



Renata Michalak

Uniwersytet im. Adama Mickiewicza w Poznaniu

ORCID 0000-0002-6578-3822

Teresa Parczewska

Uniwersytet Marii Curie-Skłodowskiej w Lublinie

ORCID 0000-0001-7651-5519

Outdoor education: perspective of Polish primary school teachers

Kształcenie w plenerze: perspektywa polskich nauczycieli edukacji elementarnej

Abstract: The paper presents and discusses the results of studies examining views and experiences of Polish primary school teachers (I-III grades) regarding outdoor education. The studies focused on the way in which the teachers define the essence of outdoor education, where they acquire their knowledge about it, whether they take into account other places than the school building in the educational process, and if so, what and how often they use them, and what kind of working methods and forms they prefer, which factors make it easier and which more difficult for them to practice outdoor education. The relationship between the selected aspects of the teachers' practice of outdoor education and the location of the school was also examined. Empirical data indicated that outdoor education is very rarely practiced in Polish schools and its frequency is mainly related to the location of the school. According to the declarations of the respondents, when organizing an educational process outside the classroom, they most often use methods of free and direct observation, and rarely use structured research methods, such as experimentation. The respondents indicate that the absence of outdoor education in the teaching process results mainly from the lack of cooperation with the headmaster and parents of learners, as well as from the lack of expertise and examples of good practice. The study is significant due to its unique character, in the context of empirical research

conducted so far in Poland. It also shows directions of change in the ways of teacher education, in the context of increasing the frequency of outdoor education in Polish schools.

Keywords: teacher, school, outdoor education, primary education.

Introduction

Education in the open air (outdoor, field or adventure education) has become a form of educating students around the world, appreciated especially by creative teachers looking for innovative and attractive methodological solutions. Some researchers (Stanisavljević et al., 2014, p. 53), bearing in mind the ongoing socio-cultural transpositions, point to the need of including partnerships with the local community and nature in school curricula. Due to its numerous advantages, outdoor education may not only be an attractive and effective alternative for educating students at all levels of education, but also a necessary one. This postulate acquires exceptional value in the context of empirical data obtained by Valerie Michaelson and her team (2020), on 23,920 students, which show the fear of being outdoors, in the fresh air, and a much more comfortable and safe students' feeling of being in the digital world. Therefore, teaching children how to safely and attractively spend time outdoors and deliberately provide them with the opportunity to „disconnect” from technology, in order to promote time in the open air, becomes a priority for modern schools.

Unfortunately, outdoor education understood as planned, intentional creation of conditions for learning in direct contact with the natural and social environment in practice is a new phenomenon in Polish schools and is, basically, non-existent. Despite the many benefits and pedagogical values that come with it, initiatives in this field are incidental. Some, though not very meaningful, movements in this regard can be observed in preschool education. In the last five years, several nursery schools carrying out outdoor education have been established. This may result, inter alia, from the fact that outdoor education is not included in the core curriculum. The voices of criticism of the model of education detached from the everyday life in which pupils function, gain even more strength in the context of the advantages of outdoor education.

The advantages of education outside the school are described by many researchers (Gilbertson, et al., 2006; Dahlberg, et al., 2007; Dillon & Dickie, 2012; Ernest, 2014; Harun & Salamuddin, 2014; Malone & Waite, 2016), pointing to the key developmental achievements of students. They turn their

special attention to the improvement of cognitive effects in areas such as geography, natural sciences and history, maths and language skills, reading and writing, cooperation and civil responsibility, conflict resolution skills, self-esteem, and motivation to learn and follow the rules of behaviour (Nundy, 1999; Scott & Boyd, 2014; Harun & Salamuddin, 2014; California Student Assessment, 2005; Effects of Outdoor Education, 2005). The research clearly shows that the activities conducted in the open air promote health, shape psychophysical immunity and well-being and also develop extra-cognitive skills constituting the basis of educational achievements, such as: self-esteem, self-control, persistence and endurance, resistance to stress and risk (Gutman & Schoon, 2013; Little & Wyver, 2008; Antonelli et al., 2019; Simonienko, 2021; Lee et al, 2011; Dymont & Bell, 2008; Hansen et al., 2017; Kotte et al., 2019; Kuo & Faber, 2004; Tipledy & Menter, 2021; Brown, 2008; Louv, 2010; Niklasson & Sandberg, 2010; Maynard & Waters, 2007; Smith, 2010; Waite, 2011; Wattchow & Brown, 2011; Melhuus, 2012; Prince, 2018; Tuuling et. al, 2019; Wells, 2000). Activities in the natural environment facilitate acquirement and development of many „soft skills” – e.g. a sense of autonomy, responsibility, agency, cooperation, coping with failure, empathy, leadership skills (Blair, 2009) – which are ignored in formal curricula. Children have many opportunities to reach sources of knowledge, test personal beliefs and judgments about reality, discover laws, truths and dependencies, construct, deconstruct, and reconstruct meanings. Direct contact with reality makes them realise that knowledge is not deposited in the mind of the teacher, book or databases on the Internet, and having that knowledge allows them to work effectively. Moreover, the active involvement in the process of personal learning allows the teacher to penetrate the child’s way of thinking and recognise what characterises the student’s process of reaching certain beliefs or conclusions. Outdoor education creates particularly favourable conditions for dialogical learning which has the research and mediation nature, leading to innovative and creative changes (Hakkarainen & Paavola, 2009).

