

**State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy
POLAND**

**University of Belgrade, Teacher Education Faculty
SERBIA**

**Educational space.
Selected theoretical and practical approaches**

edited by

Zdzisława Załona

Ivica Radovanović

Nowy Sącz 2020

Scientific Board

prof. Danimir Mandić, PhD; prof. Ivica Radovanović, PhD;
assoc. prof. Zdzisława Zaćlona, PhD

Editorial Boards

Marek Reichel, PhD – chairman; prof. Tadeusz Kudłacz, PhD; prof. Adam Ruszaj, PhD;
assoc. prof. Ryszard Gajdosz, PhD; assoc. prof. Zdzisława Zaćlona, PhD;
Tamara Bolanowska-Bobrek, PhD; Robert Rogowski, PhD; Katarzyna Zwolińska-Mirek, PhD

prof. Ivica Radovanović, PhD – chairman, prof. Danimir Mandić, PhD,
prof. Gordana Mišćević Kadijević, PhD, assoc. prof. Sanja Blagdanić, PhD,
assist. prof. Nataša Janković, PhD

Edited by

assoc. prof. Zdzisława Zaćlona, PhD; prof. Ivica Radovanović, PhD

Reviewers

assoc. prof. Anna Klim-Klimaszewska, PhD; assist. prof. Nataša Janković, PhD

Translation

PHU GALAY Tetyana Baran; Nataša Janković

Technical Editing

Tamara Bolanowska-Bobrek, PhD

© Copyright by Państwowa Wyższa Szkoła Zawodowa w Nowym Sączu
Nowy Sącz 2020

ISBN 978-83-65575-70-8

Published by

Wydawnictwo Naukowe Państwowej Wyższej Szkoły Zawodowej w Nowym Sączu
Poland, 33-300 Nowy Sącz, ul. Staszica 1
tel. +48 18 443 45 45, e-mail: tbolanowska@pwsz-ns.edu.pl

Printed by

Wydawnictwo i drukarnia NOVA SANDEC s.c.
Mariusz Kałyniuk, Roman Kałyniuk
33-300 Nowy Sącz, ul. Lwowska 143
tel. +48 18 547 45 45, e-mail: biuro@novasandec.pl

Contents

Introduction	5
---------------------------	---

PART I.

SELECTED PROBLEMS OF EARLY CHILDHOOD EDUCATION IN THEORETICAL AND PRACTICAL ASPECTS

Ana SARVANOVIĆ, Marta NIKOLIĆ

The active environment: the role of space in early childhood education from a relational materialist perspective	10
--	----

Tatjana MILOSAVLJEVIĆ ĐUKIĆ, Dragana BOGAVAC, Ivica RADOVANOVIĆ

School as an educational environment from the pupils' perspective	19
---	----

Joanna JACHIMOWICZ, Zdzisława ZACŁONA

Interpersonal conflicts in school classroom during the period of late childhood	31
---	----

Anna STRUZIĆ

Old and new media versus integrated teaching textbooks	41
--	----

Danica DŽINOVIĆ, Filip KOJIĆ

Preschool children's engagement in structured physical activity	51
---	----

PART II.

VARIOUS SPACES OF EDUCATION IN TERMS OF THEORY AND PRACTICE

Snežana BABIĆ-KEKEZ

Parent engagement teaching methodology – challenges and dilemmas	64
--	----

Nevena BUĐEVAC, Marija MERŠNIK, Ivan UMELJIĆ

The role of debate in teaching STEM subjects – getting to know the students in a different way	74
--	----

Mirosław MICHALIK, Katarzyna KACZOROWSKA-BRAY, Stanisław MILEWSKI, Anna SOLAK

<i>Articulation rate</i> in the dysfunctional discourse on the example of speech of persons with intellectual disabilities and persons with autism	83
--	----

Ana MILOVANOVIĆ

The importance of the Festival of Puppetry in Education (LUTKEF) for the development of puppetry in education in Serbia	93
---	----

Marek MIERZYŃSKI, Elżbieta CYGNAR, Bogusława GAWEŁ

Modern philosophical and axiological considerations in reference to the ethics of uniformed services	106
--	-----

Information about the authors	117
--	-----

Introduction

Scientific theory, understood as a set of general, ordered laws and theorems, is the most important area of any scientific discipline. Scientific theory describes and explains the conditions and effects of pedagogical processes. It can be used and applied to practice by solving problems that occur in the educational reality. It should be noted that pedagogy is not an isolated discipline, and therefore it uses the theoretical achievements of the humanities and social sciences – it is precisely such a complementary and multifaceted approach that results in a coherent knowledge about people functioning in the socio-cultural reality (Palka, 1989, p. 32). Thus, theoretical pedagogical knowledge concerns the collected general statements about upbringing, education, self-education and lifelong learning. Pedagogical scientists believe that it is both theoretically and practically oriented science. On the one hand, theoretical constructs, assumptions and hypotheses are verified in practice, and on the other hand, a thorough and reliable analysis of practice provides grounds for building a theory. The practical dimension of pedagogy relates to the improvement, refinement and optimization of educational activities (Palka, 2003; Hejnicka-Bezwińska, 2008).

The quoted, important, although only selected, views and scientific statements of pedagogical authorities make people aware of the need to refer to the theoretical foundations when designing and implementing fragmentary pedagogical research that allows to diagnose narrow and wider issues related to education. Complementary to qualitative and quantitative research and the use of triangulation of approaches and a variety of methods open up new fields of research interest. These two research approaches are useful in pedagogical research, they allow us for a more complete understanding the subjects of education in the context of developmental age and the expectations and challenges of contemporary education. Their results are of cognitive, theoretical, practical and methodological importance (Palka, 2020, pp. 107-108).

In the monograph, the authors present many different issues related to the issues of education, upbringing and teaching. On the basis of theoretical foundations, they discuss the results of empirical research that enable the creation of optimal and effective and stimulating conditions leading to the improvement of the quality of educational activities in socio-cultural spaces. Educational space and environment are significant stimulants of the educational changes taking place. The need to keep up with changes, understand them and undertake transformations, as well as active participation in changes related to the sphere of education, are important factors in creating favorable conditions for shaping open individuals who are prepared for life in the changing present and future. Creating conditions for education, most often considered in two categories: space and environment, parameterizes the existence of an individual in the world, and at the same time gives the opportunity to design an individual educational path, allowing for the implementation of its development tasks. Most often it is assumed that the learning process takes place in a specific educational space and in specific environmental conditions that determine its character. Space defines the scope and framework of the phenomena considered in it, thus constituting a category of place or time in which the educational process takes place. The environment, on the other hand, consists of specific physical, social and virtual elements that fill this space, their mutual connections, interactions and dependencies. The educational environment includes a set of elements that create the structure of this space (Nowak, 2014, p. 76).

The considerations presented in this publication are characteristic of theoretical and practical approaches carried out in the areas of selected elements that make up the multidimensional space of education. The scope of the subject has been organized in two separate parts of the monograph.

Part I covers issues related to the problems of early childhood education. The authors Ana Sarvanović and Marta Nikolić write about the role of space in early childhood education from a relational-materialistic perspective. They review contemporary educational and non-educational theoretical views on space that fit in the sociological-constructivist perspective. Against this background, they describe the new role of space in contemporary childhood. The results of diagnostic tests by Tatjana Milosavljević Đukić, Dragana Bogavac and Ivica Radovanović show the school as an educational environment from the students' perspective. Their analysis allows for a better understanding of children's opinions about the educational role of the school, while the conclusions presented in the conclusions may be useful for in-depth analyses and introducing justified pedagogical changes. The issues of interpersonal conflicts in the school class during late childhood are presented by Joanna Jachimowicz and Zdzisława Załona. The authors refer to conflicts related to interpersonal relations between students, students and the teacher. They believe that minimizing the negative and using the positive effects of interpersonal conflicts occurring in classrooms is possible when teachers have sufficient knowledge about the causes of conflicts, their dynamics and ways of responding to the conflict. Anna Struzik discusses the results of research on textbooks for early childhood education – she presents students' statements about the strengths and weaknesses of textbooks, she also points out the need to move away from textbook-centricity and hybrid use of both traditional and new educational media. This part of the study also includes a text by Danica Džinović and Filip Kojić on the involvement of preschool children in organized physical activity. The authors see the relationship between children's activities and their motivation and success, as well as the presented content and the teacher.

Part II contains texts on various areas of education presented in the aspect of theoretical and practical considerations. Snežana Babić-Kekez reviews social needs to improve parental involvement in their children's school life as part of developing a pedagogical culture. The author emphasizes that parents are partners in the joint interaction of school and family, but they expect professional support from the teacher in bringing up their children. Nevena Buđevac, Marija Meršnik and Ivan Umeljić present the issues of implementing the Oxford debates in teaching subjects and getting to know students. They prove, based on their implementation studies in secondary schools that it can be a useful tool in early learning comprehension, argumentation in thinking and discussing, and collaborative skills. The text by Mirosław Michalik, Katarzyna Kaczorowska-Bray, Stanisław Milewski and Anna Solak is a part of the broadly understood paradigm of inclusive pedagogy, which concerns the description of the prosodic phenomenon that determines the speed of creating an utterance – the rate of articulation on the example of statements made by people with intellectual disabilities and autism. The topic of the importance of the Festival of Puppetry in the education of teachers and development of puppetry in Serbia in the context of cooperation with the local community is undertaken by Ana Milovanović. The author also draws attention to the development of interest among children of a group of children in preschool and school age. Marek Mierzyński, Elżbieta Cygnar and Bogusława Gawel pay attention to the axiological dimension of human functioning. The morality of the person and social morality as well as professional ethics, including those who are serving the social good, are an important issue in the modern world. The authors focus their reflection on the philosophical and axiological dimension of the ethics of uniformed services.

The variety and multidimensionality of the issues to which this publication is devoted may serve as an inspiration to broaden and deepen theoretical knowledge, but also to reflect on the presented texts. The awareness of the sense of learning about the educational reality from the perspective of a researcher may become a stimulus to plan and carry out empirical research that provides insight into explaining the dependencies and cause-effect relationships of specific educational situations and events¹.

assoc. prof. Zdzisława Zaćłona, PhD
prof. Ivica Radovanović, PhD

¹ „Szkoła – nowe przestrzenie edukacyjne” (t. 1, s. 76-87), J. Nowak, 2014, w: M. Magda-Adamowicz, I. Kopaczyńska (red.), *Pedagogika wczesnoszkolna wobec zmieniających się kontekstów społecznych*, Toruń: Wydawnictwo Adam Marszałek; *Pedagogika ogólna*, T. Hejnicka-Bezwińska, 2008, Warszawa: Wydawnictwa Akademickie i Profesjonalne; *Teoria pedagogiczna a praktyczne działania nauczycieli*, S. Palka, 1989, Warszawa: WSiP; „Teoretyczna wiedza pedagogiczna a praktyka szkolna”, S. Palka, 2003, *Krakowskie Studia Małopolskie*, 7, s. 31-37; „Dziecko jako obiekt i partner w badaniach pedagogicznych”, S. Palka, 2020, w: M.M. Adamowicz, E. Kowalska (red.), *Dziecko i dzieciństwo w badaniach pedagogicznych* (s. 105-109). Toruń: Wydawnictwo Adam Marszałek.

PART I.
SELECTED PROBLEMS OF EARLY CHILDHOOD EDUCATION
IN THEORETICAL AND PRACTICAL ASPECTS

Ana SARVANOVIĆ, Marta NIKOLIĆ
University of Belgrade, Teacher Education Faculty

THE ACTIVE ENVIRONMENT: THE ROLE OF SPACE IN EARLY CHILDHOOD EDUCATION FROM A RELATIONAL MATERIALIST PERSPECTIVE

Summary

Although it is impossible to imagine a world or anything that exists in it without a place, thinking about a place, space or environment is not so common in (early childhood) educational research. This paper begins with an overview of both contemporary educational and non-educational theoretical views of space that could be situated under the social-constructionist approach. Thus, space is viewed as both a physical and a social context, and children construct knowledge, produce identities and feelings through encounters in space and with space. Following the new trends in current humanistic thought that seeks to figure out the new ways of being and becoming-with, including other-than-human perspectives, research in early childhood education is changing its frameworks. After a brief review of the most important aspects of new theoretical findings (primarily relational materialism), the new role of space in early childhood is considered.

Key words: space, early childhood education, relational materialism, intra-active pedagogy, learning bodies.

Introduction: Space in contemporary early childhood education

In the center of contemporary studies and research on the relationship between the child and space, the focus is on perceiving space within the framework of the social practices that produce it, more specifically in the context of childhood as a phenomenon. How space influences and encourages children's development and learning is also considered, as well as how children write inscribe meanings into the space that surrounds them. Thus, the emphasis is put on the processes of learning and acquiring knowledge/experience, as well as on creating the physical and social context in which these processes take place.

An integral approach to understanding the space-experience relationship is reflected in Henry Lefebvre's (1991) concept in which space is the result of both the structural characteristics and the complex everyday activities and meanings of society. Of all Lefebvre's conceptual elements (spatial practices/perceived space, representations of space/conceptualized space, spaces of representation/living space), the importance of spatial practices stands out, i.e. the research of perceived space which includes: spatial behaviours, physical space, and space experience, or more precisely, the sensory perception activities of space. Lefebvre connects perceived space with social practices in the context of space production. The understanding of space is conditioned by human relations and practices, which implies the action of actors in this process. The relationship between space, social relations, and practice implies the freedom of subjects to transform their environment, to inscribe their own meanings in space, and to change and shape it. Thus, the focus is on the different experiences that each subject or social group inscribes in a particular space. Space becomes a place of coexistence and evoking memories and building experiences within the perception of the subject. For that reason, space is seen as dynamic and open to social processes, relationships, new knowledge, and upgrading experiences.

So, on the one hand, attention is focused on how different and complex social processes, relationships, activities, and behaviours shape and transform space and perception; on the other hand, analysis is being done of how a specific space structures social relations, activities, behaviours and perception. Both perspectives are imbued with mutual relations and the action of space and social relations and form an integrated whole of the production of space itself and the way it is perceived.

Lefebvre's understanding of the relationship between perceived and produced space is seen further from the spatial context within socio-cultural theories in the context of childhood. The spatial context is defined by the basic and natural need of the child for (free) movement, play (especially symbolic play), communication, and the relationship of children with each other, with the educator, and the contents of learning. That is why the environment must enable the child to learn naturally, and this is achieved by organizing such an environment in which the child will learn actively (by researching and doing) and collaborating with other children and adults. To achieve a natural learning context, in preparing a stimulating environment one should be aware of the fact that “[...] space that surrounds us affects how we feel, how we think and how we behave and dramatically affects our quality of life. (...) Everything we do, the spatial environment can make it easier or harder for us” (Greenman, 1998, p. 168, according to Gandini, 1998). Accordingly, the ways in which the spatial environment of children supports or disables children's activities are also re-examined. By including the meaning that space has for children, the ability of children to connect with space, to identify with representations of space and/or to appropriate it is revealed. Modern research shows that children do not use space passively but, in different relationships, modify and adapt it to their needs (Rasmussen, Smidt, 2003), creating their own space of representation (Philo, 2000). It follows that children are competent actors in society who influence the processes of their own learning and cognition by acting (relationships, experiences) in a certain space. This approach in understanding the relationship between children's experience and perception of space has developed within socio-cultural theories, in which childhood is not seen as a universal biological phase that children go through, but as a category that depends on social and cultural ideas, relationships, activities, experiences in a particular historical context.

Instead of the traditional teaching of pre-set and planned facts (contents) by educators (characteristic of a traditional kindergarten), the focus is on self-initiated, self-organized learning of children and the effort for children to increasingly manage and take responsibility for their own learning process (Kinsler, Gamble, 2001). Thus, within the developmental paradigm, the emphasis shifts from age-related cognitive development theories to research into the experiences, *experiences* of space, and the *interaction* of the child and the environment (Ward, 1978). The connection between experience and space further implies a way of acquiring knowledge and experience in that space.

According to research by Biljana C. Fredriksen (2012) conducted in Norwegian kindergartens, preschool children are viewed as *co-constructors* of knowledge. An important role in the processes of learning and acquiring knowledge is played by the educator who prepares the physical context and chooses the materials for the work (*ibid*). In such a prepared social and physical context, space is seen within the framework of the concept of *embodied space*, i.e. space for reflection (*ibid*). Within the framework of the educational system, this means that thinking depends on both space and *the unity of body and mind* (Dewey, 1925). In embodied space, the child-educator relationship occurs simultaneously and implies the ways in which “[...] children and educators use bodies in physical space, communicate with objects in space, engage

emotionally, imaginatively, creatively” (Fredriksen, 2012, p. 337). By engaging the body and mind in this way, attention is focused on the processes of learning and gaining embodied experience in those processes (Dewey, 1925).

Relying on Dewey's body-mind concept, Gibson (1979) and Howes (2005) consider the *body-mind-environment* concept in their research. Thus, the context of space extends to the physical environment, which significantly affects the learning processes. In other words, the body-mind produces knowledge and experiences about the world around us, and at the same time through this type of interaction we know the possibilities of our own bodies and mind in a given environment. Paraphrasing Merleau-Ponty, Fredriksen (2012) emphasizes the curiosity and interest of younger children to explore the possibilities of the environment and themselves (their bodies) in those environments.

Similar importance is given to the environment within the framework of Reggio Emilia pedagogy, i.e. its concept of the “environment as a third educator”. In that sense, the environment is perceived as alive (being) that contributes to children's learning, and not “[...] as a *result* of human imagination and work” (Frye, 1963). Fraser (2006) has identified eight Reggio principles key to understanding the concept of environment as a third teacher: aesthetics, transparency, active learning, flexibility, collaboration, reciprocity, bringing the outdoors in, and relationships¹. The mentioned principles describe the different roles that the environment has in teaching and learning, and explain how children use it to create meaning. Namely, in the environment, we pay attention not only to what we see and/or observe but also to what we feel while observing. In such a perceptual experience, the environment ‘speaks’ with children, creates a dialogue/story inviting them in free exploratory play, creating children’s space. By connecting with space in this way, the child understands it as what he can make of it, how he can use it, or change it according to the game in which he finds himself. Thus space becomes “[...] a source for meaning, belonging, and identity largely because of the relationships facilitated by bonds to place” (Strong-Wilson, Ellis, 2007, p. 43).

In that sense, children mostly use those places that enable them creative exploration or self-development like awareness, reasoning, and observational skills. Educators also provide social support in meetings with others, but in meetings that should deepen children’s thinking and learning. This is one of the important aspects that educators take into account in the Reggio Emilia approach. In order to engage and involve children in play/research, educators introduce ‘provocations’² in a certain space. This revives space, because what the educator originally planned in a certain space and the child-space relationship further develops in unexpected directions. Unexpected here means that educators do not know in advance how the child will react to a certain provocation, how s/he will understand it and treat it, in order to know how to plan further steps³. The child’s communication with a certain object or material (provocation) and the educator in a certain space emphasizes the need for a way for the child to learn about himself and the world around him. The teachers' choices of objects bear traces of their own remembered experiences of how stimulating and full of unexpected surprises the world was

¹ “*Aesthetics* and *transparency* draw our attention to how children are attracted by and curious about anything that engages their senses. The principle of *flexibility* articulates how children will often use objects in their play in ways not explicitly intended by the teacher or curriculum. *Active learning* recognizes how children learn through experimenting with and manipulating objects, while *bringing the outdoors in* acknowledges children's curiosity about the natural and social worlds surrounding them” (Strong-Wilson, Ellis, 2007, p. 45).

² Teachers choose realistic or everyday objects for children to use in their play or materials that “invite” children for exploration.

³ This attitude towards planning and curriculum is better known in the literature as the *negotiated curriculum* or *curriculum as lived*.

when they were children, and “those remembered experiences are mostly of unplanned rather than planned learning opportunities” (Strong-Wilson, Ellis, 2007, p. 45). Likewise, the most meaningful experiences for children are those in which, in play, they transform their environment in such ways that adults do not “see” them, thus creating “children's spaces”. Having in mind such live encounters of children in space and with space, the task for the educator is to think about the “planning for place-making” situation, but from the perspective of the child, its story or play.

From such relationships, space, in Reggio Emilia pedagogy, is seen as the context in/with which children learn. It is important to “[...] create contexts that allow children to find their own ‘affordances’⁴ through their interaction with objects and other people” (Kyatta, 2002). In such a set context, educators are in a position to learn from children and with children.

New theoretical trends within early childhood education: Relational materialism

Dealing with the classification of ideologies⁵ of educational programs, Živka Krnjaja (2014) states that one of the important functions in their deconstruction is that they “[...] reflect the historical influence as well as current beliefs and understandings of education at the time in which they originate” (Krnjaja, 2014, p. 288). The time in which this paper is being written is marked by climate change, global warming, the unpredictable future of the planet and humanity, which leads to a large number of humanistic thoughts moving research towards finding new ways of being and becoming-with, away from the dominant idea of seeing and understanding the world only from humans' perspective. A growing body of research within the social sciences and humanities arises on the critique of *anthropocentrism*⁶, with the idea of overcoming the perspective in which the man is a superior being, the only one who has power and agency. Contrary to that perspective, a new one is born in which the human is seen as a being who is ‘relational and mutually agentic’.

Although they differ from each other, theoretical directions such as *post-humanism*, *material feminism*⁷, *new materialism*, and *relational materialism*, come to light as attempts to move the human from a central position and to think in an *object-oriented* way. That is, to give significance to materials, objects, and other living beings – which are most often defined in these discourses as more-than-humans, other-than-humans, or non-human organisms – which equally and actively exist and act with all their characteristics and affordances⁸.

Consequently, in the field of early childhood education (ECE), there is a noticeable shift from a dominant concept (in which the child is understood as a subject who is independent and autonomous, and as such distanced from his environment) to a concept in which the child is situational, contextual and discursively inscribed (Hultman, Lenz Taguchi, 2010). By taking theoretical concepts from post-structuralism on the one hand and the idea of the

⁴ Here, affordances are the term used to refer to what it is possible to imagine or do, because of aspects of a place that children perceive as valuable (Kyatta, 2002).

⁵ Krnjaja takes into account what is the focus of the educational programme (according to Schiro, 2013) and singles out four ideologies. The focus thus shifts from scientific-academic discipline (*the academic ideology*) to universal outcomes for functional life and market efficiency (*the ideology of social efficiency*), to the child himself (child-centered programs or *the ideology of individual development*), to focus on relationships, that is, on the change of power relations and the transformation of culture (*the ideology of socio-cultural reconstruction*). Contemporary socio-cultural perspective places the child at the center of the educational process, in the sense that the child constructs knowledge, produces identities/feelings. This central position will be criticized in the theories we deal with in this text.

⁶ Where man is seen as a new geological force that changes the planet with its activity.

⁷ Most of these directions emerge from feminist poststructural research.

⁸ *Affordance* is a term encountered in these object-oriented discourses, developed in this regard by James J. Gibson (1979). According to him, men perceive what matters afford. “[A]n affordance is neither an objective property nor a subjective property; or it is both if you like. It is equally a fact of the environment and a fact of behavior. It is both physical and psychical, yet neither” (Gibson, 1979, p. 129).

*material turn*⁹ on the other, ECE becomes an arena in which ontological assumptions about the child, learning and teaching processes are deconstructed, and accordingly new knowledge is created *with* the world. Under the influence of French philosophers Gilles Deleuze and Félix Guattari, a significant shift is made in the perception of knowledge itself. It strives to overcome the dominant vertical and hierarchically organized structures of knowledge (typical of Western European scientific thought), which are focused on origin and ontology. Instead of these linear, logic-based, arborescent knowledge structures, there is a “rhizomatic”, horizontal structure of knowledge, which is characterized by surface connections, i.e. networks of small roots that conquer a certain territory in constant (nomadic) movement (Deleuze, Guattari, 1987). Under the influence of ideas of the material turn within ECE and *post qualitative inquiry*¹⁰, besides the cultural contexts and constructs, the material agency¹¹ of objects, materials, but also place and space are taken into account (Eriksson, 2020).

What is implied in such reflections of pedagogical practice is that learning is not an activity that is reduced only to the brain, but a holistic¹² activity in which the body, senses, experiences, and feelings participate. Therefore, knowledge is not something that can be expressed only verbally but is understood as tacit¹³, embodied, emplaced knowledge that can be expressed through many different languages spoken by children (Vecchi, 2010; Hadži Jovančić, 2012) – physical, pictorial, spatial, conceptual etc.

An intra-active pedagogy

Hillevi Lenz Taguchi¹⁴ introduces the concept of *intra-active pedagogy*, taking the very notion of *intra-activity* from Karen Barad¹⁵, thus opening the field for trans-disciplinary teaching and learning that goes beyond¹⁶ the theory/practice binary divide. The neologism “intra-action” stands instead of “interaction” reflecting the idea that in a complex world there is no agent/entity/time/place as an individual pre-defined, independent category. Rather, it is about the fact that individuals could not be perceived without their environment, so they could only become or materialize through intra-actions with it. In this regard, along with humans, all matter (objects, environments, more-than-humans, other living organisms, artifacts, environments) have an agency and influence each other within a permanent continuum. They are all part of a complex world in which they mutually create relationships and react with each other. At the same time, humans affect and are being affected by everything else in the event (Deleuze, 1988). Within the intra-active pedagogy, the child is not observed separately from the environment

⁹ The material turn brought a new view of the process of constructing knowledge in which all aspects (both immaterial and material) are equally (horizontally, non-hierarchically) important and active, and have their own agency and are performative agents. In the world where “[l]anguage matters. Discourse matters. Culture matters. There is an important sense in which the only thing that doesn’t seem to matter anymore is matter” (Barad, 2007, p. 132).

¹⁰ See St Pierre, E.A. (2018a). *Post Qualitative Inquiry in an Ontology of Immanence. Qualitative Inquiry*; St Pierre, E.A. (2018b). *Writing Post Qualitative Inquiry. Qualitative Inquiry*.

¹¹ The possibility of intervening and acting upon others and the world. Rather, all matter can be understood as having agency in a relationship in which they mutually will change and alter in their on-going intra-actions (Lenz Taguchi, 2009, p. 4).

¹² Embodied forms of knowledge are traditionally promoted in the arts, therefore this view of learning has long been present in art education (Dewey, 2005 [1934]; Eisner, 2002; Efland, 2004 and others).

¹³ As an embodied engagement with the materiality.

¹⁴ The author comes from the context of Swedish ECE, which has been inspired by the Reggio Emilia approach for decades.

¹⁵ Karen Barad is an American feminist theorist, who introduced the theory of *agential realism* as a way to go beyond material: immaterial and human: non-human division. Roots of this theory of active materials could be found in quantum physics, chemistry, biology, and cybernetics. In some works when she speaks about space, she even uses *spacetime mattering* as a new concept (Barad, 2010).

¹⁶ Through intra-active pedagogy, Lenz Taguchi tries to avoid “[...] the trap of either/or: of essentialising biology, cognitive and constructivist learning-theory or discursive social constructivist theories” (Lenz Taguchi, 2009, p. 14), referring to how these educational theories and research place great emphasis on the discursive while not recognizing “[...] the constitutive force of the material” (Ibidem).

and the materials, and learning/knowing “[...] occurs in the interconnections that take place in-between different forms of matter making themselves intelligible to each other” (Dahlberg, Moss, 2009, p. xv). In other words, equal attention is paid to the teacher, the child, the material possibilities and affordances of the space, that is, all matter and all organisms have a performative contribution in learning.

Analyzing a picture of a girl who is sitting in a sandbox and playing, Lenz Taguchi (2011) wonders if the girl is playing with the sand or it is the opposite. In this way, the author is trying to flatten the border between the girl (subject) and the sand (object/material/ environment), emphasizing that playing (the same could be said for learning or becoming) always takes place *in-between* them. With their different affordances, materials “[...] can be understood to ask specific questions and formulate problems by virtue of its own force” (Lenz Taguchi, 2011, p. 38) in relation to the subject who tries to solve them. The child’s activity is understood as an activity in “suggesting meaning, conceptual understanding, and solutions to problems, and in posing new questions and formulating new problems to investigate” (Ibidem, 2011, p. 46). Not only do objects, materials, places play a significant role in children’s play (learning and becoming), but it is also about perceiving objects, materials, places as agents who ‘play back’. While engaging with materials or environments (as in the case of the girl and the sand), or to say when the body of a subject intra-act with the body of some object or place, they form a so-called *assemblage*¹⁷ (Deleuze, Guattari, 1987). In this way, the intra-active pedagogy does not deal with what the girl *is* or what the sand *is*, but with what emerges in that newly created assemblage, that is, how all participants in that process *become-with* each other and *become different in themselves* (Deleuze, 1994). “Different kinds of matter make [the subject] competent in different ways” (Lenz Taguchi, 2011, p. 38).

The role of space in processes of learning and becoming

It is clear that in this kind of pedagogy there is no hierarchical and power relation between the teacher and the child. Even more, there is no hierarchical and power relation between the child and the material objects, but a horizontal relationship in which the focus is precisely on what happens *in-between* them. By the fact that human and non-human actors who are in an intra-action are viewed as an assemblage, it is possible to talk about a different (horizontal, rhizomatic) kind of learning/becoming. Thus, learning and becoming are “[...] the phenomena that are produced in the intra-activity taking place in between the child, its body, its discursive inscriptions, the discursive conditions in the space of learning, the materials available, the time-space relations in a specific room of situated organisms, where people are only one such material organism among others” (Lenz Taguchi, 2009, p. 36).

Under the influence of Deleuze’s ideas on knowledge, it is considered that through the embodied experience and intra-actions with the environment, the learner comes to certain knowledge that goes beyond linear, hierarchical, traditional, verbal, and institutional forms of knowledge. It is more about the knowledge that is about survival, for-life, horizontal, small but real knowledge. Learning is seen as “[...] an adaptive process as bodies interact with other bodies to produce newly established emergent behaviors” (Smith, Ovens, 2014, p. 125). It is a process of experimentation, adaptation, and structural change (Ibidem), that is, a dynamic and fluid process that is constantly changing and is open for different readings. Fluidity also refers to the subject itself, the human whose body is constantly in the process of adapting both to external and to internal forces that act upon it.

¹⁷ Barad (2007) uses the term *entanglement*.

Since nothing is predefined, learning/knowing/becoming is always an unpredictable event whose framework can be determined, but not what will be learned within it. That is the huge potential of these processes. In the intra-actions/assemblages where all participants (humans, not-humans, materials, environments) matter, learning is always the result of an “involuntary adventure” (Deleuze, 1994, p. 165).

The more the child changes the environment/materials/contexts/beings the more experience he will get, and the more self-confidence he will have. Parafrizing Hultman (2011) Lenz Taguchi states: “[...] the more connections the learner is able to make, and the more s/he acknowledges dependence on other human beings, things, artefacts, milieus and environments to form connections with, the ‘freer’ s/he becomes to make new and increasingly more complex interconnections” (Lenz Taguchi, 2011, p. 40).

The active environment

As soon as he woke up in a darkened room, a boy (11 months) looked in astonishment in the direction of the window. The curtain was drawn, and only a thin ray of light could break through it, illuminating the opposite wall. Staring in the direction of the light, the boy seemed like he was looking at something I could not see. It was as if only he knew what he saw and he liked that very much. When I took a closer look, I saw that tiny dust particles flew around the room and floated carelessly in that ray of light. He looked at them and then at the light on the wall. I started moving my hands to make shadows on the opposite wall. My improvisation changed the boy's attention; therefore, he turned quickly to the lighted wall and tried to touch the shadows. After trying to touch it, he returned to the light source and reached for it, as if he was trying to imitate me, or maybe to grab flying dust particles...¹⁸.



Figures 1 and 2. An assemblage of the boy and the environment.

¹⁸ Vignettes are short stories that have been used in qualitative educational research. The described situation in the vignette above and the photos were taken by one of the authors in the spring of 2020.

Conclusion

Children examine the world around them with entire bodies and all senses, with an open mind and often without a predefined idea of a specific matter or its affordances. The vignette written above is a description of an assemblage. In such an encounter that occurred in-between the boy, the dust particles, and the mother's hands in a specific space and atmosphere (dark room, the ray of light, shadows on the wall, etc.) new knowledge must be born. This space becomes an important agent because it is encouraging the boy to play and to become a *confidently* playing child (Ibidem).

The presented theoretical perspective enables the production of new knowledge and thinking about how much space is a significant and active participant in the processes of learning, behaviour, becoming. Moreover, that is another shift in comparison to previous pedagogical concepts in which the focus of the learning process over the years has been on either the child or the teacher-child relationship. Although considerations of space as a significant factor, not just a passive physical environment, are not new, with relational materialism it is possible to think of space as something that has its agency, that is, something that equally arises along with the subject through their mutual encounters and relationships. Put in a nutshell, space becomes a co-creator of knowledge in the process of becoming a subject.

Moreover, sitting on a specific chair in a specific space with specific other human and non-human organisms and matter will regulate how and what we might say or do, or not say or do. All spaces, and certainly pedagogical spaces, call upon us and demand specific ways of sitting or moving, talking or socialising with different affective force and intensities, depending on the material-discursive interconnections and intra-actions at work in this space (Hultman, 2009, according to Lenz Taguchi, 2009, pp. 5-6).

A small shift from previous perceptions of learning that is located within an isolated human being represents a major shift in the context of the upheaval of the anthropocentric paradigm. Learning, as well as becoming, is not possible without the world and the various spaces in which the human is embedded. It remains for pedagogical practices to be further developed in this direction, as well as the curricula to be constructed between active participants and their active physical environments. It is up to the educators not only to create a stimulating environment in which the child will actively learn, but also to “see [the child] involved in an encounter of mutual engagement and transformation with [space]” (Lenz Taguchi, 2011, p. 48). Bearing in mind the new views on space and materials, the educator will become aware that s/he and everything around her/him, human or non-human organisms, matter or space, have the same agency in the learning process.

Bibliography

- Barad, K. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Barad, K. (2010). Quantum Entanglements and Hauntological Relations of Inheritance: Dis/Continuities, Space Time Enfoldings, and Justice-to-Come. *Derrida Today*, 3(2), 240-268.
- Dahlberg, G., Moss, P. (2009). Introduction by the series editors. In: H. Lenz Taguchi, *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*, ix-xx. London, New York: Routledge.

- Deleuze, G. (1988). *Spinoza: practical philosophy*. San Francisco: City Lights Books.
- Deleuze, G. (1994). *Difference and repetition*. London: Athlone.
- Deleuze, G. (1995). *Negotiations*. New York: Columbia University.
- Deleuze, G., Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. New York: Continuum.
- Dewey, J. (1925). *Experience and Nature*. Chicago: Open Court.
- Dewey, J. (2005 [1934]). *Art as experience*. New York: Berkley Publishing Group.
- Efland, A.D. (2004). Art education as imaginative cognition. In: E. W. Eisner, M.D. Day (eds.), *Handbook of research and policy in art education* (pp. 751-773). Mahwah: National Art Education Association / Lawrence Erlbaum Associates.
- Eisner, E.W. (2002). *The arts and the creation of mind*. New Haven: Yale University Press.
- Eriksson, C. (2020). *A preschool that brings children into public spaces: Onto-epistemological research methods of vocal strolls, metaphors, mappings and preschool displacements*. Doctoral thesis. Stockholm: Department of Child and Youth Studies, Stockholm University.
- Fraser, S. (2006). *Authentic childhood: Experiencing Reggio Emilia in the classroom*. Nelson Thomson Learning.
- Fredriksen, B.C. (2012). Providing materials and spaces for the negotiation of meaning in explorative play: Teachers' responsibilities. *Education Inquiry*, 3(3), 335-352.
- Frye, N. (1963). *The educated imagination*. Toronto: Canadian Broadcasting Corporation.
- Gandini, L. (1998). Educational and Caring Spaces. In: C.P. Edwards, L. Gandini, L. Forman (eds.), *The Hundred Languages of Children – The Reggio Emilia Approach – Advanced Reflections* (pp. 161-178). London: Ablex Publishing Corporation.
- Gibson, J.J. (1979). *The ecological approach to visual perception*. Boston: Houghton Mifflin Company.
- Hadži Jovančić, N. (2012). *Umetnost u opštem obrazovanju*. Beograd: Klett.
- Howes, D. (2005). *Subjectivities in Relation to Materiality in Educational Settings*. PhD manuscript. Department of Education, Stockholm University.
- Kinsler, K., Gamble, A.M. (2001). *Reforming Schools*. London, New York: Continuum.
- Krnjaja, Ž. (2014). Ideologije obrazovnih programa: Šta očekujemo od obrazovanja – stanje i perspektive u Srbiji. *Sociologija*, LVI(3), 286-303.
- Kyatta, M. (2002). Affordances of children's environments in the context of cities, small towns, suburbs and rural villages in Finland and Belarus. *Journal of Environmental Psychology*, 22, 109-123.
- Lefebvre, H. (1991). *The Production of Space*. Oxford: Basil Blackwell.
- Lenz Taguchi, H. (2009). *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*. London, New York: Routledge.
- Lenz Taguchi, H. (2011). Investigating learning, participation and becoming in early childhood practices with a relational materialist approach. *Global Studies of Childhood*, 1(1), 36-50.
- Philo, C. (2000). The Corner-Stones of My World: Editorial Introduction to Special Issue on Spaces of Childhood. *Childhood*, 7(3), 243-256.
- Rasmussen, K., Smidt, S. (2003). Children in the neighbourhood: the neighbourhood in the children. In: P. Christensen, M. O'Brien (eds.), *Children in the City. Home, neighbourhood and community* (pp. 82-100). London: Routledge.
- Smith, W., Ovens, A. (2014). Learning bodies – embedded, embedding and always emerging. In: P. O'Connor, K. Fitzpatrick (eds.), *Education and the body* (pp. 115-126). Edify: Auckland.
- St Pierre, E.A. (2018a). Post Qualitative Inquiry in an Ontology of Immanence. *Qualitative Inquiry*.
- St Pierre, E.A. (2018b). Writing Post Qualitative Inquiry. *Qualitative Inquiry*.
- Strong-Wilson, T., Ellis, J. (2007). Children and place: Reggio Emilia's environment as third teacher. *Theory into Practice*, 46(1), 40-47.
- Vecchi, V. (2010). *Art and Creativity in Reggio Emilia*. London: Routledge.
- Ward, C. (1978). *The Child in the City*. London: Architectural Press.

