

THE IMPORTANCE OF OUTDOOR LEARNING AT EARLY AGES

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Abstract: The idea of learning outside the classroom, i.e. learning outdoors, is not at all new and recent. The beginnings of outdoor learning can be found in the works of pedagogical classics (Russo, Froebel, Pestalozzi, Montessori) at the end of the 18th and the beginning of the 19th century, but also by Serbian pedagogues, primarily Sreten Adžić, the first headmaster of the Serbian Royal Men's Teacher's School in Jagodina (1897), although they teach intuitively different skills, children's play and stay outdoor is as old as human civilization. It wasn't until the late eighteenth century that children began to be seen as individuals in their own right; previously they were regarded by society as miniature adults .. In the paper, we analyze the advantages and importance of outdoor learning for children at an early age and present the results of the students survey - future preschool teachers of the Faculty of Education of the University of Kragujevac, who, for the first time within their formal education, had the opportunity to, both theoretically and practically, become familiar with the basic principles of forest pedagogy and outdoor learning. 43 students of the final year of academic studies in the department for teacher in preschool institutions filled out the survey anonymously on a five-point Likert-type scale. The results show that students' prior knowledge - future preschool teachers about forest pedagogy and outdoor learning is rather modest, that most respondents have positive opinion about working with children in nature and considers such work interesting, useful, but difficult and demanding. Future preschool teachers believe that the benefits of working with children in nature are great, starting with motor development, through physical and mental health, to the development of ecological awareness and a positive attitude towards nature as a whole. Significant number of respondents are of the opinion that by attending the professional meeting and workshop "Šumagogija (šuma meaning forest + pedagogy) - forest pedagogy from idea to realization" significantly increased their professional competence by visiting the forest playground in the Botanical Garden in Kragujevac and openly expresses the view that, if given the opportunity, they would accept a job in the forest kindergartens. For these reasons it is necessary that forest pedagogy and methodological specifics of outdoor learning become an integral part of compulsory subjects at the basic studies of future preschool teachers, to systematically carry out professional development of people who work with children of early ages and to enable teachers who are already employed in preschool institutions to attended seminars, round tables, gatherings and teacher trainings that have as their theme work with children in nature, in the forest, and outdoors.

Keywords: outdoor learning, children of early age, students, attitudes.

Field: Humanities sciences

1. INTRODUCTION

The rapid development of technology and the pace of life means that, regardless of age, it is increasing day by day sedentary lifestyle and stay in closed rooms. Children and young people spend most of their time in front of the screen -TVs, computers, tablets, iPods that allow them to indirectly learn about plants, animals, phenomena and processes that they have never seen in reality, but the problem is that in this way they are deprived of staying in nature, in the clean air and direct study and research of its immediate environment. Stay indoors, institutionally upbringing and distance from nature can have immeasurable negative consequences on the overall development of the personality, especially children of early ages. For all-round personality development indoors and outdoors, children need a range of multi-sensory experiences as they taste, touch, listen, smell and observe their environment. The outdoors is a real thing important part of children's world and being outdoors sparks children's curiosity into their natural environment and promotes a love of nature. The natural environment today, when the technologization of educational practice tends to reduce individuals to users of artificial imputations, it is not only a space for performing various activities, but an entity that has a transmission role to, in the context of sustainable development, develop responsibility for young generations preserving nature and improving people's lives. There is increasing concern in most western societies that children are lacking connection with nature and outdoor play that has healthy learning and developmental benefits (Bento & Dias 2017). For these reasons, learning In nature and About nature is today an indispensable part of the modern

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educational process.

Ideas about the need and importance of moving the learning process outside the walls of schools (and later kindergartens) we notice at the end of the 18th and the beginning of the 19th century in the works of pedagogical classics (Russo, Froebel, Pestalozzi, Montessori). According to Rousseau, the best we can offer our children is an upbringing full of freedom, possibilities to follow their curiosity and opportunities to explore and make their own experiences. He said that nature has meant it strengthen the child's body and make it grow. To counteract it is a deadly sin: »Don't force a child to sit still when it wants to walk or to walk when it wants to sit still. They need to be allowed to jump, run and yell as much as they do want. Their constitution strives to be strong and demands movement«. Fröbel claimed that education is like a natural process; that the child is an organic whole which develops through creative self-activity according to nature laws. Similar to him, Pestalozzi thought that learning outdoors with and through nature is fundamental importance for children's development and their future life.