Outdoor education is important for acquiring pro-ecological attitudes. Direct contact with nature becomes an effective context for the development of cognitive and emotional-volitional spheres, which are the basis of activities aimed at the rational use of natural resources, as well as protection and revitalisation of nature (Carrier et al., 2014; Collado et al., 2015; Larson et al., 2014; Davis, 2015). It should be noted that outdoor education supports the cognitive, socio-emotional and motor functioning of students with special educational needs (Kuo & Faber-Taylor, 2004; Taylor et. al., 2002; Wells & Evans, 2003). In the context of the presented arguments showing the educational

potential of the concept of learning outdoors, the studies undertaken by the authors are important because they diagnose the condition of that concept in the practice of Polish primary education teachers, identify its selected determinants and show the direction of desired changes.

Method

The research project used the diagnostic survey method and the poll technique (Stupnicki, 2015). In order to obtain empirical material, a questionnaire was prepared for primary education teachers who disclosed their knowledge and their own views. They described their own activities related to the practice of outdoor education. The questionnaire, apart from closed questions and semi-open ones, also contained questions requiring a descriptive answer. The obtained results were analysed statistically. The values of the measurable parameters were presented by means of the mean value, median, standard deviation and mean rank, and for non-measurable ones – by count and percentage. To check the dependency of the way of organising outdoor education and the location of the school, a chi-square test was used. Assessment of differences in frequency of the use of this concept, due to the location of the institution, was performed using the Mann-Whitney U test. The significance level was assumed $p < 0.05$ indicating the presence of statistically significant differences or relationships. The database and statistical research were carried out on the basis of the Statistica 9.1 StatSoft, Poland. The content analysis method (Strauss & Corbin, 1998; Miles & Huberman, 1994; Krzystek, 2018) was used in the analysis of data collected through open-ended questions. The thematic analysis was carried out in the ATLAS.ti. After drawing up a list of the most frequent thematic threads, an attempt was made to interpret their shared meaning.

Attempt

The survey included 276 primary education teachers (2.17% – men, and 97.83% – women), employed in Polish schools, located in rural (44.93%) and urban areas (55.07%), in the Lublin and Greater Poland Provinces. The age of the respondents ranged from 25 to 66 years. 40.22% of them belonged to the group of 41-50 years; 23.19% to the 31-40; in the group of 25-30, 21.01% was recorded; in the 51-60 group – 13.41%; people aged 61-66 accounted for 2.17%. All the respondents had a university degree in education. Professional experience ranged from 1 to 45 years. The teachers with work experience up to 5 years constituted 22.83% of the respondents, those with experience from 6 to 20 years constituted 31.88% of the respondents, and

over 21 years – 45.29%. The respondents had different degrees of professional promotion. The most numerous group consisted of chartered teachers (49.64%), followed by appointed teachers (29.35%) and contract teachers (13.41%). 7.60% were probationary teachers. 79.35% of them undertook activities related to professional development.

Ethical issues

The respondents were assured that they would not be identified and that participation in the study was voluntary and could be withdrawn without any consequences. They obtained information that the results of the study would be used only for scientific purposes.

The selection of the research method and procedure does not have the potential to threaten the interests and infringement of their personal rights.

Results and discussion

A. The meaning attributed to outdoor education by primary school teachers

The analysis of the respondents' statements aimed at getting to know the meanings they give to outdoor education, allowed the identification of six categories of components which have some common features that distinguish them from other elements which do not have these features (Krzystek, 2018). The defined categories are: educational space; activating method; source of sensory stimuli; physical activity, tourism and adventure; environmental education; personal development.