Tatjana MILOSAVLJEVIĆ ĐUKIĆ

University of Niš, Teacher Training Faculty, Vranje

Dragana BOGAVAC, Ivica RADOVANOVIĆ

University of Belgrade, Teacher Education Faculty

SCHOOL AS AN EDUCATIONAL ENVIRONMENT FROM THE PUPILS' PERSPECTIVE¹

Summary

The aim of this paper was to examine how pupils see school as an educational environment. The research was conducted on a sample of 265 fourth grade primary school students from five towns in South Serbia. The research is based on the application of the descriptive method and a Questionnaire for assessing the educational function of the school from the pupils' perspective as the research instrument. Among the statistical procedures, descriptive statistics, One-factor analysis of variance (ANOVA), t-test for large independent samples and a Chi-square test (χ^2) were used. The obtained research results help gain a better insight into the educational role of the school from the perspective of primary school pupils in the Republic of Serbia. The research findings can be used for a deeper observation of this very important pedagogical issue.

Key words: educational function of the school, school as an educational environment, student.

Introduction

School as an educational institution is characterized by: purposefulness – the existence of adopted goals that are to be achieved; complexity – it consists of elements that can be identified and interconnected with the whole of the targeted activities; and differentiation of goals and structure in relation to the environment (Dymara, 2009, p. 42). Purposefulness is also relevant for the specific needs of each student on the way to the fulfilment of educational goals (Perkowska-Klejman, Górka-Strzałkowska, 2016, p. 14).

There are numerous classifications of methods and methodological strategies in the literature that can be applied both in pedagogical activities and in teaching, such as those proposed by Reich (2006) and Müller and Wiegman (2001), Udiljak (2010) and others.

Related to this issue, Kersten Reich is an advocate of systemic-constructivist methodological pluralism (Reich, 2010, p. 224). Thus, the basic concepts in his theory are those of construction (enabling children/students to find and design, then explaining and proving and finally shaping and developing their own cognition), reconstruction (discovery and finding, then generalization and finally an independent experiential verification and personal discovery) and deconstruction (enabling children/students to discover and doubt, to be in a position of critical thinking and evaluation) (Reich, 2010, pp. 119-121). Namely, from his point of view, it is important to constructivistically set up and observe all pedagogical activities.

¹ The text is the result of work on the Project (number 179020) titled *Concepts and Strategies for Ensuring the Quality of Basic Education and Upbringing* of the Teacher Education Faculty in Belgrade, whose implementation is funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

With reference to teaching and upbringing, Reich's constructivist approach does not allow for the dominance of teacher-oriented teaching and the passive position of students. Therefore, Kersten Reich talks about strategies and methods that focus on the child/student (Reich, 2006, p. 297), strategies and methods of upbringing, strategies of upbringing and education directed towards action, as well as complex methodological scenarios². When it comes to the strategies and methods of upbringing, Reich names the following: working studio (Arbeitsateliers), flash (Blitzlicht), storm of ideas (Brainstorming), grouping (Clustering), conceptual learning (Concept-Learning), input/output (Einstiege/Ausstiege), talking (Erzählung), guided fantasy (Fantasiereise), conversation (Gespräch), constructivist game of knowledge (Konstruktives Wissensspiel), correspondence (Korrespondenz), memory game (Memory), metacognition (Metacognition), metaplan (Metaplan), mnemonics (Mnemotechniken), mind maps (Mindmapping), open space (Open Space), learning content organizer (Organizer), individual mat (Placemat-Methode), mailbox method (Postkorbmethode), quiz and puzzles/riddles (Quiz und Rätsel), subjective mapping (Subjektives Kartografieren), script method (Szenario-Methode), stage interpretation (Szenischelinterpretation), social study (Sozialstudie), diary keeping (Tagebuchmethode), selection of different techniques (Techniken-einigeausgewählte), wall newspapers (Wandzeitung), network tools (Web-Tools), weekly plan (Wochenplan).

The German pedagogue Reich also gives a classification of strategies of upbringing and education according to action undertaken: motivational instructions (Anchored Instruction), biographical method (Biografiearbeit), method of writing letters for different purposes (Briefmethode), method of cognitive learning (Cognitive Apprenticeship), e-learning (E-learning), research (Erkundung), conducting experiments (Experiment), case study (Fallstudien), freelance work (Freiarbeit), group meeting of experts (Gruppen-Experten-Rallye), group competition (Gruppen-Wettkampf-Rallye), collaborative learning (Kooperatives Lernen), text work (Leittexte), meta learning (Metalernen – nach Reich), moderation/metaplan – stimulative impulses for group activities (Moderation/Metaplan), open lecture (Offener Unterricht), constructivist game plan (Planspiel), portfolio (Portfolio), problem-based learning (Problem Based Learning), project work (Projektarbeit), role-playing (Rollenspiele), paper-writing (Referate), situational learning (Situieretes Lernen), thematically (situation description) directed method (Storyline-Methode Glasgow), centers of interest (Stationenlernen).

In addition to the above, Kersten Reich defines a corpus of methodological scenarios of a complex format. These “systemic methods”, thus, are: feedback (Feedback), psychodrama (Psychodrama), reflective teams (Reflectingteams) – psychotherapeutic technique, reinterpretation (Reframing) – psychotherapeutic technique, visualization of a situation in the form of a sculpture (Skulpturen), systemic constellations (Sistemmaufstellungen) – developed from the sculpture technique, questions in a circle (Zirkuläres Fragen).

Every interaction in the educational process is related to the input (Perkowska-Klejman, Górka-Strzałkowska, 2016, p. 11). In order to achieve the defined goal of education, Reich emphasizes that it is important to respect the methodological principles of competence, diversity and interdependence.

When pedagogical activities are in question, the inevitable question is that of the styles of upbringing, as well as the issue of positive discipline. In pedagogical theory, when it comes to the styles of upbringing, the ones typically named are: authoritarian, compliant, indifferent and authoritative. Of course, in the process of education in general, and even in school as an educational environment, a democratic (authoritative) style is desirable. The characteristics of

² Detailed explanation of the stated methods at: <http://methodenpool.uni-koeln.de/uebersicht.html> (accessed on 14th Nov.2019).

this style are two-way communication (Nelsen, Escobar, 2001), caring for the child's feelings, respect for the child's abilities and interests. Based on the positive discipline as a determinant of the methodology of upbringing, the child/student is supposed to feel acceptance and encouragement, the need to discover what is positive, the need to express unconditional love and be always ready for agreement and cooperation (Nelsen, Escobar, 2001).

Research methodology

The aim of the research was to examine how primary school pupils perceive school as an educational environment. Based on the aim of the research, the following tasks were defined:

- 1) To seek the opinion of fourth grade pupils on various aspects of the educational activities in primary school;
- 2) To seek the opinion of fourth grade primary school pupils on the contents of the compulsory elective courses;
- 3) To seek the opinion of fourth grade pupils about classroom community lessons;
- 4) To explore the interest of fourth grade pupils in educational activities organized in primary school;
- 5) To examine fourth grade pupils' reasons for opting for certain educational activities organized in primary school;
- 6) To determine what problems fourth grade pupils face in primary school;
- 7) To seek the opinions of fourth grade pupils on raising the level of satisfaction with school as an educational environment.

The main hypothesis is: it is assumed that fourth grade primary school pupils have recognized the school as an educational environment.

The research was conducted in the school year 2020/21 on a sample of 265 fourth grade primary school pupils from five towns in South Serbia. The sample included 154 girls and 108 boys. Regarding the academic achievement of fourth grade pupils in the previous school year, 40 of them ended it with good overall academic performance (15.7%), 58 students with very good performance (22.8%), and 156 students with excellent performance (61.4%).

The research was based on the descriptive method. For the needs of the research, a Questionnaire for assessing the educational function of the school from the pupils' perspective was constructed, which contains 17 questions related to various educational aspects within the school context.

After the analysis of descriptive indicators, and of the measure of distribution normality, the factorization of the questionnaire was done. The following statistical procedures were used in data processing: descriptive statistics to calculate the measure of frequency between different segments of variables, arithmetic mean, standard deviation; one-factor analysis of variance (ANOVA) to determine differences between the arithmetic means of multiple samples; t-test for large independent samples, which examined statistically significant differences between the two samples; Chi-square test (χ^2) to examine the difference in frequency distribution.

Interpretation of results and discussion

Based on the collected data, several types of narratives were singled out.

The first type of narrative refers to the opinion of fourth grade pupils on various aspects of the educational activity of primary school. Out of the total number of respondents, 224 (84.8%) fourth graders answered that they like going to school, 30 (11.4%) like only sometimes, while 10 (3.8%) pupils said they do not like going to school. When it comes to the involvement of pupils in extracurricular activities, out of the total number of surveyed fourth grade pupils,

the coverage of pupils with extracurricular activities is 217 (81.9%), and the other 48 (18.1%) pupils answered they do not participate in any extracurricular activities. From this, it can be concluded that most fourth grade pupils are engaged in extracurricular activities. The engagement of pupils in out-of-school activities is also important for our research into the educational role of the school. The following results were obtained: 131 pupils (3.9%) answered that they do not belong to any club or workshop outside the school, and 112 (46.1%) pupils confirmed that they are a regular member of a club or workshop outside the school, while 22 (8.3%) pupils did not answer the question. The fourth grade pupils also expressed their opinion on the responsibilities in the classroom community, as one of the frameworks of the educational activities of the primary school. Out of the total number, 186 (70.2%) pupils answered that they do not have any responsibilities, while the other 79 (29.8%) answered that they have certain responsibilities in the classroom community. The focus of this research was also to establish the opinion of pupils about the problems that occur in primary school. Pupils who have some kind of problem in school, more precisely 204 of them (85.7%) address their class teacher, 25 of them (10.5%) answered they contact the teacher on duty, and only 9 pupils (3.8%) addresses someone else. The answer to this question was not provided by 27 (10.2%) pupils, which may imply that they have not faced a problematic situation within the school. When we talk about the educational role of the school, the aspect of safety/security of pupils is also important. When we consider this segment, 226 (85.6%) pupils feel safe, 34 (12.9%) pupils do not feel safe and secure only sometimes, while 4 (1.5%) pupils do not feel safe. The pupils are of the opinion that among the rules of conduct that they talk most about with their class teacher is the rule of good behaviour in every situation, which was pointed out by 88 (33.2%) pupils. There are also high scores related to the responsibility for one's actions (31.7%), respect for diversity (30.9%), care for others (30.2%), cooperation with peers (21.9%). The topics on tolerance and freedom of expressing personal opinions in front of others were less represented in their conversations (18.5%), while 13 (4.9%) pupils reported talking about other things with their teachers as well. According to the estimates of fourth grade pupils, the teacher very often praises positive behaviour, which is the opinion of 179 (74.9%) pupils, while 79 (32.2%) pupils think that the teacher punishes them very often; 54 (22.6%) pupils think that the teacher only sometimes praises positive behaviour, while 69 (28.2%) pupils think that they resort to punishment; and 6 (2.5%) pupils are of the opinion that the teacher never praises positive behaviour, while 97 (39.6%) pupils think that negative behaviour is punished. Among the compulsory elective courses, 144 respondents (56.5%) attend Civic Education lessons, 111 (43.5%) attend Religious Education lessons, while 10 (3.8%) respondents did not answer. The results of the above fourth grade pupils' answers are shown in table 1.

Table 1

Opinions of fourth grade pupils on various aspects of primary school educational activity

	(n=265)
Do you like going to school, n (%)	
Yes, because I feel good in it.	224 (84,8%)
Only sometimes.	30 (11,4%)
No, I don't feel good at school.	10 (3,8%)
Extracurricular activities, n (%)	
yes	217 (81,9%)
no	48 (18,1%)
Participation in out-of-school activities, n (%)	
yes	112 (46,1%)
no	131 (53,9%)
Coverage of pupils with responsibilities in the classroom community, n (%)	
yes	79 (29,8%)
no	186 (70,2%)
When I have a problem at school I address, n (%)	
My class teacher	204 (85,7%)
The teacher on duty	25 (10,5%)
Someone else	9 (3,8%)
Pupils' opinion on the pupils' safety and security at school, n (%)	
I often feel safe	226 (85,6%)
I only sometimes feel safe	34 (12,9%)
I never feel safe	4 (1,5%)
Rules of conduct that are most often the topic of conversation with the class teacher, n (%)	
good behaviour in every situation	88 (33,2%)
being responsible for one's actions	84 (31,7%)
respect for diversity	82 (30,9%)
care for others	80 (30,2%)
cooperating with peers	58 (21,9%)
being tolerant	49 (18,5%)
express opinion freely in front of friends	49 (18,5%)
something else*	13 (4,9%)
Pupils' evaluations on the ways of the teachers' monitoring of pupils' behaviour, n (%)	
– the teacher praises pupils' positive behaviour	
Very often	179 (74,9%)
Only sometimes	54 (22,6%)
Never	6 (2,5%)
– the teacher punishes negative behaviour	
Very often	79 (32,2%)
Only sometimes	69 (28,2%)
Never	97 (39,6%)
Pupils' attendance of compulsory elective courses, n (%)	
Civic education	144 (56,5%)
Religious education	111 (43,5%)

The second type of narrative refers to pupils' opinions on the contents of compulsory elective courses. There are 40 (27.8%) pupils who attend the compulsory elective subject Civic Education, and they state that the issue of peaceful conflict resolution is in the focus of their interest, and among the 44 (41.1%) pupils who attend Religious Education, the highest score is occupied by the contents related to their religion and personal qualities. Statistical significance is at the level of 0.01 ($\chi^2 = 266.43$, $df = 1$, $p = 0.000$). The results are shown in table 2.

Table 2

Opinions of fourth grade pupils on the contents of compulsory elective courses in primary school

			What do you particularly like in these classes:					Total (Σ)
			we learn to resolve conflicts peacefully	we learn to love and respect ourselves and others	we learn about our religion and our qualities	we learn how to talk politely with other people	I have no benefit from attending these subjects	
Which elective course do you attend among compulsory courses?	Civic education	Total	40	35	57	11	1	144
		%	27,8%	24,3%	39,6%	7,6%	0,7%	100,0%
	Religious education	Total	24	7	44	32	0	107
		%	22,4%	6,5%	41,1%	29,9%	0,0%	100,0%
Total (Σ)		Total	64	42	101	43	1	251
		%	25,5%	16,7%	40,2%	17,1%	0,4%	100,0%

The opinion of fourth grade pupils about the classroom community lessons is the third type of narrative within which the following data were obtained: 178 (67.2%) pupils answered that in classroom community lessons they all discuss topics together, 42 (15.8%) respondents answered that they solve peer problems in these lessons, 15 (5.7%) respondents answered that the class teacher talks to some pupils while the other pupils are neglected, 2 (8%) pupils answered that the class teacher uses the classroom community lessons to complete administrative tasks during which pupils are bored, and 28 (10.6%) respondents gave the answer that the teacher is then doing other things, but did not specify what. Statistical significance is at the level of 0.01 ($\chi^2 = 87.61$, $df = 1$, $p = 0.000$). The results are shown in table 3.

Table 3

Opinion of fourth grade pupils about their classroom community lessons

	Frequency	Percentage	Valid percentage
The teacher talks about a topic, we listen and discuss	178	67,2	67,2
We solve current problems in the class	42	15,8	15,8
The teacher talks to some pupils while others are bored	15	5,7	5,7
The teacher deals with absences with pupils and does other work	2	,8	,8
Other	28	10,6	10,6
Total (Σ)	265	100,0	100,0

$\chi^2=87,61$, $df=1$, $p=0,000$.

The obtained results within the fourth narrative, which referred to the interest of fourth grade pupils in educational activities organized in primary school, indicate that: 91 (34.3%) pupils are most interested in sports activities, in the second place are pupils' interests in fine art activities 53 (20.0%), then scientific and research activities 35 (13.2%), music activities 16 (6%), and only 5 (1.9%) pupils are interested in creative activities. Among the activities related to helping others, only 27 (10.2%) pupils show interest, which is certainly a low percentage. The obtained

result implies the need for greater involvement of teachers in the field of student empathy. Other activities, initiated by pupils themselves are also represented, which 38 (14.3%) respondents are attracted to. Statistical significance is at the level of 0.01 ($\chi^2 = 241.35$, $df = 1$, $p = 0.000$). The results are shown in table 4.

Table 4
Interest of fourth grade pupils in educational activities organized in primary school

	Frequency	Percentage	Valid percentage
Sports activities	91	34,3	34,3
Fine art activities	53	20,0	20,0
Scientific and research activities	35	13,2	13,2
Humanitarian activities (helping others)	27	10,2	10,2
Music activities	16	6,0	6,0
Creative activities	5	1,9	1,9
Other activities	38	14,3	14,3
Total (Σ)	265	100,0	100,0

$\chi^2=241,35$, $df=1$, $p=0,000$.

Statistical analysis of the obtained data within the narrative related to the reasons why fourth grade pupils opt for certain educational activities organized in primary school shows the following: 120 (46.7%) respondents answered that they find the specific workshop interesting and fun and that is the reason they joined it; 34 (13.2%) pupils mentioned research as a reason for joining a workshop, public appearances are attractive to 31 (12.1%) pupils, 24 (9.3%) pupils gave the answer that they could choose which workshop they wanted to join, 15 (5.8%) pupils opted for a workshop because of socializing, 12 (4.7%) pupils joined a certain workshop because activities are based on their own initiative, for 11 (4.3%) pupils the reasons for joining a workshop are music and sports. Statistical significance is at the level of 0.01 ($\chi^2 = 189.56$, $df = 1$, $p = 0.000$). The results are shown in table 5.

Table 5
Fourth grade pupils' reasons for choosing certain educational activities organized in primary school

	Frequency	Percentage	Valid percentage
It is interesting and fun to me	120	45,3	46,7
I can explore and discover something new	34	12,8	13,2
We can have public appearances	31	11,7	12,1
I could choose it as I wished	24	9,1	9,3
We can socialize	15	5,7	5,8
Pupils can suggest what they will do in the workshop	12	4,5	4,7
The contents vary and include music and sports	11	4,2	4,3
Other	10	3,8	3,9
Total (Σ)	257	97,0	100,0
Missing data	8	3,0	
Total (Σ)	265	100,0	

$\chi^2=189,56$, $df=1$, $p=0,000$.

Within the narrative that refers to the opinion of fourth grade pupils about problems in primary school, statistical analysis showed the following: 95 (35.8%) pupils believe that the biggest problem they face in school is too strict assessment, 67 (25.3%) pupils see lack of discipline in some lessons as a problem, while 60 (22.6%) pupils believe that there are poor relations in the class. The main issue for 49 (18.5%) pupils is too strict discipline in some of their lessons, while 45 (17%) pupils find it to be safety and security. For 43 (16.2%) pupils the biggest problem is information overload, and for another 29 (10.9%) of them the problems lies in learning and understanding the contents. Private problems that prevent pupils from progressing in school (7.2%), class teacher's disrespect for pupils (4.9%), and rarely given opportunities for pupils to express their knowledge and opinion (1.9%) are of justifiably low scores. This percentage distribution of responses caused the statistical significance of the Chi-square test to be at the level of 0.01 ($\chi^2 = 231.67$, $df = 1$, $p = 0.000$). The results of pupils' opinions are shown in table 6.

Table 6
Fourth grade pupils' opinion on problems in primary school

	Frequency	Percentage
Too strict assessment	95	35,8
Lack of discipline in some of the lessons	67	25,3
Poor relations in the class	60	22,6
Too strict discipline in some of the lessons	49	18,5
Safety and security in the school	45	17,0
Information overload	43	16,2
Problems in learning and understanding the contents	29	10,9
Problems of a personal nature that prevent you from committing to school obligations (family problems, health problems, etc.)	19	7,2
Disrespect of pupils by teachers	13	4,9
Inability to show your knowledge and express your opinion	5	1,9
Some other problem, write	0	0

$\chi^2=231,67$, $df=1$, $p=0,000$.

The opinions of fourth grade primary school pupils about the feeling of satisfaction in the school environment is the following narrative within this research. What the pupils suggest should be done is as follows: strengthen group and team work, which is proposed by 97 (36.6%) pupils, organize new workshops at the request of pupils to help them feel more satisfied as proposed by 94 (35.5%) pupils, make lessons more interesting as suggested by 64 (24.2%) pupils, reduce school obligations as stated by 44 (16.6%) pupils, provide learning assistance as requested by 40 (15.1%) pupils, increase student safety, which 15 (5.7%) pupils find an important issue. Within this segment, pupils stated the following: undisciplined pupils should be strictly punished, as said by 36 (13.6%) pupils, pupils should be enabled to exercise their rights and obligations in the opinion of 22 (8.3%) pupils, and student discipline should be improved, as stated by 16 (6.0%) pupils. There is a statistically significant difference when it comes to the percentage of responses ($\chi^2 = 143.29$, $df = 1$, $p = 0.000$). The results of pupils' opinions are shown in table 7.

Table 7

Opinions of fourth grade primary school pupils about the feeling of satisfaction in the school environment

	Frequency	Percentage
Strengthen pupils' group and team work	97	36,6
Organize new workshops according to pupils' wishes and interests	94	35,5
Make classes more interesting	64	24,2
Reduce school obligations	44	16,6
Provide learning assistance – “how to learn”	40	15,1
Strictly punish undisciplined pupils	36	13,6
Enable pupils to exercise their rights and obligations	22	8,3
Improve student discipline	16	6,0
Increase student safety	15	5,7
something else	5	1,9

$\chi^2=143,29$, $df=1$, $p=0,000$.

After determining the statistical significance in the representation of certain modalities of answers to questions, as well as the percentage of pupils' answers, it was found that fourth grade primary school pupils differ statistically significantly related to the activities with a dominant educational component, taking into account the independent variables (gender, school performance at the end of the previous grade, whether the pupil participates in some extracurricular activities and whether he/she has any responsibilities in the class community).

One of the questions that can serve as an example of this type of statistical analysis is the following: We have listed several activities related to student behaviour to find out the pupils' attitude to these activities: they respect the elders, their teachers, they like to explore and learn something new, they pay attention to their behaviour and rules of conduct, they respect the rights of others, they regularly fulfill school obligations, socialize, help others, and are active in the class community.

The T-test examined whether there was a statistically significant difference between the boys and girls for the questions related to school activities that contain an educational component. There is a statistically significant difference between the following items: they regularly fulfill school obligations ($t = 4.87$, $p = 0.000$), they like to explore and learn something new ($t = 2.70$, $p = 0.007$) and they socialize, help others ($t = 1.97$, $p = 0.050$). From the mean values (M), we see that boys fulfill school obligations to a greater extent and socialize more, while girls prefer to research and learn something new. The results are presented in table 8.

Table 8

Independent variable “Gender differences” and fourth grade pupils' attitude towards listed activities

	Female (N=141)	Male (N=107)	P
they regularly fulfill school obligations	3,87±0,72	4,33±0,76	< 0,001
they like to explore and learn something new	4,43±0,777	4,14±0,96	< 0,01
they socialize, help others	3,88±1,21	4,19±1,23	< 0,05
they respect the elders, the teachers	4,51±0,58	4,49±0,84	> 0,05
they respect the rights of others	4,26±0,74	4,06±1,20	> 0,05
they pay attention to their behaviour, rules of conduct	3,87±0,83	3,86±1,31	> 0,05
they are active in the class community	4,27±0,93	4,23±1,24	> 0,05

Note: Mean ± Std. Deviation; A t-test was performed for large independent samples

Abbreviations: N – number of respondents; p – statistical significance

During the research, by using ANOVA, it was concluded that there is a statistically significant difference between pupils of different academic performance on issues related to activities that contain an educational component. There is a statistically significant difference on the items: they regularly fulfill school obligations ($F = 26.90$, $p = 0.000$), they like to research and learn something new ($F = 6.53$, $p = 0.002$), they socialize, help others ($F = 6.92$, $p = 0.001$) and respect the rights of others ($F = 3.58$, $p = 0.029$). All statistical significance is below the limit of 0.05. From the mean values (M), we see that excellent pupils more often than others regularly fulfill school obligations, like to research and learn something new and socialize. While the rights of others are more often respected by pupils with good school performance than by others. The results are presented in table 9.

Table 9

Independent variable “Academic performance” and fourth grade pupils’ attitude towards listed activities

	Good (N=40)	Very good (N=58)	Excellent (N=153)	p
they regularly fulfill school obligations	3,50±0,71	3,82±0,75	4,33±0,68	< 0,001
they like to explore and learn something new	3,90±0,70	4,27±0,91	4,44±0,86	< 0,01
they socialize, help others	3,95±0,71	3,55±1,61	4,23±1,11	< 0,01
the respect the elders, the teachers	4,50±0,50	4,51±0,53	4,52±0,79	> 0,05
they respect the rights of others	4,47±0,50	3,94±0,73	4,20±1,11	< 0,05
they pay attention to behaviour and rules of conduct	4,24±0,57	3,74±0,86	3,87±1,17	> 0,05
they are active in the class community	4,24±0,98	4,00±0,95	4,37±1,10	> 0,05

Note: Mean ± Std. Deviation; One-factor analysis of variance (ANOVA) was performed

Abbreviations: N – number of respondents; p – statistical significance

The T-test examined whether there was a statistically significant difference between the pupils who attend and do not attend extracurricular activities in terms of the activities that contain an educational component. There is a statistically significant difference on the item: they regularly fulfill school obligations ($t = 2.53$, $p = 0.012$). Those pupils who do not attend extracurricular activities perform their duties more regularly than those who do. The results are presented in table 10.

Based on the obtained statistical data, we see that the pupils’ academic performance and engagement in extracurricular activities are negatively correlated.

Table 10

Independent variable “Membership in extracurricular activities” and fourth grade pupils’ attitude towards these activities

	No (N=47)	Yes (N=204)	p
they regularly fulfill school obligations	4,34± 0,56	4,02±0 ,80	< 0,05
they like to explore and learn something new	4,34± 0,96	4,31± 0,85	> 0,05
they hang out, help others	4,44± 0,87	3,93±1,27	> 0,05
they respect the elders, the teachers	4,20±1,00	4,57± 0,59	> 0,05
they respect the rights of others	4,29± 0,74	4,16±1,01	> 0,05
they pay attention to behaviour and rules of conduct	3,93±1,16	3,87±1,02	> 0,05
they are active in the class community	4,53± 0,71	4,21±1,11	> 0,05

Note: Mean ± Std. Deviation; A t-test was performed for large independent samples

Abbreviations: N – number of respondents; p – statistical significance

Whether there is a statistically significant difference between pupils who have and do not have responsibilities in the class community in terms of activities that contain an educational component, was also examined by T-test. There is a statistically significant difference on the item: they regularly fulfill school obligations ($t = 4.55, p = 0.000$). Those pupils who have certain duties in the class community fulfill their obligations more regularly than those who do not. The results of the research are presented in table 11.

Table 11
Independent variable “Duty in the classroom community” and fourth grade pupils’ attitude to these activities

	No (N=176)	Yes (N=75)	p
they regularly fulfill school obligations	3,94± ,73	4,41± ,79	< 0,001
they like to explore and learn something new	4,34± ,86	4,26± ,89	> 0,05
they socialize, help others	3,83±1,34	4,49± ,70	> 0,05
they respect the elders, the teachers	4,33± ,74	4,95± ,26	> 0,05
they respect the rights of others	4,11±1,01	4,34± ,84	> 0,05
they pay attention to behaviour and rules of conduct	3,84±1,13	3,98± ,84	> 0,05
they are active in the classroom community	4,13±1,12	4,54± ,85	< 0,01

Note: Mean ± Std. Deviation; A t-test was performed for large independent samples

Abbreviations: N – number of respondents; p – statistical significance

Conclusion

The paper examines the opinions of younger primary school pupils on the educational function of the school in order to obtain data on how the educational role of the school is seen by those for whom it is intended, as well as to determine whether aspects of educational work implemented in schools meet the pupils’ needs.

A hypothesis was set which according to which it is assumed that the pupils of the fourth grade of primary school recognize the school as an educational environment, and it has been confirmed.

The largest number of surveyed fourth grade pupils (84.8%) answered that they like going to school because they feel good in it. Pupils (85.7%) turn to their class teacher when they have a problem, and 85.6% of pupils feel safe and secure in the school. The rules that the pupils know best are the rules of good behaviour in every situation, of being responsible for their actions, of respecting diversity and taking care of others. The teacher, in their opinion, monitors the behaviour of pupils by very often praising the positive behaviour of pupils, and sometimes punishing negative behaviour.

What they like about their elective courses most is that they learn to resolve conflicts peacefully and also about their religion and personal qualities. The largest percentage of pupils (67.2%) discuss a certain topic in their lessons of classroom community, though the percentage (15.8%) is not negligible either of those who think that other pupils' problems are solved in those lessons and that conflicts often occur.

Pupils' interest in extracurricular activities is mostly in the field of sports. Their reasons for opting for a certain extracurricular activity is because it is interesting and fun or because pupils can explore and discover something new.

The problems that fourth grade pupils most often encounter in school are, in the highest percentage, too strict assessment, lack of discipline and poor relations in the class.

Pupils believe that they would feel more satisfied at school if new workshops were organized, if lessons were made more interesting, if assistance in learning was provided and if student safety was increased.

After determining the statistical significance in the representation of certain modalities of answers to questions, as well as the percentage of pupils' answers, it was found that fourth-graders differ statistically significantly in the performance of activities with a dominant educational component with reference to the independent variables (gender, academic performance at the end of the previous school year, membership in extracurricular activities and performing duties in the classroom community).

In the independent variable "Gender differences", we see that boys are more focused on fulfilling school obligations and socializing, while girls prefer to research and learn something new.

Among the independent variables, the negatively correlated ones are the "Academic performance" and "Membership in extracurricular activities". From the mean values, we can see that excellent pupils regularly fulfill school obligations more often than others, they like to research and learn something new and socialize. While pupils with good academic performance respect the rights of others more often than others. Also, those pupils who do not attend extracurricular activities fulfill their obligations more regularly than those who do.

There is a statistically significant difference in the independent variable "Duty in the classroom community" in the question that contains an educational component and relates to the fulfilment of school obligations. Those pupils who have certain duties in the classroom community fulfill school obligations more regularly than those who do not.

The obtained research results contribute to a more complete picture of the educational role of the school from the perspective of the pupils of younger school age in primary school in the Republic of Serbia. The research findings can serve for a deeper observation of this very important pedagogical problem.

Bibliography

- Dymara, B. (2009). *Dziecko w świecie edukacji. Podstawy uczenia się kompleksowego nowe kształty i wymiary edukacji*. Kraków: Oficyna Wydawnicza „Impuls”.
- Müller, W., Wiegmann, S. (2001). *Netradicionalne metode u obrazovanju odraslih*. Zagreb: Hrvatska zajednica pučkih otvorenih učilišta.
- Nelsen, J., Escobar, L. et al. (2001). *Positive Discipline, A Teacher`s A-Z Guide*. New York: Three Rivers Press.
- Perkowska-Klejman A., Górka-Strzałkowska, A. (2016). Szkoła jako instytucja, system społeczny i organizacja. W: A. Minczanowska, A. Szafrńska-Gajdzica, M. Szymański (red.), *Szkoła. Wspólnota dążeń?* Toruń: Wydawnictwo Adam Marszałek.
- Reich, K. (2006). *Konstruktivistische Didaktik*. Weinheim und Basel: Beltz
- Reich, K. (2010). *Systemisch-konstruktivistische Pädagogik*. Weinheim und Basel: Beltz Verlag.
- Udiljak, M. (2010). *Igre za učenike osnovne škole u slobodno vrijeme*. Zagreb: Alfa.

Joanna JACHIMOWICZ, Zdzisława ZACŁONA

State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy

INTERPERSONAL CONFLICTS IN SCHOOL CLASSROOM DURING THE PERIOD OF LATE CHILDHOOD

Summary

As in all social groups conflicts arise in the collectivity of a school class. They are related to interpersonal relations between pupils and between pupils and teachers. This publication presents fragmentary diagnostic survey concerning the opinion of 112 children from grade III of elementary schools and 50 early school education teachers on the subject of interpersonal conflicts and the reasons behind them.

Key words: late childhood period, school class, interpersonal conflict.

1. Theoretical deliberations

1.1. Development of a child in the period of late childhood and the interpersonal contacts in a school class

Late childhood, also referred to as the early school education period or mature childhood falls on years 6-7 to 10-12 of life. It is a period of radical changes in life of a child significantly influenced by school education (Brzezińska, Appelt, Ziółkowska, 2016, p. 164). At this age the activities of a child, until now dominated by the desire to play, change and move towards actions related to responsibilities and educational tasks. Psychological functions are developing further still and entering the environment of school results in the necessity of subjecting oneself to social influence including the rules effective in school and a classroom which are different from the rules adopted for functioning of family.

From the point of view of the theoretical deliberations and the analysis of the results of own pedagogic research it is worth to refer to the social development of children in the late childhood period as it is significant for forming interpersonal relations in the classroom group of school peers. „Most frequently social development is understood as a number of changes occurring in personality of an individual resulting in this individual becoming capable of constructive participation in life and activities of the society” (Wołoszynowa, 1982, p. 627). In truth, an individual becomes fully capable of operating within society only after reaching the age of maturity but in the early school education period significant development changes occur in this sphere because a child enters new social groups, school environment and learns to commune with peers in the area of school and classroom.

A characteristic feature of this period is the shift of the developmental areas and tasks a child must be methodically introduced to in order to cope with the educational requirements, master the abilities related to reading and writing, become a member of peer group and function appropriately within it. Accepting school responsibilities and subjecting oneself to external discipline normalizes social life and presents an opportunity for developing extensive social contacts. The goal of a school is to support children's upbringing and to help them in fulfilling social roles by providing children with positive examples and stimuli which come from social environment, primarily from school. A school class – as an educational environment– becomes a place where a pupil experiences important social interactions. It is a peculiar group, „a system consisting of pupils mutually influencing each other, who differ in terms of position and roles

occupied and possessing a common system of values and standards regulating their behaviour during the events and interactions significant for the class” (Łobocki, 1985, p. 15).

The most important changes occurring at this stage pertain to the nature of social relations and interactions concerning functioning in a classroom group which can become a source of peer support, an environment for forming friendships or camaraderie. By coexisting with other people a child becomes more aware of itself. Working together, engaging in various activities, learning to help each other and mastering interpersonal communication are all valuable skills to acquire, which in a structured manner is significant for pupils of early school education.

At the early school education stage the interpersonal relations are not static, they change under the influence of educational actions and members of class group accumulating social experiences. At this stage we can observe the interest in engaging in contact with peers, children display more activity in social interactions. These interactions become important subjects of children's conversation, which particularly concerns class peers. Children are becoming interested in opinions of their peers, which are becoming models for evaluation, expressing opinion and communication. School class is a group playing a prominent role in adopting social standards, communication, expressing friendship, seizing initiative and directing others. Over time pupils within a class begin to establish collegial contacts, form sympathy, establish sovereignty, develop the sense of belonging and identification with class group.

In contact with peers a child satisfies its needs for play, sense of security, acclaim and acceptance within the group and this fact facilitates development of collegial relations and friendships (Cywińska, 2005, p. 4). The most prominent qualities of collegialship are displayed as mutual help, the ability to cooperate, kindness and common care for joint success. “To be a colleague means to be able to adapt to the rhythm, rate and capabilities of a partner. Frequently one has to relinquish own egotistical benefits in favour of the success of joint work or realization of joint tasks” (Niebrzydowski, 1989, p. 258). Small informal and collegial groups begin to form in classes which share interests or are formed by children living close to each other. Collegialship is an important element of class life, based on mutual interpersonal relations. Friendship is also a specific form of emotional connection between two individuals. M. Szczepańska claims that friendship cannot be imposed or forbidden by anyone, it is a mutual interpersonal relationship based on expressing selfless sympathy, willingness to help and on mutual interests and engaging in activities jointly (2009, pp. 28-29). Friendships are distinguished by the need for constant or frequent company of each other, sharing, doing things together and providing help to other person. J. Dunn observes that a difference exists between how friendship is being perceived by boys and girls. Girls more frequently than boys discuss emotions and impressions, are prone to providing support and aid. In general children select friends from among persons similar in terms of age, sex and interests. At the early school education stage children most frequently choose friends of the same sex, however, this does not mean that friendships between children of different sexes do not exist (Dunn, 2008, pp. 114-125).