There has been increasing recognition of the value of outdoor learning, primarily in the Scandinavian countries (Denmark, Norway), and then in Germany, Austria, Switzerland, England. Positive experiences of these countries and the need to carry out Ecologization of education was recognized at the end of the 19th century by important workers in the creation of education politics and in Serbian society. Unencumbered by foreign examples, external authorities and "the need of copying other people's experiences to our specific reality" (Trifunović, 2018: 52), in the Male Teacher's School in Jagodina since 1898, starts implementation of the authentic solution of the so-called Field classrooms. Showing understanding the need for reform, modernization of the educational system and the direction of changes in developed schools and educational institutions systems of western societies, the headmaster of the new Teacher's School in Jagodina, Sreten Adžić, in the ornamental garden of Male Teacher's School is formed by a new, hygienic-pedagogical type of classroom and a new way of working that implies an authentic educational practice - teaching in a free, open natural environment. Field classrooms exemplified a project of an innovative and prestigious model of ecologically arranged school space, which has had not only educational but also pedagogical, ethical, social, ecological and aesthetic function. They required a high level of knowledge in botany, medicine, pedagogy and other sciences; knowledge of the necessary practical skills, effort and perseverance of the teaching staff in order to achieve benefits for children and youth - future teachers, both in the field of health promotion, i.e. bodily and spiritual (mental) development, as well as in the field of intellectual development not only of students but also of preschool teachers and teacher. "On the trail of deep knowledge about man's primordial connection with nature and realizing the dangers of emergence of alienation from it, Adžić visionarily anticipated a completely new teaching model, which met the highest health, pedagogical and environmental requirements of quality education, and not only of the that time but certainly of the present and future" (Petrović, 2018: 62).

Even today, after a full 120 years, in the same area where Adžić in built an ornamental garden with field classrooms and an instructive agricultural property within the area of 9ha for student exercises in 1903, students of the Faculty of Pedagogical Sciences of the University of Kragujevac are being educated for future preschool and primary teachers. During their four-year academic studies, unfortunately, they do not have a single study subject related to outdoor learning, and even less have the opportunity to directly participate in similar practice with children. With the aim of examining their views on the importance of early-age children learning outdoors, we first encouraged them to attend the teacher training and workshop "Shumagogy - forest pedagogy from idea to realization", and then visit to the forest playground of the preschool institution "Vrabac" in Kragujevac.

2. MATERIALS AND METHODS

The research examined student attitudes - future preschool teachers about the importance of organizing pedagogical and educational work with early ages outdoor, ambient learning and the forest pedagogy. Research was carried out during the spring semester of 2023. Descriptive scientific-research method and surveying technique were used, and a convenient, intentional sample consisted of 43 students in the final year of basic academic studies majoring in early childhood education. Respondents filled out the survey questionnaire after attending the aforementioned teacher training and visiting the forest playground. A questionnaire of 10 questions/statements, based on the questionnaires of ZUOV intended for participants of professional training seminars (the national Institute established to monitor, ensure and improve the quality and development of the education and upbringing system and performs developmental, advisory, research and other similar tasks in preschool, primary and secondary education and upbringing), was filled out anonymously by the respondents and, by circling the appropriate numbers

on a 5-point Likert-type scale, expressed their degree of agreement with the stated statements. Data processing included critical, quantitative and qualitative analysis of data collected through surveys, application of descriptive statistics procedures, calculation of percentages and frequencies.