The data showed that the meaning of outdoor education is identified by the responders mainly with the educational space, learning and teaching outdoors, in a natural environment. The surveyed teachers mentioned institutions: museums, libraries, culture and education centres where it may take place. In their attempts to define outdoor education, many respondents narrowed its essence to activating methods as ways of making the education more attractive. A significant part of the research sample found that outdoor education is a source of sensory stimuli. More than half of the surveyed teachers combined it with physical activity, adventure education and tourism, and a 25% of the subjects with ecological education – ecosystem interdependencies, nature protection and human relations with the environment. Few teachers related the essence of outdoor education mainly to the personal development of a child. Generally, all the respondents considered conducting education in the natural environment as important, mainly due to the

exploratory capacity and cognitive development of their pupils. On the other hand, only a small number of respondents noticed that external education is conducive to the implementation of the curriculum content of integrated education and positively influences the child's well-being, the sense of joy, happiness and satisfaction with life. The benefits related to building the child's identity, shaping their personality, social and emotional development were occasionally emphasised.

The analysis shows that the main source of obtaining information about outdoor education is the Internet. The vast majority of the respondents use descriptions posted on blogs and Facebook, as well as tourist guides, folders, magazines and methodological books, and advice of other teachers. It is worth adding that the responders feel deficit of sources of knowledge and good practices in this field.

It should be emphasised that in attempts to define outdoor education and grasping its sense, meaning and essence, the surveyed teachers used a language characterised by a positivist, and mainly behavioural approach to their role and to the pupil. Curriculum-centrism and largely conservative and uncritical attitude dominated in the statements. The teachers did not notice, or noticed to a minimum extent, the educational value of the concept discussed here. They did not treat it as an effective alternative to the traditional concept, which is limited to school walls and isolated from the natural environment. They hardly noticed its extraordinary potential for the implementation of any educational issues, and basically limited its value to the occasional opportunity to make classes more attractive.

B. Factors that support and hinder the implementation of outdoor education in the experience of primary education teachers

An important aspect of the research was obtaining information on the factors facilitating and hindering the responders to practise outdoor education. The contributing factors included: an appropriate amount of knowledge and competence, positive contacts between the school and the social environment, teachers' motivation and commitment, the ability to recognise pupils' needs, and a rich and varied physical space around the school building. Almost all responders emphasised that a necessary condition for conducting classes outside the classroom is a properly equipped space, and mentioned ready-made elements of the arrangement (e.g. climbing walls, trampolines, a fountain, a traffic town), which in their opinion, decide about their usefulness, effectiveness and attractiveness. The teachers completely ignored the role of their pupils in it and the possibility of arranging space

compliant with their needs and interests. They did not see the educational potential in a changing organisation, spontaneously constructed from materials currently available, naturally occurring in the environment and adapted to the subject and objectives of the classes in the situation of changing expectations of pupils.

The analysis of the data on infrastructure, which, in the opinion of the respondents, is conducive to the implementation of outdoor activities, shows that they indicated two main groups of facilities: traditional (common at schools) and atypical, created for outdoor education. The traditional ones include: sports fields, playgrounds, trees, shrubs, flowerbeds and lawns. According to the teachers, the group of atypical facilities and places includes: huts, weather stations, vegetable gardens, ponds, thematic playhouses, arbours and an amphitheatre. The respondents most often mentioned traditional facilities and places located around the school. The greatest number of responses – both in the city and in rural areas – referred to recreation ground and school playgrounds – 100% each. Subsequently, in the case of teachers from country schools, lawns (90.32%) as well as flowerbeds (89.47%) were mentioned. Flowerbeds (74.19%) were also very popular in urban institutions, followed by trees and bushes (70.97%). Much less indications were recorded for atypical facilities. In the rural environment, ponds (9.68%), an amphitheatre (11.84%) and sheds (13.82%) were the least frequently mentioned, and most often playhouses (65.13%) and meteorological stations (54.61%). In the urban environment, the least popular facility was the amphitheatre (3.23%), and the most popular – playhouses (54.03%), vegetable gardens (38.71%) and huts (37.1%).

The data show that the factors that make it difficult for the responders to educate outside are primarily the lack of the so-called good practices and ready-made methodological solutions, as well as inadequate weather and problems related to ensuring children's safety, lack of cooperation with parents and school management. The respondents would expect from parents: greater involvement and interest in their child's education; assistance in caring during activities conducted in the field; acceptance and trust in the teacher and what they do; readiness for substantive cooperation. On the part of the headmaster, they would expect: consent to outdoor education; acceptance for classes without textbooks and worksheets; substantive support in organising field activities; retrofitting the area around the school; motivating and appreciating efforts and financing and organising training to improve the teachers' skills in this area; as well as consent to give up encyclopaedism in favour of self-constructing knowledge.