Collegialship and friendships improve children's sensitivity towards the needs of other people, increase interest in other people, expand knowledge of peers and teach understanding their needs and experiencing successes and failures (Ibidem, pp. 114-125). Simultaneously it has to be noted that children are susceptible to behaviour of their colleagues as the phenomenon of group pressure exists within a class group. The need for recognition, acceptance and acclaim in the period of late childhood is strong enough for children to respect the opinion of a group, wish for becoming a member of this group and so children attempt to adapt their behaviour to expectations of class peers (Fontana, 1995, pp. 318-319).

Psychologists emphasize that at the late childhood stage interpersonal relations between children are personal in character and frequently are based on emotional connection, particularly in groups bound by collegueship or friendship. They can also be substantive in character and form while completing given tasks and engaging in activities. It is also worth noting that intergroup relations also fall within the widely understood scope of personal relations in a class group. They can take the form of cooperation or aid but can also be negative in character and display antagonistic attitudes leading to conflicts (Skorny, 1987, pp. 150-151).

An actual community of a school class, based on positive interpersonal relations between pupils and between pupils and a teacher is the foundation for optimal development of children and supporting them adequately to their individual capabilities. A teacher is obliged to in the education process to actively participate in task groups, communicate effectively, establish and maintain proper interpersonal relations. A teacher is a central figure of the interpersonal relations in a class group and thus his attitude and behaviour in particular situations and the manner in which he communicates frequently decide whether pupils are able to (individually or with the aid of the teacher) appropriately resolve arising conflicts or if they are pushing conflicts towards a destructive stage.

1.2. Interpersonal conflicts in school classes at the stage of late childhood

Speaking of conflicts it is wise to remember that they are a common phenomenon because there is not a single field of human activity where varied conflicts would not exist, beginning with the conflict of consciousness of an individual person, through familial conflicts, conflicts among friends or in a workplace, and finishing with group conflicts in which numerous persons or informal groups participate. The same is true for education. In this case the attention is being drawn to the very difficult problem of notorious passivity of children and detrimental conditions of relations between pupils and adults (Bodanko, Kowolik, 2007, p. 83).

The daily and several hours-long interpersonal contacts occurring in the classroom are inescapably related with conflicts which arise due to various misunderstandings in communication with other persons. It is so because there are individual differences between children being members of a particular school class and children do not need to agree on their views, assessments or opinions on particular subjects, which results in tensions leading to conflicts. In the subject literature a conflict presents itself as complex, multivariate term dependant on numerous factors. M. Cywiński writes that an interpersonal conflict is the result of interpersonal contacts during which influence exerted by at least one person is detrimental for a partner and thus it endangers partner's existence, well-being, prosperity, opinion on oneself or good name (2004, p. 14). K. Polak indicates that the term "conflict" originates from Latin and means collision, antagonism, discord, contention and discussion. It refers to such situations in which opposite actions, intentions or feelings appear. Conflicts arise for various reasons. Some originate from improper interpersonal relations and are related to disturbance of the communication process, accumulation of negative emotions and being unable to control them (Polak, 2010, p. 23).

The reasons behind school conflicts are also varied and pertain to school environment in which pupils, teachers, principals and the remaining staff operate. A school is a living environment presenting a wide array of various people, differing characters, plethora of events, stereotypes, emotions, biases, sympathy and antipathy. In face of such a plenitude of people and situations conflicts in school and school class appear to be something natural (Ibidem, p. 25). Conflicts between pupils are the most common and the most cumbersome for young children. By participating in pupil-pupil conflicts a child acquires experience, learns how to recognize and read emotions of itself

and another child, express them and, over time, to control them. It also discovers needs and expectations of class peers, discovers values and patterns of behaviour in particular situations. It has the opportunity to perceive opinions of its peers on various subjects different from its own views. It expands own experience of socializing with other people and learns that the readiness for cooperation, collegueship and willingness to provide aid are important conditions for maintaining proper peer relationships (Ibidem, p. 28).

In principle, pupils at the stage of late childhood have poor knowledge of themselves, or the manner in which they react in conflict situations, putting forward arguments or expressing emotions during conflicts. Although the emerging cognitive conflicts contribute to intellectual development, because experiencing such conflict is related with differing opinions and assessment of reality such conflicts have to fulfill the conditions of logical consistency and the opposing opinions and assessments should be presented by different persons. Understanding this is not easy for a child, conflicts in the class peer group resulting from such conditions may result in the sense of not being understood, being underappreciated and not being accepted by a group. On the other hand, they are stimuli towards discovering oneself and others by participating in conflict situations.

However, at times conflicts arise in a school class which are destructive in nature and provoke aggression and hate. They are conditioned by the motifs of jealousy, envy and resentment. Their negative overtone translates into handicapping teamwork in task groups or establishing positive relations between peers.

The interpersonal conflicts at the early school education stage can also be a result of relations between pupils and teachers. They are related to obstacles in the teacher-pupil communication during classes and pertain to verbal and nonverbal communication or transmitting conflict-sparking messages directly related to a teacher including not hearing a pupil's words properly, questions improperly formulated by a teacher, not giving an answer to the pupil's question or diverging views of the teacher and the pupil on the subject of the scope and contents of homework (Jachimowicz, 2018, pp. 123-176). A plenitude of conflict situations is connected with assessing pupils. Sending such messages by a teacher is sometimes experienced by younger children as a conflict situation because a child feels underappreciated, harmed, judged unjustly or compared to other pupils without noticing its contribution.

Another group of conflicts arising due to interpersonal conflicts is related with behaviours of a pupil/pupils not accepted by a teacher. These may be aggressive behaviours, destruction of property and school assets, unjustified absence from classes, improper behaviour of a pupil during classes etc. Usually, teachers' view on such behaviours is unambiguous. They do not tolerate such behaviour and usually attempt to eliminate it by all means possible or severely restrict its occurrence in class or in school. Such behaviours are prominent and unequivocally assessed as negative. However, sometimes situations arise in school which are hard to judge unequivocally and pupils' behaviours do not submit to easy judgment in terms of right and wrong. For teacher such situations are controversial as they do not result from a pupil's ill will or shortcomings of socialization (Polak, 2010, p. 26) but are, indeed, the root of conflict.

Personality related differences can also spark conflict situations between teachers and pupils. They may pertain to fulfilling school obligations, rate and diligence of work, the manner in which a teacher discusses subjects, the scope of homework tasks assigned by a teacher etc. Conscious and deliberate actions of a teacher aimed at learning about pupils under his care could minimize these conflicts because such a teacher would possess knowledge concerning relatively permanent qualities of pupils' personality which determine pupils' actions but do not submit (or do not submit easily) to the teacher's intervention (e.g. intellect, capabilities, organic

characteristics). Undoubtedly the condition for resolving interpersonal conflicts in a class is recognizing such qualities which can be successfully shaped over the course of school education such as motives, interests and aspirations (Ibidem, p. 27).

Adopting wise attitude towards conflicts in a school class by a teacher is related to the assumption that such conflicts are an ordinary element of pupils' coexistence. Children differ among themselves in terms of reasoning and conduct, sensitivity and behaviour and the diverse qualities of their personalities criss-cross in peer relations observed in classrooms. However, it appears that proper educational cooperation between teachers and parents facilitates resolving conflicts at the early school education stage as the possibility exists to refer to similar and socially acceptable patterns of behaviour and hierarchy of values which provide pupils with stimuli towards effecting constructive changes in their behaviours and simultaneously satisfying their needs. Introducing children to the idea of resolving conflicts independently, adequately to their developmental capabilities, teaches children how to act in conflict situation, draw conclusions and, in consequence, how to perceive interpersonal conflicts also as positive and constructive categories instead of destructive categories.

2. Methodological premises of own research

The subject matter of the diagnostic survey was formulated into the following questions:

- What interpersonal conflicts occur in grade III and what are their causes according to pupils?
- What conflicts arise between children and what are their causes according to early school education teachers?

The empirical material was collected on the grounds of individual interviews with pupils. The research was conducted through diagnostic survey method including the questionnaire technique – teachers were filling the questionnaire on the subject of conflicts they observe in grade III and their causes.

The area of research covered 5 instances of grade III of elementary schools. The research group consisted of 112 grade III pupils, including 58 girls and 54 boys. The surveyed classes were selected according to their availability. Fifty early school education teachers also participated in the research. All teachers had between 10 to 20 years of practice and thus possessed rather extensive professional experience and education appropriate for working with children at the late childhood stage as these teacher all held MA degree. The research was conducted in years 2016-2017.

3. The analysis of the results of own research

The fact that conflicts are an inseparable element of interpersonal relations is an undeniable. From the point of view of the conducted research collecting empirical material from pupils of grade III of elementary schools and early school education teachers on the subject of conflicts arising in school class and their causes was cognitively interesting.

3.1. Interpersonal conflicts and their causes according to pupils

The conflicts between pupils and their peers in school take the form of peer clashes. The children from the surveyed group (112 individuals) claimed that arguments are the most frequent form of conflict between peers and such answer was given by as many as 76 pupils (67.8%). Within this group 31 children (27.6%) said that arguments occur daily although children emphasized that arguments arise between different pupils, as many as 45 individuals (40.2%) argue with

their class peers occasionally (once a week or less frequently). Analyzing answers given by children and taking their sex into consideration is noteworthy. Girls argue more frequently than boys. Such behaviour primarily pertained to conflicts within the same-sex groups.

Table 1

Arguments with peers in the opinion of grade III pupils (N=76)

Pupils of grade III argue about:	Girls	Boys	Amount	Percentage
a schoolmate (a schoolmate returns home from school with someone else; does not want to pair with me)	32	3	35	15,5
taking away objects (school supplies, backpacks, jackets etc.)	21	19	40	17,6
opinion	6	17	23	10,1
refusal to help	15	9	24	10,6
games, gadgets, toys	11	14	25	11,0
badmouthing/giving offence/calling names	26	15	41	18,1
pushing/pinching/tugging/jostling/hitting	17	21	39	17,1
In Total	128	98	226	100

Source: own research.

* the table takes into account answers given by 76 pupils who indicated arguments as conflicts between class peers.

From among the collected answers grouped into categories and presented in table 1 it can be discerned that 76 pupils from grade III gave 226 answers in total which pertained to conflicts resulting in arguments of which answers 128 (56.6%) answers were given by girls and 98 (43.4%) by boys. The largest number of answers (32 – 14.1%) given by girls related to jealousy towards a schoolmate/friend. The surveyed boys claimed that the most frequent causes for argument are related to aggressive behaviour of classmates – there were 39 (17.3%) such answers.

Determining what children argue about most frequently leads to the claim that the causes for arguments among girls are not the same as among boys. Girls indicate that most frequently they argue about classmates as confirmed by the following answers given: “I argue when my best friend chooses someone else to play with; when she insults me and I do not know what she refers to; I do not like it when my friend takes something from me (e.g. crayons, an eraser, a book) or when she does not want to walk home from school with me; when she pairs with someone else; I argue with girls about my opinion; I argue when they tell on me, when they call me names (“you are stupid”), when they badmouth my looks (hair, eyes, nose, clothes) or speak about me untruthfully; about treating me badly (shouting at me, saying bad words, pointing at me with fingers, turning away from me, hitting me, putting rubbish on my shelf, pushing my book from the table); when they are shouting at me and saying they do not like me; when she gets offended; when she is not helping me although I help her; when she pulls my hair; when she takes my pocket money; when she calls me names in chat”. Several girls, despite considering the issue, were unable to say why they argue. Two girls claim: “I argue because someone irritates me; other children are arguing so I also argue”.

Boys have given slightly different causes for participation in arguments. Among them they listed: “I argue about games, gadgets, school supplies; when I want to prove that I am right; when someone starts an argument with me, hits me or pushes me, walks behind me into a toilet; when someone attempts to tip me over, jerks me around, harasses me; when they accuse me; when someone cheats; when they take my things from me”. In the analysis of the quoted children’s statements it can be concluded that irrespective of sex the conflicts between classmates are related to arguments bearing marks of verbal aggression (insults, badmouthing, accusations) or physical

aggression (harassment, hitting, jerking, taking away items). Among girls jealousy towards friends can be observed whereas among boys the causes for conflicts consist of arguing about games, defending own opinion and views but also behaviours founded on aggression (harassment, mockery, fights). From among the surveyed children only barely more than a third of pupils (32.1%) claims that they do not argue with their peers.

In summary it can be concluded that the conflicts arising between children from grade III usually concern clashes between individual pupils which manifest as arguments caused by various reasons and conditions.

The surveyed pupils are aware that the conflicts in school class pertain not only to their peers. Interpersonal contacts with teachers also give birth to certain difficulties leading to conflicts. More than 66% of pupils (74 individuals) claims that they can trust their teacher, refer to their teacher in the case of difficulties or when they require aid, explanation or counsel. They claim that the teacher will always help them, listen to them and will become interested in their affairs. They refer to the teacher when they do not know something, do not know how to do something, do not understand a task or an exercise, when something troubles them or they are ill. They also indicate other situations when, e.g. someone is pestering them, hits them, does not allow them to speak during a conversation, insults them or interrupts classes. This group of children believes that a teacher will always take an action to resolve a conflict. They trust their teacher and speak to him/her freely, are open for counsel and follow it. This group of pupils like their teacher or likes him/her very much. When confirming their words children explained that the teacher is nice, likeable, kind, helpful, takes care of them (opinions given by girls), laughs a lot, tells interesting things, likes them, has a sense of humour, jokes with them, conducts short tests and teaches them a lot, is wise, is reliable (opinions given by boys).

From among the surveyed pupils 32 children (28.6%) indicated that they never or almost never refer to a teacher as they believe that turning to a teacher will not change anything and this is why they resolve conflicts with class peers on their own. The answers given by children indicate that they “are afraid to talk to the teacher; the teacher is not interested in what children have to say; “when I am speaking the teacher is not listening to me”; “I do not need teacher's help, he/she will think that I am worse than the other pupil and I am unable to do something”; “the teacher did not help my friend and I think he/she will not be able to help me with my problem”; “the teacher gets angry when children ask questions”; “when children come to talk to the teacher he/she says we should not tell on others”; “the teacher does not listen to me and says he/she has no time”. This group of children indirectly indicate the conflict situations which are incited in interpersonal contacts by teachers themselves. The following answers given by pupils indicate that teachers create communication obstructions in interpersonal contacts with pupils: “I do not know what the teacher means; a teacher always hurries me up; a teacher does not want me to be a good pupil; the teacher asks one question after another and I do not know which one I am to answer; the teacher only tells me off, and he does not tell off other children even if they behave badly; a teacher constantly writes comments on me in the class register; the teacher compares me to other children; I do not always understand what the teacher has in mind” (14 individuals). Several pupils (9) claim that they are very agitated when speaking to the teacher and claim that the teacher does not treat all children equally, they are afraid that the teacher will mock them in front of the class or will not keep a secret. These pupils perceive their teacher as aloof, unpleasant, unlikeable, bossy and authoritarian. Pupils claim that “teachers speak ill of them to parents; always order something to be done; hush pupils; assess and grade behaviour; call in parents; separate children when they tease each other; order children to sit elsewhere; send emails to parents; send children to the principal's office”.

Summarizing the deliberations concerning the interpersonal relations between pupils and teachers as seen by children, it can be stated that in general these relations are positive as 66% of respondents do not associate these relations with conflict. Only less than a third of grade III pupils perceive the arising conflicts with teachers and considers these conflicts to be a negative experience because these pupils feel rejected, misunderstood and treated unjustly.

3.2. Conflicts among the children and their causes – opinions of early school education teachers

Writing about interpersonal conflicts in a school classroom it is important to also present the issue from the point of view of early school education teachers. The surveyed teachers (35 out of 50 respondents) claim that the conflicts among children occur rarely or very rarely – in teachers' opinion once or twice a week. The remaining teachers indicate that they observe conflicts between children frequently – several times a day. Comparing these answers with the answers given by the pupils we can observe discrepancies in indications of these two subjects of survey. Teachers do not notice such conflicts or deprecate them and do not consider such conflicts meaningful saying that: “even when I see that there is a conflict between pupils I attempt to not intervene; I believe that as long as children do not inform me about conflict I should not react because I believe they should resolve it themselves; I do not focus on conflicts between pupils because children make amends just as fast as they are arguing; in the third grade children do not always wish for the teacher to resolve their conflicts because they have experience in dealing with peers”.

Among the conflict situations the surveyed teachers (18 individuals) indicate arguments between children as the most frequent form of conflict. In teachers' opinion these conflicts stem from misunderstandings, differing opinions, different family home upbringing or different values children believe in. Several individuals (9) claim that the conflicts between children are caused by rivalry for education and sports achievements, jealousy towards friends/schoolmates, possessing fashionable clothes/items/smartphones, new computer games. Teachers claim that children notify them of such events. It is evidenced by the following phrases: “children come to me when they do not understand tasks; are unable to do an exercise; when they say that they did not do homework; ask me to explain the rules of grading”. Other individuals speak of resolving conflicts concerning peer problems between children, including certain children boasting about good grades or other achievements or material goods related to higher standard of living.

Eight persons drew attention to children's behaviour which contributes to sparking conflicts – they write about insulting, fights, pushing, harassing, jerking, taking away school supplies or tattling. The statements of teachers concerning their reaction to such situations are also interesting – teachers claim that in such situations they always attempt to lead to resolution of interpersonal conflicts, particularly when these conflicts are related to aggressive behaviour. Two persons declare that they authoritatively give orders to make up, determine who and why caused the incident and give orders concerning further conduct. Six persons state that they always involve children in resolving conflicts in order to teach them the skills necessary for future harmonious coexistence in a group of peers. These individuals emphasize that they refer to the defined rules of behaviour in a school class adopted by all pupils and remind pupils of cultural and acceptable behaviour in a peer group because they want children to acquire positive experiences related to responsible functioning under a group.

Only one in three teachers in the surveyed group is aware that the conflicts arising in a school class may also result from the communication barriers created by teachers. They admit that “lack of time; excess of material to teach in the process of education; personal indispositions; too many classes; stress and lack of professional satisfaction” are the causes of conflicts with individual pupils or a group of pupils. Teachers indicate the following situations: “I enforce rapid pace of work; I do not always react to children's questions; I refer to the class as a group rather than referring to individual pupils; I give a lot of commands and use a lot of prohibitions; I get angry when pupils are unable to answer my questions or do not listen to what I am saying”. The majority of the surveyed teachers (33) claims that their relations with pupils are very good (29) or good (4). They emphasize that pupils trust them, respect them, come for aid, speak about their problems not only in school but also at home. These teachers believe that they have knowledge and professional experience appropriate for education process and are well prepared for teaching. Furthermore, over the course of professional work they have already developed efficient methods of communicating with pupils in class which result in high level of educational achievements.

An effective communication between a teacher and pupils may be beneficial for pupils' school achievement educational effects of but we must remember that ineffective communication in teacher-pupil(s) relations may be the cause of lack of effectiveness in resolving conflicts which inevitably arise in a peer group. The conflicts in interpersonal relations between teachers and pupils result in both parties in communication becoming frustrated, which when not resolved on an ongoing basis leads to excessive psychological encumbrance of individuals. The psychological resistance of a child at the stage of late childhood is decidedly lower than the psychological resistance of an adult. Therefore teachers should at all costs avoid strong emotional tensions in personal relations which generate conflicts.

Care for constructive resolution of conflicts or, if it is possible – not allowing for conflicts to arise, appears to be an important element of caring for proper atmosphere in a school class and learning about the mutual, unobstructed communication. Skillful reception of feedback is the evidence of how pupils and teachers react to another person and a source presenting opportunities of making conscious corrections to one's own behaviour. Methodically introducing pupils to the analysis of interpersonal conflicts and the means of resolving such conflicts are important educational tasks of a school and when realizing them we have to remember that conflicts are conditioned by numerous various factors among which the personality related qualities of pupils and teachers are imperative. The factors related to the characteristics of a class group in which a child functions, its structure, patterns of behaviour and the interpersonal relations in informal groups are also significant.

Conclusion

The difficulties of social integration, including emergence of conflicts in class groups at the early school education stage are a rather frequent phenomenon. The relations of pupils of grade III with their peers and teachers determine not only the academic achievement but undoubtedly influence the atmosphere in a class because interpersonal contacts of pupils and teachers are long-lasting, based on a particular connection determining the manner of communication in a school class.

The fact that children at the stage of late childhood still have difficulties with verbalizing their feelings and emotions is also not without importance and thus it is significant for the verbal language of a teacher to correspond to non-verbal messages. The interpersonal skills of early school education teachers, including the constructive resolution of difficult situations and conflicts,

are a model for pupils for acquiring communication competences. A teacher, as a person leading a school class and intentionally realizing educational tasks, should display care for his/her communication with pupils and communication between pupils and their peers to be beneficial for development of harmonious personal relations based on respecting other people under the dialogue of goodwill.

In order to minimize the negative outcomes of conflicts and maximize the use of positive results of resolving conflicts arising in school classes it would be important for teachers to possess adequate knowledge (concerning the causes of conflicts, conflict dynamics, manners of reacting to conflicts i.e. avoiding conflicts, tempering conflicts, reaching a compromise, cooperation) and to possess the capability for and the awareness of the need for perfecting their competences in the field of positive communication with pupils, including the ability to resolve conflicts arising at the late childhood stage.

Resolving conflicts in a class is a major task as it requires being aware which conflicts are important, which are trite and which can be mitigated and tempered through humour. A good mediator can do so with benefits for all engaged parties and simultaneously earn trust and approval of members of a class but it must be emphasized that it is an ability which will result in success only when an educator possesses knowledge on the subject of his/her charges.

Bibliography

- Bodanko, A., Kowolik, P. (2007). Konflikty w świetle teorii psychologicznych. *Nauczyciel i Szkoła*, 3/4, 81-98.
- Brzezińska, A.I., Appelt, K., Ziółkowska, B. (2016). *Psychologia rozwoju człowieka*. Sopot: Gdańskie Wydawnictwo Psychologiczne.
- Cywińska, M. (2004). *Konflikty interpersonalne dzieci w młodszym wieku szkolnym w projekcjach i sędach dziecięcych*. Poznań: Wydawnictwo Naukowe UAM.
- Cywińska, M. (2005). Przyjaźnie i konflikty. *Życie Szkoły*, 1, 4-9.
- Dunn, J. (2008). *Przyjaźnie dzieci*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Fontana, D. (1995). *Psychologia dla nauczycieli*. Transl. by M. Żywicki. Poznań: Wydawnictwo Zysk i S-ka.
- Harwas-Napierała, B., Trempała, J. (2004). *Psychologia rozwoju człowieka. Charakterystyka okresów życia człowieka* (vol. II). Warszawa: Wydawnictwo Naukowe PWN.
- Jachimowicz, J. (2018). *Komunikowanie się nauczycieli szkół podstawowych z uczniami w procesie edukacji szkolnej*. Nowy Sącz: Wydawnictwo Naukowe Państwowej Wyższej Szkoły Zawodowej w Nowym Sączu.
- Łobocki, M. (1985). *Wychowanie w klasie szkolnej. Z zagadnień dydaktyki grupowej*. Warszawa: WSiP.
- Niebrzydowski, L. (1989). *Psychologia wychowawcza, samoświadomość, aktywność, stosunki interpersonalne*. Warszawa: PWN.
- Polak, K. (2010). Uczeń w sytuacji konfliktów szkolnych. In: D. Borecka-Biernat (ed.), *Sytuacje konfliktu w środowisku rodzinnym, szkolnym i rówieśniczym: jak sobie radzą z nimi dzieci i młodzież?* (pp. 23-39). Warszawa: Difin.
- Skorny, Z. (1987). *Proces socjalizacji dzieci i młodzieży*. Warszawa: WSiP.
- Stefańska-Klar, R. (2007). Późne dzieciństwo. Młodszy wiek szkolny. In: B. Harwas-Napierała, J. Trempała (eds.), *Psychologia rozwoju człowieka: charakterystyka okresów życia człowieka* (vol. 2, pp. 131-149). Warszawa: PWN.
- Szczepańska, M. (2009). *Przyjaźń jako wartość w relacjach społecznych dzieci i młodzieży*. Kraków: Oficyna Wydawnicza „Impuls”.
- Wołoszynowa, L. (1982). Młodszy wiek szkolny. In: M. Żebrowska (ed.), *Psychologia rozwojowa dzieci i młodzieży* (pp. 523-526). Warszawa: Państwowe Wydawnictwo Naukowe.

Anna STRUZIK

State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy

OLD AND NEW MEDIA VERSUS INTEGRATED TEACHING TEXTBOOKS

Summary

This paper discusses various research performed on the early school education textbooks, more frequently conducted under the conventional rather than analytic-discourse approach. It has been stated assumed the results of this exploration will not present an optimistic vision. The opinions of the surveyed pupils concerning merits and drawbacks of the textbooks turned out to be interesting and consistent with the theory.

The conclusion indicates the necessity of departing from teaching focused on textbooks and the need for hybrid use of new and old educational media. Several series of books and websites useful for organizing engaging tasks under the integrated teaching were indicated.

Key words: integrated teaching textbook, educational measures, media, Information Technology, early-school education, learning paradigms.

Introduction

Considering the theory and practice of early school education it is difficult to not refer to the modern learning paradigms. Two opposing paradigms are the objectivist theory stemming from exact sciences and the premises of behavioural psychology and the interpretative-constructivist theory stemming from human sciences and developmental psychology. The first paradigm is expressed through the traditional school and puts emphasis on the curriculum, the supervisory role of a teacher and the objectiveness of a pupil in the education process. A textbook is considered the most important teaching aid. The other paradigm, in turn, is represented by the so-called progressive school model in which the emphasis is put on the focus on the holistic development of a pupil and its subjectivity whereas the role of a teacher is to provide proper conditions for learning and observing the changes occurring in children as the result of the social process of learning. In both humanistic variations, the constructive-cognitive approach and in the constructive-social approach, the necessity for using various sources of information and knowledge acquisition is being emphasized.

Despite the modest attempts at restructuring early school education the references to the conservative vision of school and to the effectiveness in reaching education goals are still strongly rooted. The primary aid in realizing this goal is to be the government-sanctioned, a legal document, The Programme of General Education, as well as the integrated teaching textbooks based on the Programme's premises. The textbooks themselves, their volume, contents and construction, sparked controversies from the very beginning of reform's introduction and were subject of research conducted by various authors. Their pervasiveness, during both the school classes and home learning, merit taking a closer look at the selected trends of their analysis.

The research areas of the integrated teaching textbooks research

The genesis of a textbook as a basic teaching aid for the entire generations of children is related to the model of traditional school. The politicized education authorities decided what proper knowledge to include within textbooks and selected and standardized the contents. After political transformation and in the face of contemporary challenges the formula of the textbook should be changed, particularly in the face of giving teachers the right of selecting textbooks autonomously from among the presented selection.

The acceptance of the alternative selection of textbooks and the criteria for assessing value of textbooks were researched by, for instance, M. Drost, A. Struzik and Z. Zbróg. The results of M. Drost's research (2002) conducted on a group of 600 early school education teachers indicate that majority of teachers (79.8%) accepts the possibility of a teacher selecting the textbook. However, the justifications for such attitude may cause aloofness as the teachers presented the following arguments: making teacher's work easier, preventing routine, adapting the choice to the financial capacities of parents and making solving cognitive problems and acquiring knowledge by pupils easier. Simultaneously, 55.2% of the surveyed teachers thinks that working with children without the use of textbook is impossible, a fact which attests not only to the dominant role of a textbook but also the attachment to the traditional manner of control over the sequentiality of the arranged actions aimed at reaching goals established beforehand. Low percentage of respondents (10.5%) perceives such possibility but emphasizes that working in such a manner is very difficult in case of the leading areas of education. When asked about the role which the textbook should play, the respondents, referring to the classification created by J. Grzesiak in accordance with the multilateral education theory, indicated the informational-structuring role – corresponding with learning through assimilation (96.7%), exercise/self-learning role (learning through activity, 81%), motivational-verifying role (learning through experience, 30.0%) and, ultimately, transformation-research role (learning through discovery, 14.2%). Among the criteria for selection of a textbook the following were indicated: compliance with curriculum (27.3%), accessibility of contents (25.7%), the format of a book (14.1%), presence of problem solving tasks and price (10.1%).

The results of the research conducted by A. Struzik (2005) on the group of 60 early school education teachers, also concerning the criteria for selection of textbooks, yielded similar results. According to the answers given by respondents the most important were, in order, the format of a book, wealth and diversity of contents, price, approachable and easy language of the textbook, consistency with curriculum, scripts for classes prepared for the textbook, integrated arrangement of contents and substantive correctness of the book. The extratextual elements such as: the manner of formulating questions, tasks and instructions, which are reflection of the convention adopted by authors of the textbook, were not recorded among the answers given by the teachers. 15.0% of respondents gave no answers. Thus it can be assumed that teachers are not selecting and evaluating the textbook through the lens of their own substantive and didactic competences and do not take into consideration the capacities, cognitive needs and interests of pupils. In the subsequent studies A. Struzik (2007) engaged in comparison of the number of elements incorporated into 7 popular and frequently selected educational packages. In general it can be stated that the compared packages differ in terms of number and subject of the included materials addressed to pupils. Over the years the offers of publishing houses were expanded. Three packages were indicated particularly often which consist of: 73, 68 and 59 basic and additional elements for pupils as well as 46, 107 elements (63 printed components and 44 video components) for teachers including 38 compilations for early school education teachers. The components for pupils apart

from several volumes of textbooks included work sheets, writing exercise books, required reading exercise books, counting exercise books, expanded exercise books for talented and skilled pupils and the exercise books for consolidating material for pupils with difficulties with learning, work sheets for reading comprehension exercises, required reading summaries and homework exercise books. The materials prepared for teachers were equally impressive and consisted of, apart from lesson scripts including distribution of contents of education, e.g. descriptive evaluation sheets, pupils' achievements tests, dictation exercises, method guides for required readings, method guides for European education, method guides for didactic-compensatory classes, drama interpretations of required school readings and the guide for parents of the first grade pupils. Even a superficial analysis of the contents of the textbooks indicated their unification, frequent instances of infantilisation, preserving stereotypes far removed from the modern interpretation of the world as well as the schematization of pupils' activity. The materials for teachers were characterized with methodic instrumentalism encouraging intellectual passivity and pedagogic reproductiveness.

In the instance of constructing textbooks in such instructional manner the fact of prof. E. Gruszczyk-Kolczyńską calling the early school education “paper education” based on meticulously and frequently uniformly plowing through the subsequent pages of the textbook and work sheets in order, is not surprising. Treating a textbook as the primary source of knowledge results in fetishizing a textbook and makes it impossible for an average pupil to develop independent thinking.

In search for the causes of such a state of affairs Z. Zbróg (2005) has determined that the attachment of a teacher to working with a textbook is the result of fear of criticism on the part of the school board and pressure of parents who are enforcing full completion and exhaustion of all the purchased learning materials. 65% of the surveyed parents held to the belief that not exhausting textbook material, leaving certain parts of a textbook not completely filled in, is the evidence of the lack of teaching competences, improper organization of classes and the classes not being up to standard. The author of the research claims that the reason behind substituting the work of teachers with textbooks is the lack of teachers' reflection on the purposefulness of their actions, lack of knowledge concerning facilitating comprehensive development of children and the manner in which children construct their knowledge.

The selected areas of education are also the subject of the analysis of the early school education textbooks. The object of the research conducted by K. Gąsiorek (2007) was to determine the degree of clarity of the texts contained within the Grade I-III textbooks from the point of view of the recipients these textbooks were designed for. The meticulous calculations concerning the readability indicators allowed establishing that not all texts presented in the textbooks can be deemed readable and thus make it more difficult for children to acquire language competences.

In turn A. Korzeniowska (2007), in her analysis of the questions and instructions used in three series of integrated education textbooks, has determined that the majority of the instructions in the textbooks has the character of a command and was formulated in imperative. Interpreting these results the author believes that such construction is supposed to, on the one hand, spur pupils on towards executing certain actions but, on the other hand, this construction may facilitate developing improper language habits reinforcing strongly imperative forms and eliminating more polite forms.

For particularly contemplative teachers the initial studies of B. Pawlak (2013) may prove particularly interesting as they concern the search for the criteria of the order of introducing letters used by the authors in 4 textbooks for Grade I. B. Pawlak, referring to the proposition of B. Raclawski, isolated the following criteria: phonetic, orthographic and graphical; B. Pawlak also considers the thematic criterion to be significant. Compiling the collected material the author determined

that only a singular textbook takes into consideration the orthographical criterion of introducing letters, in the remaining textbooks this criterion remained unresolved. The thematic criterion is related to the selection of the words which accompany introduction of a letter, e.g. foreman – effect, river – Andrew, cat – catastrophe, and working towards integration of the educational content. The presented examples allow us to observe that combining them into a singular or two at most thematic areas presents itself as an exceedingly difficult task. The more thorough analysis of the entirety of the issues proposed by the authors of the Grade I textbooks also confirms such distribution of contents – which according to B. Pawlak is not beneficial, or even is damaging for the process of integration of education (2013, p. 531).

The analysis of textbooks used in years 2008-2009 in terms of mathematical education was undertaken by Z. Semadeni. The results of the studies allowed indicating several disturbing phenomena including:

- an enormous number of books per a single pupil in a single package;
- excess of visual information on covers, difficulties with determining the structure of the package;
- insufficient assistance in terms of pre-activity thinking;
- inclusion of contents which are not required by curriculum without providing information that such material is optional;
- inclusion of tasks/exercises with level of difficulty far exceeding the capabilities of pupils at this stage of education without marking them as “difficult”;
- use of general instructions, e.g. “Use the formula to calculate”, commanding a pupil to copy a pattern;
- overuse of arrows with various meanings (quoting: Pawlak, 2013).

A. Jakubowicz-Bryx (2013) engaged in the studies concerning formation of pro-ecological knowledge of Grade I pupils on the basis of two different textbooks. The author created a descriptive analysis as the result of which she established that the contents of these textbooks significantly influence formation of pro-ecological attitudes. New terms are introduced through words as well as images and the textbooks observe the rule of increasing difficulty and complexity gradually. The illustrative material consists of drawings and pictures which reflect the real shapes and colours of the world surrounding a child. In one of the textbooks the author has noticed an illustration distorting the actual image of the environment but she did not notice substantive errors. The author emphasized that the analyzed textbooks include tasks which require not only reading, listening but also engaging in activity and, furthermore, the nature-related contents are seamlessly and legibly combined with other areas of education such as: Polish language, music, arts and even mathematics.

Another area for exploration of textbooks has been for years related to the issue of developing critical thinking of younger pupils. For a modern man living in a world with free access to various media this competence is crucial. The very term constitutes the principal goal of the transformative learning directed at changes and stems from the Dewey's school of reasoning. Critical thinking is related to the attitude of skepticism which encourages individuals to challenging established facts, debunking, questioning ideas and premises and not accepting them without reservations. The studies undertaken by I. Czaja-Chudyba (2006) had the object of identifying the instruction which facilitates development of inquisitiveness and the attitude of doubting, searching for alternatives or debating contained within 3 sets of textbooks, work sheets and exercise books for pupils of Grades II and III. On the grounds of the analysis of 6793 instructions the author has determined that only approximately 6% of all the analyzed materials pertained to or contributed

to development of critical thinking. The tasks pertaining to judging correctness, conduct and possibility were rather frequent whereas the tasks pertaining to individual evaluation were rare. The other categories were: searching for causes and explaining them in own words, determining own wishes and preferences, searching for alternatives. More rarely tasks encouraged pupils to search for information in various sources or to provide explanation of meaning and justification; the tasks stimulating doubts, searching for consequences or encouraging redefinition of problems were the rarest. In conclusion of the performed analysis the author states that:

tasks and instructions activating critical thinking of children are extremely rare. It results in the situation in which a teacher basing his work on these didactic materials as well as a child using them do not learn to interpret, doubt and search for the sources of information. Not only does the information conveyed through these materials display excessive encyclopedism but even more disturbing is the fact that individual tasks through which this knowledge is acquired and processed are based on schematism, algorithm and receptiveness (Ibidem, p. 297).

