory without good practice]*. Sveučilište u Rijeci, Učiteljski fakultet.

Vujičić, L. (2021a). Učenje u ranom djetinjstvu: učiniti učenje vidljivim [Learning in early childhood: make learning visible]. In: Pejić Papak, Zuljan, Vujičić (ur.) Poticajno okruženje za učenje i poučavanje: razvoj kompetencija studenata. Učiteljski fakultet; Kopar: Pedagoški fakultet (p. 30–72).

Vujičić, L., Petrić, V. (2021). Integrirano učenje uz pokret u ustanovama ranog odgoja [Integrated learning with movement in early childhood education institutions]. Učiteljski fakultet Sveučilišta u Rijeci.

ABOUT THE AUTHORS

Tatjana Bandera-Mrakovčić has been working in elementary schools for over 41 years. She has been working at Nikola Tesla Elementary School as an elementary school teacher in half-day and full-day classes and she advanced from teacher to mentor and was also the coordinator of the district council for elementary school teachers. She is principal of Nikola Tesla Elementary School since 2008. She has given numerous lectures and participated in various professional development workshops, especially as a principal of a school that participated in the national experimental educational reform "Škole za život". She is a member of the Professional Examination Board for prospective teachers. She has also been advanced to principal mentor.

Sanja Berčnik, PhD, is employed at the Faculty of Education, University of Ljubljana. She is an assistant professor in the area of pedagogy and the head of the Department of Basic Pedagogical Studies. She took her doctoral degree in the field of pedagogy; her doctorate was titled Parent cooperation as a part of kindergartens and schools educational concept. Her bibliography consists of more than 150 units. She is the co-authoress of books, textbooks, manuals, and workbooks, authoress of scientific and professional articles from the field of education and preschool education, partnership between faculties, kindergartens and schools which appeared in journals, monographs and other publications at home and abroad.

Željko Boneta, PhD, is an associate professor at the Faculty of Teachers in Rijeka, where he teaches sociology subjects (Sociology, Sociology of Education, Sociology of the Family). He has published a book and more than 30 scientific articles in national and international journals and proceedings. He has directed two scientific research projects and is a collaborator on nine scientific research projects. He actively participated in international and national scientific meetings.

Daniela Car Mohač is a doctoral student of Pedagogy at the Faculty of Humanities and Social Sciences in Rijeka. Since this year she has been working as an assistant at the Faculty of Education in Rijeka. She has a Master's degree in Early and Preschool Education and a degree as a professional for the coaching profession. With twenty-three years of experience in Radost Crikvenica kindergarten and as a founder and manager of Children's sports schools, she combines sports and pedagogy in her

practical and theoretical framework. In addition to children's physical activity, her areas of interest are early childhood and preschool education, professional development of preschool educators and partnership between kindergarten and family. Her work has been presented at numerous local and international scientific meetings and conferences.

Akvilina Čamber Tambolaš is a Master of Early and Preschool Education and works as a teaching and research assistant at the Faculty of Teacher Education, University of Rijeka, Croatia. She is a doctoral student at the Department of Pedagogy, Faculty of Arts and Social Studies, Rijeka, Croatia. Her research interests include early and preschool education, the culture of educational institutions, the new paradigm of children and childhood, curriculum (co-)construction, and action research. As a co-author, she has published a number of scientific research papers and chapters in scientific books and manuals in national and international contexts and actively participated in a dozen international and national scientific conferences. As a member of a project team, she has been involved in several national and European professional/scientific research projects.

Tatjana Devjak, PhD, works at the Faculty of Education, University of Ljubljana. She is a full professor of pedagogy. She received her Master's degree and PhD in Ethics and Citizenship Education. She is the author of books, textbooks, handbooks, workbooks, scientific and expert contributions in education, ethics, citizenship, and preschool education, continuing education, and training of professionals in education, in journals, monographs and other publications in Slovenia and worldwide. Her work has been presented in numerous local and international scientific meetings and conferences. In addition to European Social Fund projects, she leads and implements foreign and local research projects.

Martina Jularić is a PhD student at the Faculty of Humanities and Social Sciences at the University of Josip Juraj Strossmayer in Osijek. She works as a preschool teacher at Palunko Sports Kindergarten in Slavonski Brod. She received her Master's degree from the Faculty of Education at the University of Josip Juraj Strossmayer in Osijek. She is the author of professional articles, case reports and reviews in the field of education and preschool education, which have appeared in journals and other publications in Croatia. Her work has been presented at many local and international scientific meetings and conferences.

Petra Ljubičić is an early childhood and preschool educator in Dječji vrtić Rijeka. She received her master's degree in Early Childhood and Preschool Education at the Faculty of Teacher Education in Rijeka. She presented her master's thesis at the days of the Alumni Club of the Faculty of Teacher Education. She attended a number of certified courses, professional lectures and workshops on topics related to early childhood and preschool education, creativity, psychology, mental health, growth and development issues, etc.

Špela Mlakar is a Master of special and rehabilitation pedagogy. She works at primary school Brinje Grousuplje, where she teaches in the adapted education programme for nine-year elementary schools with a lower education standard. The title of her Master›s Thesis is Collaboration between special education teachers and parents in distance education. She is a co-author of the scientific article Accessibility of the constitution of the Republic of Slovenia for persons with intellectual disabilities, the article Creation of an animated film – an opportunity for inter-subject cooperation and the co-author of the Easy-to-read constitution of the Republic of Slovenia, which was voted the best voluntary project of 2021.

Tena Pejčić works as a teaching assistant at the Faculty of Teacher Education, University of Rijeka. She obtained her Master's degree in Integrated undergraduate and graduate study of Primary School Education at the Faculty of Teacher Education in Rijeka. As a Ph.D. student of Pedagogy at the Faculty of Humanities and Social Sciences in Rijeka, her articles deal with primary education. She participated in several conferences where she presented her work.