3. RESULTS

At the end of March 2023, the students - respondents had the opportunity to learn from the teachers and school support staff of the preschool institution "Vrabac" from Kragujevac what forest pedagogy is, how forest kindergartens function, how to effectively apply forest pedagogy and what are the benefits of forest pedagogy practice. The organizers of the professional meeting accredited by ZUOV, presented their experiences gained within the framework of the ERASMUS+ project "Kindergarten under the canopy - development and implementation of forest pedagogy curricula in kindergartens" (Erasmus + Programme | Key action 2: Small Strategic Partnerships | Agreement number : KA210-SCH-70C6A7D3) which was implemented from October 1st, 2021 until 31st of October 2022. The partners were PU "Vrabac" from Kragujevac, Serbia and Vrtec Beltinci from Slovenia. The aim was to create opportunity for students to acquire basic knowledge about learning About nature In nature and to point out the possibility of implementation of this practice, which has been applied in across the globe for years, in our kindergartens. Furthermore to emphasize the importance of early childhood outdoor education, returning to nature, developing environmental awareness and raising generations that will protect and preserve their environment. In the second phase of the research, at the end of May 2023, students were able to see concrete examples of games and activities that could be organized with children in the forest during a full-day stay in the "Forest Playground" of the Botanical Garden. During the workshop and interaction with the children of the "Vrabac" kindergarten, students discovered that games and activities could be easily organized in the yard, parks, nature; how to engage and encourage children and that resources are everywhere in nature and can be made from recycled materials with minimal investment. Out of a total of 43 surveyed students, 36 of them (83.7%) attended professional meeting "Shumagogy - forest pedagogy from idea to realization", while 32 of them (74.4%) visited the Botanical Garden in Kragujevac and the "Forest Playground". After returning from Kragujevac, all students anonymously filled out a survey, and the data we collected are as follows: the majority of students (67%) declared that their prior knowledge of forest pedagogy before attending the panel (expert meeting) was very modest (on a scale from 1 to 7, the average was 2.8); all respondents were of the opinion that going to the "Forest Playground" had a positive effect on their opinion about the importance of working with children in nature (average score 6.6); the majority of students had a positive opinion when it comes to the statement that children's stay in forest playgrounds and kindergartens affects their physical and mental health - 73% of respondents opted for a rating of 1- a lot (this is a control statement where the positive answer was on the lowest level of the Likert scale). Also, the majority of students agree with the statement that the importance of staying and learning in nature for children's motor development is great - 38 of them (88.3%) circled the highest number on the scale (7). 33 (76.7%) students believed that the impact of staying and learning in nature on children's attitude towards nature and their environmental awareness is great. Still we should remember the fact that not all respondents attended the professional meeting nor all respondents visited Forest playground. What is important is that there were no negative opinions and grades for some of the aforementioned statements - students did not round grade lower than 3, except for the statement that was a control. Between the answers "none" and "enormous", which referred to the advantages and benefits of applying forest pedagogy in working with children of early ages, the majority of students opted for positive answers - the average grade was 6.3. Somewhat less positive answers (average 5.1) were given when it comes to the influence of attending the professional meeting and workshop on the increase of students' professional competencies. It is quite expected that students whose prior knowledge of outdoor learning and forest pedagogy, before the research, was too modest, will be reserved and unsure in their answers about the theoretical and practical knowledge they acquired during the professional meeting and workshop. The mentioned activities did influence the positive opinion of the students about this way of working with children, but in order to acquire and increase professional competences, more theoretical training, lectures and exercises, as well as practical, direct work with children in natural environments are certainly needed. Games, activities and work with children in nature are considered interesting (grade 2.7), useful (2, 3), difficult and demanding (grade 4, 1) by students on a scale of 1 - 7 (again control statement); but most of them (28 or 65.1%) are of the opinion that, if they had the opportunity, they would accept a job in a forest kindergarten. The fact that 35 respondents (81.3%) believe that professional gatherings of this and similar content should be organized regularly (grade 5.8) shows that the overall

impressions of the students are positive, that the content and direct work with children in nature motivated them and interested in becoming more and more fully educated about this topic and showing the desire, will and readiness to increase their professional competences in this field. Their need for professional training on this topic indicates a desire to expand their theoretical knowledge and gain more experience in order to be safer, more successful and more efficient in this segment of work with children.