In reference to the experience of Germans in the field of analyzing textbooks E. Zalewska (2009) recommends examining textbooks through the lens of their informational, pedagogic and political functions as well as their socializing potential which is to be understood as the space of varied meanings, attitudes, symbols and values. It means that in selecting a textbook we should consider the image of the world presented by the authors. On the grounds of the analysis of 7 series of textbooks for grades I-III the author cautions about the monodiscursive vision of the world expressed in the act of shaping a pupil in accordance with the adopted patterns and presenting a school as an institution which plays only a positive role in the education and development of a child. The author indicates the idealistic vision of the world devoid of contradictions, multi-dimensionality and conflicts and based on the bipolar version of reality. The author notices the one-dimensional patterns of social roles e.g. stereotypical images of family members, dominance of the technical aspect of forming pupil's competences and marginalizing the critical and creative aspect, as well as the transmissive-reproductive strategy of teaching and learning based on the premises of behaviourism. It is recommended when selecting a textbook to contemplate the topicality of the presented goals and the proposed subject matter, search for complementarity and complexity of the holistic view of the world devoid of reductionism, schematism or superficiality of the discussed subjects, marginalizing certain issues due to their low rank in the hierarchy of contents significant for education, disintegration of contents expressed as the liberal associations or the regressive character of the diachronic order in terms of content resulting from not applying the rule of increasing difficulty gradually in relation to the educational material, in the subsequent classes.

Worthy of attention are also the latest results of the studies of textbooks in both the conventional aspect (functions, texts and extratextual components in the area of language, mathematics and nature) and the analytical-discourse aspect (socializing potential and source of knowledge concerning the world). An analysis of 3 educational packages was conducted by A. Szyller (2018) who complemented it with opinions of grade III pupils concerning the role and usefulness of the textbooks in education and the experiences of children related to the use of textbooks in the educational practice. Taking into consideration opinions of pupils is very valuable as pupils themselves are recipients and main users of the developed educational materials. As a result of diligent and expanded analysis the author indicated a number of positive and negative substantive and didactic aspects and illustrated them with book examples. In summary the

author states that evaluating textbooks unequivocally is impossible because textbooks contained both pro-development tasks, e.g. divergent, creative, alluding to personal knowledge of a pupil and inspiring a pupil to research independently as well as the tasks which were obliterating the pupil's potential and were not taking into consideration the pupil's capabilities e.g. language mistakes, incomprehensible instructions, meaningless tasks and tasks demotivating pupils to learning.

A. Szyller considered the lack of realization of the transformational function and neglecting the research-motivational function in the packages as a serious reservation; it clearly indicates the transmissional character of the premises underlying the conception of textbooks. On the ground of the examination of instructions and tasks the author strongly stated that:

The character, type and level of difficulty of the tasks presented in the textbook may also telegraph the attitude of authors of textbooks towards pupils and authors' opinion on pupils. Analyzing the modern textbooks it can be stated that this attitude is at least dismissive. The authors and publishers of the educational packages are going back in time, they do not adapt their offer of textbooks to the needs and capabilities of the contemporary pupil, which are changing under the influence of social and cultural transformations (Szyller, 2018a, p. 162).

The opinions of pupils, the majority of which were not in favour of textbooks, deserve a discussion, even if a brief one. In formulating their opinions on the progress of integrated education children indicated that it is obligatory on the school grounds, complained about neglecting such activities as: arts and crafts, music or physical education and computer classes. They also suggested the methods of learning such as: conversation, discussion, direct experiences and referring to own experiences, learning through spontaneous, organized and scientific play as well as learning through contact with nature, carrying out observations and experiments as well as creating constructions and projects.

Pupils are noticing the unified education which does not respect individual needs of children and does not allow for independent decisions concerning what and how to learn. Children complain about the excess of homework consisting of catching up with the textbook material not realized during classes and the excessive verbalism in school.

Pupils display ambivalent attitude towards textbooks. They accept: knowledge-forming texts, current and pragmatic topics related to the context of their experience, e.g. with the calendar, celebrated holidays, as well as the variety of forms of expression, e.g. cartoons, interviews, demonstrativeness of the presentation of information as well as repetitions and consolidation and summaries of contents which help pupils in learning. Children prefer creative activities, solving crosswords, word puzzles, riddles and other forms of activity which require thinking, decoding information or containing an element of mystery. Pupils prefer group activities to collective learning.

Among the issues requiring improvement pupils listed, among other issues, excessive number of books in educational packages, chaotic nature of contents and lack of integration, infantility, triteness, stereotypical character, repeatability as well as worthlessness of certain parts of content, excess of tasks assigned to one skill as well as lack of fictionalization of the texts of readers which some pupils consider dull. Speaking on the subject of textbooks pupils assess negatively imposing restrictions upon them during written assignments, inability to choose the manner of solving mathematical tasks or the meaninglessness of certain tasks, for instance writing out the entirety of calculations during mathematics classes, cut-out tasks, colouring tasks, filling in word gaps in sentences. They experience shortage in the area of analyzing poetry. Among the neglected

subjects pupils indicated: sport, anatomy, health and human body, multicultural aspects of traditions, customs, religion and character qualities of people from various corner of the world. Pupils desire pragmatic knowledge from the fields of chemistry, physics, technology, robotics; are interested in inventions, geology, geography, natural phenomena, history, politics and science fiction subjects. Pupils did not shy away from tackling difficult subjects such as: death of relatives, disorders and disabilities, arguments between parents, racial differences, poverty or migration of Poles. The opinions on the last issue divided the respondents into supporters of discussing these subjects in school due to their importance, topicality and closeness to real life issues and opponents who suggested home and family as the place and circle for discussing such subjects.

In summary of the opinions given by pupils it must be stated that these opinions are consistent with the modern theory of learning and the very respondents know better than their teachers how they would like their education to look.

In conclusion of the conducted review of the studies concerning the early school education textbooks it must be emphasized that these studies cover a wide spectrum of issues and present varied degree of penetration of the subject. The analyses primarily cover the conventional methodological approach based on the post-war pedagogic ideas. The modern approach, more adequate for the interpretative-constructive or transformative theories of learning was proposed by E. Zalewska. The work of A. Szyller combines both research approaches although the conventional approach is dominant. The results of the empirical inquiries conducted through various methods are critical towards the authors of textbooks, publishers and reviewers. Despite numerous shortcomings, errors and faults in the practice the excessive fetishization of textbooks can be observed which should be acknowledged as the main source of the problems of Polish education. The dominant focus on textbooks directs the process of education towards the skills important in the XIX century and at the beginning of XX century, which Cz. Kupisiewicz refers to as the 3R: Reading, wRiting, aRytmetic.

Old and new media as an inspiring alternative to textbooks

The use of traditional and modern teaching aids, commonly referred to as media, constitutes an important factor in organization of education and its effectiveness. According to W. Strykowski (2003) media is a broad term covering teaching aids, demonstrative aids, didactic aids as well as mass media and information technologies. A medium is an intermediary in relaying information between the sender and recipient and if it is used in the process of education it becomes an educational medium.

In case of education media consist of various items, devices and materials as well as institutions: radio, television, the Internet, which enable accessing information or passing information from sender to recipient in the form of messages constructed from words, images and sounds (Strykowski, 2003, p. 27).

Works on the subject propose different divisions of educational media. B. Niemierko (1996) divides them in terms of interactivity to: natural passive, e.g. landscapes, live and fabricated specimen; passive low-simulationist, e.g. texts, images, theatre performances, films, radio shows; passive high-simulationist, e.g. word and graphical symbols, graphical models, books and school textbooks, and to interactive natural, e.g. musical instruments, live culture specimen, craft tools; interactive low-simulationist, e.g. cameras, models with movable parts, school farms; interactive high-simulationist, e.g. didactic games, computers, software.

The most popular form of classification is division into simple, single-element, and complex, multi-element (technical) media.

An interesting division of media in terms of their source was proposed by R. Meighan (brw). “First hand” means of learning are the media which are used by pupils to search and process information independently, they create their own textbooks, participate in various simulations, create slides, TV programs, exhibitions. “Second hand learning” consists of using the information contained in films, books, TV programs or standard classes to learn. “Third hand” experiences are information obtained from textbooks and problem studies (Meighan, brw, p. 52).

Development of modern information technologies led to digitalization of culture in many areas of social life, in both macroeconomic areas (commerce, medicine, art, economy, science etc.) and in the ways of spending leisure time, engaging in social contacts or, ultimately, obtaining information. Education answered to development of digital media by developing the theory of connectivity described as a concept of online learning.

Current corona-virus pandemic which enforced rapid introduction of remote education using web and the Internet itself, along with its various educational platforms, is now a liaison between teachers realizing classes and pupils.

In search for the alternative to extra-textbook learning, the grade III children participating in Szyller's studies (2018) indicated various sources for obtaining information. Among these there were books, magazines, textbooks created by teachers and pupils, propositions of using simple objects from the nearest surroundings and introducing didactic card and board games into the process of education. The postulate for classes conducted through the use of modern media, educational films, tablets, computers or interactive blackboards was also prominent.

Strong implications of the theory can be observed in children's statements. Multimedia displayed enormous potential and became not only the unrestricted source of information but they also serve as an alternative to teachers. The threats of anonymous and unrestricted access to the Internet must also be taken into consideration. For this reason, being aware of the importance of the use of simple, manipulative teaching aids in the didactic process, we may be tempted to claim that by organizing classes for younger pupils we must take into account the hybrid sources facilitating the process of learning. By contemplatively and intentionally adopting various – simple and technical – media or well thought – out textbooks or their elements we will be able to help to satisfy the cognitive inquisitiveness, interest and provide children with positive motivation and by the same token we will make the process of acquiring knowledge easier.

Conclusion

The modern early school education requires changes. One of the main reasons behind its low quality is the excessive attachment of teachers to the textbook-based education methods consisting of giving information and exercises only rarely activating pupils during classes and using interactive boards in well thought-out manner.

Redirecting the reasoning from textbook-based teaching towards considering pupils – and their development, potential and needs – as the most important subjects of stimulation for the purpose of independent and group learning, we should replace the 3R education with 3EX: EXploring, EXpressing and EXchanging (Kupisiewicz 2006).

I recommend the following series of books, different than the ones presented in method guides, as the alternative sources of inspiring research:

PATRZE. PODZIWIAM. POZNAJĘ (I SEE, I ADMIRE, I LEARN) – is a series of popular science books published by Arkady publishing house in years 1990-2005 in Warsaw. It is an album publication consisting of nearly 70 titles from the field of natural sciences (e.g. Butterflies, Birds, Plants), geography (e.g. Africa, Cosmos, Hurricanes and tornadoes), social sciences (e.g. Spies, Salvage Services, Inventions).

Młody Obserwator Przyrody (Young Nature Observer) – is a series of books published in years 2010-2012 by Oficyna Wydawnicza Multico from Warsaw which received Edukacja XXI award. It combines play and learning. The contents of each volume consist of beautiful pictures, interesting information, questions for independent deliberation as well as exercises, and quizzes. The series consists of 24 titles incl. Ecology, Nature 2000, Amphibians and reptiles, Birds of lakes and rivers, Protected plants, Animal tracks.

MYSTERIOUS ANIMALS – are a proposition of Wydawnictwo Dolnośląskie from Wrocław published in the Nineties. The books have the album format and are devoted to popular science, describe and illustrate in an interesting manner the life of prehistoric and modern fauna living in ecosystems in Poland and around the world. This series allows readers to learn about numerous interesting species of animals, their habits and interesting facts about them. Examples of available titles: House cats, Monkeys. From a dwarf to a giant, Amazing fish, House dogs, Secrets of small mammals, Nocturnal animals.

Websites for children which can be used during classes and in leisure time:

- <http://fdn.pl/kursy/>;
- <http://matematykadladzieci.pl>;
- www.anglomaniacy.pl/;
- www.dyktanda.net/;
- www.edukacyjne-gry.pl;
- www.sieciaki.pl;
- www.tuxpaint.org/;
- www.wierszedladzieci.pl;
- www.zygotebody.com/.

Bibliography

- Czaja-Chudyba, I. (2006). Rozwijanie myślenia krytycznego u dzieci powinnością współczesnej edukacji. In: B. Muchacka (ed.), *Szkoła w nauce i praktyce edukacyjnej* (pp. 287-299). Kraków: Oficyna Wydawnicza „Impuls”.
- Drost, M. (2002). Funkcje podręczników i ich dobór. *Życie Szkoły*, 8, 461-467.
- Gąsiorek, K. (2007). Wskaźnik czytelności podręczników dla klas I-III szkoły podstawowej w ujęciu diachronicznym. In: H. Synowiec (ed.), *Podręczniki do kształcenia polonistycznego w zreformowanej szkole: koncepcje, funkcje, język* (pp. 97-108). Kraków: Wydawnictwo Edukacyjne.
- Jakubowska-Bryx, A. (2013). Wartość poznawcza podręczników w kształtowaniu wiedzy proekologicznej uczniów klasy I. In: K. Gąsiorek, I. Paśko (ed.), *Poznanie świata w edukacji dziecka* (pp. 242-255). Kraków: Wydawnictwo Naukowe Uniwersytet Pedagogiczny.
- Korzeniowska, A. (2007). Modalność zadań dydaktycznych w podręcznikach do kształcenia zintegrowanego. In: H. Synowiec (ed.), *Podręczniki do kształcenia polonistycznego w zreformowanej szkole: koncepcje, funkcje, język* (pp. 154-161). Kraków: Wydawnictwo Edukacyjne.
- Kupisiewicz, Cz. (2006). *Szkoła w XX wieku. Kierunki i problemy przebudowy*. Warszawa: PWN.
- Meighan, R. (brw). *Edukacja elastyczna. Jutro Twojego dziecka decyduje się dzisiaj. Stowarzyszenie Nasza Szkoła*.

- Niemierko, B. (1998). Inwentarz programowy. In: A.C. Orstein, F.P. Hunkins (eds.), *Program szkolny. Założenia, zasady, problematyka*. Warszawa: WSiP.
- Pawlak, B. (2013). Podręczniki w edukacji wczesnoszkolnej – obszary wątpliwości i badań. In: K. Gąsiorek, I. Paśko (eds.), *Poznawanie świata w edukacji dziecka* (pp. 523-535). Kraków: Wydawnictwo Naukowe Uniwersytetu Pedagogicznego.
- Struzik, A. (2005). Nauczyciele o programach do kształcenia zintegrowanego i ich obudowie. In: Z. Ratajek (ed.), *Uczeń we współczesnej szkole. Problemy reformy edukacji* (pp. 73-78). Kielce: WN Akademii Świętokrzyskiej.
- Struzik, A. (2007). Pytanie o jakość i sens akademickiej edukacji nauczycieli klas I-III wobec pakietów edukacyjnych. In: M. Królicza, E. Piwowarska, E. Skoczylas-Krotla (eds.), *Edukacja przedszkolna i wczesnoszkolna na początku XXI wieku. Wyzwania i konteksty* (pp. 171-176). Częstochowa: Wydawnictwo Naukowe Akademii im. Jana Długosza.
- Strykowski, W. (2003). Media wyznacznikiem zmian w edukacji. *Neodidagmata*, 25/26, 25-35.
- Szyller, A. (2018). *Ewaluacja podręczników zintegrowanych do edukacji wczesnoszkolnej. Perspektywa dorosłych*. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Zalewska, E. (2009). Programy kształcenia i podręczniki szkolne jak do edukacji początkowej jako „wybór z kultury”. In: D. Klus-Stańska, M. Szczepska-Pustkowska (eds.), *Pedagogika wczesnoszkolna – dyskursy, problemy, rozwiązania* (pp. 505-529). Warszawa: Wydawnictwo Akademickie i Profesjonalne.
- Zbróg, Z. (2005). Wybrane założenia „Podstawy programowej” a praktyka szkolna. In: Z. Ratajek (red.), *Uczeń we współczesnej szkole. Problemy reformy edukacji* (pp. 42-47). Kielce: WN Akademii Świętokrzyskiej.

PRESCHOOL CHILDREN'S ENGAGEMENT IN STRUCTURED PHYSICAL ACTIVITY

Summary

The paper presents the results of research that aimed to explore preschool children's engagement during structured physical activity, and to find in which phase of the structured physical activity the children are most engaged.

The research results, obtained on a sample of 25 middle-group children, show that the children were optimally engaged in structured activities which included dance activities and movement games. The children's engagement largely depended on their motivation induced both by the contents and the teachers. Since the peak of motivation in the dance activity was based on individual success with no competitive element, the children persevered longer and tried harder to learn the given choreography. Related to the contents of the movement game, the children's engagement in the introductory phase of this activity yielded better results than in the introductory phase of the dance activity, with a complete turn of events in the central phase, when the dance choreography motivated children more and gave better results than the central phase of the movement games. It can be concluded that children's engagement in the movement games was dependent on the success, that is, victory or defeat in the game set. If the child is not successful in a movement game, their motivation drops and so does their overall engagement in the game.

The child's gender did not significantly influence the level of their physical engagement during the structured physical activity. Results show that girls were slightly more engaged in dance activities, while the movement games were dominated by the competitive spirit, regardless of the gender. Thus, it can be concluded that the driving force of a child's engagement in both types of structured activities is motivation, as well as success in the task performance.

Key words: engagement, physical education, preschool children, structured activity.

Introduction

During the early childhood, physical activity is one of the essential needs of the child. Children have a constant need for movement and play, and through such activities they develop psychosomatically. The National Association for Sports and Physical Education (NASPE) recommends that preschoolers engage in minimum 60 minutes of physical activity daily (Clarke et al., 2002). It is generally believed that young children can meet these recommendations through free play, however there are certain indications that it is necessary to implement structured movement (motor) activities in order to achieve optimal development of the preschoolers (Tucker, 2008).

It is well-established that structured physical activity leads to positive effects on physiological and psychological characteristics of school children (Strong et al., 2005). On the other hand, for preschoolers, the effect of structured physical activity is often neglected. One of the reasons of such trend was a general opinion that children at that age are sufficiently physically active (Timmons et al., 2007). However, recent studies point out that there is a problem of increasing obesity and sedentary behaviour in children aged 2-6 years (Tucker, 2008; Marie et al., 2013). In a systematic review, Tucker (2008) concluded that nearly 50% of preschool-aged children (2-6 years) do not engage in sufficient physical activity. Furthermore, Lin et al. (2016) reported

that as many as 90% of Taiwan preschoolers do not follow the recommendations related to participation in physical activities prescribed by the National Association for Sports and Physical Education. Lack of time spent in physical activities leads to reduced motor skills (Holfelder, Schott, 2014; Santos et al., 2016), which are the basis for efficient movement in adulthood (Džinović, Pelemiš, 2016). Also, there is a connection between developed motor skills in preschool age, with engagement in physical activities and the prevalence of obesity during adolescence. Children who have adopted proper movement habits will later participate in physical activities, which certainly have a positive effect on overall health (Robinson et al., 2015). In that context, proper planning, dosing and selection of motor activities are essentials in order to promote optimal morpho-functional development of a child, and later an adult. Special attention should be paid to the selection of a movement programme itself, as children's motor engagement may vary according to the type of physical activity.

Probably the most utilized activity in preschoolers' physical education is movement games, which are highly effective in improving basic motor skills (Kojić, 2016). Apart from movement games, dance activities could be a useful tool in preschool curriculum. Dancing themes are always accompanied with music and listening to music has a positive effect on psychological factors during physical activity (Mohammadzadeh, Tartibiyan, Ahmadi, 2008). Also, implementing dance contents promotes significant improvements in motor abilities (Alpert et al., 1990) and can be very productive, especially for young females (Oja, Jurimae, 2002).

In addition to that, introducing modern technologies and non-traditional equipment in the curriculum of physical education can contribute to a greater level of interest and motivation of preschool children in both competitive and relay games as well as individual motor activities. The characteristics of the external environment have a positive effect on the level of children's physical activity, where green areas and playgrounds contribute to a longer duration of physical activity (Boldemann et al., 2006). Children of more active parents and those who spend more time outdoors are also more physically active (Hinkley, Crawford, Salmon, Okely, Hesketh, 2008).

Based on the observation of traditional physical activities with preschool children, we may notice a decrease in children's interest in organized motor activities, their inactivity, and unwillingness to participate in games and exercises. Motor activities should be purposeful and need to correspond to the experience, interests, desires, and functional capabilities of preschool children. The contents of the movement should be rational, based on the optimal ratio of different types of activities, aimed at the development of mental, spiritual and physical abilities, taking into account the age and individual characteristics of children. Constant monitoring is required to meet such conditions. One of the most important areas of preschool teachers' expertise is the methodological management of the physical education syllabus fulfilment based on a range of factors. First and foremost, it includes the analysis of children's engagement and amount of activity while performing different tasks. The form in which the monitoring of children's engagement is applied mainly coincides with the children's activity in different areas of physical education, the change of their engagement in physical activities depending on the children's physical fitness, their own and their teachers' motivation, but most of all depending on the children's interest. Apart from providing feedback, the obtained results will enable comparisons with the planned outcomes, i.e., aims, which, in turn, would open the possibilities for direct monitoring of every child's progress and assessment of the level of acquired physical contents that make part of the physical education syllabus.

Previous research

Palmer, Matsuyama & Robertson (2016) investigated preschoolers' ($n=87$, 4.7 ± 0.5 years) engagement during free play and during structured movement programme. The structured movement programme consisted of dance-based activity, a variety of motor skills exercises and movement games. All sessions lasted 30 minutes and physical activity was determined using the accelerometers. They found that children in structured movement programme demonstrated an average of 15 minutes more time spent in light to vigorous physical activity compared to children who played freely.

Shen et al. (2013) examined seasonal variation from autumn to winter in the physical activity among preschoolers ($n=60$, 3-5 years). The engagement in physical activity was measured via accelerometers during the preschool time and during the after-school or weekend time. The results indicate that overall physical activity level declined in winter, however only during no-school time. On the other hand, during school time, the level of physical activity was equal, regardless of the season. These results point to the importance of preschool institutions in maintaining the optimal dosage of children's physical activity level.

Jakson et al. (2003) compared the level of physical activity between preschool boys and girls ($n=104$, 52 boys, 3.7 ± 0.4 years). The physical activity level was assessed using accelerometers over 3 days. After 1 year, the measurement was repeated for 60 children (30 boys). The main results indicated that boys were significantly more active than girls and that total activity increases after 1-year period, for both genders.

Vazou et al. (2016) investigated the influence of a 12-week structured movement programme on the physical and psycho-social outcomes with preschool children ($n=27$, 4 years). They found that movement intervention positively affected the children's perceived competence, which was related to higher motor engagement during the movement programme. These results indicate that success in performing motor tasks is one of the main drivers of the child's engagement in physical activity.

Janković (2013) points out that children's motor engagement varies between different phases of physical activity (introductory, preparatory, main and final phase). On a sample of 166 children, the results showed that during a 30-minute period of physical activity, the children's motor engagement was 17 minutes, and that the engagement was at its peak during the preparatory phase (22.9%), while it is the lowest in the main activity (5.7%).

Marković & Višnjić (2016) investigated preschoolers' motor engagement during the performance of dancing and movement games contents in each phase (i.e. introductory, preparatory, main and final phase). The time of the engagement was measured by random choice of one of the children, who was monitored during the structured activity. The main results indicated that the total dance contents elicited 18 seconds longer engagement compared to the movement games; however this was not statistically significant. During the introductory and final phase, the children's engagement was longer related to the dance contents, while movement games provoked greater engagement during the preparatory and main phase.

Marković et al. (2017) examined the influence of athletic, gymnastic and dance contents on the preschoolers' motor engagement during each phase (introductory, preparatory, main and final phase). They found that the total motor engagement with the athletic and dance contents was higher compared to gymnastics. Also, during the preparatory and main phase, the greatest engagement was observed with the dance contents, while elements of athletics were more efficient during the introductory and final phase. The authors concluded that athletic and dance activities influence preschoolers' motor engagement more positively than gymnastic contents.

Sharma, Chuang, Skala, Atteberry (2011) showed, by using the SOFIT protocol on a sample of children aged 3-6 years, that about 77% of the time measured was spent in light physical activity, and the rest of the time in moderate and intense activity. This study found that physical activity was more intense when the children were outdoors than when they were indoors (about 45% of outdoor time was spent in physical activities, from moderate to intense, and indoors about 13%).

Methodological framework

In the literature, research examining the involvement of preschool children in organized structured activities is scarce, and one of the main factors in the proper growth and development of children is physical activity, about which there is little empirical data; therefore, physical activity of preschool children is largely unexplored.

There is no perfect way to obtain data on physical activities, because no measuring instrument meets all the above criteria at the same time. The ideal measuring instrument or method should be accurate, precise, objective, easy to use, unaffected by the subject's activity, and should also allow continuous and detailed monitoring of motor movement, be socially acceptable and applicable to a large sample of subjects (Livingstone, Robson, Wallace, McKinley, 2003).

However, if more well-designed research is introduced into the practice of preschool education, it is possible to obtain quality data that can eventually lead to appropriate conclusions. The best way to collect data during structured activities is by direct observation because, in addition to data on children's motor engagement, data can be collected on the type of activity, work intensity, social and pedagogical context, etc. In addition, other instruments (pedometer, accelerometer and heart rate monitor) can be used, but the purpose of their use should be to supplement the discussion of the results obtained by direct observation (Janković, 2016).

The research problem refers to the analysis of children's engagement in structured physical activities. In other words, it was necessary to apply the test of children's engagement in physical activity to determine which contents and in which parts of the activity engage children the most.

The research objective was getting a clear picture of the engagement of middle-group preschool children in structured activities of different contents. What is a very important indicator of structured activity is children's active movement, i.e. their direct engagement in the activity. Therefore, the aim of the research was to collect data that would help determine the engagement of middle-group preschool children in structured physical activity. The subsidiary aims were related to obtaining data on children's engagement by phases of activities, and on the contents which engage children more (movement games or dance activities).

Based on the set aims, the structure of the research was defined, with the following research tasks:

- to prepare and apply suitable structured physical activities in a preschool institution (dance activities and movement games),
- to measure and record chronometric values of children's engagement in structured physical activities (dance activities and movement games),
- to determine the level of children's engagement in a structured physical activity by its phases,
- to determine if there is a connection, and of what kind, between the type of the structured activity and the level of children's engagement,
- to draw adequate conclusions based on the obtained results.

The following hypotheses were proposed for the needs of the research:

H1 – it is assumed that children are optimally engaged and will be able to successfully complete the structured activities (dance activities and movement games);

H2 – it is assumed that there are differences in children’s engagement between structured physical activities (dance activities and movement games) related to activity phases (introductory, preparatory, main and final phase);

H3 – it is assumed that children’s engagement is closely related to the type of the structured physical activity;

H4 – it is assumed that the child’s gender does not affect the level of children’s engagement during a structured physical activity.

Since our goal is acquiring new information and knowledge necessary for practical application in preschool physical education, this is classified as applied research. The monitoring of physical engagement was performed in a preschool institution gym, so according to the nature of scientific research, it is empirical, and in terms of duration – it is transversal. Prior to the start of the research, a written consent for conducting it was sought from the management of the preschool institution, an oral consent of the preschool teachers who lead the kindergarten group and a written consent of the parents for their child to participate in the research.

For the purposes of the research, the following instruments were used: a) the test of measuring the children’s engagement in the physical activity according to its structure (Appendix 1); b) the protocol for observing children during the activity; and c) a record sheet for recording the data during each stage of measurement (Appendix 2). The dynamics of children’s engagement were analyzed and assessed by monitoring the recorded values of chronometric measurement, as a reliable indicator of the level of children’s physical engagement during the observed targeted activities.

The research was conducted in the school year 2019/2020. The target group of the research are 4-5 years old (middle-group) children from preschool institution “Blue bird”. The sample included 25 participants – 14 girls and 11 boys.

Results and discussion

As already mentioned, a total of 25 children, 11 boys and 14 girls, participated in this research. The two observed activities were divided into four phases (introductory, preparatory, main and final), with a total duration of 30 minutes per activity. The introductory phase lasted 5 minutes, the preparatory 7 minutes, the main 14 minutes and the final 4 minutes.

Based on each child’s individual results of engagement, the statistical value of the cross-section, and the arithmetic mean, we generated the average values of children’s engagement in the physical activity in the movement game and dance activity areas (tables 1 and 2).

Table 1

Descriptive statistics for each phase during the movement game activity

Phase	Min	Max	Mean	Sd
Introductory (s)	196.0	512.0	310.3	101.2
Preparatory (s)	176.0	508.0	311.6	101.9
Main (s)	404.0	813.0	577.8	133.93
Final (s)	73.0	243.0	153.12	53.93
Total (s)	938.0	1988.0	1353.8	320.2

Table 1 shows that the average motor engagement of children during the movement game in the introductory phase was 310.3 seconds (5 minutes and 10 seconds), in the preparatory phase 311.6 seconds (5 minutes and 11 seconds), in the main phase 577.8 seconds (9 minutes and 37.8 seconds), and in the final phase 153.12 seconds (2 minutes and 33.12 seconds). The total average engagement of children in the structured physical activity conducted in the area of movement games is 1353.8 seconds (22 minutes and 33.8 seconds). The obtained results show that about 80% of the children were engaged in the total duration of the structured activity. A previous study conducted with children of an average age of four and a half years showed that out of the planned 30 minutes, activities lasted 24, and the children were motorically engaged 9.46 minutes (Ružić, Marincel, Runjić, 2006). The maximum and minimum score, as well as standard deviation are also shown in tables 1 and 2.

Table 2

Descriptive statistics for each phase during the dance activity

Phase	Min	Max	Mean	Sd
Introductory (s)	79.0	256.0	144.0	42.1
Preparatory (s)	114.0	381.0	245.0	60.9
Main (s)	601.0	1009.0	879.4	107.4
Final (s)	67.0	211.0	133.7	47.8
Total (s)	866.0	1771.0	1402.5	225.1

When we look at the structured physical activity performed through the dance activity (table 2), we can see that in the introductory phase, the engagement of children through different types of movement is 144.0 seconds (2 minutes and 24 seconds), in the preparatory phase 245.0 seconds (4 minutes and 5 seconds), in the main phase 879.4 seconds (14 minutes and 39.4 seconds), and in the final phase 133.7 seconds (2 minutes and 13.7 seconds). The total average engagement of children in the structured physical activity that was conducted through in the area of dance activity is 1771.4 seconds (29 minutes and 31.4 seconds). The obtained results show a high average value of motor engagement, which can be explained by the higher motivation for the performance of the activity contents, as well as a longer duration of the activity itself.

As the key part of this research was related to testing the accuracy of the proposed hypotheses, we may conclude the following:

The first hypothesis (H1), which assumes that children are optimally engaged and will be able to successfully complete the structured activities (dance activities and movement games) has been confirmed. The total average engagement of the children in the structured physical activity conducted in the field of dance was higher than the engagement of the children in the performance of movement games. Therefore, by applying different contents within structured physical activities, different results for the total motor engagement appear, since higher or lower scores are achieved due to the application of different contents.

The second hypothesis (H2) assumed that there are differences in children's engagement between structured physical activities (dance activities and movement games) related to the activity phases (introductory, preparatory, main and final phase). When looking at the obtained values in children's motor engagement between the movement games and the dance activities for each phase, there are certain differences, although not statistically significant (table 3).

In the introductory phase of the movement games children are more engaged than in the introductory phase of the dance activities. It was noticed that there was a lot of restraint on the part of the boys in getting involved in the dance choreography, as opposed to the movement games, which motivated them.

In the central part of the structured activity, there was a greater involvement of children in dance activities. The choice of songs and choreography motivated the children to persevere in repetitions and successfully master the tasks. The girls dominated here as well, as they did in the introductory phase of the dance activity, especially those who are already active in dancing. This result corresponds to the previous findings of Oja & Jurimae (2002), who found greater motor engagement in dance contents for young girls than boys. Nevertheless, after some time, motivated by the positive atmosphere, laughter and encouragement from their teachers, the boys also actively participated in learning the choreography. When performing the central part of the movement games, the children were motivated by personal success (victory or defeat in the game), which contributed to a certain number of children losing interest after one failure, and this was reflected in the results. Similar findings were obtained in a previous research, which reported greater engagement of children who successfully performed the given motor task (Stodden et al., 2008; Vazou et al., 2016). This indicates that perceived competence is one of the main drivers of the child's engagement in physical activity.

In the final phase of the activity, the children were more engaged in the performance of the movement games, which is explained by the choice of content. The children were motivated by the interesting rules and the way they move during the game, so the children's engagement in the final phase was greater in the movement games than in the dance activities.

While assessing the children's engagement in each individual phase of the structured activities, it was observed that in the introductory and preparatory phase, the children were most engaged in the movement games. Conversely, in the main part of the activity, children's engagement was higher during dance contents compared to movement games. This finding indicates that the interest of the children fluctuated depending on the performed activity.

Given that the third hypothesis (H3), which assumes that children's engagement is closely related to the type of the structured physical activity is also confirmed, we can conclude that children's engagement is optimal when, in addition to its main parameters (volume, duration, intensity), the choice of the content is harmonized with children's interests. Besides that, when planning children's engagement in structured physical activities, and, therefore, a successful and efficient fulfilment of physical education contents, the factors to bear in mind are: presence of interest in performing the activity; providing good atmosphere that enables cooperation and prospects of success; assistance only in extreme cases, i.e. if the child asks for it; all activities, if possible, should be conducted outdoors, or if not, then in a sports gym which fulfills all the hygienic (sanitary) conditions.

Table 3

Differences in children's motor engagement between the movement games and dance activities for each phase (mean ± standard deviation)

Phase	Movement games	Dance activities	<i>t</i>	<i>p</i>
Introductory (s)	310.3±101.2	144.0±42.1	7.573	0.000
Preparatory (s)	311.6±101.9	245.0±60.9	2.800	0.008
Main (s)	577.8±133.9	879.4±107.4	-8.778	0.000
Final (s)	153.12±53.9	133.7±47.8	1.346	0.185
Total (s)	1353.8	1402.5±225.1	-0.622	0.537

Part of the research is based on determining the differences between boys and girls, in respect to different phases of the activity and to the two differently content-oriented activities. These potential differences were examined by t-test for independent samples and can be read from tables 4 and 5. The results show that the fourth hypothesis (H4) is justified, in which it was assumed that the child's gender does not affect the degree of their engagement during the structured physical activity. It is crucial that all children be motivated not only for the contents of the games and dances, but also for a range of other contents, regardless of gender. Based on these results we can see that if all children are sufficiently motivated, there will be no differences between them in terms of their interest in the movement within the two different types of structured activities. In line with these results are the findings obtained by Janković (2016), who reported no significant differences between boys and girls in the variables used to assess the motor engagement of children in structured physical activities. This is an important factor, because preschool teachers do not have to plan programmes specifically for boys and girls, which is also reflected in the rational use of time.

Table 4

Gender differences in motor engagement during movement games for each phase (mean ± standard deviation)

Phase	Girls (n=14)	Boys (n=11)	<i>t</i>	<i>p</i>
Introductory (s)	306.2±112.1	315.54±90.4	-0.224	0.824
Preparatory (s)	316.7±114.9	305.2±87.6	0.275	0.786
Main (s)	584.4±128.4	571.5±145.3	0.235	0.816
Final (s)	151.9±56.9	154.6±52.5	-0.122	0.904
Total (s)	1359.3±356.5	1346.9±284.1	0.094	0.926

Table 5

Gender differences in motor engagement during dance activities for each phase (mean ± standard deviation)

Phase	Girls (n=14)	Boys (n=11)	<i>t</i>	<i>p</i>
Introductory (s)	146.3±30.6	141.7±55.1	0.267	0.792
Preparatory (s)	256.8±46.2	230.3±75.6	1.083	0.290
Main (s)	926.0±42.4	820.0±135.8	2.494	0.029
Final (s)	141.2±42.9	124.2±53.9	0.880	0.388
Total (s)	1470.3±103.8	1316.2±304.8	1.606	0.135

In conclusion, direct observation can be useful in many ways, because it can enable collecting relevant data on the content, type and intensity of physical activity, etc., as well as data related to their social and pedagogical aspects.

The combination of these results opens space for the improvement of structured activities themselves and contributes to a better fulfilment of the goals and tasks of physical education, which can directly be reflected in the optimal growth and development of each child.