Petra Pejić Papak, PhD, is an associate professor at the Faculty of Teacher Education, University of Rijeka, where she teaches several graduate courses such as Didactics, Didactic Docimology, and Education and Teaching for Leisure Time. She publishes scientific papers dealing with new pedagogical approaches, teaching and learning strategies in a stimulating environment, teacher competences and the importance of using modern technologies in teaching. She participated in many international and national scientific conferences and collaborated in several national and international projects. She is a member of the committee of the Centre for Childhood Research at the Faculty of Teacher Education, a member of the Teachers' Association and the Association for the Development of Higher Education "Universitas".

Vilko Petrić, PhD, is an associate professor at the Faculty of Teacher Education at the University of Rijeka and is involved in kinesiological education. He is editor-in-chief of the journal Educational issues, leader of the research project on tracking physical activity in education and collaborator on several international projects in the field of education. He is the author of several university books and numerous significant scientific papers. He is one of the creators of the National Curriculum and the Curriculum of Physical and Health Culture. The quality of his work is confirmed by numerous prestigious international awards for science and education, including the award for the best young scientist in Europe and for the best scientist in the field of social sciences from the University of Rijeka.

Romina Plešec Gasparič, PhD, is a teaching assistant for didactics at the Faculty of Education, University of Ljubljana. She defended her doctoral dissertation at the Faculty of Education, University of Ljubljana in 2019. She is a reviewer for different scientific journals. Her main research interests are within-class student grouping, flipped learning and teaching and student teachers' participation in online discussions.

Vesna Podgornik, PhD, works at the Faculty of Education and at the Faculty of Arts, University of Ljubljana. She is an assistant professor in the field of methodology of educational research. She did her PhD on the topic of quality assessment and assurance through self-evaluation in education and professional development of teachers. Her research is therefore based on determining the importance of self-evaluation and teacher research in the process of quality assessment and assurance of school work and kindergartens, as well as professional development of teachers and preschool teachers. She publishes in Slovenian and international journals and monographs on the topics of quality assurance in education, school as a research community, teacher research and self-evaluation, teachers´ professional development, research competence, school climate, etc.

Laura Rožman Krivec, PhD, is employed at the Faculty of Education, University of Ljubljana. She is an assistant in the field of pedagogy. She has a PhD in the field of pedagogy; her doctoral thesis is entitled Leadership for learning and didactical characteristics of teaching in primary school. She is a co-author of books and author of scientific and professional papers in the fields of education, school leadership, entrepreneurship and school social work. Her previous professional experience has been in primary and secondary schools as well as international school.

Vivien Skladany, MA in the field of early childhood education, works in a local preschool on the island of Pašman "Dječji vrtić "Bodulić". After graduating from the Faculty of Teacher Education at the University of Rijeka, she obtained a master's degree in early childhood education. Many of her articles were presented at local festivals for master's theses of the Faculty of Teacher Education; with one of her articles she participated in the International Congress of Teacher Education. Since 2018, she has been working as a preschool teacher, continuously improving her professional development by participating in workshops and lectures and expanding her skills in response to an ever-changing environment.

Milena Valenčič Zuljan, PhD, is a full professor at the Faculty of Education, University of Ljubljana. She obtained her Doctor's degree at the Faculty of Arts, University of Ljubljana, Department of Educational Sciences. Since 1994 she has been employed at the Faculty of Education, University of Ljubljana. Her research interests include various specific didactic topics as well as mentorship, resilience and teacher's professional development. She has published 15 monographs (2 as a single author) and numerous papers in scientific journals, chapters in monographs and conference proceedings. She is an editor and a reviewer of several journals and scientific monographs.

Janez Vogrinc, PhD, is a full professor of educational research at the Faculty of Education, University of Ljubljana. His main area of expertise is methodology of educational research and his current research interests are qualitative research, criteria for assessing the quality of scientific results, teacher education, professional development of teachers, action research and quality assurance. Since October 2016, he has been the Dean of the Faculty of Education at the University of Ljubljana. He is also the chairman of the National Commission for National Examination in Primary Education in Slovenia. He has been involved in numerous international and national research projects in the field of education and is the author or co-author of numerous publications and monographs (e.g. Qualitative Research in Education).

Lidija Vujičić, PhD, is a pedagogue, and full professor. She is the founder and director of the Centre for Childhood Research at the Faculty of Teacher Education, University of Rijeka. Her scientific interests include early and preschool education, the new paradigm of the child and childhood, the culture of educational institutions, (co-)construction of curricula, initial training of preschool teachers, professional development

of teachers/preschool teachers, and action research. She teaches in the Postgraduate Doctoral Programme in Pedagogy at the Faculty of Arts and Social Sciences in Rijeka. For 25 years she has been working with kindergarten teachers to improve their pedagogical skills. As a researcher, she has been involved in several research projects, published a number of research papers and participated in numerous international and national conferences.

Jasna Vukonić Žunič has been working in education for more than 40 years. She started as a teacher in the first generation of full-day educational work at Nikola Tesla Elementary School in the city of Rijeka. She continues to work in the Education Agency as a senior adviser for classroom teachers. She initiated or was involved in numerous programmes and projects to improve educational outcomes. For the past eight years, she has worked as the principal of Pećine Elementary School in Rijeka and also advanced to principal mentor. She is an associate and member of the Quality Committee of the Faculty of Teacher Education at the University of Rijeka. She is the author of a manual for teachers in the field of puppetry, co-author and reviewer of numerous manuals for students and teachers.

Centre for Childhood Research

University *of Ljubljana*
Faculty *of Education*

9 789537 917647