4. DISCUSSIONS

Although a relatively new pedagogical discipline, forest pedagogy is increasingly popular in many countries throughout Europe and the world, especially in more developed countries where people are aware of the benefits of nature and its positive effects on the overall, versatile development of children. Children's stay in nature, outdoors and outdoor learning means that a certain group of children, of the same or different age, spends a certain amount of time (in some countries it is daily, in some one day a week, and in some for a few hours) in one of the natural ecosystem - forest, meadow, park, riverside... In order to get acquainted with the basic characteristics of outdoor learning and natural-based education, the students, in addition to the theoretical data obtained at the professional meeting, had the opportunity to directly see how children can sing around the fire, to learn using and making tools, to build dens, to dig in the mud, to identify bugs with magnifying glasses or retreat to the tent for reading and puzzles. The children played, explored, and had complete freedom in their choice of activities, and the teachers supported them, supervised and motivated them for further activities, followed their interests and deepened them with new skills and knowledge. "The learning is play-based and, as far as possible, child-initiated and child-led" (Michek, Nováková & Menclová, 2015: 739).

The idea, first implemented in Denmark by Ella Flatau, that children play and learn in the forest, spread very quickly, so that today, there are thousands of these programs operating under various names (e.g., "nature preschools," "forest kindergartens," "bush kindies," "udeskole") in the Scandinavian countries, Germany, the UK, Australia, New Zealand, the USA and many Asian countries (Sobel, 2016; Michek, Nováková & Menclová, 2015; Dabaja & Uysal, 2022). The student-respondents did not have the opportunity to acquire this basic knowledge about the origin and beginnings of the development of forest pedagogy during their formal education at the university, because in their curriculum study programs (subjects) that relate to or include these contents do not exist. Hence, their attitudes and assessment that their prior knowledge, before attending the professional meeting on forest pedagogy, was very modest, and reduced to information they came to incidentally and spontaneously through the media, the press, and the Internet.

The attitudes and opinions of respondents about the advantages and benefits of applying forest pedagogy in working with children of early ages were influenced by the presentations of the lecturers during the professional, but much more by the experience gained during workshop and direct work with children in the forest playground. Most of them were of the opinion that the advantages and benefits of outdoor learning are great, but the personal qualities and skills of preschool teachers - "perseverance, persistence, and patience" (Boileau & Dabaja, 2020: 15) are very important in overcoming obstacles when implementing such a way of working. Benefits were found in various areas of child development: cognitive function, motor coordination and balance, connectedness to nature, and health and well-being outcomes (Sella et al., 2021). Although they spent only a few hours in the forest playground, survey participants observed the positive influence of being and learning in nature on children's attitude towards nature and their environmental awareness - involved children had gained a "love of nature," developed a sense of "environmental stewardship," and become "more curious about life, about knowing why and how" (Boileau & Dabaja, 2020:16). During games and outdoor exploring, children are directed to each other, they need cooperation and mutual help in overcoming difficulties, solving problems, checking assumptions, which the students saw for themselves by direct participation in activities with children and educators. On that occasion, they noted that children have the freedom to explore, play, build, create, imagine, use their senses to experience the outdoor environment and engage with one another, i.e. that outdoor learning contributes to the development of social skills and cooperation, i.e. affects the development of the children's ability to work cooperatively, communicate effectively, behave respectfully and show empathy towards one another" (Dabaja, 2021: 646). They confirmed this with their answers in the survey.

The fact that 38 (88.3%) of the respondents emphasized the great influence of being and learning in nature on the motor development of children indicates the fact that during the play and work with the children in the forest playground, the students noticed that the children use different forms of movement (running, jumping, climbing, crawling, walking on trunks, etc.), they use different natural materials (stones,

twigs, leaves, cones, chestnuts...) to build certain structures and in symbolic games, which contributes to the development of gross and fine motor skills, dexterity, physical endurance, balance, coordination (Dabaja & Yılmaz-Uysal, 2022).

The fact that the children were satisfied, happy, in a good mood, cheerful, and played in the fresh air during their stay in the forest playground confirms the positive impact of outdoor learning on children's physical and mental health (Dabaja, 2021). Activities and learning in nature "provides many well-being and health benefits such as reducing anxiety, producing vitality and personal growth, and promoting happiness and life satisfaction" (Cudworth and Lumber, 2021: 74). Staying in different places in nature implies that educators encouraging children to explore and investigate, dealing with risky situations, to be independent, and persistent, thus enabling them to achieve and develop confidence and self-esteem through hands-on learning experiences in a natural environment (Knight 2018).