Bibliography

- Alpert, B., Field, T., Goldstein, S., Perry S. (1990). Aerobics enhances cardiovascular fitness and agility in preschoolers. *Health Psychology, 1*, 48-56.
- Boldemann, C., Blennow, M., Dal, H., Mårtensson, F., Raustorp, A., Yuen, K., Wester, U. (2006). Impact of preschool environment upon children's physical activity and sun exposure. *Preventive medicine, 42*(4), 301-308.
- Clark, J.E., Clements, R.L., Guddemi, M., Morgan, D.W., Pica, R., Pivarnik, J.M., Virgilio, S.J. (2002). *Active start: A statement of physical activity guidelines for children birth to five years*: ERIC.
- Džinović, D., Pelemiš, V. (2016). *Monitoring fizičkog vaspitanja dece*. Beograd: Draslar partner.
- Hinkley, T., Crawford, D., Salmon, J., Okely, A.D., Hesketh, K. (2008). Preschool children and physical activity: a review of correlates. *American journal of preventive medicine, 34*(5), 435-441.
- Holfelder, B. Schoot, N.(2014). Relationship of fundamental movement skills and physical activity in children and adolescents: A systematic review. *Psychology of sport and exercise, 15*, 382-391.
- Jackson, D.M., Reilly, J.J., Kelly, L.A., Montgomery, C., Grant, S., Paton, J.Y.J.O. (2003). Objectively measured physical activity in a representative sample of 3-to 4-year-old children. *Obes Res, 11*(3), 420-425.
- Janković, M. (2013). Efektivno vreme rada dece na usmerenim telesnim aktivnostima u vrtiću. [Effective time of work of children during directed body activities in kindergarten]. *Nastava i vaspitanje, 62*(2), 294-303.
- Janković, M. (2016). *Fizička aktivnost predškolske dece*. Novi Sad: Doktorska disertacija, 72.
- Kojic, F. (2016). Mobile games as the factors of motoric skills development in children aged from 3 to 4 years. *Educația Plus, 16*(2), 87-97.
- Lin, L.Y., Cherng, R.J., Chen, Y.Y. (2016). Relationship between time use in physical activity and gross motor performance of preschool children. *Australian Occupational Therapy, 64*, 49-57.
- Livingstone, M.B.E., Robson, P.J., Wallace, J.M.W., McKinley, M.C. (2003). How active are we? Levels of routine physical activity in children and adults. *Proceedings of the Nutrition Society, 62*(3), 681-702.
- Marković, Ž., Višnjić, D. (2016). The influence of dancing and game contents on preschoolers' motor engagement. *Exercise and quality of life, 8*(1), 10.
- Marković, Ž., Džinović-Kojić, D., Ignjatović, A., Šekeljić, G., Stanković, S. (2017). The influence of different content on the motor engagement of preschoolers. *Facta Universitatis, Series: Physical Education and Sport, 371-380*.
- Mohammadzadeh, H., Tartibiyani, B., Ahmadi, A. (2008). The effects of music on the perceived exertion rate and performance of trained and untrained individuals during progressive exercise. *Facta Universitatis-Series: Physical Education and Sport, 6*(1), 67-74.
- Ng, M., Fleming T., Robison, M. et al. (2013). Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Burden Global of Disaes Study 2013. *The Lancet., 384*, 766-781.
- Oja, L., Jürimäe, T. (2002). Physical activity, motor ability, and school readiness of 6-yr.-old children. *Perceptual and Motor Skills, 95*(2), 407-415.
- Palmer, K.K., Matsuyama, A.L., Robinson, L.E. (2017). Impact of structured movement time on preschoolers' physical activity engagement. *Early Childhood Education Journal, 45*(2), 201-206.
- Robinson, L., Stodden, D., Barnett, L. et al. (2015). Motor competence and its effect on positive developmental trajectories of health. *Sports Medicine, 45*, 1279-1284.

- Ružić, E., Marincel, M., Runjić, K. (2006). *Efektivno vježbanje na satu tjelesne i zdravstvene kulture u predškolskom odgoju*. Kvaliteta rada u području edukacije, sporta i sportske rekreacije / 15. Ljetna škola kineziologa Republike Hrvatske (327-331). Zagreb: Hrvatski kineziološki savez.
- Sharma, S.V., Chuang, R.J., Skala, K., Atteberry, H. (2011). Measuring physical activity in preschoolers: reliability and validity of the System for Observing Fitness Instruction Time for Preschoolers (SOFIT-P). *Measurement in physical education and exercise science*, 15(4), 257-273.
- Shen, B., Alexander, G., Milberger, S., Jen, K.-L. C. (2013). An exploratory study of seasonality and preschoolers' physical activity engagement. *Journal of physical activity and health*, 10(7), 993-999.
- Stodden, D.F., Goodway, J.D., Langendorfer, S.J., Roberton, M.A., Rudisill, M.E., Garcia, C., Garcia, L.E. (2008). A developmental perspective on the role of motor skill competence in physical activity: An emergent relationship. *Quest*, 60(2), 290-306.
- Strong, B., Malina, B., Blimkie, C. et al. (2005). Evidence based physical activity for school-age youth. *The journal of Pediatrics*, 146, 732-737.
- Timmons, B., Naylor, P.J., Pfeiffer, K. (2007). Physical activity for preschool children – how much and how? *Applied Physiology, Nutrition, and Metabolism*, 32, 122-134.
- Tucker, P. (2008). The physical activity levels of preschool-aged children: A systematic review. *Early Childhood Research Quarterly*, 23(4), 547-558.
- Vazou, S., Mantis, C., Luze, G., Krogh, J.S. (2017). Self-perceptions and social-emotional classroom engagement following structured physical activity among preschoolers: A feasibility study. *Journal of sport and health science*, 6(2), 241-247.

Appendix 1

Test: Measuring children's engagement in physical activity

In order for a preschool teacher to have an objective picture of the children's engagement, values are to be recorded for the chronometric measuring of their active engagement in a physical activity, in such a way that the assessor chooses a child and monitors them during the activity. When the child is performing the activity (running, jumping, throwing, doing warm-up or obstacle course exercises...), that is, when it is active, the assessor starts the stopwatch and records the result expressed in seconds in a designated form. Upon the completed performance, the recorded times are summed up, the children's activity (engagement) percentage value is calculated for activity phases and in total, and is graphically represented. The child whose engagement time is being measured should not know they are subject of measuring and observation.

Record

Activity _____

Type of activity _____

1 introductory phase _____

total _____

2 central phase

a) preparatory phase (warm-up exercises) _____

total _____

b) main phase _____

total _____

3 final phase _____

total _____

Appendix 2

Graphic representation

Percentage %	Chart of children's active engagement in physical education activities in %				
100					
90					
80					
70					
60					
50					
40					
30					
20					
10					
Activity phase	introductory	warm-up	main phase	game	final phase

PART II.
VARIOUS SPACES OF EDUCATION IN TERMS OF THEORY AND PRACTICE

Snežana BABIĆ-KEKEZ

University of Novi Sad, Faculty of Sciences

Department of Chemistry, Biochemistry and Environmental Protection

PARENT ENGAGEMENT TEACHING METHODOLOGY – CHALLENGES AND DILEMMAS¹

Summary

The goal is to review the current social needs for the development and improvement of parents' engagement in their children's school life as part of their pedagogical culture development through the analysis of the existing policy and current scarce research. One of the basic pedagogical principles is the principle of unified influence of all educational factors. The need for educating parents in this direction is thus self-imposing, since parents are equal partners in the educational process, according to the Law on the bases of education (Sl. glasnik RS, 88/2017). The extent to which parents can be expected to perform responsible school-related functions and progress in them is another important question. The school-parent partnership mostly takes place within the school, so teachers and pedagogues are expected to educate parents and give them full professional support for such forms of engagement. To what extent, if at all, are future education workers instructed for advisory work with parents? Social support to the family is defined within strategic documents of social care through population policies. Operationalizing the aims of population education, as a measure of non-material nature, includes, among other things, sharing knowledge about family life, that is, the promotion of healthy family life. It also entails the reaffirmation and modernization of the advisory function of institutions, through the creation of an advisory network meant for raising and developing parents' pedagogical culture (Babić-Kekez, 2016, p. 118). Scarce research on the educational needs of parents shows there are both individual and social needs for it; programmes of parent education should be developed, as well as methods and frameworks for their implementation. A very important question is the training of future preschool and school teachers and form tutors for the pedagogical education of parents for their school-life engagement. The paper attempts to answer these questions by proposing a syllabus for a corresponding teaching methodology.

Key words: parent engagement, pedagogical culture of parents, population education, teaching methodology.

Introduction

There has been a growing need for strengthening the family in the last few decades, not only in a material, organizational and programme sense, but above all in the sense of strengthening its educational function. This need results from the fact that, due to its policies, society has minimized its role in children's upbringing within the educational system, transferring this aspect of their education almost entirely onto the family. The question is being raised of the extent to which parents are capable of performing the two basic functions in the parent-child relationship: the function of childcare in the sense of fulfilling the child's basic physiological needs, and the function of upbringing with the aim of forming the child's complete personality. How does one "get equipped" for efficient individual and social functioning? According to Gojkov (2008), there is an entire set of general abilities, or competences, which are necessary for achieving individual and social fulfilment. Competence, and its subfields of self-competence

¹ The paper is result of the project "Pedagogical pluralism as a basis for education strategy", no. 179036 (2011-2020), which is supported by the Ministry of Education, Science and Technological Development of Serbia.

and social competence, are considered to be the key abilities for an individual's personal and social fulfilment. On the other hand, the tendency and the requirements of society for attaining knowledge in competent parenthood impose the need for a systemic solution, which implies the growing need of society for educating parents for the active role in child-rearing within the family (Babić-Kekez, 2009a, p. 32). The rising demands of society, the new socio-economic circumstances, and the pluralization of the family forms create the need for strengthening the family and developing a family policy. Thus, in broader sense, the social conditions for fulfilling the aims of child upbringing and education make the basis for new reform processes and creation of new education policies with the aim of educating parents and developing their pedagogical culture.

The end of last century was marked by a transition of former socialist countries. The political and economic crisis, immense social changes and wars have brought about changes within the family itself, its functions and moral values. Serbia is one of the countries where transition took place on several parallel tracks at the same time, largely starting from the year 2000. Unlike other Eastern European countries, Serbia was about 10 years late with the beginning of the transitional reforms. In those "missed" years, negative trends were on the rise: the fall of gross domestic product; instead of integrative processes, the country was disintegrated through several wars; instead of being included in the international community, the country was isolated and sanctions were imposed on it; the processes of forming new social and federal units were not yet completed; the social stratification of the population was changing on a daily basis because of the economic instability and restructuring. From today's point of view, it is evident that these years were not only missed but were much more devastating, starting from the destruction of the basic social infrastructure all the way to the human resources (*National report on the development and condition of education and adult learning – Serbia*, Confintea VI, 2008, p. 1). The question of a social need for the reform of the entire education system was opened by the end of the year 2000; however, excluding a few sporadic attempts, it has not come into the focus of the governing elite to this day. The enthusiasm for the reconstruction of all basic social systems lasted until 2003, when Serbia was faced with another social crisis. The dissolution of the State Union of Serbia and Montenegro, the separation and proclamation of independence of Montenegro, and then the Kosovo crisis, turned the focus of society to completely different problems and again shoved education to the margins of governmental support – both in the sphere of politics and legislation and in the sphere of finance and institutionalization (Ibidem, p. 2). Under such circumstances, the society only takes education into consideration through legal acts, that is, through educational policies, and thus minimizes its own role in the processes and tasks pertaining to upbringing, leaving it largely to the responsibility of the family and parents. This opens many dilemmas and challenges, but also problems which directly affect the adaptability of family and its functioning in general. The basic question is that of the level of parents' competences for responsible parenthood, as well as the question of social support to the family.

Social support to the family and the development of family policy have been in the focus of our public in the recent years. They include a long-term intent of employing both parents, enhancing the development of family services and investing in children's development. It is necessary to gradually shift from the current compensation model towards a developmental model of family policy. The society has to face with the pluralization of family forms, which, besides a complete family, includes single-parent families, cohabitation, extramarital children, and single-person households, and also with an increase in the divorce rate, a decrease in the number of formal marriages and postponement of childbirth. The country's support to the family is paramount in financial, organizational, and logistical sense. The financial support

should be separated from the social support system over time and acquire developmental character, and it should be an investment in the future, since positive demographic development directly influences industrial progress and overall progress of society. The family policy needs to have its basepoints in both parents' employment – the two jobholders model, and in the development of family services which would strengthen the family in performing its basic functions, including raising and socializing the children. The two-jobholders model firstly implies employment of women, especially those who want to get an employment after having raised their children. Employing people younger than 25 is supposed to improve the unfavourable demographic image, the quality of future family relations, the partnership among family members, as well as between the family and society. Family services should be developed at the level of local governments and especially in terms of affirmation programmes for successful and responsible parenting. This can be achieved by investing in the improved pedagogical culture of parents with the aim of lowering the psychological costs of parenthood (Babić-Kekez, 2012a, p. 160). The question of the developmental level of parents' pedagogical culture and the improvement of their competences for responsible parenting as a social and personal, i.e. individual goal, depends on the changes in the modern family and parents' awareness of their role and responsibility in raising a child. The readiness of parents to cope with changes opens the possibility for new approaches to and methods of parent education.

The education and engagement of parents through new approaches and methods, as well as the education of primary and preschool teachers and other experts cooperating with parents, either through the process of population education or through the school system, is the topic of research presented in this paper.

Parent education aimed at developing pedagogical culture

Parent education with the aim of strengthening the educational competences within the family and developing its pedagogical culture has been gaining more and more interest in Serbia in the recent years. Due to the fact that this and other forms of educational activity are socially dependent, we may say that the need for parent education and the development of parents' pedagogical culture in general has been following the development of the family as a social group (Babić-Kekez, 2013, p. 143).

Organized work on developing the pedagogical culture of parents started at the end of 19th century as a specificity or consequence of the economic growth of certain countries. At the beginning of the 20th century, an entire line of new pedagogical ideas and theories emerge as consequence of the new social and cultural milieu. The society was showing the necessity for strengthening the educational function of the family and the development of parents' pedagogical culture, especially after the dramatic changes of the time. Namely, after the World War II, the development of the pedagogical scientific thought in former Yugoslavia was heavily influenced by Soviet authors, primarily A.S. Makarenko, which resulted in the publication of papers following in the footsteps of Makarenko's *A Book for Parents*. The work of R.G. Glavički *We and Our Children*, published in 1954, tells of the ways parents act, the pedagogical mistakes they make and the consequences of those mistakes, and about the way of forming a healthy person. In her work *The Dysfunctional Family and Children*, published in 1958 in the form of then-popular pocket edition, R.G. Glavički talks of the fatality of an unhealthy family atmosphere for the child's development, exemplifying it with authentic everyday stories. R. Makarić writes about the need and importance of the unique educational work of the family and school in the book *On our children's behaviour*, published in 1956 by the Pedagogical Center for Family Education

in Novi Sad. The book is intended for parent education and was printed in Serbo-Croatian, Hungarian, Slovakian and Romanian. *Parents' Mistakes in Raising Children* by M.V. Matic, published in 1957, instructs parents on the educational work within the family in a popular and approachable way. The author's intention is to help parents, as many of them lack knowledge on how to pedagogically approach the child and so make unintentional mistakes. The book is important because it puts forward the demand for pedagogical education of parents as an important factor of achieving better results in children's upbringing. In the book *Education for family life*, published in 1966, D. Savićević speaks of the importance of educating parents and suggests concrete methods of work. The book is particularly important because it proposes constituting Family andragogy as a specific discipline of andragogy. Among other things, the author considers the sociological and psychological bases and specificities of education for the life in a family; the goal, tasks and principles of life in a family; and, particularly important for this paper, the methods, forms and resources for the upbringing and education for the life in a family. The methods which D. Savićević (1966) postulates are: the method of teaching, talking, discussion, demonstration, of working on a text, the method of written and graphic pieces of work and the method of practical work; the interactive forms of work proposed are: courses, seminars, parents' meetings, lectures, discussions and conversations, theme-based evenings, senior evenings, music and film nights, performances, visitations, exhibitions, conferences about family education, whole-group work, group work and individual form of work. In the chapter: "The choice and implementation of educational resources", the author (ibid) suggests films, radio and television shows, magnetophones, applicators, educational journals, propaganda leaflets and posters. What is particularly important is the emphasis placed on the role of the teacher in the process of upbringing and education for life within the family. An immense theoretical and practical contribution to the development of pedagogical culture in Serbia in the last decades has been made by Lj. Prodanović with her works such as *In what, when and how... to collaborate with parents in the school* (1979); *Collaboration of the family with the school* (Prodanović and Lunginović, 1987); *Individual collaboration with parents* (1997); *Check your educational skills within your family* (2007); and *Collaboration of the teacher with parents* (2008). In the same time period, the *Handbook for Parents – Secrets Big and Small*, was written by S. Babić-Kekez and published by Matica Srpska (1998). In the range of the ever growing theoretical and practical activities and knowledge accrued in Serbia in the recent years, the following outstanding works can be singled out: *The Child in the Family and School – Check Your Educational Skills* by S. Stanojlović (2004), and the international project "Kindergarten as a family center", carried out by the Serbian Institute for Pedagogy and Andragogy within the Faculty of Philosophy in Belgrade. An entire set of programme activities was developed, with the specific standards for performance set, which contributed to the development and improvement of the pedagogical culture of parents.

Parent education for child-rearing within the family has found its place in the systematic documents of the last years under the scope of population education. Population education, which is an important element of population policy, starts from the fact that an individual does not have enough specific knowledge necessary for decision-making and informed acting in many areas of life. The goal of population education is to effect a change in the value system, attitudes and behaviours, and the process of population education itself should be long-lasting and systematic. The measures for educating population are versatile and depend on the national strategy for the population policy or on the country's programme of demographic development. Most commonly, a measure of non-material nature is sharing knowledge, that is, population education which should include the entire population as well as specific target groups, such as teachers and school

associates, social workers, preschool staff and parents. The emphasis is placed on the application of interactive teaching methods and training in modern working methods of those who are conducting the population education. Operationalizing the aims of population education, as a measure of non-material nature, includes, among other things, sharing knowledge about family life, that is, the promotion of healthy family life. It also entails the reaffirmation and modernization of the advisory function of institutions, through the creation of an advisory network meant for raising and developing parents' pedagogical culture (Babić-Kekez, 2016, p. 118). The conditions for the fulfilment of such demands are provided by the Law on adult education (2013) through different forms of non-formal education. Starting from its primary characteristics, such as willingness, flexibility and accessibility, non-formal education provides the possibilities of satisfying social and personal needs. Alongside formal education, non-formal education, as part of modern education concept, should create the conditions for the fulfilment of the goals referring to acquiring new knowledge and mastering different skills.

Given that the development and improvement of pedagogical culture of parents is not only a social but also an individual goal, the important question is what parent competences need to be improved. The importance of parent education for responsible parenthood is gaining ever more attention of not only scientific community but of general public as well. The problem can be examined from different points of view. Some of them may provide the answer to the questions: how to organize parent education, which methods and forms of work with parents are adequate, which resources to use, what content to offer, how to strengthen parents' competences, etc. The ultimate goal of the implementation of a programme of parents' engagement in the work of educational institutions is harmonization of their influences on children's upbringing. It is very important to choose correctly the forms, methods, and contents of cooperation. While devising their programme of collaboration with parents, the educational institutions should establish why the parents want to be engaged in their work, whether they are satisfied with the cooperation, how it can be improved, and how the educational needs of parents can be met in order to harmonize the effects of their child-rearing with the development of their competence for responsible parenthood (Babić-Kekez, 2014, p. 660).

Although this is a topical issue, there is scarce research aimed at establishing the educational needs of parents. One of such studies comes from the Faculty of Philosophy in Novi Sad: The pedagogical culture of parents and the effects of child-rearing in the family (Babić-Kekez, 2008). It identifies the educational needs of parents and offers a framework for devising a programme for their engagement on the three levels of education in Serbia. The problem of the educational needs of parents is closely considered as well as the need for new approaches in parent education with the aim of developing their competences for responsible parenthood. The survey results, with a representative sample ($N=709$) including parents from two cities in Vojvodina, gave the guidelines for introducing new ways, forms and resources necessary for the collaboration between the parents and preschool and school teachers during the programme implementation. According to the acquired data, the parents were motivated to get engaged in cooperation with the educational institution, primarily in order to help their child become part of the preschool/school life, in order to balance their own requirements towards the child with the requirements of the preschool/school. They were also willing to ensure the best conditions for their child's development through collaboration with preschool/school teachers and the pedagogical-psychological service. The established forms of parent engagement are individual contacts and parents' meetings, mainly focused on the children's achievement as a group, as well as theme-based parents' meetings with expert lecturers, usually the institution's pedagogue or psychologist.

There are also parent counselling practices, however, they are rare and exist only within larger urban environments. Based on a questionnaire administered in 2007, the following forms of engagement are proposed: parents' meetings, lectures and forums, educational workshops where parents can actively participate and exchange experience, parent counselling, brochures and handbooks which contain advice and recommendations. Most of the surveyed parents (42.37%) consider that brochures and handbooks with advice and recommendations are the best way to gain more knowledge about parenthood and child-rearing. Almost the same percentage of the respondents (40.08%) think that parents' meetings and individual contacts are the most convenient forms of work. One third of the surveyed parents (32.69%) think that educational workshops are the form of work which would give them more knowledge on parenthood and family education, while a smaller, but not negligible, number of parents (18.04%) consider that counselling as well as forum lectures would suit them most. It may be concluded that parents find all the offered forms and methods of engagement interesting; the novelty is their need to participate in educational workshops. This should by all means be taken into consideration while planning one's work with parents (Babić-Kekez, 2014, p. 658).

A contribution to the development of parent engagement teaching methodology

Speaking of the social context for developing parents' pedagogical function, it is extremely important to include parent education in strategic documents which define education policy and refer to formal and non-formal education. The focus should be on the accreditation and ensuring programme quality (in terms of contents and teaching methods), teaching conditions and the level of teachers' (educators', trainers') competences.

Taking into account all the above, we think it is highly important to educate future preschool and school teachers, and other professionals who get in daily contact with parents and can provide them support for the educational work within the family. In line with that, we suggest introducing the elective subject: Parent Engagement Teaching Methodology, which could be implemented in vocational, basic academic or master studies at higher education institutions which educate the aforementioned professionals.

Course title: Parent Engagement Teaching Methodology			
Lecturer: dr Snežana Babić-Kekez			
Status: Elective			
ECTS:			
Requirements: Exam in Pedagogy			
Learning objectives:			
<ul style="list-style-type: none"> – comprehension of different theoretical frameworks in studying the family and adopting the basic concepts related to family, marriage and parenthood. – Obtaining knowledge on characteristics and functions of modern family and development of pedagogical culture of parents in the conditions of social changes. – Training students for parent education and engagement. – Training students to prepare, perform and evaluate parent education and engagement counselling. 			
Learning outcomes:			
<ul style="list-style-type: none"> – gaining competences for parent engagement counselling and development of parents' pedagogical culture, – affirmation of family life values and parenthood in the development of individual within society. 			
Syllabus:			
<ul style="list-style-type: none"> – Theoretical approaches to studying family, marriage, and parenthood. – Historical review of parent pedagogical culture development. – Functioning of modern family in the conditions of social changes (characteristics and functions). – Types of family, structure and functionality. Family relations. – Models of family upbringing based on marital and parental relationship. – Family-planning and responsible parenthood as a need of modern society. – Forms of organizing the educational work with family. – Didactic principles, modern teaching methods, interaction patterns. – Educational technology, multimedia in teaching. – Counselling work with parents. – Family protection in society and child protection in society and family. 			
Literature:			
Babić-Kekez, S. (2009a): <i>Obrazovne potrebe u funkciji razvoja kompetencija za odgovornim roditeljstvom</i> , Vršac.			
Babić-Kekez, S. (2009b): <i>Utvrđivanje obrazovnih potreba roditelja</i> , Pedagogija, 2, s. 269-275.			
Babić-Kekez, S. (2009c): <i>Novi pristupi u obrazovanju roditelja za odgovorno roditeljstvo</i> , Zbornik TIO 5, Institut za pedagoška istraživanja, Beograd; Fakultet tehničkih nauka, Novi Sad; Centar za razvoj i primenu nauke, tehnologije i informatike, Novi Sad.			
Babić-Kekez, S. (2013): <i>Razvoj pedagoške kulture roditelja</i> , Zbornik Matice srpske za društvene nauke, Novi Sad.			
Weekly teaching load	Lectures: 2 (30)	Practice: 2	
Teaching Methods: Lectures, individual work, pair and group work, workshops, discussions, debates, simulations, case studies, role play, consultation hours.			
Score (maximum 100 points)			
Pre-examination assignments	points	Examination	
Class activity	10	Written examination	
Seminar paper	30	Oral examination	60

The proposed elective course Parent Engagement Teaching Methodology, should be taken after the attended and successfully passed course of Pedagogy in the third year of basic vocational and basic academic studies of pedagogical orientation.

Conclusion

The paper looks into the education of parents by exploring new approaches and methods of teaching, as well as the education of preschool and school teachers and other professionals engaged in work with parents, either through the process of population education or within school institutions.

Through history, every society has fulfilled its general social needs and goals by concretizing its educational goals and adjusting them to its stated needs. Reform processes are inseparable from the fact that goals of education and upbringing and socially dependent, particularly in school systems. Currently, in the midst of the pandemic, we are witnessing global economic crisis, and new trends in education are already visible, especially in the requalification of the related professionals. These new socio-economic needs will surely influence in the near future influence the creation of new educational policies on the global level, and also in individual countries, depending on the level of its economic and technological development.

Social development causes changes in education; therefore, the traditional role of education in acquiring knowledge, and the development of one's individual competences is getting new characteristics. The wealth of a country does not only depend on its natural resources, but is rather reflected in the expertise and educational level of its people, who discover, develop, improve and use those resources.

The process of transition which our society is exposed to, has led to some major social changes, political and economic crisis, which affect the family directly, as well as its functions, dynamics, structure, adaptability, functionality and value system. According to A. Milić (2001), the conflict in the society and impossibility of the individual to satisfy their basic needs and aspirations can affect the family in various ways: the dissatisfaction with society can be transferred from parents to the family, which may represent a latent source of family conflict and disorganization. Similarly, given that the society has minimized its responsibilities in the tasks of children's upbringing pertaining to the education system in the last two decades, rather transferring them to the family, there is a growing need to strengthen the family, not only in a material, organizational and programme sense, but above all in the sense of strengthening its educational function. Social support to the family, which is based on pluralization of family forms and the growing demands of the society, should take steps to implement programmes of development of family policy and family strengthening. As one of the forms of population policy, the programme of social support to the family should be developed through population education. That entails investment in raising the pedagogical culture of parents in order to lower the psychological cost of parenthood. Population education, an important element of population policy, starts from the fact that the individual does not have enough specialized knowledge necessary for decision making and acting in different spheres of life. The goal of population education is to initiate change in the value system, attitudes and behaviour, and the process itself is supposed to be long-lasting and systematic. The society should establish family services at the local level and should develop programmes towards the affirmation of successful and responsible parenthood by investing in the development of the pedagogical culture of parents.

Parents' education for strengthening competences for educational activity in the family and pedagogical culture development has been gaining importance recently in Serbia. A responsible parent strives to balance their own demands pertaining to child's upbringing with the demands of society, i.e. the school. The feeling of personal responsibility guides them to obtain necessary knowledge for parenthood (more in: Babić-Kekez, 2012b). Given that the development and improvement of parents' pedagogical culture is not only a social, but also an individual goal, the important question is what competences should be improved. Despite the topicality of the issue in question, there is scarce research focused on the educational needs of parents. Such research was conducted at the Faculty of Philosophy in Novi Sad: The pedagogical culture of parents and the effects of child-rearing in the family (Babić-Kekez, Oljača, 2008), looking into the educational needs of parents and establishing a framework for developing a programme of work with parents at the three levels of education in Serbia. It also focused on the approaches necessary for helping parents to develop new competences for responsible parenthood. The results of the survey conducted in two cities in the region of Vojvodina provided guidelines for developing new ways, forms and resources for parents' engagement and the parent-teacher collaboration programme. A step further would be an advanced training for future teachers and other professionals in education who cooperate with parents in their everyday practice. The aim of the training is to prepare them for professional collaboration with parents in terms of parent engagement in their children's educational activities in the family and at school. In line with that, the paper offers a proposal of detailed contents of the elective subject: Parent Engagement Teaching Methodology. The primary goal of the subject is training students towards the development of parents' pedagogical culture and their informed engagement in their children's school education and upbringing. The contents of the course thoroughly ponder the theoretical and pragmatic aspects of family life and relations, marriage and parenthood, family members' protection, and functioning of the modern family in the conditions of social change. The final outcomes should be gaining competences for the counselling work with parents and development of their pedagogical culture, as well as the affirmation of family values and parenthood in the development of an individual within society.

Taking into account all above-mentioned, it is essential that society should acknowledge the need for parent education, and include it, through collective activity, in the strategic documents which define educational policy, as well as legislation which arranges the system of education and upbringing.

Bibliography

- Babić-Kekez, S. (2008). *Razvoj pedagoške kulture roditelja i vaspitno delovanje u porodici*. Doktorska disertacija. Filozofski fakultet, Univerzitet u Novom Sadu.
- Babić-Kekez, S. (2009a). *Obrazovne potrebe u funkciji razvoja kompetencija za odgovornim roditeljstvom*. Vršac, Visoka škola strukovnih studija za obrazovanje vaspitača „Mihailo Palov“.
- Babić-Kekez, S. (2009b). Utvrđivanje obrazovnih potreba roditelja. *Pedagogija*, 2, 269-275.
- Babić-Kekez, S. (2009c). Novi pristupi u obrazovanju roditelja za odgovorno roditeljstvo, 5. Međunarodni simpozijum: Tehnologija, informatika i obrazovanje za društvo učenja i znanja. UNESCO, Fakultet tehničkih nauka, Novi Sad, FTN, CNTI, Institut za pedagoška istraživanja, PMF. Saopštenje po pozivu.
- Babić-Kekez, S. (2012a). A School Role in the Population Policy Implementation Programme. *Didactica Slovenica – Pedagoška Obzorja*, Novo Mesto, 158-171.
- Babić-Kekez, S. (2012b). Društveni kontekst kao osnova pedagoškog delovanja. U: *Pedagoški pluralizam i filozofija obrazovanja* (pp.175-194). Novi Sad: Filozofski fakultet.

- Babić-Kekez, S. (2013). Razvoj pedagoške kulture roditelja. Novi Sad, *Zbornik Matice srpske za društvene nauke*, 142(1), 119-128.
- Babić-Kekez, S. (2014). Pluralnost društvenih i individualnih potreba u funkciji razvoja metodike rada sa roditeljima, *Pedagoška stvarnost*, *bp.* 4, 654-665.
- Babić-Kekez, S. (2016). Prilozi za obrazovne politike, Visoka škola za obrazovanje vaspitača. „Mihailo Palov“, Vršac, p. 161. Elektronsko izdanje dostupno na www.uskolavrsac.edu.rs.
- Glavički Galevska, R. (1958). *Poremećena porodica i deca*. Beograd: IP Rad.
- Gojkov, G. (2008). *Ciljevi vaspitanja – kompetencije učitelja i vaspitača*, *Visoka škola za obrazovanje vaspitača*. Vršac.
- Makarić, R. (1956). *O ponašanju naše dece*. Novi Sad: Pedagoški centar za porodično vaspitanje.
- Matić, M.V. (1957). *Greške roditelja u vaspitanju dece*. Beograd: Naučna knjiga.
- Milić, A. (2001). *Sociologija porodice*. Beograd: Čigoja.
- Nacionalni izveštaj o razvoju i stanju obrazovanja i učenja odraslih – Srbija, Confintea VI. (2008).
- Prodanović, LJ. (1979). *U čemu, kad, kako...sarađivati sa roditeljima u školi*. Beograd: Privredno finansijski vodič.
- Prodanović, LJ. (1997). *Individualna saradnja sa roditeljima*. Beograd: Savez učitelja Srbije.
- Prodanović, LJ. (2007). *Proverite kako vaspitavate u porodici*. Beograd: Savez učitelja Srbije.
- Prodanović, LJ. (2008). *Saradnja prosvetnog radnika s roditeljima*. Beograd: Savez učitelja Srbije.
- Prodanović, LJ., Lunginović, V. (1987). *Saradnja porodice sa školom*. Beograd: Nova prosveta.
- Savićević, D. (1966). *Obrazovanje za život u porodici*. Beograd: ZZIU.
- Stanojlović, S. (2004). *Dijete u porodici i školi*. Beograd: Zzuns.
- Zakon o obrazovanju odraslih (Sl.glasnik RS, br. 55/2013).
- Zakon o osnovama sistema vaspitanja i obrazovanja R Srbije, Sl. glasnik RS, 88/2017.

Nevena BUDEVAC

University of Belgrade, Teacher Education Faculty

Marija MERŠNIK

University of Belgrade, Faculty of Organizational Sciences

Ivan UMELJIĆ

Center for the Promotion of Science, Belgrade

THE ROLE OF DEBATE IN TEACHING STEM SUBJECTS – GETTING TO KNOW THE STUDENTS IN A DIFFERENT WAY

Summary

Debate is a discussion between two teams, which includes research on a topic through argumentative practice. Having in mind the importance of argumentative thinking for learning with understanding, we can hypothesize that this kind of discussion can be a useful teaching tool in everyday classroom practices. In this paper we present the results of an International Erasmus+ KA2 project ODYSSEY which attempted to implement Oxford debates in STEM education in several high schools in Serbia. Specifically, we have collected feedback from teachers involved in the project and tried to analyze their experiences. The results showed that teachers recognize the relevance of debate for the development of several competences that students in Serbia lack, such as argumentation, public speech, collaboration, and research skills. At the same time, they observed several obstacles incorporated in our educational system and practice, hindering the use of debate. We conclude the paper by highlighting why it is important to include argumentative practices in education from the very beginning, and which prerequisites are required to make it possible, especially concerning future teacher education.

Key words: argumentation, debate, STEM subjects, teaching, students, future teacher education.

Introduction

Debate is a structured discussion on a specific topic between two teams, one of which supports a specific viewpoint, while the other opposes it. Participation in a debate requires tackling a topic, or doing research on a particular topic, through argumentation. Also, debate demands active participation from all parties, i.e. this is an educational activity without passive participants. Whichever role they assume (position team member, opposition team member, or audience member), participants assume active roles defined by debate rules. The debate rules followed in the project are outlined in one of the project intellectual outputs *Methodological Guide for Teachers. ODYSSEY: Oxford Debates for Youths in Science Education* (Egglezou, 2019). We will first provide an overview of empirical and theoretical knowledge on argumentative thinking, and the position of argumentation in learning. We will also outline what is known so far about the opportunities to develop argumentation in school practice in Serbia.

According to one of the definitions of argumentation, it is a dialogue in which participants tend to increase or decrease the acceptability of their viewpoints (Walton, 2006). Therefore, by connecting their viewpoint to other knowledge sources, participants strive to determine the epistemological status of ideas discussed, and persuade other persons of the correctness of the idea they question (Toulmin et al., 1979; Baker, 2002). Argumentation skills are part of a number of official documents which define educational outcomes, both in our country and other countries (European Commission, 2008; Nacionalni okvir kvalifikacija, 2010). They also play a highly important role in the very process of learning, which is confirmed by a large volume of research in the area (e.g. Mercer, 2000; Fernández et al., 2001; Schwarz, Linchevski, 2007;

Schwarz et al., 2008). In other words, on the one hand this is a cognitive tool required for learning with understanding, and on the other – it represents skills recognized as key for navigating the professional and private life of every individual. Since the focus of this paper is on debate as a teaching activity which should help students learn, the following paragraphs will be devoted to the importance of discussion and argumentation as tools for learning with understanding.

Opportunity for *discussion on different viewpoints* on a topic in focus has long been recognized as one of the key factors for further development of knowledge and competences (Doise, Mugny, Perret-Clermont, 1975; Mugny, Doise, 1978; Doise, Mugny, 1979; Light, Perret-Clermont, 1989; Schwartz, 1995; Schwartz et al., 2000; Howe et al., 2007; Schwartz, Linchevski, 2007; Howe, 2010). If participants hold the same viewpoint, the work process will be similar to individual work, which decreases the developmental potential of social interaction, or its power to broaden our understanding of a specific subject (Tudge, 1992). On the other hand, laying out and analyzing different ideas in a dialogue leads to other new ideas whose analysis furthers the understanding of a subject (Schwartz et al., 2000). However, although analyzing different viewpoints is very important for the creation of a socio-cognitive conflict (Doise, Mugny, Perret-Clermont, 1975; Mugny, Doise, 1978; Doise, Mugny, 1979) and the subsequent development of new knowledge and competences, this will not happen if understanding is not a product of argumentative discussion – discussion in which the answer to different viewpoints is argumentation (Muller Mirza et al., 2009). Numerous studies show that argumentative dialogues open more space for learning in comparison to other types of dialogues (e.g. Asterhan, Schwartz, 2009). In addition, it is also important to focus attention on findings which reveal that teachers can successfully support children in learning how to effectively use argumentative dialogue in the educational context (Mercer, 2000; Fernández et al., 2001). Related to that, we would like to highlight that present-day studies define argumentation not as a result of a dialogue, but as a process which is a part of interaction, as it is jointly co-constructed by interlocutors (Kuhn et al., 1997; Arcidiacono, Perret-Clermont, 2009).

Although the role of argumentation and argumentative dialogues in the development of new competences has been extensively documented in scientific literature, research done in Serbia shows that our students fail to develop this complex and relevant competence to the extent necessary to use it as a tool for learning and development. Although children participate in argumentative exchanges early on, much before school age (Arcidiacono, Bova, 2013; Pontecorvo, Arcidiacono, 2014), experimental studies in the educational context show that the use of argumentation at the early age is not stable and that it depends on contextual factors (Muller Mirza et al., 2009). One of our previous studies (Buđevac, Baucal, 2015) also showed that even seven-year-olds managed to spontaneously produce arguments within educational exchanges, unsupported by a teacher and without any previous systematic preparation. However, another study done within our educational system (Branković et al., 2013) showed that our students completely lack systematic support in the development of this competence during their schooling. Starting from the results of PISA evaluative study (Baucal, Pavlović Babić, 2010), authors of this paper attempt to explain why there are 0% of students at the highest level of the reading literacy scale in Serbia. Taking into account that argumentative practice is inherent to these tasks, authors analyzed students' answers, on the one hand, and the educational practice in our schools, on the other (through interviews with teachers and the analysis of students' course books) (Branković et al., 2013). This showed that the school practice does not support the development of argumentative skills and that these skills are not even recognized as a relevant educational outcome.

Most European countries have identified the need to increase interest and reasoning in STEM (Science, Technology, Engineering, and Mathematics) subjects with elementary and high school students. Consequently, argumentative and critical thinking, public presentation, and debate have been identified as the main prerequisites for advancement in these fields. One of the starting points is that students who lack these important life and professional skills are more susceptible to fake news, fallacies, and incredible information. International Erasmus+ KA2 project *ODYSSEY* (Oxford Debates for Youths in Science Education) has been devised as an attempted answer to these needs and a possible way to bridge the gap between the need to develop argumentative practices in our schools and the systematic absence of these practices.

The project was implemented in four countries (Serbia, Poland, Estonia and Greece), in 32 schools (8 schools per country), with students aged between 13 and 19. Initial work on the project began in October 2018, and the expected completion date is March 2021. *ODYSSEY* ran in five phases: preparatory phase (devising desk report research, project implementation methodology, Oxford debate guidelines, and educational materials); recruitment of schools; testing phase (workshop for teachers followed by the implementation of debate and educational packages in each school participating in the project, finishing with a national debate competition); dissemination (national conference with debate finals and subsequent workshops for new teachers interested in applying this method in their everyday practice); and wrap-up (drafting reports and evaluating project outputs, see: https://odyssey.igf.edu.pl/?page_id=210).

Despite being implemented in four different national curricula, the educational materials proved to be easily adaptable to meet local needs. As for Serbia, eight high schools took part in the course of the testing phase (five schools from Belgrade, and one from Kragujevac, Niš, Pančevo, and Ruski Krstur respectively). Two teachers per school (usually a STEM teacher and a teacher of a social science-related subject) went through a training, where they were familiarized with the basics of the Oxford debate and the educational materials prepared within the project, followed by a simulation of a debate in which they themselves acted as debaters. Afterwards, during the summer term of school year 2019/2020, teachers applied this knowledge with their students and practiced debate on five different pre-prepared topics. Unfortunately, due to the situation with COVID-19 pandemic, teachers were unable to implement the educational materials in-class, and turned to online platforms. Despite the hindrances, the debate contest held in September 2020 showed that both teachers and students managed to make the most out of the project and found it to be a great success. The contest was followed by the national conference, where interested teachers from the whole country were given an opportunity to get acquainted with the project content and outputs and see the power of debate in teaching and reasoning.

A focus group interview was organized before the national contest and the national conference and served to evaluate the project from the perspective of STEM teachers involved in project implementation in schools. They are, apart from the students, the best source of information about the utility of debate in everyday school practice. The aim of this paper is to present and summarize teachers' experiences and to explore implications for future teachers' education.

Method

Teachers from the eight high schools in Serbia participating in the project, who were trained how to implement debate in everyday school practice and worked with students using debate, participated in the focus group interview. The interview took approximately one hour and was conducted online, via Zoom platform. Having in mind the global epidemiological circumstances caused by the COVID-19 pandemic, it was not safe to organize it differently. The interview was held by one of the authors of this paper following the guidelines for a focus

group interview prepared earlier within the project. The following topics were discussed:

1. Expectations (concerning teachers' professional development as well as their students' learning);
2. Experience with debate in classrooms;
3. Educational materials supporting debate in classrooms;
4. Sustainability and utility of the method. All teachers were willing to share their impressions and thoughts and actively participated in the meeting.

Results

Teachers' answers are summarized and presented following the aforementioned topics. Digested answers are accompanied by the cited segments of teachers' responses in order to further clarify and support their thoughts.

1 Expectations (efficacy)

The first questions addressed what the teachers expected of the project, both in terms of their professional development and their students' learning.

Answering these questions, all teachers evaluated the project in a very positive manner, stating that their expectations were exceeded on both points. They initially expected only some kind of teacher training, but they got much more – useful guidelines for their teaching practice, excellent training and a very nice collaboration with other teachers and colleagues running the project.

“This project is the best we've had for the last several years. We got the opportunity to implement in our teaching exactly what we usually completely miss – public speech, confrontation of different positions, argumentation. I would like it to be implemented more broadly.”
(Math teacher)

“We expected to get just another teacher training without further development, but then we were surprised when it turned out to be much more than a training for us. The training was very useful, as well as the guidelines and the whole collaboration within the project.”
(Biology teacher)

2 Experience with debate

The first subtopic concerning teachers' experiences was related to the main challenges they faced during the implementation of the project in their schools and the ways they attempted to overcome these challenges.

All teachers pointed to the COVID-19 pandemic as the main barrier in the implementation of project activities in their schools. One teacher said that it did not lead to attrition of students previously enrolled in the project, but made the opportunities to practice debate limited. So, the main barrier was a completely external factor, unrelated to the topic of the project or the educational system. However, it influenced the course of the project activities.

Teachers highlighted another challenge in this part of conversation – lack of time for practicing debate at school, as it was considered an extracurricular activity and not a part of everyday teaching. A teacher mentioned this challenge and the others confirmed this to have been a problem they faced as well.

“The system does not recognize this kind of activity and that is why it is very difficult to find time for them. We really need to do mental gymnastics in order to organize it to fit with all students' other obligations.” (Math teacher)

The second subtopic in this part of the conversation with teachers referred to their impressions about the relation between the project workload and its results. Teachers either stated that there was a balance between the workload and the results, or that they gained much more than they had invested. Teachers elaborated on this issue using descriptors such as: *this is a very valuable project, we really enjoyed working, it is definitely not wasted time*, etc.

“It was useful both for us and our students. We got to know our students in a different way through this engagement.” (Math teacher)

“We got much more than we invested. One year is not much compared to the fact that we are going to use these tools for many, many years.” (Biology teacher)

3 Usefulness of educational materials

All teachers confirmed that the materials were very useful, well designed, with sufficiently detailed and carefully thought-out content, examples and explanations. From their perspective, the materials were all created by professionals and, as one teacher said – *were selflessly shared with teachers*. As the most useful, teachers indicated the resolutions with pro and con argumentation, and video materials. Two teachers described the materials with the following statement:

“Materials were great because they offered us borders to have a better understanding of the space we are moving through.” (Biology and Math teachers)

One of the questions concerning materials focused on the materials that were less useful. However, teachers did not name any material that was not useful to them. They all said that it is impossible to describe any material as less useful, so we did not spend much time on this question.

4 Sustainability and utility of the method

Talking about the barriers of using the proposed method in school practice, all teachers agreed that our educational system lacks support for the various skills necessary for debate. Thus, the main challenges concerned the insufficiently developed students’ skills such as: finding information and checking its reliability, developing argumentation, communication and public speech, self-confidence when presenting one’s opinion in front of classmates, etc.

“They are used to digested lectures, to materials they are supposed to memorize. It is not easy for them to communicate, debate, discuss argumentatively. It is not simple. They feel insecure.” (Math teacher)

“They are not so skilled in research and argumentation. They are not careful enough about the reliability of information they find although we ask them to check everything.” (Chemistry teacher)

“Students definitely like debate, but they are not all very motivated to work hard, because it requires hard work. They need to take responsibility and they are not always ready for that.” (Physics teacher)

A part of the conversation was dedicated to the possibilities of using project results after its termination. All teachers said that debate is an excellent way of teaching elective subjects and primarily see its use there. They said that the syllabi of other subjects usually provided no room for such a method because it is time-consuming. However, two Math teachers added that they recognized Mathematics classes as a great opportunity for debate because it helps students to better understand mathematics and relate it to everyday topics. Finally, two teachers said that debate was very useful to use when they discuss their own relations and conflicts with students because it allows them to communicate constructively.

“The debate has become the main teaching method within all my elective courses.” (Biology teacher, also teaching elective courses Sustainable development and Science)

“Debate helps students to understand the applicability of mathematics in a great way because they discuss everyday topics based on mathematics and other sciences.” (Math teacher)

“It is also very good because it motivates us and our students to establish a debate club in our school.” (Math teacher)

Talking about the future support that would help teachers work this way with students, all teachers commented on a list of topics for future work – some of them said that it would be very useful to get a list of topics with elaborated resolutions, and some of them said that they would like to get a list of topics *not suitable* for debate. A teacher added that it would be great to have new, up-to-date topics (such as something connected to the coronavirus); another teacher said that it would be great to think about the topics relevant for high-school students’ everyday life. A teacher highlighted that during the project they learned that some topics should not be debated, as the pro and con arguments are not balanced, saying that this would be very useful – to get a list of topics not suitable for debate as she does not feel experienced enough to estimate it by herself.

5 **Ending**

At the very end of the interview, two teachers wanted to add something that is their most valuable impression related to the project. Here are their statements:

“I would like to have more opportunities to play with students in this useful way.”
(Chemistry teacher)

“I was running a debate with students from the social sciences department who are traditionally not so interested in physics and this is the first time for me to have students from that department so motivated for physics.” (Physics teacher)

Discussion and implications for future teachers’ education

The aim of this paper was to look at the effects of a program which attempted to implement debate in everyday school practice. Although *ODYSSEY* is an international project which was simultaneously implemented in several countries (Poland, Greece, Estonia and Serbia), our goal was to review its effects in Serbia. The importance of this project lies in the fact that it is one of the rare efforts to include important argumentative practice in our educational system. As we have already pointed out, numerous studies during past decades have shown the importance of argumentative thinking for learning. We can say that it lies in the core of the learning process.

Considering teachers’ statements during the interview, the project can be given positive evaluation and should be continued. However, what is more relevant from the scientific and educational perspective are two findings, both very significant from the point of view of learning and development of competences. Firstly, debate can be used in the regular teaching process and can have multiple positive effects on learning and the acquisition of knowledge. Teachers’ answers show that they easily recognize all the positive effects of the debate method on learning and learning motivation. Secondly, although the importance of teaching based on argumentative practices is well documented, teachers’ answers indicate significant barriers inherent to our educational practice which imply that this method of teaching has little support and the possibilities for its use are quite limited. Teachers have stated that this type of practice is not recognized by the school system, which puts them and students in a difficult position to practice it as some kind of extracurricular activity. Of course, teachers participating in this project were motivated and creative, and managed to incorporate it in their classroom activities, but if we want to make it part of wider practice, it would be necessary to provide additional support for teachers and remove the identified barriers.

Having in mind the role of argumentation and argumentative practices in the learning process, it is of great importance to include this type of practice into the education of future teachers. Also, they should be directly taught about the concept of argumentative thinking, its place in the learning and competence development processes, how we can foster argumentative thinking in students, and so on. Thereby, we want to emphasize that supporting argumentative thinking should start from the youngest age. As we could see from earlier studies (Buđevac, 2011; Buđevac, Baucal, 2015) even the youngest students are ready to use argumentation in the educational context, but this competence is still unstable and very much depends on the support from the teacher. For this reason, it is necessary to strengthen the capacities of teachers to be effective partners of students on this important journey of learning and development. Unfortunately, previous studies of our educational system (Branković et al., 2013) revealed that our subject teachers lack understanding of the concept of argumentative thinking (equating it, for example, with expressing an opinion), and they are unaware of its importance in the learning processes or how they can help their students to develop it. This is in a way paradoxical, because argumentative thinking is at the core of science. The whole scientific work revolves around the production of

evidence and the change of the epistemological status of justifications. On the other hand, we are witnessing that science concepts acquisition in our schools is mostly devoid of argumentative practices and teaching children how to explore a topic and find pro or con arguments to a statement. Teachers' statements show us that students are mostly unskilled in argumentation, oral communication and research. This is also confirmed by different international student assessment studies, such as PISA (Branković et al., 2013). Still, although this tradition of expelling argumentative practices from everyday classroom activities is quite long and strong, even minor interventions and adjustments can help implement it. Of course, one project is not and cannot be enough, but it is an example of good practice and can be used as an exemplar of the possibility to implement debate in teaching even in a system that does not recognize its importance.

If we want to take the project a step further towards a more robust improvement of educational practice, we need to consider preparing future teachers for teaching more based on argumentative practices. As already mentioned, it includes direct teaching of argumentation and its role in learning within a specialized course. At one stage of the *ODYSSEY* project, teachers went through extensive training in order to learn about argumentation and different related concepts. Unfortunately, that was not part of their initial teacher education. They also received a substantial amount of educational material for direct use in their work with students, including methodological guidelines on how to implement it. Consequently, special attention should be paid to prepare future teachers to use teaching methods with carefully incorporated argumentative practices.

Learning is not a process of memorizing, but a process of thinking and re-thinking, reconsidering, doubting and resolving doubts, making decisions based on investigation, questioning and looking for answers. However, in the classroom reality, learning is a reflection of a teacher's understanding of the concept. Argumentation can and does develop spontaneously, but a teacher needs to plant its seeds and help it grow. The only way to assure this is to make argumentative practice part of teachers' initial education. In addition to the previously mentioned directions for its implementation, this kind of practice should be incorporated in the future teachers' own learning. In other words, the way we teach them and our classroom practice needs to be argumentative in exactly the same way. Their experience of learning through debate is the most direct way to reach our goal, as previous studies have shown that teachers' everyday practice is mostly affected by their implicit theories about teaching, which are based on the way they had been taught (Brookfield, 1995; Radulović, 2011). For this reason, those teaching future teachers are the first link in the chain.

It goes without saying that university students are capable of argumentative discussion on professional topics, which is evident both from the perspective of the developmental cognitive preconditions they need to meet to participate in this kind of activity and from the perspective of our experience with them. We know that they are capable of discussion and favor this kind of communication when given an opportunity to practice it. However, we also know that they are insufficiently skilled, as their pre-university education was mostly disengaged from argumentative discussions. Therefore, we need to carefully guide them through the process, not only to open discussions. To this end, we can also rely on the materials from *ODYSSEY* and/or prepare our own by expanding and tailoring them to the topics of the field we teach. *ODYSSEY* focused on STEM subjects, but debate is equally useful in social sciences and humanities. Organizing seminars and workshops for active university teachers would be the first step towards reaching this goal. Their experience could, thus, be transferred to the pre-service teachers they educate, and through them, to younger generations as well.

To conclude, it is obvious that we all need to devote considerable effort to set in motion this kind of practice in our schools. It is a long, complex endeavor in which we all depend on each other, but it is a safe way to enable our teachers and their young students to enjoy fruitful learning and playful growth.

Bibliography

- Arcidiacono, F., Bova, A. (2013). Argumentation among family members in Italy and Switzerland: A cross-cultural perspective. In: Y. Kashima, E. S. Kashima, R. Beatson (eds.), *Steering the Cultural Dynamics* (pp. 167-174). Melbourne: IACCP.
- Arcidiacono, F., Perret-Clermont, A.-N. (2009). Revisiting the piagetian test of conservation of quantities of liquid: argumentation within the adult-child interaction. *Cultural-Historical Psychology*, 3, 25-33.
- Asterhan, C.S.C., Schwarz, B.B. (2009). Argumentation and Explanation in Conceptual Change: Indications from Protocol Analyses of Peer-to-Peer Dialog. *Cognitive Science*, 33, 374-400.
- Baker, M.J. (2002). Argumentative interactions, discursive operations and learning to model in science. In: P. Brna, M. Baker, K. Stenning, A. Tiberghien (eds.), *The role of communication in learning to model* (pp. 303-324). Mahwah, NJ: Lawrence Erlbaum Associates.
- Baucal, A., Pavlović Babić, D. (2010). *PISA 2009 u Srbiji: prvi rezultati. Nauči me da mislim, nauči me da učim*. Institut za psihologiju Filozofskog fakulteta u Beogradu i Centar za primenjenu psihologiju.
- Branković, M., Buđevac, N., Ivanović, A., Jović, V. (2013). Činioci razvoja viših nivoa čitalačke pismenosti – veštine argumentovanja u školskoj nastavi. *Psihološka istraživanja*, 16(2), 141-158.
- Brookfield, S.D. (1995). *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass.
- Buđevac, N., Baucal, A. (2015). The role of argumentation in seven-year-olds joint comprehension of written texts. *Teaching Innovations*, 28(3), 67-82.
- Buđevac, N. (2011). "I'll accept, but next time you'll have to listen to me!" How seven-year-olds read together. In: A. Baucal, F. Arcidiacono, N. Buđevac, *Studying interaction in different contexts: A qualitative view* (pp. 91-122). Belgrade: Institute of Psychology.
- Doise, W., Mugny, G. (1979). Individual and Collective conflicts of centration in cognitive development. *European Journal of Social Psychology*, 9, 245-247.
- Doise, W., Mugny, G., Perret-Clermont, A.-N. (1975). Social interaction and the development of logical operations. *European Journal of Social Psychology*, 6, 367-383.
- Egglezou, Foteini (2019). *Methodological Guide for Teachers. ODYSSEY: Oxford Debates for Youths in Science Education*. Retrieved from: <https://odyssey.igf.edu.pl/wp-content/uploads/2019/11/%CE%9F4-IN-ENGLISH.pdf>.
- European Commission. (2008). *The European Qualifications Framework for Lifelong Learning (EQF)*. Luxembourg: Office for Official Publications of the European Communities.
- Fernández, M., Wegerif, R., Mercer, N., Rojas-Drummond. (2001). Re-conceptualizing „Scaffolding“ and the Zone of proximal development in the Context of Symmetrical Collaborative Learning. *Journal of Classroom Interaction*, 36(2), 40-54.
- Howe, C. (2010). Peer dialogue and cognitive development. In: L. Littleton, C. Howe (eds.), *Educational Dialogues: Understanding and promoting productive interaction* (pp. 32-47). London and New York: Routledge.
- Howe, C., Tolmie A., Thurston, A., Topping, K., Christie, D., Livingston, K., Jessiman, E., Donaldson, C. (2007). Group work in elementary science: towards organizational principles for supporting pupil learning, *Learning and Instruction*, 17, 549-563.
- Kuhn, D., Shaw, V., Felton, M. (1997). Effects of Dyadic Interaction on Argumentative Reasoning, *Cognition & Instruction*, 15(3), 287-315.

- Light P., Perret-Clermont A.-N. (1989). Social context effects in learning and testing. In A. Gellatly, D. Rogers, J.A. Sloboda (eds.), *Cognition and Social Worlds* (pp. 99-112). Oxford: Oxford University Press.
- Mercer, N. (2000). *Words and Minds: How We Use Language to Think Together*. London: Routledge.
- Mugny, G., Doise, W. (1978). Socio-cognitive conflict and structure of individual and collective performances. *European Journal of Social Psychology*, 8, 181-192.
- Muller Mirza, N., Perret-Clermont, A.-N., Tartas, V., Iannaccone A. (2009). Psychosocial Processes in Argumentation. In: N. Muller Mirza, A.-N. Perret-Clermont (eds.), *Argumentation and Education. Theoretical Foundations and Practices* (pp. 67-90). New York: Springer Science + Business Media.
- Nacionalni okvir kvalifikacija (2010). Beograd: Centar za obrazovne politike.
- Pontecorvo, C., Arcidiacono, F. (2014). Social interactions in families and schools as context for the development of spaces of thinking: In: T. Zittoun, A. Iannaccone (eds.), *Activity of thinking in social spaces* (pp. 83-97). New York, NY: Nova Science Publishers.
- Radulović, L. (2011). *Obrazovanje nastavnika za refleksivnu praksu*. Beograd: Univerzitet u Beogradu, Filozofski fakultet.
- Schwarz, B.B., Linchevski, L. (2007). The role of task design and argumentation in cognitive development during peer interaction: The case of proportional reasoning. *Learning and Instruction*, 17, 510-531.
- Schwarz, B.B. (1995). The emergence of abstract representations in dyad problem solving. *Journal of the Learning Sciences*, 4, 321-354.
- Schwarz, B.B., Neuman, Y., Biezuner, S. (2000). Two wrongs make a right... if they argue together! *Cognition & Instruction*, 18, 461-494.
- Schwarz, B.B., Perret-Clermont A.-N., Trogon A., Marro, P. (2008). Emergent learning in Successive activities: Learning in interaction in a laboratory context. *Pragmatics and Cognition*, 16(1), 57-87.
- Toulmin, S., Janik, A., Rieke, R.D. (1979). *An Introduction to Reasoning*. Macmillan Publishing Company.
- Tudge, R.H.J. (1992). Processes and Consequences of Peer Collaboration: A Vygotskian Analysis. *Child Development*, 63, 1364-1379.
- Walton, D. (2006). *Fundamentals of critical argumentation: Critical reasoning and argumentation*. New York: Cambridge University Press.

Mirosław MICHALIK

State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy

Katarzyna KACZOROWSKA-BRAY, Stanisław MILEWSKI

Logopaedics Institute of University of Gdańsk

Anna SOLAK

Tarnow College

ARTICULATION RATE IN THE DYSFUNCTIONAL DISCOURSE ON THE EXAMPLE OF SPEECH OF PERSONS WITH INTELLECTUAL DISABILITIES AND PERSONS WITH AUTISM

Summary

This paper describes the prosodic phenomenon defining the rate of forming utterances – the *articulation rate*. During collection of the research material with the use of measuring instruments (*Audacity* computer software) and statistical processing of the collected material (tests: Shapiro-Wilk test, Mann-Whitney test, *t-Student* test) we focused on the persons afflicted with speech, language and communication issues based on mild intellectual disability, afflicted with speech, language and communication issues based on moderate intellectual disability and persons with autism (ASD). Such persons jointly form dysfunctional speech-therapy discourse.

Key words: articulation rate, autism, speech, language and communication issues.

Introduction

The term invoked in the title, related to the phenomenon of the speech rate, is most frequently connected with the field of prosody, articulation and the problem of utterance forming competences of a language user (Grabias, 2012; Wysocka, 2012). Considering the fact that the articulation rate is of concrete and physical character (it pertains to actual utterances), closely related to the *parole* plane of speech, it can be researched experimentally and measured (see: Wagner, 2017, p. 66).

If we were to accept, following S. Grabias, that a “discourse” is a sequence of “language” behaviours the form of which is dependent of who and why is speaking to whom and in what situation” and that it is “a kind of social interaction conducted through language” (1994, p. 231) then the “dysfunctional discourse” should be perceived in the categories of the language interaction behaviours engaged in by persons with dysfunctional linguistic competences. Following T. Rittel we understand a dysfunctional language competence as a disturbed competency defined by the dysfunctional language model (resulting from audiological, laryngological and orthodontic deficiencies) and the pathological model (resulting from the occurrence of deficiencies related to damage to nervous system, its dysfunctions or underdevelopment in the field of language competence) (1994, p. 71).

Undeniably the articulation rate subjected to analysis occurred among the subjects of research displaying dysfunctional and/or pathological and/or non-normative language model. We assessed utterances formed by representatives of three research groups: children afflicted with speech, language and communication issues as a result of a mild intellectual disability, children afflicted with speech, language and communication issues as a result of a moderate intellectual disability and children with autism. Children not afflicted with any speech or development disorders served as the control group¹.

¹ This chapter constitutes major modification of our paper titled *Tempo mówienia i tempo artykulacji w dyskursie zaburzonym* (*Speech rate and articulation rate in disturbed discourse*) published in *Prozodia. Przyswajanie, badanie, zaburzenia, terapia* under editorship of M. Wysocka, B.Kamińska and S. Milewski published in Gdańsk in 2020.

Articulation rate as a research category

Under the discipline of logopaedics the titular term is closely related to the phenomenon of rate and fluency of forming verbal utterances. The fluency of realizing verbal sub-code, as T. Woźniak claims (2012, p. 550) referring to the articulation rate, consists in:

Effortlessly forming a phonic sequence understandable for the recipient. The fluency is based on continuously realizing subsequent sounds of speech which occur within the constraints of regularly repeating rhythmic groups (phrases) which last approximately 2-3 seconds and are nearly identically arranged in terms of prosody. A phrase can consist of a varied amount of sounds (syllables) depending on the rate (...) and the average rate (...) in the common speech is 10-12 sounds (4-5 syllables) per second. A short break occurs in between phrases the duration of which is not precisely defined. However, in the case of uninterrupted utterance it should be shorter than 2 seconds as such length of break does not carry meaning.

In turn, phrases, as stated by A. Wagner, are “rhythmical units forming a perceptual whole or a form” (2017, s. 16). In relation to the above statement, new regularly repeating rhythmic groups (phrases) are used for assessing articulation rate during analysis which last approx. 2-3 seconds (Woźniak, 2012, p. 550; compare: Michalik, Cholewiak, 2017; Michalik, Solak, 2017). In other words, the articulation rate informs about the number of spoken sounds/syllables in an utterance in a time unit. S. Milewski (2020) characterizes this category in the following words in *Encyklopedia logopedii (Encyclopedia of Logopaedics)*:

The rate (...) may significantly influence pronunciation. Rapid rate usually leads to the decrease in clarity of articulation. Slowing down rate is usually beneficial for the correctness of articulation. However, the relation between pronunciation and rate (...) is not absolute. In rapid rate of speech (...) the qualities of diligent speech can be maintained, the slow rate not always guarantees pronunciation compliant with the orthophonic standards.

Milewski also indicates that “three types of rate are usually distinguished: *lento* – a slow rate, *moderato* – a moderate rate, and *allegro* – a quick rate. Usually phrases are uttered at a moderate rate” (Milewski, 2020).

Articulation rate of children's speech

Owing to the fact that there were no standards set for the articulation rate for Polish-speaking children this task was realized in 2018 in Neurolinguistics Institute of Pedagogical University of Kraków (Solak, 2018). The first stage of the conducted research consisted in collecting recordings of speech. During individual meetings with children the following questions were asked: *What are you doing in class/group? What are you playing? What were you doing in common room? What were you doing today? What were you doing yesterday? What do you most frequently do at home? What will you do?* The material collected for research consisted of audio recordings which were replayed repeatedly in order to take measurements of significant phenomena. For this purpose Audacity² computer software was used.

² Audacity Team (2014). Audacity(R): Free Audio Editor and Recorder [Computer program]. Version 2.1.0 retrieved September 19th 2015 from <http://audacity.sourceforge.net/>

From the entirety of the speaker's utterance a 30-second, continuous fragment was selected. If numerous fragments of this length appeared in the utterance the first one meeting the stated criteria was selected for analysis.

First stage of the analysis of the recording consisted of listening to the recording in its entirety. Listening to the recording repeatedly allowed for preparing a simplified transcript – which made it possible to indicate the number of speech sounds.

The first stage of the analysis (quantitative) covered the assessment of the average articulation rate (speech sounds per second, syllables per second), the second stage consisted of statistical calculations concerning average articulation rate. The following tests were used for this purpose: Saphiro-Wilk, Mann-Whitney and *t-Student*.

In order to establish the developmental standards for *articulation rate* the utterances of children not afflicted with speech communication or any development disorders were selected (Solak, 2018). The following children participated in the research: 30 children from a senior pre-school group; 15 boys aged 5.7-6.5 (average age: 6.0) and 15 girls aged 5.7-6.3 (average age: 5.9); 30 pupils of grade I: 15 boys aged 6.9-7.5 (average age: 7.2) and 15 girls aged 6.7-7.4 (average age: 6.9); 30 pupils of grade III: 15 boys aged 8.7-9.5 (average age: 9.0) and 15 girls aged 8.8-9.5 (average age: 9.0).

After the analysis of the collected material through the use of *Audacity* program and conducting quantitative and statistical calculations we were able to formulate the following conclusion: the articulation rate increases depending on age (Solak, 2018).

The data collected from 9-year old children (quantitative and statistical) became a point of reference, a specific interpretative matrix for the research on articulation rate. The choice of the control group resulted from the fact that children at this age have practically concluded the process of acquiring language competences. The results of the average articulation rate applied in the research, calculated on the basis of the analysis of the utterance of 9-year old children not afflicted with any development disorders, are as follows: 11.226875 sounds/sec and 4.666625 syllables/sec.³

Articulation rate of people with intellectual disabilities

Phenomena directly or indirectly indicating problems with realization of articulation rate are frequently listed in symptomatological characteristics of the speech process of people with intellectual disabilities. From among the problems indirectly influencing pace of speech the oligophrenologopaedic subject literature emphasizes, for instance: slower rate of development of passive and active vocabulary, difficulties with constructing utterances consisting of two or more words (dysfunction of syntactic competence), using improper grammatical forms (problems with flexion), difficulties with forming coherent longer texts (decrease in narrative proficiency) (Jęczeń, 2015, p. 268; Kaczorowska-Bray, 2012). Simultaneously a statement is frequently present in oligophrenologopaedic subject literature – usually arbitrary and unequivocal – directly pertaining to the slower rate of speech of people with intellectual disabilities. For example, J. Błeszyński indicates such phenomena as: slower rate of speech, increasing problems with fluency of expression (2013, p. 47); K. Kaczorowska-Bray – decreased verbal activity, difficulties with remembering an appropriate word, difficulties with updating names resulting in frequent breaks for searching for words (2012, pp. 55-56); U. Jęczeń – broadly understood dysfunctions

³ The presented parameter, i.e. articulation rate, is consistent with the standards given by Milewski (2020) and Woźniak (2012) for general Polish language for adults – it fits in within the caesura of 10-15 sounds/sec. It may constitute another argument for the aptness of the choice of the control group.

of articulation (2015, p.268); T. Gałkowski and Z.Tarkowski – stutter (Gałkowski, 1979, p.192; Tarkowski, 2003, p. 209). Undoubtedly these phenomena may substantially influence articulation rate and rate of speech of people with intellectual disabilities which, aside from other prosodic dysfunctions, we recognize, following opinion of S. Grabias, as the indicator of formation dysfunction of this group of speakers (2012; see also: Michalik, Cholewiak, 2017).

In undertaking the empirical verification of the statements concerning the rate of forming utterances by people with intellectual disabilities we collected research material from the representatives of two groups: children with mild intellectual disability and children with moderate intellectual disability. The first stage of research concluded with the comparative analysis of the selected parameters deciding the articulation rate obtained from pupils with mild intellectual disabilities and the previously established standards in this field (see also: Michalik, Cholewiak, 2017). Specifically: the subjects of the research were people with mild intellectual disabilities, aged 9 years and 3 months. The choice of the research group results from the fact that the people with diagnosed intellectual disability are in 85% of cases displaying mild level of disability (Kaczorowska-Bray, 2017). The progress and organization of the research were similar to the research which allowed us to establish the developmental standards (see also: Solak, 2018). The collected numerical data are presented in table 1.

Table 1

Articulation rate of people with mild intellectual disabilities in comparison to the control group – quantitative data

Criteria of comparison – research parameters	Pupils within the intellectual norm	Pupils with mild intellectual disabilities
Average articulation rate	11.226875 sounds/sec 4.66625 syllables/sec	10.990625 sounds/sec 4.563125 syllables/sec
Number of the research subjects	16	16
Age of the research subjects (in years)	9,1	9,3

Source: own research

Subsequently statistical calculations were performed concerning the average articulation rate, average number of breaks in utterances and average length of proper breaks, average length of partially filled breaks and the average length of filled breaks. The Shapiro-Wilk test was used for performing calculations. The collected data are presented in table 2.

Table 2

Statistical analysis of the average statistical articulation rate of people with mild intellectual disabilities in comparison to control group

Variables	Group						Results of t test
	Norm			speech, language and communication issues			
	<i>M</i>	<i>SD</i>	<i>Me</i>	<i>M</i>	<i>SD</i>	<i>Me</i>	
Average articulation rate: sounds/sec	11,2	1,5	11,5	11,0	2,3	10,1	$t = 0,339$ $df = 26$ $p = 0,737$
Average articulation rate: syllables/sec	4,7	0,6	4,7	4,6	1,1	4,2	$t = 0,335$ $df = 24$ $p = 0,741$

Source: own research

Statistical analysis did not confirm the assumed, hypothetical differences in the articulation rate of representatives of two research groups. The results also did not overlap with the quantitative data – see: table 1. Thus the results demonstrate that the articulation rate in the case of speech, language and communication issues based on mild intellectual disability does not differ significantly from the articulation rate of people fully capable intellectually (see: Michalik, Cholewiak 2017).

The second stage of the research concerned the articulation rate in cases of speech, language and communication issues based on moderate intellectual disability. The control group did not differ from the group that provided results concerning articulation rate which were used during confrontative analysis pertaining to people with mild intellectual disabilities. The group proper consisted of 16 children with moderate intellectual disabilities.

Comparing the data we adopted the criterion of *mental age*. It results from the fact that the subject literature frequently compares the skills of children with mental disabilities with the skills of a group of children who are younger but within the intellectual norm (both groups function on the same level of mental age). Referring to the *mental age criterion* it is assumed that the people with moderate intellectual disabilities are functioning on the level of 6-9-year-old children not afflicted with development disorders⁴. The average biological age of the research subjects is 15.4 years and the sex parameter – girls/boys was – analogously to the control group – 5/11.

Analogously to the research concerning the rate of speech of persons with mild intellectual disability the analysis concerned the average articulation rate (sounds/sec, syllables/sec). Data is presented in table 3.

Table 3

Articulation rate of persons with moderate intellectual disabilities in comparison to the control group – quantitative data

Criteria of comparison – research parameters	Pupils within the intellectual norm	Pupils with moderate intellectual disabilities
Average articulation rate	11.226875 sounds/sec 4.66625 syllables/sec	7.7875 sounds/sec 3.3875 syllables/sec
Number of the research subjects	16	16
Age of the research subjects (in years)	9,1	15,3
Mental age (in years)	9	6-9

Source: own research

The approximate evaluation of the collected data allows us to observe the differences between individual parameters in the two researched groups. The importance of the differences was verified through statistical analysis – the parametric *t-Student* test and the non-parametric *Mann-Whitney U* test were performed. The first test was used in the case of the variables which bore the characteristics of normal distribution; the second test was used when variables did not meet this premise. The character of the distribution of variables was checked through use of the Shapiro-Wilk test. In all analysis the level of importance $p = 0.05$ was adopted. The results are presented in table 4.

⁴ According to the ICD-10 (1998: 128) rating persons with intellectual disabilities reach the mental age indicated below: severe intellectual disability – 3 to >6 years of age; moderate intellectual disability – 6 to >9 years of age; mild intellectual disability – within the range of 9 to >12 years old (compare: Kaczorowska-Bray, 2017).

Table 4

Statistical analysis of the average articulation rate of persons with moderate intellectual disabilities in comparison to the control group.

	Group										Test results
	Norm					Moderate intellectual disability					
	M	SD	Min	Max	Me	M	SD	Min	Max	Me	
Average articulation rate: sounds/sec	11,23	1,50	8,69	13,72	11,52	7,79	1,77	5,60	12,30	7,35	t = 5,929 df = 30 p < 0,001
Average articulation rate: syllables/sec	4,67	0,62	3,53	5,71	4,70	3,39	0,82	2,40	5,50	3,10	t = 4,974 df = 30 p < 0,001

Source: own research.

Statistically significant result was noted in reference to the average articulation rate.

In comparison of both parameters comprising articulation rate of people with moderate intellectual disability and people with mild intellectual disability the following results were produced (table 5).

Table 5

Articulation rate parameters for people with moderate intellectual disabilities in comparison to utterances of people with mild intellectual disabilities – statistical data

	Group										Test results
	Mild intellectual disability					Moderate intellectual disability					
	M	SD	Min	Max	Me	M	SD	Min	Max	Me	
Average articulation rate: sounds/sec	10,99	2,35	8,10	15,13	10,12	7,79	1,77	5,60	12,30	7,35	t = 4,362 df = 30 p < 0,001
Average articulation rate: syllables/sec	4,56	1,06	3,18	6,47	4,19	3,39	0,82	2,40	5,50	3,10	t = 3,506 df = 30 p = 0,001

Source: own research

Also in this case, in reference to the average articulation rate, the statistically significant results have been noted.

Conclusions

Statistical analyses indicate that meaningful differences occur in the average articulation rate of the children with moderate intellectual disabilities in comparison to the children within the range of developmental norm. The same conclusions pertain to the differences in the average articulation rate of the children with moderate intellectual disabilities and the children with mild intellectual disabilities. No statistically significant differences pertaining to utterances of the children with mild intellectual disabilities were indicated in comparison to the children within the range of developmental norm.

Articulation rate in cases of autism spectrum dysfunctions (atrial septal defect)

The communication difficulties of people afflicted with developmental disorders related to the autism spectrum can manifest in various forms and are dependant on numerous factors: the stage of development at which the first symptoms of autism manifested, the intensity and type of autism characteristics, intellectual development level, coexisting disabilities, type and progress of therapies, including speech therapy (see: Wolski, 2009, p. 160).