In addition to attending the professional meeting and a one-day stay in the forest playground, the students were aware that this was not enough to increase their professional competences in that direction, but they showed the desire and need to expand their knowledge and experiences of outdoor learning through various ways of professional development. They noticed that children's outdoor games are inspiring, exploratory, team-based, diverse and complex, and although they characterized working with children in nature as difficult and demanding, they showed a positive attitude when it comes to accepting employment in a forest kindergarten.

Teaching our children to enjoy being outside and thrive in natural environments has the potential to lead to a life-long desire for healthy living and contentedness with the world around us (Beresford, 2021). Playing in the mud, making chains and climbing trees are simple pleasures that have defined childhood for generations. The problem is that nowadays such youthful pleasures are dying out as more and more children are playing computer games instead. Modern society limits any sort of physical activity and positive feelings that nature provokes. Social isolation in early preschool age is increasing, and with it the lack of a stimulating environment to encourage children's comprehensive development. There is much concern that children today who are deprived of nature immersion experiences will lose that innate connection to nature which leads to compassion for the natural world. It is necessary that someone, and we believe that students educated to work with children of early ages, and who are also future parents of small children, point out the need to return to nature, to live in nature and with nature. Consequences of sitting in closed spaces, insufficient movement, looking at screens and alienation from nature, when they appear (and they do), will be difficult to overcome. Physical deformities, poor motor skills, weak immunity, alienation, insecurity, depressive states and other problems that arise due to insufficient time in nature, especially at early ages, can only be prevented if there are organizations, institutions and individuals who are aware of cognitive, physical, emotional, and social benefits of being in nature and the importance of outdoor learning at early ages.

5. CONCLUSIONS

To our knowledge, this is the first review that deals with the views of students of future educators on the importance of outdoor learning, the benefits of forest kindergartens and nature-based early childhood education. Although data collected from the study's small sample size could be informative, they are far from being comprehensive or generalizable. However, in Serbia, where within formal higher education there are no study programs and courses focused on outdoor learning and nature-based education, and where the number of forest kindergartens is insignificant (mostly private institutions), it is significant that future preschool teachers recognized the importance of outdoor learning and noticed the advantages of children being outdoors. The fact is that time spent in a nature preschool or forest kindergarten can play an important role in creating lifelong learners, but it is very important that the creators of the educational policy in one country (in our case Serbia), the authors of the curriculum at the faculties of which educate future teachers and young people (students) who are educated and prepared to work with children of early ages are also aware of that fact. In this regard, it is also significant that the benefits identified in other studies - better appreciation of nature and development of environmental awareness, child-led, inquiry-based learning, expanded imagination and creativity, increased social skills and cooperation, promotion of self-confidence and self-esteem, and improved physical skills and health, were recognized by young people who had no previous knowledge about it. Working with children outdoors requires adequately educated and qualified educators, persons who are theoretically and practically trained, and who differentiate between traditional indoor formal education and outdoor learning system. In the education of

future educators who will work with children outdoors, it is necessary to implement contents concerning communication with parents and breaking down their prejudices when it comes to children's safety. Every parent should understand the children's need to spend time outdoors, to engage with nature, enjoying the fresh air and having free play. Also, it is necessary to familiarize them with the challenges and problems they may encounter during the implementation of outdoor learning and forest preschool (Whincup, Allin & Greer, 2021), which could be topics of some future research. Finally, playing, especially in natural spaces, undoubtedly provides massive opportunities for learning, development and well-being in the early years. It is remarkable that the training of preschool teachers still pays little attention to outdoor play and learning, when there is ample evidence to show the undisputed benefits for children, and even the staff. We hope that this work will be an inspiration to other researchers to start dealing with this topic, but even more so that the competent authorities and institutions in Serbia will understand that it is high time that natural-based education becomes part of the national curriculum, an integral part of educational work with children of early ages and a compulsory study subject at the faculties for the education of teachers and educators.

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