Taking a synthetic look at the issue of speech in autism it can be stated that, as W. Lipski indicates, “autistic children have problems with mimicking sounds of speech they hear, signalling their needs in verbal manner, naming objects and illustrations of objects, understanding spoken and written texts, exchanging opinions, engaging in discussion, forming narrative statements” (2015, p. 487). The listed general characteristics have more or less direct influence on the rate of forming verbal messages. However, only under the expanded characteristic of individual types of autistic children, isolated on the basis of symptomatology, we may enter their communication problems into, on one side, the model of a child with infinitesimal or even no signs of engaging in verbal or nonverbal interactions (withdrawn persons) or, on the other side, into the model of a child with idiosyncratic patterns (repeating questions constantly, verbal rituals) which may or may not be used for communication (see: echophrasia phenomenon) (peculiar persons, active but in a specific manner) or, on yet another side, into the model of a person able of verbal or non-verbal communication (passive persons) (Lipski, 2015, p. 466). The articulation rate phenomenon in the case of child autism can be referred to two groups of persons: peculiar and passive persons (Bobkowicz-Lewartowska, 2005). The following phenomena which can influence articulation rate can be distinguished in their linguistic competences: verbal expression consisting of messages in the form of singular words (Jaklewicz, 1996, p. 35), disprosody, echolalia and echophrasia (Bobkowicz-Lewartowska, 2005, p. 58; Lipski, 2015, p. 471), monotonous, interrupted, chaunted and disfluent utterances, excessive syntax complexity, syntactic errors, prolonged vowel length, exaggerated articulation, irregular speech tempo, vowel perseveration, stereotypical repetition of meaningless sequences of utterances, breathing dysfunctions (Winczura, 2008, p. 37), repeated, idiosyncratic verbal behaviour patterns, problems with assigning meaning (Lipski, 2015, p. 466, p. 487). Some of the listed phenomena fit in with the theory of language competence (syntactic and articulation errors) but the majority should be placed within the domain of language, pragmatic competences. Undoubtedly all the listed phenomena may influence the speech rate of people with autism (compare: Michalik, Solak, 2017).

Working towards empirical verifications of judgements and hypotheses concerning the rate of forming utterances by persons with autism the research material collected from this group was compared with the previously established norms for this field (Solak, 2018). The progress and organization of the research was not different from the methods used in working with people with speech, language and communication issues. The language material obtained from 16 children with autism, described and analyzed in accordance with the adopted research criteria, was compared with the analogous data collected from 16 properly developing pupils. The researched group of children with autism, of average age 9 years and 6 months, can be classified into two groups: the peculiar language users and the linguistically passive ones (Bobkowicz-Lewartowska, 2005). All researched children were fully capable intellectually. Sex parameter – girls/boys – 5/11 in both groups, the average age of pupils with no developmental disorders – being 9 years and 1 month.

In order to verify the hypothesis concerning the possible differences pertaining to the rate of forming utterances the same parameter which decided the rate of forming verbal utterances by persons with speech, language and communication issues was subjected to comparative analysis. The produced results were collected in table 6.

Table 6

Articulation rate of persons with autism in comparison to the control group – quantitative data – quantitative data

Criteria of comparison – research parameters	Pupils within the intellectual norm	Pupils with autism
Average articulation rate	11.226875 sounds/sec 4.66625 syllables/sec	10.43435 sounds/sec 4.27297 syllables/sec
Average age	9,1	9,6

Source: own research

The approximate evaluation of the collected results allows us to identify appearance of differences in two research groups. The problem of its possible importance was verified through statistical analysis.

The statistical analysis of the collected material covered the average articulation rate, in this case: sounds/sec and syllables/sec. In order to examine the relationships emerging in the first group of data the parametric *t-Student* test was performed. The test was used because the distribution of variables had the characteristics of normal distribution. In all analyses the level of importance $p = 0.05$ was adopted. The produced results were collected in table 7.

Table 7

The statistical analysis concerning the average articulation rate of persons with autism in comparison to the control group

	Developmental norm			Autism			Results of t test
	<i>M</i>	<i>SD</i>	<i>Me</i>	<i>M</i>	<i>SD</i>	<i>Me</i>	
Average articulation rate: sounds/sec	11,2	1,5	11,5	10,4	1,5	10,7	$t = 1,517$ $df = 30$ $p = 0,140$
Average articulation rate: syllables/sec	4,7	0,6	4,7	4,3	0,6	4,4	$t = 1,750$ $df = 30$ $p = 0,090$

Source: own research

The performed test did not indicate statistically significant differences in the examined area.

Conclusions

The statistical analysis did not confirm the assumed, hypothetical differences between the articulation rate of the representatives of two research groups. Thus it falls out that the rate of forming verbal utterances displayed by pupils with autism (two groups: the peculiar language users and the linguistically passive ones) does not differ significant from the rate of speech of their peers not afflicted with developmental disorders.

The performed analyses indicated that from the four researched groups only the representatives of the persons afflicted with speech, language and communication issues related to moderate intellectual disability speak distinctively slower in comparison to the children constituting the control group. The articulation rate analyzed on the basis of the utterances recorded in the three remaining groups does not differ significant in comparison to the data established during the ontolinguistic process of defining the norms for undisturbed discourse.

Obviously we cannot rule out the possibility that the size of the research group – there were 80 individuals examined in total – had influence on the results, frequently deviating from the data presented in subject literature. On the other hand, we can assume that the authors of the statements concerning the rate of forming messages in dysfunctional discourse are frequently formulating notions and judgements not supported by experimental studies and based solely on diagnostic intuition and linguistic sense. The assessment of such a particular phenomenon as speech requires conducting specific empirical studies, not simply proclaiming statements apriori.

Bibliography

- Błęszyński, J. (2013). *Niepełnosprawność intelektualna. Mowa – język – komunikacja. Czy iloraz inteligencji wyjaśnia wszystko?* Gdańsk: Wydawnictwo Harmonia.
- Bobkowicz-Lewartowska, L. (2005). *Autyzm dziecięcy. Zagadnienia diagnozy i terapii*. Kraków: Oficyna Wydawnicza „Impuls”.
- Gałkowski, T. (1979). *Dzieci specjalnej troski. Psychologiczne podstawy rehabilitacji dzieci opóźnionych umysłowo*. Warszawa: Wiedza Powszechna.
- Grabias, S. (1994). *Język w zachowaniach społecznych*. Lublin: UMCS.
- Grabias, S. (2012). Teoria zaburzeń mowy. Perspektywy badań, typologie zaburzeń, procedury postępowania logopedycznego. In: S. Grabias, M. Kurkowski (eds.), *Logopedia. Teoria zaburzeń mowy* (pp. 16-69). Lublin: Wydawnictwo UMCS.
- Jaklewicz, H. (1996). *Autyzm wczesnodziecięcy. Diagnoza, przebieg, leczenie*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Jęczeń, U. (2015). Postępowanie logopedyczne w przypadku oligofazji. In: S. Grabias, J. Panasiuk, T. Woźniak (eds.), *Standardy postępowania logopedycznego. Podręcznik akademicki* (pp. 267-282). Lublin: UMCS.
- Kaczorowska-Bray, K. (2012). Zaburzenia komunikacji językowej w grupie osób z niepełnosprawnością intelektualną. In: J. Błęszyński, K. Kaczorowska-Bray (eds.), *Diagnoza i terapia logopedyczna osób z niepełnosprawnością intelektualną* (pp. 36-64). Gdańsk: Harmonia Universalis.
- Kaczorowska-Bray, K. (2017). *Kompetencja i sprawność językowa dzieci z niepełnosprawnością intelektualną w stopniu znacznym, umiarkowanym, i lekkim*. Gdańsk: Wydawnictwo Naukowe UG.
- Lipski, W. (2015). Standard postępowania logopedycznego w przypadku autyzmu. In: S. Grabias, J. Panasiuk, T. Woźniak (eds.), *Logopedia. Standardy postępowania logopedycznego* (pp. 461-516). Lublin: UMCS.
- Michalik, M., Cholewiak, A. (2017). Tempo wypowiedzi w oligofazji. *Logopedia*, 46, 267-283.
- Michalik, M., Kaczorowska-Bray, K., Milewski, S., Solak, A. (2020). Tempo mówienia i tempo artykulacji w dyskursie zaburzonym. In: M. Wysocka, B. Kamińska, S. Milewski (eds.), *Prozodia. Przystawianie, badanie, zaburzenia, terapia* (pp. 395-429). Gdańsk: Harmonia Universalis.
- Michalik, M., Solak, A. (2017). The pace of speech in autistic spectrum disorder (ASD). *Acta Neuropsychologica*, 15(4), 433-441.
- Milewski, S. (2020). *Tempo mówienia*. Downloaded from: www.encyklopedialogopedii.pl/tiki-index.php?page=TEMPO+M%C3%93WIENIA.
- Rittel, T. (1994). *Podstawy lingwistyki edukacyjnej. Nabywanie i kształcenie języka*. Kraków: WSP.

- Solak, A. (2018). *Tempo wypowiedzi dziecięcych*. Unpublished doctoral thesis written in Neurolinguistics Institute of Pedagogical University of Kraków under dr hab. Mirosław Michalik.
- Tarkowski, Z. (2003). Zaburzenia mowy dzieci upośledzonych umysłowo. In: T. Gałkowski, G. Jastrzębowska (eds.), *Logopedia. Pytania i odpowiedzi. Podręcznik akademicki* (vol. 2, pp. 203-209). Opole: Wydawnictwo Uniwersytetu Opolskiego.
- Wagner A. (2017). *Rytm w mowie i języku w ujęciu wielowymiarowym*. Warszawa: Dom Wydawniczy „Elipsa”.
- Winczura, B. (2008). *Dziecko z autyzmem. Terapia deficytów poznawczych a teoria umysłu*. Kraków: Oficyna Wydawnicza „Impuls”.
- Wolski, A. (2009). Przygotowanie dziecka z autyzmem do uczestniczenia w edukacji. In: J. Kossewska (ed.), *Kompleksowe wspomaganie rozwoju uczniów z autyzmem i zaburzeniami pokrewnymi* (pp. 155-168). Kraków: Oficyna Wydawnicza „Impuls”.
- Woźniak, T. (2012). Niepłynność mówienia. In: S. Grabias, M. Kurkowski (eds.), *Logopedia. Teoria zaburzeń mowy* (pp. 549-565). Lublin: Wydawnictwo UMCS.
- Wysocka M. (2012). Zaburzenia prozodii mowy. In: S. Grabias, M. Kurkowski (eds.), *Logopedia. Teoria zaburzeń mowy* (pp. 165-184). Lublin: Wydawnictwo UMCS.

Ana MILOVANOVIĆ

University of Belgrade, Teacher Education Faculty

THE IMPORTANCE OF THE FESTIVAL OF PUPPETRY IN EDUCATION (LUTKEF) FOR THE DEVELOPMENT OF PUPPETRY IN EDUCATION IN SERBIA

Summary

During the 25 years of its existence, the Festival of Puppetry in Education (LUTKEF) has developed and significantly improved the position of puppetry art in Serbian education. It also initiated or largely contributed to the founding of puppetry art in the education in Montenegro and in the Republic of Srpska. Through its various forms of organization and multiple programmes, LUTKEF gathers children, students and teachers from many places inside and out of the borders of today's Serbia. Through its activities, the Festival helps children and teachers to expand their knowledge and skills within the education system and wider, as it also includes humanitarian programmes, local community events and televised performances. The motivation of local communities for puppetry in education has resulted in opening 12 LUTKEF centres around Serbia. Due to its cultural and educational significance, the art of puppetry makes an obligatory course in the university education of future preschool and primary school teachers. Most of all, the Festival of Puppetry in Education has proved to be very important for the awakening of interest and developing of love for the puppet theatre and arts among pre-schoolers and pupils in Serbia.

Key words: Festival of Puppetry in Education (LUTKEF), puppet theatre art, puppet workshop, preschool teacher education, school teacher education, puppet dramaturgy.

Puppetry in education

Puppetry has always been an important form of human expression, which can best be seen in the following quotation: "If very small children are to determine the question, they will decide for the puppet show." Plato's words (Laws II-658) are proof that children's fondness for puppets is not a new thing" (Dolci, 2000, p. 74). Dolci means the temptation in the world of education to exploit this interest is legitimate. According to him:

Teachers have to be persuaded that the use of puppet theatre is not merely the result of artistic conceit or a desire to hone particular skills, but rather of a semantic void that an actor cannot fill. Puppets need to be seen as a specific theatrical strategy, which extends and broadens the creative power of the figure on stage and thereby develops the heuristic power of the fiction introducing a freedom that would be unthinkable for an actor (Dolci, 2000, p. 77).

In the process of education, puppetry has many functions, some of them being: aesthetic, educational, therapeutic, and the function of development and improving of child's knowledge (Hunt, Renfro, 1981, p. 5). According to Currell, "puppetry is an excellent medium for integrating a wide spectrum of the curriculum, not only crafts and performance arts but academic subjects as well" (Currell, 1980, p. 12). From Dolci's point of view, "regular use of puppets can be considered an intelligent strategy for exploring, experimenting with and coming to terms with inner and outer reality" (Dolci, 2000, p. 80).

The exceptional potentials of puppet art and the importance of the application of puppet theatre art in education are emphasized in all theories of educational puppetry (Milovanović, 1992; 1993; 1994). Puppet theatre art has symbolic, metaphoric and incorporate qualities which offer exclusive possibilities of child's cognitive, sensitive and emotional development. The huge potential of puppet art lies in its ability of symbolic and metaphoric presentation, which supports children's development and their acquisition of knowledge and competences. According to Bensky (1971) and Korolov (1967), there are no more paradigmatic stage symbols than the theatre puppets. Similarly, Obrascov (1971; 1973) observes that due to the fact that it is not a living creature, a puppet can represent man in general, and can make the universal in him raised to the symbolic level (Milovanović, 2016, p. 21). By its very nature, a puppet is predestined to tell us the truths about ourselves and to make a strong impression on us, and the reason why puppets can do so is that they are given in a metaphorical form (Meschke, 1992; Tilis, 1992). Since metaphor is a legitimate means of dramatic expression of a puppet (Pavlova, 1993), many puppetry theoreticians consider it to be a dramatic metaphor (Tarbay, 1972, p. 79). Puppetry helps children's progress in a number of ways, as they must master the language of symbols, and must have a particularly well-developed symbolic thinking, which will support their cognitive, sensitive and emotional development. In particular, a puppet could be useful in the development of the symbolic function in children's growing and development of speech and thinking of deaf children (Vigotski, 1977). When playing with puppets, children can free their creative spirit and express themselves through different symbolic systems.

It is worth noting first that puppetry is a language, a way of communicating ideas and feelings; it has a place alongside other forms of communication, whether prose, poetry, graphic arts or performance arts (Currell, 1980, p. 11).

Also, playing with puppet allows children to adopt an aesthetic taste in literature, (Milovanović, 2008), music and art. Puppetry in children education facilitates the development of their special talents, skills, feelings, perception, speech, willingness for communication, and emotional intelligence. According to Vygotsky, playing with puppets also fulfills children's psychosocial needs and strengthens their self-confidence and self-respect (Vigotski, 2005).

Puppet plays carry both individual and collective benefits. They are characterized by a child's conscious and voluntary acting in a joint activity with peers. They also encourage children towards diversity, correlating with their individual abilities, to the benefit of both the child and the community. "Puppetry also performs a useful function as an integrating medium by bringing together children of varied interests, abilities and talents in a way that few other school activities can" (Currell, 1980, p. 12). The knowledge, moral and spiritual values adopted by children this way are permanent and suitable for further improvement and transfer (Signorielli, 1991). Then the puppet method has all the qualities of a method of active learning.

Writing about the learning experiences, David Currell (1980, p. 10) pointed that, unlike a popular misunderstanding, the idea is not that maths, history, geography, science, etc. should be taught through puppetry, but rather that puppetry provides the child "with opportunities to meet and understand a wide range of concepts or situations for the first time through a puppet activity". The child then has to accommodate, and puppetry becomes a stimulus for further learning. At other times, as Currell notices, "puppetry provides the opportunity to confront concepts already encountered, so providing practice and reinforcement, that is, opportunities for assimilation". That is why Currell sees puppets as a stimulus for, and consolidation of, learning. "Moreover,

the learning that takes place is linked to a meaningful activity and is not just another of the apparently pointless exercises with which children are faced in school all too frequently” (Ibidem). He believes the appeal of puppet activities and the performance provide a subject and the motivation to talk, but language development with puppets goes further than this.

For too long the role of puppetry in language development has been seen simply as helping to release children’s inhibitions and encourage them to talk. *Puppetry promotes language development* has become almost a slogan (Currell, 1980, p. 13).

The author also notices that the emphasis has so far mainly been on the oral aspects of language, since it is the least well understood and utilized in puppetry in education and adds that puppets can be beneficial for reading too, as they create and stimulate a need to read, at the same time diverting the child’s attention from the anxiety of reading (Currell, 1980, p. 15).

Research on children’s speech, conducted in kindergartens in Belgrade and focused especially on the suprasegmental features formed and developed under the application of the puppet theatre method, proved that the morphological and prosodic features of speech in the studied group of children, and the theatrical features in their dialogues, were much better than in the control group of children (Milovanović, 2001).

Morris Willitts (1980, p. 3) is sure that a child will talk freely when given the chance to indulge in talking to the puppets.

Puppetry is the perfect combination of storytelling and education with humour, symbolic thinking, and problem solving techniques, to teach pre/school children concepts like health and safety, socialization skills, and stories. A child can learn to attend, assess, evaluate, participate, and co-operate with other children.

Referring to the vast range of arts and crafts and the accompanying skills involved in puppet theatre, Currell also sees the benefits of art and craft activities, as they contribute to the construction of puppets and of the scenery and props. Through these activities, the child can meet and develop a wide range of skills, handle various kinds of materials and get to know their properties. Additionally, these types of activities present many opportunities for introducing and using a variety of concepts, measurement and so on (Currell, 1980, p. 11). In terms of practical manual skills, he observes that making puppets and props involves such activities as: drawing, painting, cutting, sewing, gluing, modelling from a range of materials, sculpting or carving from wood, balsa, foam rubber, and casting in various materials. An opportunity to develop mathematical concepts is another benefit of constructing puppets and stages (Ibidem, p. 16). Such activities include: measuring, sorting, classifying and matching; dealing with shape, proportions and weight; doing various kinds of calculations and making comparisons such as taller and shorter, stouter and slimmer, heavier and lighter; calculating sight lines and viewing angles; making designs and scale drawings, plans and elevations. Moreover, as Currell states (Ibidem), there are many concepts that might not arise during the construction stage (e.g. distance and proximity), but they will arise in the performance-time and space.

According to the therapeutic puppeteer Mickey Aronoff, puppets are perceived as useful not only for their ability to serve as a symbol, but also because of their projective ability. Therefore, when applied to health education or special education, psychotherapies, and other institutional work (for instance, in speech therapies, physical or occupational therapies, in drama, art or play

therapy, in social and prison work, etc.), puppet theatre arts all fit under the broad umbrella of therapeutic puppetry. In such settings, puppets can be used for psychotherapeutic understanding or change, for physical strengthening (passive or active) – either purely in each category or in combination (Aronoff, 2000, p. 82).

The origins of the Festival of Puppetry in Education (LUTKEF)

The Festival of Puppetry in Education (LUTKEF) was founded by Ana Milovanović as the result of her seven-year practical and theoretical work on the development of puppetry in education. She decided to research and work in the area of puppetry in education for two basic reasons. First, working as a puppet director and a puppet playwright, she recognized the great importance of the puppet theatre art for children, as well as its enormous educational potentials. Secondly, in communication with teachers, she came to the conclusion that, despite its educational values, the puppet was insufficiently and unprofessionally applied in the work with children. It means the current status of puppetry in education in the country was in direct contradiction both to the real needs of children and the contemporary approach to education. In former Yugoslavia, to be engaged in puppetry in education meant to be engaged in pioneering undertakings, especially in view of the fact that the disparaging attitude towards the puppet theatre art was already a genetically established phenomenon in the country.

The first step in the systematic development of puppetry in education was the “Puppet Workshop”, which was founded by Ana Milovanović at the Pedagogical Academy for Teacher Education in Belgrade (now the Teacher Education Faculty) in the school year 1989/1990. The “Puppet Workshop” was seriously engaged in experimental research of the application of puppet theatre arts in the education of primary school children, focusing to specific subjects in their curriculum. Although experimental work of the “Puppet Workshop” had remarkable success among students and professors of the Academy, as well as at many educational conferences and theatre festivals, puppetry did not enter into schools and the other formal education institutions massively.



Picture 1. Hand Theatre of the Puppet Workshop Teacher Education Faculty, Belgrade, Serbia.

In order to motivate teachers for the creative application of puppetry and to provide a more efficient transfer of acquired knowledge and experience to the field of puppetry in education in Yugoslavia, Ana Milovanović (in cooperation with the Teachers Union of Serbia) decided to establish the Puppetry Festival in Education (FLUO) in 1993. The first Puppetry Festival in Education (FLUO) was held at the Pedagogical Academy for Teacher Education in Belgrade. In practice, the entire festival was based on the “Puppet Workshop”, with its former members and their pupils participating in all of the seven puppet shows (the only ones existing in the country at all). It was the second stage in the development of puppetry in education in Yugoslavia. FLUO had three successful editions, each one contributing to a wider and more professional application of puppetry in education in Yugoslavia. As a result, at the Third FLUO Festival, there were twenty-six puppet performances made by preschool and school children and their teachers, as well as two outstanding professional performances from The National Academy for Theatre and Film Arts from Sofia, Bulgaria. There was an obvious advancement not only in the number of performances, but also in their theatrical and educational quality. It means that the Festival stimulated the children’s and their teachers’ creative expression in puppetry and hastened a progress both in the quantity and quality of production of children’s puppet performances. The Festival sparked remarkable media and professional attention and confirmed itself both as a model of motivation and as good practice for the development of puppetry in education.



Picture 2. Emblem of the Festival of Puppetry in Education (LUTKEF).
Source: private collection.

The third stage of the project devoted to the development of puppetry in education in former Yugoslavia (today in the Republic of Serbia and in Montenegro) was the organization of a larger and more comprehensive and inclusive festival, with higher quality expectations. It was **The Festival of Puppetry in Education (LUTKEF)**, founded in 1996 by Ana Milovanović, under the auspices of the Ministry of Education of Serbia and Radio-Television of Serbia (Milovanović, 2010), as a follow-up of the closed FLUO festival.



Picture 3. The poster of XXII Festival of Puppetry in Education (LUTKEF).

Source: private collection.

Conception of the Festival of Puppetry in Education (LUTKEF)

The Festival of Puppetry in Education (LUTKEF), unique by its conception, is a specific theatrical and educational festival for children and made by children.

At the time of its conception, the main aims of LUTKEF were, and still are, to represent, develop and promote both the puppet theatre the performance productions of preschool children, pupils, educators, teachers, pedagogues, students and professors, and any form of application of puppetry in education. The secondary (but no less important) goals of LUTKEF are: contribution to the development of the theatre culture in general and innovation of education as a whole in then Yugoslavia (now Serbia and Montenegro). As written in the LUTKEF Manifesto: “LUTKEF exists to remind: that the puppet in the school and kindergarten is not a toy, but the object to which life is given by the child or teacher; that everything can become a puppet if somebody finds a reason for its existence” (Milovanović, 1997, p. 89).

The complex conception of LUTKEF considers the main programme and a series of complementary programmes. The main programme of LUTKEF contains two parts: the first one presents puppet performances made by preschool and primary school children and high school and university students (with the methodological guidance of their educators, teachers and professors). It is very important that children participate in all the phases of the realisation of a puppet performance (starting from the text, through the creating and making of the puppets, to the voice characterization, selection of theatre music and the animation of puppets). The second part of the main programme presents the possible kinds of application of puppetry in education by the educators, teachers and professors. The main programme of LUTKEF has a competitive character: it means the best puppet performances made by children and the best applications of puppetry in education by educators, teachers and professors are selected and rewarded. The jury of LUTKEF always consists of the specialists in puppet theatre and pedagogy, not only from Serbia, but also including professors from the best European puppet academies. The awards are motivational ones (for example, participation in a professional puppet festival for children or ten days’ holiday at a seaside). “LUTKEF wants

at least one puppet to come to life in every kindergarten and at every school throughout the country, and to show to all educators and teachers that the best way for children to express themselves, learn, get experience and feel loved is through playing with puppets” (Manifesto of LUTKEF) (Milovanović, 1997, p. 89). The Festival is aimed at the development of all children, not only those who are gifted with theatrical abilities, which is one of the main reasons for the Festival decentralization and realization of LUTKEF programmes all year round in different centres of LUTKEF in then Yugoslavia (nowadays, Serbia and Montenegro).

From the beginning of LUTKEF, children with special needs have not only been included in the Festival activities, but their participation is based on absolutely equal rights.

The complementary programme of LUTKEF has three parts: a) the education of educators; b) the humanitarian LUTKEF; c) the motivation of local communities for puppetry in education.

The education of educators (through puppet workshops and seminars for educators and teachers, round tables and conferences, theatre puppets exhibitions and puppet stage design) gives educators and teachers both the basic knowledge and skills in the field of puppet art and the methodological knowledge and examples of the best practices of applying puppetry in education. The conception of this part of LUTKEF’s complementary programme was initially based on the curriculums both of The Drama Academy of Muse's Arts, Prague, Czechoslovakia and The National Academy for Theatre and Film Arts, Sofia, Bulgaria.

The contents of the puppet workshop, as the main form of educating educators, are: 1) the theory of puppet theatre art (the fundamental concepts of puppet art, the differential characteristics of the puppet theatre in relation to the drama theatre, the poetics of puppetry), 2) the history of puppet theatre (a short review; the puppet as the theatre symbol in the history of human civilization), 3) puppet plays (specifics of drama for children; the basic principles of dramatization of fairy tales; characteristics of puppet dramaturgy with examples from famous literature), 4) the types of puppets (the idea, genesis, characteristics, principles of creation and construction, and technology of different types of puppets: marionette, the sticky puppet, puppet of java, shadow puppets, hand puppets, improvised puppets, mimics puppets), 5) improvisations in puppetry (the theatre of hands, the hand as a fundamental means of expression in puppet art; theatrical potentials and principles of animation of hands; methods of analyzing everyday objects from the aspect of their usability for animation), 6) the speech of different types of puppets (characteristics of theatre speech, speech characteristics of different types of puppets), 7) the puppet animation (universal principles of puppet animation; specific principles of animation of different types of puppets), 8) the puppet scenery (specifics of scenic space; the visual and theatric patterns of shaping of puppet space; different principles of creation and construction of a puppet scene), 9) the music in the puppet theatre (characteristics of scenic music; the principles of choosing the music for different types of puppets), 10) the puppet directing (the basic patterns of theatre directing, the specifics of puppet directing; the puppet mise-en-scene, the principles of composition of a puppet spectacle).

The humanitarian LUTKEF considers not only holding humanitarian performances in children’s hospitals, orphanages and refugee centres, but also the design of special performances for health education and therapeutic re-education performances.

The motivation of society for puppetry in education means motivating local communities and places without puppet theatres for puppetry in education (through puppet carnivals and children’s collective creation of puppets in town squares).

The achievements of the Festival of Puppetry in Education (LUTKEF)

During the 25 years of its existence, LUTKEF has significantly developed the puppetry in education in Serbia. It also initiated the founding of puppetry in education in Montenegro and contributed to its foundation in education in the Republic of Srpska. Only the highest achievements of LUTKEF will be mentioned here.

The Festival of Puppetry in Education (LUTKEF) founded its centres of puppetry in education in the following cities and towns in Serbia: Belgrade, Kruševac, Batočina, Aleksinac, Kragujevac, Subotica, Brus, Čičevac, Smederevo, Knjaževac, Sokobanja, as well as in Montenegro (Podgorica). For twenty-four years now there have been parallel annual editions of the Festival in the centres of LUTKEF in: Belgrade (I-XIII, XX-XXIV), Kruševac (II-XI), Batočina (XIV-XIX), Aleksinac (VI-VIII), Kragujevac (XII, XIII), Subotica (II-III), Brus (IV), Čičevac (XIII), Smederevo (I), Knjaževac (II), Sokobanja and Podgorica (III) (Milovanović, 2016).



Pictures 4-6. The Festival of Puppetry in Education (LUTKEF).

Source: private collection.

In the official system of education throughout Serbia, children perform puppet theatre plays with more and more quality as a result of professional supervision and evaluation. All types of puppet theatre (even marionette) are now represented in Serbian education, as well as all puppetry theatre genres (even operettas). More than 5,500 children (aged 4 to 15) from all over Serbia, Montenegro and the Republic of Srpska have played in 518 puppet performances. LUTKEF's audience in Serbia and Montenegro counts more than 30,000 children and, it is important to notice, all performances and programmes can be enjoyed by children for free.

The biggest of the creative achievements of the puppeteers in education – both children and educators – was the series of the Radio-Television of Serbia “The Smallest Theatre in the World” (filmed and viewed in the period 1996-2002). The best children puppet performances from LUTKEF were selected and professionally recorded for that series, which ran 3 cycles (each consisting of 13 episodes). Until now, LUTKEF's “The Smallest Theatre in the World” has been replayed on the Radio-Television of Serbia 11 times and has participated at the festival of TV programmes for children in Gera, Germany, offering the widest affirmation to its authors.

The best children and adult puppeteers from LUTKEF were rewarded with live participation in the educational puppet serial program “The Puppet Primary Book” on The Independent Television “Studio B” (aired live 1997-1999).

The books in which LUTKEF's best puppet plays were published represent its permanent contribution to puppetry in education. The first one was *The Anthology of puppet plays of LUTKEF* (with *The Introduction to Puppet Dramaturgy*), which has had three editions until now (2001, 2003, 2008) and sold more than 10,000 copies (Milovanović, 2008). The second book, *The Puppet plays for kindergarten and school (from LUTKEF)* was published in Belgrade in 2016 by the Festival, which then starts with its publishing work as well (Milovanović, 2016).

The number and aesthetic values of the original puppet plays written by teachers are better represented in the second book. Both books have become primary books for puppet play writing, representing the affirmation of puppet play writers and a support for their further creativity in puppetry in education.

The approach of LUTKEF to the development of puppet dramaturgy is based on the results of research which not only shed light on the existence, function and importance of elements of Serbian fairy tale in children's drama literature in Serbia, but lead to the conclusion that Serbian fairy tales are the inspiration of the best drama for children in the Serbian language. There is, however, a wrong tendency noticed in modern Serbian dramaturgy for children: a negative change of the meaning of fairy tale has been keeping up with the changing political situation during the last thirty years. Serbian fairy tale is a very important base for creating plays for children of high aesthetic qualities and both the meaning and the *Weltanschauung* of Serbian fairy tales have been inventively conserved among LUTKEF's puppet play writers (Milovanović, 2002, p. 80).

The thematic diversity of puppet performances in education in Serbia is also increased through the efforts of LUTKEF. Teachers, authors of plays for older school age (pre-adolescents), do not flee from the cruel reality in which their pupils live, but they creatively cope with it. Social justice and emotional and other problems of the young, which are of particular importance to pre-adolescents (e.g.: the dangers that ‘lurk’ from social networks and human traffickers, bullying, etc.), are treated very successfully at LUTKEF.



*Pictures 7-8. The Puppety in Education Festival (LUTKEF).
Source: private collection.*

It is important to point out that, in a situation where true critical tones are rarely heard in the professional children’s drama theatre of Serbia, the strongest social criticism comes from a puppet theatre at a small puppet festival. Secondly, LUTKEF promotes plays based on the application of puppet theatre art in the processes of young people’s forming and adopting patriotic attitudes, values and behaviours; assimilating knowledge about the Serbian culture, history and tradition; moulding a positive attitude towards them and a continuous interest in their spiritual values; cultivating the feeling of national self-consciousness and cherishing the deepest love for their own country.

LUTKEF has successfully presented the optimal models for children's speech development, as well as an original method of initial reading and writing of Serbian Cyrillic alphabet based on the application of puppet theatre art in developing literacy (Milovanović, 2020). There were performances based on that method and approach to learning the Serbian language, then made by the students of the Department of the Serbocroatian language at the Faculty of Slavic languages at Sofia University “St kliment Ohridski” (Milovanović, 2007).

We should point out another contribution of LUTKEF in a very rare application of puppetry in education, which is very important for children’s development – the creative application of puppet art in the process of forming and developing initial mathematical concepts and relations among preschool children. There have been a dozen “math” performances at LUTKEF as a result of its workshops, initiated through annual public calls and targeted towards the professional development of educators.



Picture 9. Math performance of pre-schoolers at The Festival of Puppetry in Education (LUTKEF). Source: private collection.

LUTKEF also pays attention to the full inclusion of children with special needs. They, too, have received the main rewards and were selected for television series (Milovanović, 1997). Various attempts to establish the influence of a systematic and professional utilization of puppet theatre art in the development of speech and literacy development of children with hearing impairment have proved to be successful, too. The performances in which puppets helped in the learning of a foreign language have found their place at LUTKEF, too.

From the very beginning, the Festival has been devoted to developing children's musical taste and ecological awareness, and to presenting and promoting the national tradition and folk literature of Serbia. Special attention is always paid to promoting and adopting moral norms and ethical principles among children. As an integral part of all LUTKEF performances, the development of children's motor skills (especially delicate hand movements), is becoming increasingly important in the world of the prevailing information technology progress.

These achievements of the Festival are not accidental: they arrived after a continual, systematic and thorough preparation of the complementary LUTKEF programme – 'The education of educators'. More than five hundred education workers in Serbia have participated in the workshops and seminars related to the specific fields of puppet art (dramaturgy, directing, animation, creating and making of puppets), often held by eminent professors of the puppet academies from Bulgaria and Great Britain. Many of the teachers-puppeteers had the opportunities to see very good performances of international puppet theatres at dozens of exhibitions of puppets and stage design.

The roundtables devoted to the status of puppetry in education in Serbia have precisely identified and highlighted the problems and proposed effective solutions to them.

The humanitarian LUTKEF has delivered more than 150 charity plays performed in children's hospitals and orphans' homes and more than 200 puppets have been donated to children. It has served as a kind of therapy in re-education as well, and was particularly useful in the post-war period in Yugoslavia and after the NATO bombing of Serbia and Montenegro. Humanitarian LUTKEF concerns not only performing humanitarian performances in children's hospitals, orphanages and refugee centres, but also the design of special performances for health education and therapeutic re-education performances.

The motivation of local communities for puppetry in education has resulted in opening 12 LUTKEF's centres around Serbia in which 38 puppet carnivals have been held and 11 collective creations of puppets in town squares).

The festival has significantly contributed to the wider media and professional affirmation of both puppetry in education and the best contributors of LUTKEF.



Picture 10. Press clipping of The Festival of Puppetry in Education (LUTKEF). Source: private collection.

The very important contribution of LUTKEF lies in the fact that puppet theatre art is an obligatory subject at all levels of education of preschool and primary school teachers. In accordance with its tradition of innovative application of puppet theatre art in the primary school, LUTKEF is based at the Teacher Education Faculty in Belgrade¹.

Conclusion

The Puppetry in Education Festival (LUTKEF) has been very important for the development of puppetry in education in Serbia and for the awakening of interest and developing love for the puppet theatre and arts among pre-schoolers and pupils.

¹ <https://www.flickr.com/photos/87316354@N02/sets/72157676854897532/>.

Bibliography

- Aronoff, M. (2000). Therapeutic Puppetry. In: *The Worldwide Art of Puppetry* (pp. 82-84). UNIMA.
- Batchelder, M., Comer, V.L. (1956). *Puppets and Plays*. New York.
- Bensky, R.D. (1971). *Recherches sur les structures et la symbolique de la-marionnette*. Paris.
- Currell, D. (1980). *Learning with Puppet*. London, Manchester: Ward Lock Educational.
- Dolci, M. (2000). Puppetry and Education. In: *The Worldwide Art of Puppetry* (pp. 74-81). UNIMA.
- Hunt, T., Renfro, N. (1981). Puppetry and Early Childhood Education. *The Puppetry Journal*, 33, 5-12.
- Meschke, M. (1992). *In Search of Aesthetics for the Puppet Theatre*. New Delhi: Indira Gandhi National Center for the Arts.
- Milovanović, A. (1992). Uvod u teoriju lutkarstva. *Učitelj*, 39.
- Milovanović, A. (1993). Aplikacija lutkarstva u razvijanju ekološke svesti studenata Pedagoške akademije. *Inovacije u nastavi*, 1/2.
- Milovanović, A. (1994). Kreativna dramatika – element stručnog usavršavanja učitelja. *Učitelj*, 43/46.
- Milovanović, A. (1997). Lutkarski edukativni festival kao model podsticanja dečje darovitosti. U: *Zbornik Više škole za obrazovanje vaspitača*. Vršac: Viša škola za obrazovanje vaspitača.
- Milovanović, A. (2001). Neke karakteristike dečjeg govora u dramskim i lutkarskim dijalozima. *Nastava i vaspitanje*, 244-252.
- Milovanović, A. (2002). *Srpska bajka u drami za decu*. Beograd: Zadužbina Andrejević.
- Milovanović, A. (2007). Savremene metode i novi pristupi u učenju srpskog kao stranog jezika. U: Dešić, M. (ur.). *Srpski kao strani jezik u teoriji i praksi* (pp. 91-98). Međunarodni naučni skup Srpski kao strani jezik u teoriji i praksi, 20-21.10.2006. Beograd: Filološki fakultet Univerziteta u Beogradu, Centar za srpski kao strani jezik.
- Milovanović, A. (2008). *Antologija lutkarskih tekstova (sa LUTKEF-a)*. Beograd: Kreativni centar.
- Milovanović, A. (2010). Kako je rastao LUTKEF. *LUDUS*, 2.
- Milovanović, A. (2016). *Lutkarski tekstovi za pozorište u vrtiću i školi (sa LUTKEF-a)*. Beograd: Udruženje građana „LUTKEF”.
- Milovanović, A. (2020). *Lutkarska cirilica: lutkarska metoda u učenju čitanja i pisanja srpskog jezika*. Beograd: Učiteljski fakultet.
- Obrascov, S. (1971). Kakvo predstavlja kukleniät teatr. U: *Kakvo i kak v kukleniä teatr*. Sofiä: Komitet za izkustvo i kultura.
- Obrascov, S. (1973). Kakv še bdeš ti, Teatr? *Literaturnaja gazeta*. Moskva.
- Pavlova, V. (1993). Specifika na kuklenoto iskustvo – postojano privlekatelna sila. U: *Kukleno izkustvo*. Sofiä: VITIS.
- Signorielli, N. (1991). *Sourcebook on Children and Television*. New York: Greenwood Press.
- Tarbay, E. (1972). Teatr lalkowy i metafora. Y: *Lalka w službie metafor* (pp. 75-79). Bielsko-Biala: Festiwal Teatrow lalek w Bielsku-Bialej.
- Tilis, S. (1992). *Towards an Aesthetic of the Puppet*. New York: Greenwood Press.
- Vigotski, L. (1977). *Mišljenje i govor*. Beograd: Nolit.
- Vigotski, L. (2005). *Dečja mašta i stvaralaštvo*. Beograd: Zavod za udžbenike i nastavna sredstva.
- Willitts, M. (1980). Storytelling with Puppets and the Pre-School Audience. *The Puppetry Journal*. New York: num. 31.
- Korolov, M. (1967). A Producer's Reflections on the Roles of the Actor and Designer. In: *The Puppet Theatre of the Modern World*. New York, London: George G. Harrad Co, LTD.

Marek MIERZYŃSKI

State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy

Elżbieta CYGNAR

State University of Applied Sciences in Nowy Sącz, Institute Physical Education

Bogusława GAWEŁ

University of Lower Silesia in Wrocław; State University of Applied Sciences in Nowy Sącz, Institute of Pedagogy

MODERN PHILOSOPHICAL AND AXIOLOGICAL CONSIDERATIONS IN REFERENCE TO THE ETHICS OF UNIFORMED SERVICES

Summary

The morality of the individual man, as well as the social one, as well as that of individual professional groups, including those who perform the important service for the good of society, are inevitably connected with ethical decisions made constantly.

The sources of moral and ethical attitudes of functionaries are based on specific ideas and phenomena of human communities. They are described, among others, by ethics – in the article, in terms useful for members of uniformed services.

Key words: sense of justice, officer, coercion, restriction of freedom, security, ethics of uniformed services.

The operations of an institution and performance of public servants and relations between an individual and various institutions is related to the overwhelmingly complex moral issues and is focused on two crucial problems. One of these problems is the widely understood and interpreted sense of justice which concerns the problem of what pertains to who in social relations and thus it refers to the mutual obligations between an individual and institutions. Under this problem the reflection focuses on the analysis of the moral foundations and search for the rules of just law and political system of the state in its institutional aspect. Subsequently the issue of the moral, proper and just conduct of an individual in the public space, both private and public persons such as officials and policemen, emerges.

The second problem pertains to the issue of justifying the application of coercion in the field of restriction of freedom by authorized public authorities and the specific formulation of conditions and scope of its admissibility. However, as it can be easily discerned, the use of a form of coercion is in each case undeniably related with the issue of justice as the justice constitutes a proper justifying rationale. Executing each vision of just public order requires application of coercion for the purpose of implementing adopted legal imperatives and proscriptions (Taracha, 1994). At such time a question is revealed: is the public authority and its officers morally authorized to restrict our freedoms in the name of the upheld beliefs concerning the issue of what public order is proper and just and what behaviours of individuals merit rejection and to what extent they are allowed to do so?

It must be stated that contemporarily the majority of moral debates tackling the issues related to the public aspect is woven around the values of justice and freedom (from coercion). Both assume affirmation of something akin to a common denominator, mainly a particular and enigmatic concept called equality (Hartman, Woleński, 2009, p. 271). Deliberating on the issue of conditioning, particularly the conditioning of the uniformed services, we must take into

account other momentous and significant values of public and social life. Among these we must distinguish such values as the internal security of citizens and external security (peace, personal inviolability, care for family piety, low crime rates), property (legal protection of property), law-abidingness (observing the law, the law giver respecting the fundamental rights), self-determination (care for democratic autonomy), public health (care for preservation of health, also during pandemic). Thus working towards the ideal of justice would consist of realization of all these values with simultaneous possible least depreciation of the freedoms of an individual and avoidance of causing harm to anyone in the space of public life (Wiszwaty, 2011).

Thus in the declaratory aspect – developed over the last decades – a moral ideal of the modern civilized world presents itself.

However, in terms of the efficient and proper functioning of social life a common conviction exists in the modern western societies that subjecting laws and public system to any form of ideology defining a proper life model is not ethically acceptable and this issue is no longer up for discussion. Regarding the vision of social life it is accepted that a liberal democracy constitutes a proper and just form of organizing political life. It is so because it is being acknowledged that a liberal democracy allows for peaceful life and functioning of all participants of the political dispute concerning the proper model of life. Liberal democracy constitutes a guarantee that none of the parties will force its beliefs and systems upon the remaining members of the society (Lyons, 2000).

The ethical argument regarding the boundaries of freedom in the private and public domains, along with particular devotion to all displays of discrimination in social life, is contemporarily instigated. This argument also touches upon the issues of the presence of the state in realizing state's care functions towards the citizens as well as the moral scope of the practicalities of the functioning of a civil society.

Liberal-conservative doctrinal considerations

Since the birth of the ethical and political thought, since the times of ancient Greece and Rome, two paths of reasoning concerning the state and civic conduct were formed. According to the republican reasoning formulated by Plato and Aristotle further developed and interpreted anew in the early modern period (Machiavelli, Rousseau) and currently cultivated by the conservatives the state (*res publica*) is the greatest moral achievement of humanity and a civic state possesses the rank of the highest moral dignity of an individual. The state, as a collectivity of the citizens' lives, requires veneration and servitude as the state is the means by which every individual becomes civilized and morally responsible. For these reasons the virtue of a good citizen is one of the noblest virtues and service to the state is the highest honour and the greatest of responsibilities. Thus the conservatism undeniably presents itself as a clear opposite of the liberal ideology. E. Burke, a representative of this movement was characterized by the attitude of suspicion and distrust towards Lock's empiricism, and he did not agree with his arguments justifying the revolutionary changes (Gottfreid, 1993). Rather than that he sided with and lauded the tradition of cultural heritage as the achievement of humanity and emphasized its contribution to preserving societal order (Chapman, 1967).

The declaration of Burke's conservative ideals emphasized the importance of tradition and the cultural heritage as the timeless treasury of human knowledge. Such perception of the world and mechanisms of history allowed Burke to see social, political, religious and educational institutions – a family, the state, the church and a school – as products of culture which constitute a derivative of the experience accumulated over generations. The standards of decent behaviour

and civilized discourse, ethical standards and values were not defined in accordance with the will of the majority. Such ideological stance is the result of a careful, suspicious even, approach towards all changes perceived as a possible threat to civilization and morality (Kirk, 1995).

The main characteristic of individualism which distinguishes the idea of liberalism is the premise and belief that an individual is more important than society (Rawls, 1993). According to the conception of individualism, the basics of which were formed by Locke and Jefferson, an individual possesses certain guaranteed rights and an individual under this social and political system possesses practically unrestricted opportunities for realization of own desires and the state should interfere with his actions as little as possible (Mill, 2006).

In emphasizing the significance of general education representatives of liberalism underline the importance of the civic upbringing possessing cognitive and emotional aspects. On one hand expanding and enriching the knowledge of young people concerning structures of the state system and its institutions is indispensable, on the other the emotional aspect of upbringing which should, according to the liberal vision, be based on implanting the sense of civic responsibility is displayed. The indicated aspects, the cognitive aspect and the aspect related to forming attitudes, are combined in the liberal concept of the so-called “public decency” which, in turn, translates in the practicalities of social life to appreciation of the importance of ranks of the procedures and functioning of institutions in politics and education alike (Nowak, Cern, 2008).

Liberalism is an ideology under which a concept was developed of a human as a sapient being which realizes its potential in unrestrained manner in the spirit of individualism and at the same time respects the democratic social order. Liberals eagerly speak of a civil society – but they refer not to the idea of the collectivity but to the idea of possessing inalienable human and political rights – as the essence of citizenship. Participation in political life is an expression of goodwill of a citizen and not their moral obligation. However, ultimately this right has a decisive character in regards to what is acceptable and what is not in the institutional and political aspect. Thus the moral value consists of law-abidingness – the dominance of laws over the particular will of any state official (Kahan, 1992).

Discovering an easy solution for the moral controversy between conservatives and liberals is therefore difficult. Both parties consider their beliefs as morally justified which results in their beliefs being apodictic and non-negotiable in character.

The equivalent of this fundamental political dispute in the field of ethics is the dispute between the conception of the eudemonic ethics and absolutist ethics on one hand and the utilitarian and pragmatic ethics on the other (Anzenbacher, 2008). Conservatives are convinced that the state plays the role of an educator teaching citizens about virtues and the very fact of being a citizens is connected with practising virtues of a good citizen which include bravery and honesty but also obedience to proper superiors. Frequently conservatives adopt the attitude of moral absolutism and perceive moral obligations as absolute and unarguable and, by the same token, possible to unequivocally define through the use of moral intuition. Thinking in categories of virtues and thinking in categories of the purity of motivations to act, the goodwill of fulfilling moral obligations in accordance with moral law (deontology), frequently occur together in ethics. One representative of such reasoning was I. Kant (Hoeffe, 2003).

Ethics and law

The history appears to clearly indicate that the rulers rather frequently displayed abuse of the state authorities for realization of their own particular or ideological goals. Thus the strict criteria are applied contemporarily in order to elevate a form of a state authority to the rank of a “democratic state based on the rule of law”. In such a state, supposed to distinguish itself with high standards of law-abidingness, the forces of law and order must be subjected to strictly define legal rigours. Thus a question can be posed: why is it necessary to touch upon the subject of ethics in the work of a policeman if the professional actions he undertakes are very strictly regulated by law? In essence this question pertains not to the separateness of the ethics of the police or the widely understood uniformed services but to the mutual relations between ethics and law (Wiszwaty, 2011).

However, it must be noted here that a policeman is bound by both the obligation to remain faithful to the constitutional state authorities (as a public-legal official) as well as the obligation to serve the people, which, in turn, raises practical implications. The terms law and morality can be, obviously, assigned various meanings. The very term “law” possesses numerous varied components. First and foremost it designates the effective legal order along with the appropriate legal standards defined by codices and judicial sentences. The law formulated in this manner constitutes the foundation for legitimizing the effective legal order. Ultimately, these definitions are frequently used to define particular legal standards in the object meaning (“the wording of law as an obligation” -*lex*) as well as the subject meaning (“as a right to do something, an authorization” - *ius*) (Lyons, 2000).

In search for the answer to the question of what constitutes the essence of law two movements were formed: the conception of the natural law and the so called legal positivism. The supporters of natural law assume that it is common for all people regardless of the cultural differences; in terms of history it does not change; this law cannot be taken away as it results from the human nature and defines the fundamental rights and obligations of a human being. Furthermore, the natural law has an imperative character in regards to the positive law and serves as its legitimizing and critical-correctional factor (Brandt, 1996).

The differences in the understanding of the basic wording of the rules of natural law result from the different approach to its genesis and the very anthropological premises (Hartman, Woleński, 2009). In essence they depend on whether the substance of this law is of Greek origins, which are founded on the Plato's philosophy of ideals and the Aristotle's conception of the intentional structure of the human nature, or based on the theological Christian teachings of St. Augustine concerning the order of creation presenting the primeval display of God's law and teachings of St. Thomas of Aquinas concerning the law of nature as the reflection of the eternal God-given law in the mind of men (Anzenbacher, 2010). These rules may also be woven from the ideals of enlightenment (the theory of I. Kant of the natural law based purely on the *a priori* rules recognized and acknowledged by human reason) (Kant, 2004).

In the tradition of Aristotle and St. Thomas the natural law has the character of the moral law and its fundamental rule is contained within the “do good, avoid evil” adage. The awareness of this law increases when the law effective in the country is being perceived as unjust or when the practice of law is being assessed negatively because it is deviating from the legislation deemed as just because in such circumstances the natural law entitles citizens to a so-called civil refusal which constitutes the foundation for legal opposition (Fuller, 2004).

The opposite movement is called the legal positivism. J. Austin (1790-1859) was the most prominent representative of its Anglo-Saxon iteration. This movement operates under the premise that the law is binding solely due to the act of establishing a legislative body of the state and its binding nature is independent of the moral principles. It is well exemplified by the adage formulated by T. Hobbs: "The authority, not the truth, makes right". Expressed in such a manner the content of a moral standard constitutes a second-rate reality which *depending on needs* can be altered and its importance is based solely on the formal and procedural considerations. Thus the legal positivism dissolves the internal connection between the law and morality (Holda, 2008).

The movement attempts to solve the problem of how the law should be formed and established in order for it to become a vector for justice and not only a tool of the authorities by indicating the instruments of democratic expression of will in a country based on the rule of law. However, the history teaches us that the majority does not always guarantee infallibility. For this reason the question of moral (ethical) foundations of law still remains open. The early modern period contained the certain defined collection of normative elements which are supposed to form the moral foundation of law in various human rights declarations (Wisowaty, 2011).

The theory proposed by an Austrian lawyer H. Kelsen (1991) presented a belief that there is no relation between legal and moral standards. According to this conception a policeman is an official of the state which is equated with law. Therefore his personal conscience and sense of responsibility must give way to the authority of the state.

In its preamble the Constitution of the Republic of Poland refers to the universal values and in this intended manner connects them with the positive legal order. Under this momentous document the compromise which assumes the existence of ethics and law as the mutually non-exclusive realities associated with each other is presented.

Tackling the issue of relation between law and ethics we have to first and foremost underline that the codified law – as a formal act of the state authority – is able to regulate only the external actions of citizens subject to control with particular attention and consideration of the rule of justice. Breaching the law is threatened with specific, defined punitive sanctions. The law directs its standards – usually expressed in the form of restrictive imperatives and proscriptions – at the members of specific collectivity (Szlachta, 2008).

Engaging in philosophical deliberation normative ethics, in turn, attempt to indicate values and formulate norms which are to define the life worthy of a man. In the case of conflict between these values and standards normative ethics indicate what just and rational actions are. We must observe that the ethical standards equated with moral law are not as precise and unambiguous as the regulations of positive law. Possessing teleological character these laws indicate a general path, the proper inclinations for acting. Apart from that the ethics refer to the internal side of the personality of an individual and respect the autonomy of conscience in the field of the ethical decisions made (Brandt, 1996).

In the light of the collation presented above we must properly emphasize the ascertainment that the ethics of the police do not intend or aspire to transform guardians of law into guardians of morality. However, we can imagine a situation in which despite numerous detailed legal adjudications a police officer may come to the conclusion that if law does not proscribe a particular deed this deed is ethically acceptable (Szerauc, 2010).

In such case the professional ethics, which maintain the immutable independence of moral resolutions, are supposed to indicate the authenticity of what is moral and by the same token practically illustrate the critical function of ethics in regards to the standards of positive law.

The spectrum of contemporarily emerging ethical tendencies

More or less since time immemorial ethical deliberations have accompanied human existence. From the very beginning, coming into contact with good and evil, people were debating not so much the genesis of good but primarily the means of achieving the good which would satisfy yearnings of hearts but would also allow experiencing joy and fulfillment of existence. Particularly the work of uniformed services, police officers in particular, leads to constant contact and confrontations with moral evil.

Ethics make efforts to present certain fundamental value which is the source of common conviction concerning moral good and evil. Depending on the approach to this issue, in particular to how the basic good towards which each human action should aspire is perceived and understood, various different movements emerge in the field of ethics. The moral good understood in such a manner became the foundation for distinguishing three main movements of the ethics: deontological ethics, eudemonism and personalism. We will focus our deliberations on these movements in order to indicate various ethical inclinations as considerations and circumstances in which the representatives of modern uniformed services realize their social service (Styczeń, Merecki, 2007).

Representatives of deontological ethics (Greek – deon – obligation, responsibility; Greek – Logos – a word, science) claim that an action is good when it is compliant with the imperative of an appropriate authority. In this fact they seek for the source of moral obligation – the moral duty to fulfil an imperative of sorts. According to the heteronomous deontological ethics the authority constituting the higher instance can be the God as well as the state (Hegel) but also the society or a social class (Marx). In turn the autonomous deontological ethics adopts the belief that the entity imposing the imperative can be the entity itself (practical reason according to Kant) or “an authentic choice” stemming from the propulsion towards freedom according to the concept of Sartre (January, 2001).

Thus the deontological ethics striving for guaranteeing selflessness of the moral good presents itself as the reaction to the subjectivity of theories looking for the fundamental good in joy. The key reservation which rises in response to this movement is related with bereaving the moral entity of the right to act rationally. A sapient and rational human, in order to act in accordance with the moral imperative and accept it as right and just, has to find the rational justification himself, independently of even the highest authorities (Czarnik, 1998).

In turn, the second of the listed movements – eudemonism (Greek – *eudajmon* – happy) – deems an act to be morally good if it leads towards happiness which it indicates as the greatest goal and motif behind human actions. Thus happiness is elevated to the rank of the greatest good and constitutes the final goal of human struggle. This movement contains the majority of ancient conceptions, although these conceptions differ among themselves. This is also where we can place the hedonism of epicureans (Aristippus, Epicurus) related to the worship of life but also to moderation and prudence which are to ensure the serenity and calmness of mind (Paszyński, 2001).

This movement also includes utilitarianism (Latin – *utilis* – useful) the meaning of which can be brought down to the adage: “as much happiness and joy for the greatest number of people”. The very name of the movement would point towards the utility as the criterion of the moral good. This movement was primarily represented by J. Bentham (1748-1832) and J.S. Mill (1806-1873). In the opinion of Bentham the act is good which brings as much joy and happiness and as little pain as possible. Thus striving for happiness a man should choose the enjoyable good which brings the greatest benefits. In order to rationally define the scale of pleasure (happiness) and

John Bentham introduced a number of criteria, including the criterion of intensity and endurance of sensations (Anzenbacher, 2008).

In this context the underlying question presents itself – can happiness reduced to the level of pleasure and enjoyment constitute the fundamental good which could decide what is morally good and what is not? It is probably doubtful as the modern condition of culture is severely strained by such a consumerist perception of the world of values. In any case, J.S. Mill (2006) himself saw that pleasure is experienced incidentally when struggling towards other goals.

The third of the listed movements is personalism which was formed under the influence of several modern philosophical movements. Its formation was influenced by the contemporary European philosophy emphasizing the autonomous value of personality understood as the dignity of an individual and appreciating the value of individual's existence (Vardy, Grosch, 1995). The ordeal of the XX century totalitarian regimes – which radically obliterated human dignity – gave this movement the quality of particular and deep social sensitivity to the threat to human dignity and individuals' inalienable rights. The modern term “personalism” (taking its name from the Latin word *persona*) refers to numerous different philosophical movements.

In its basics personalism can be described as a movement focusing on the ethical issues concerning the meaning of the term “person”. Its representatives, such as J. Maritain (1882-1973) and E.H. Gilson (1884-1978), held a deep belief that the development of a human should constitute the main goal of social life and that the personal values are more important under the hierarchy of values than the economical and social values. One of the most important statements of the Christian personalism is the belief that a human is the greatest worldly entity, possessing reason and free will, individualized, inimitable nature and the capacity for exceeding oneself through affirmation of the truth about oneself and presenting oneself through actions (Szostek, 2007).

It is prudent to emphasize that personalism constitutes a conception fundamentally compliant with the Christian vision of a man although it underlines the exceptional character of men stemming from the very fact of existence (Szlachta, 2008). Such perception of human value is concordant with the contemporarily commonly accepted rule of respecting human dignity and the resulting inherent rights. This very presumption presents itself as one of the main premises of the ethics of the police.

Human dignity and rights as fundamental standards

In our modern times the perception of human rights and dignity is influenced by both positive and negative factors. The positive factors include the philosophical conceptions referring to humanistic values, the religiousness related to ethics and development of culture and civilization. Among the negative factors we may list humiliation of human beings, genocide, totalitarian and racist ideologies as well as the barbaric and genocidal political systems established on the foundation of such ideologies.

Thus as a reaction to such criminal and sinister systems a peculiar “revolution of human dignity” occurred and resulted in various actions including introduction of the human dignity definition into the *United Nations Charter, Universal Declaration of Human Rights* (1948), and in the subsequent documents of UN devoted to the issue of human rights and in other international documents, including the documents of certain state institutions. Thus despite the undeniable bolstering of the value of human dignity the modernity, marked with the pluralism of the convictions, attitudes and behaviours, departing from not only the Christian but also the enlightenment sources of the human dignity concept, is unable to reach a uniform stance concerning the issue of human dignity or the justification for this term and its contents. However, the modernity

cannot constitute the foundation for any form of neglecting or disregarding human dignity or relativizing it as it would mean renouncing all humanistic values of our culture and would, in consequence, lead to degeneration and violations (Skorowski, 2004).

It appears that in our times the human dignity is primarily violated there where police force is being consciously or unconsciously manipulated by the political factors or is provoked to taking certain actions by the contemporary media which in their pursuit of ratings are focusing on search for sensationalist material. In the face of the enormous influence of media a disastrous inclination may emerge among police chiefs to improve the *image* of the police force by presenting successful and spectacular interventions displaying the necessity of police operations (Wiszwaty, 2011).

In the case of detaining an individual (or individuals) suspected of committing a penal act and the following treatment of detainees and interrogation – particularly when such individuals have little chance of submitting a complaint regarding officers' behaviour – the policeman sensitized to respecting human dignity must exercise delicate tact regarding how far he can interfere with the sphere of human rights in order to protect the endangered social safety and order (Nowak, Cern, 2008).

Along with transfer of the subject of human dignity from the philosophical and theological plane onto the political and legal plane the issue acquired a new quality. Incorporation of the postulate of the human dignity respect into the basic law of the democratic nations resulted in the issue gaining importance in the field of, for instance, equality in the face of law. Thus contemporarily the human dignity plays momentous role not only in regards to ethics but also as a fundamental value it underlies other moral standards and constitutes the foundation of human rights which would hover in void without acknowledging it (Szostek, 2007).

The issue of human rights possesses numerous definitions. The definition contained within the encyclopedia of international public law defines it as “these freedoms, protection and benefit measures which should be respected as rights in accordance with the contemporarily accepted freedoms and demanded by people from the society they are living in” (Wąsik, 2000).

The content aspect of the human rights is concisely defined by A. Wielomski as a “set of inalienable laws due to each human always and everywhere by the very merit of being a human” (2008, p. 319). These rights being founded on the inviolability of human dignity are universal and do not require referring to other laws and thus are defined as the basic laws. From the point of view of the daily police practice it seems prudent to emphasize that their basic character does not mean that these rights are absolute. Thus they can be subject to restrictions – but only in the exceptional circumstances defined beforehand, under recognized and acknowledged procedures and not in accordance with arbitrary caprice (Taracha, 1994). In reality human rights are the ethical foundation of the state and its institutions.

The dispute regarding values

The contemporary acute axiological crisis is related with the act of undermining the existence of the objective truth, including the truth regarding mankind (Bartnik, 2006). Therefore entering into service in uniformed services is undertaken under difficult and complicated circumstances of the ethical and moral crisis. The value of a person, acknowledged as a primal and absolute value which does not require justification owing to its dignity, cannot be a means to an end but must constitute a goal in its own right. The role of this value for service in the police force cannot be overestimated (Mazurek, 2001). The value of a person lies at the foundation of the inalienable inherent dignity and rights of human respecting which we recognized as the fundamental rule of the police ethics.

Although in the consumer society – which we are increasingly growing similar to owing to the progressing process of mcdonaldization of culture – we will discover a rather large throng of supporters of vital and utilitarian values, the popularization of such values presents itself as a threat to society because selecting such values equates with covertly siding with the hedonistic attitudes and permissive behaviours which relativize the difference between moral good and moral evil (Hostyński, 2006). Giving consent for introducing this rule into the police service would mean degrading the role of the police force to the role of an instrument of violence. Apart from that it seems that the hedonistic values which put pleasure in the forefront are not appropriate as the leading ideals of social life. It is difficult to imagine a policeman considering pleasure and enjoyment as the supreme values of his life, a policeman ready to endanger his life in order to protect any other values.

Ultimately a justified question emerges – Can a singular unifying plane of common values emerge in the pluralist society, individualized and targeted at market laws and profits, adopting the liberal and axiological vision of a man (Promieńska, 1998)? The search for an answer to this problem indicated the so-called basic values regarding which O.V. Nell Breuning (1890-1991) stated that without them human society, and by the same token, the state, cannot exist (Lehmann, 1992). These values can be defined as the values which are accepted by the majority of citizens convinced that these values give meaning and identity to society and the state. These values present themselves as the values which should enjoy the particular protection, also the police protection, and should focus the service of police force. However, asking what particular values are indispensable for maintaining unity, integrity and sovereignty of the state we will receive various answers dependant on the reasoning and the thought inspirations under which the answer for the presented problem was formulated.

The morality of both an individual and the society as well as the morality of individual professional groups, including the groups committed to the momentous service for the benefit of society, is inseparably connected with continuously made ethical decisions. The modern considerations and circumstances of the axiological choices fit in with the reality of the multiplying communal and personal good and, at the same time, are a kind of peculiar hermeneutic key which allows us to understand longings, desires and aspirations of the modern man.

Bibliography

- Anzenbacher, A. (2008). *Wprowadzenie do etyki*. Transl. by J. Zychowicz. Kraków: Wydawnictwo Apostolstwa Modlitwy.
- Anzenbacher, A. (2010). *Wprowadzenie do chrześcijańskiej etyki społecznej*. Transl. by L. Łysień. Kraków: Wydawnictwo Apostolstwa Modlitwy.
- Bartnik, Cz. (2006). *Szkice do systemu personalizmu*. Lublin : Wydawnictwo KUL.
- Brandt, R.B. (1996). *Etyka. Zagadnienia etyki normatywnej i metaetyki*. Transl. by B. Stanosz. Warszawa: Państwowe Wydawnictwo Naukowe.
- Chapman, G.W. (1967). *Edmund Burke: The Practical Imagination*. Cambridge, MA: Harvard University Press.
- Czarnik, T. (1998). Prawo i jego podstawy moralne. In: J. Pawlica (ed.), *Etyka a prawo i praworządność. Materiały IX Jagiellońskiego Sympozjum Etycznego*, Kraków 2-3 June 1997 (pp. 77-80). Kraków: Wydawnictwo UJ.
- Fuller, T.L. (2004). *Moralność prawa*. Warszawa: Dom Wydawniczy ABC.
- Gottfreid, P. (1993). *The Conservative Movement*. New York: Twayn ePublishers.
- Hartman, J., Woleński, J. (2009). *Wiedza o etyce*. Warszawa-Bielsko Biała: Park Edukacja.
- Hoeffe, O. (2003). *Immanuel Kant*. Transl. by A.M. Kaniowski. Warszawa: Wydawnictwo Naukowe PWN.
- Hołda, J. (2008). *Prawa człowieka: zarys wykładu*. Warszawa: Wydawnictwo LEX.

- Hostyński, L. (2006). *Wartości w świecie konsumpcji*. Lublin: Wydawnictwo UMCS.
- Kahan, A.S. (1992). *Aristocraticliberalism: The social and Political Thought of Jacob Burckhardt, John Stuart Mill, and Alexis de Tocqueville*. New York: Oxford University Press.
- Kant, I. (2004). *Krytyka praktycznego rozumu*. Transl. by J. Gałęcki. Warszawa: Wydawnictwo PWN.
- Kelsen, H. (1991). *General Theory of Norms*. Oxford University Press.
- Kirk, R. (1995). *A Program for Conservatives*. Chicago: Henry Regnery Co.
- Lyons, D. (2000). *Etyka i rządy prawa*. Warszawa: Dom Wydawniczy ABC.
- Mazurek, F.J. (2001). *Godność osoby ludzkiej podstawą praw człowieka*. Lublin: Wydawnictwo KUL.
- Mill, J.S. (2006). *Utylitaryzm. O wolności*. Transl. by M. Ossowska, A. Kurlandzka. Warszawa: Wydawnictwo Naukowe PWN.
- Nowak, E., Cern, K. (2008). *Ethos w życiu publicznym*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Paszyński, J. (2001). Eudajmonizm. In: A. Maryniarczyk (ed.), *Powszechna Encyklopedia Filozofii* (vol. 3, p. 303). Lublin: Wydawnictwo KUL.
- Pleszyński, J. (2007). *Etyka dziennikarska*. Warszawa: Wydawnictwo Difin.
- Promieńska, H. (1998). O podstawach myślenia poliaksjologicznego (Legitymizm i etyka sumienia). In: J. Pawlica (ed.), *Etyka a prawo i praworządność. Materiały IX Jagiellońskiego Sympozjum Etycznego*, Kraków 2-3 czerwca 1997 (pp. 103-113).
- Rawls, J. (1993). *Political Liberalism*. New York: Columbia University Press.
- Singer, P. (2006). *Jeden świat. Etyka globalizacji*. Warszawa: Wydawnictwo Książka i Wiedza.
- Skorowski, H. (2004). Katolicka etyka życia publicznego wobec współczesnych wyzwań. In: K. Głódź (ed.), *Kościół w życiu publicznym. Teologia polska i europejska wobec nowych wyzwań*. Vol. 1: *Wykłady i wprowadzenia do dyskusji grupowych* (pp. 73-91). Lublin: Wydawnictwo KUL.
- Smolka, B. (2002). *Narodziny i rozwój personalizmu*. Opole: Redakcja Wydawnictw WT UO.
- Spencer, H. (2002). *Jednostka wobec państwa*. Trans. by A. Bosiacki. Warszawa: Wydawnictwo Liber.
- Styczeń, T. (2001). Deontologizm. In: A. Maryniarczyk (ed.), *Powszechna Encyklopedia Filozofii* (vol.2, pp. 487-488). Lublin: Wydawnictwo KUL.
- Styczeń, T., Merecki, J. (2007). *ABC etyki*. Lublin: Wydawnictwo KUL.
- Szahaj, A. (2000). *Spór liberalistów z komunitarystami a „sprawa polska”*. Warszawa: Fundacja Aletheia.
- Szerauc, A. (ed.). (2010). *Służyć w ochronie i obronie wartości. Aksjologiczne fundamenty służb mundurowych*. Płock: Wydawnictwo Naukowe Novum.
- Szlachta, B. (2008). *Wokół katolickiej myśli społecznej*. Kraków: Wydawnictwo Apostolstwa Modlitwy.
- Szostek, A. (1991). Elementy etyki zawodowej policjanta. *Przegląd Policyjny*, 1, 113-120.
- Szostek, A. (2007). Wokół godności i miłości. In: A. Królikowska, Z. Marek (eds.), *Refleksje nad godnością człowieka* (pp. 15-27). Kraków: Wydawnictwo Znak.
- Tannsjo, T. (1990). *Conservatism for Our Time*. New York: Routledge.
- Taracha, A. (1994). Prawa człowieka w polskim prawie karnym procesowym i prawie policyjnym. In: A. Rzepliński (ed.), *Prawa człowieka a policja. Problemy teorii i praktyki*. Legionowo: Centrum Szkolenia Policji.
- Tischner, J. (1982). Etyka wartości i nadziei. In: *Dietrich von Hildebrand et al. Wobec wartości* (pp. 55-149). Poznań: W Drodze.
- Vardy, P., Grosh, P. (1995). *Etyka. Poglądy i problemy*. Transl. by J. Łoziński. Poznań: Wydawnictwo PWN.
- Wąsik, W. (2000). Prawa człowieka. In: H. Witczyk (ed.), *Encyklopedia chrześcijaństwa. Historia i współczesność 2000 lat nadziei*. Kielce: Wydawnictwo Jedność.
- Wielomski, A. (2007). Prawa człowieka. In: J. Bartyzel, B. Szlachta, A. Wielomski, *Encyklopedia polityczna*, vol. 1, *Myśl polityczna: główne pojęcia, doktryny i formy ustroju* (pp. 318-321). Radom: Księgarnia PWN.
- Wiszowaty, E. (2011). *Etyka policji. Między prawem, moralnością i skutecznością*. Warszawa: Wydawnictwo Łośgraf.

Information about the authors

State University of Applied Sciences in Nowy Sącz:

Mirosław MICHALIK, PhD – professor, Department of Pedagogy and Auxiliary Sciences, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz
e-mail: mmichalik@pwsz-ns.edu.pl

Zdzisława ZACŁONA, PhD – associate professor, Department of Pedagogy and Auxiliary Sciences, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz
e-mail: zzaclona@pwsz-ns.edu.pl

Elżbieta CYGNAR, PhD – lecturer, Department of Physical Education, Institute Physical Education, State University of Applied Sciences in Nowy Sącz
e-mail: ecygnar@pwsz-ns.edu.pl

Joanna JACHIMOWICZ, PhD – lecturer, Department of Pedagogy and Auxiliary Sciences, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz
e-mail: jjachimowicz@pwsz-ns.edu.pl

Marek MIERZYŃSKI, PhD – lecturer, Department of Pedagogy and Auxiliary Sciences, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz
e-mail: mmierzynski@pwsz-ns.edu.pl

Anna STRUZIŁ, PhD – lecturer, Department of Preschool and Early School Education, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz
e-mail: astrozik@pwsz-ns.edu.pl

Bogusława GAWEL, MA – lecturer, Department of Pedagogy and Auxiliary Sciences, Institute of Pedagogy, State University of Applied Sciences in Nowy Sącz; PhD student of University of Lower Silesia in Wrocław
e-mail: bgawel@pwsz-ns.edu.pl

Katarzyna KACZOROWSKA-BRAY – associate professor, Logopaedics Institute of University of Gdańsk
e-mail: katarzyna.bray@ug.edu.pl

Stanisław MILEWSKI – associate professor, Logopaedics Institute of University of Gdańsk
e-mail: stanislaw.milewski@ug.edu.pl

Anna SOLAK – lecturer, Tarnow College
e-mail: an.cholewiak@gmail.com

University of Belgrade, Teacher Education Faculty:

Dragana BOGAVAC, PhD – professor, Department for Pedagogy and Psychology, Teacher Education Faculty, University of Belgrade
e-mail: dragana.bogavac@uf.bg.ac.rs

Ivica RADOVANOVIĆ, PhD – professor, Department for Pedagogy and Psychology, Teacher Education Faculty, University of Belgrade
e-mail: ivica.radovanovic@uf.bg.ac.rs

Snežana BABIĆ-KEKEZ, PhD – associate professor, Department of Chemistry, Biochemistry and Environmental Protection, Faculty of Sciences, University of Novi Sad
e-mail: snezana.babic-kekez@dh.uns.ac.rs

Nevena BUDEVAC, PhD – associate professor, Department for Pedagogy and Psychology, Teacher Education Faculty, University of Belgrade
e-mail: nevena.budjevac@uf.bg.ac.rs

Danica DŽINOVIĆ, PhD – associate professor, Department for Physical Education Teaching Methodology, Teacher Education Faculty, University of Belgrade
e-mail: danica.dzinovic@uf.bg.ac.rs

Ana MILOVANOVIĆ, PhD – assistant professor, Department for Serbian Language and Literature with the Teaching Methodology, Teacher Education Faculty, University of Belgrade
e-mail: ana.milovanovic@uf.bg.ac.rs

Tatjana MILOSAVLJEVIĆ ĐUKIĆ, PhD – assistant professor, Department for Pedagogy and Psychology, Teacher Training Faculty, Vranje, University of Niš
e-mail: tatjanamdj@pfvr.ni.ac.rs

Ana SARVANOVIĆ, PhD – assistant professor, Department for Fine Arts Teaching Methodology, Teacher Education Faculty, University of Belgrade
e-mail: ana.sarvanovic@uf.bg.ac.rs

Marija MERŠNIK – teaching assistant, Department of Human Resources Management, Faculty of Organizational Sciences, University of Belgrade
e-mail: marija.mersnik@fon.bg.ac.rs

Marta NIKOLIĆ – teaching assistant and doctoral candidate, Department for Fine Arts Teaching Methodology, Teacher Education Faculty, University of Belgrade
e-mail: marta.nikolic@uf.bg.ac.rs

Filip KOJIĆ – doctoral candidate, PE teacher, Department for Physical Education Teaching Methodology, Teacher Education Faculty, University of Belgrade
e-mail: filip.kojic@uf.bg.ac.rs

Ivan UMELJIĆ – Head of Department for Publishing and Media Production, Center for the Promotion of Science, Belgrade
e-mail: iumeljic@cpn.rs