C. The frequency of organising outdoor activities by the teachers surveyed in core subject areas

As one could expect, teachers from both village and urban schools organise outdoor education most often in nature during physical education classes. Learning outside is the least often practised during computer science lessons. Meanwhile, as the research by Deborah J. Chavez (2009) indicates, technology can support children's involvement in experiencing the world in the open air. Equally rarely, this form of education is used by teachers working in village schools on mathematics and technical classes, and by teachers from urban environments during music classes. A detailed distribution of the respondents' answers is presented in Table 1. A statistically significant difference between the empirical data from the study of village and urban teachers regarding the frequency of using outdoor education in individual classes was revealed in: mathematical education ($p < 0.001$) and art education ($p < 0.001$), as shown in Table 2.

Table 1. The frequency of outdoor education, in particular thematic areas, conducted by the teachers surveyed working in village and urban schools

Thematic areas	School location	Frequency of using outdoor education												
		Less often / not applied		Applies		P	Once a month		2-3 times a month		1-2 times a week		3 times per week	
		N	%	N	%		N	%	N	%	N	%	N	%
Language education	Village	6	4.84	118	95.16	0.949 ^Y	38	30.65	40	32.26	28	22.58	12	9.68
	Town/city	6	3.95	146	96.05		48	31.58	48	31.58	31	20.39	19	12.50
Mathematical education	Village	41	33.06	83	66.94	<0.001	42	33.87	28	22.58	8	6.45	5	4.03
	Town/city	9	5.92	143	94.08		81	53.29	36	23.68	14	9.21	12	7.89
Nature education	Village	0	0.00	124	100.00	0.113 ^Y	6	4.84	30	24.19	49	39.52	39	31.45
	town/city	5	3.29	147	96.71		29	19.08	44	28.95	52	34.21	22	14.47
Art education	Village	3	2.42	121	97.58	<0.001	55	44.35	47	37.90	11	8.87	8	6.45
	Town/city	30	19.74	122	80.26		67	44.08	41	26.97	9	5.92	5	3.29
Technical education	Village	37	29.84	87	70.16	0.070	38	30.65	38	30.65	8	6.45	3	2.42
	Town/city	31	20.39	121	79.61		64	42.11	53	34.87	4	2.63	0	0.00
IT education	Village	75	60.48	49	39.52	0.426	31	25.00	18	14.52	0	0.00	0	0.00
	Town/city	99	65.13	53	34.87		30	19.74	19	12.50	4	2.63	0	0.00
Music education	Village	17	13.71	107	86.29	0.086	29	23.39	52	41.94	22	17.74	4	3.23
	Town/city	33	21.71	119	78.29		63	41.45	40	26.32	10	6.58	6	3.95
Physical education	Village	0	0.00	124	100.00	-	5	4.03	40	32.26	21	16.94	58	46.77
	Town/city	0	0.00	152	100.00		23	15.13	36	23.68	46	30.26	47	30.92

Y - Chi-square test analysis with Yates correction

Table 2. Descriptive statistics for use of outdoor education in the analysed thematic areas by the responders working in schools in rural and urban areas

Thematic areas	Village				Town/city				P
	M.	Me	SD	Mean rank	M.	Me	SD	Mean rank	
Language education	3.02	3	1.06	137.3	3.06	3	1.09	139.5	0.819
Mathematical education	2.15	2	1.08	119.6	2.60	2	1.01	153.9	<0.001
Nature education	3.98	4	0.87	162.4	3.38	3	1.05	119.0	<0.001
Art education	2.73	3	0.90	157.9	2.29	2	0.96	122.7	<0.001
Technical education	2.21	2	1.02	137.0	2.20	2	0.79	139.7	0.770
IT education	1.54	1	0.74	141.0	1.53	1	0.81	136.4	0.578
Music education	2.73	3	1.01	158.3	2.30	2	1.01	122.3	<0.001
Physical education	4.06	4	0.98	150.2	3.77	4	1.05	129.0	<0.021

D. The frequency of organising outdoor education by the responders and preferred places

Certain spaces may, to a greater or lesser extent, serve given forms of learning, achieving specific goals and teaching content, motivating and arousing students' cognitive curiosity, etc. (Moore, Marcus, 2008; White, 2004). Therefore, due to their specificity, they perform definite functions in relation to the education process based on the multilateral involvement of learners. The experience gained outside the classroom seems „more genuine” and rooted in a „reality” that is known and understood by students. Therefore, it has become an interesting research issue to identify the spaces and places preferred by the responders where they most often educate outside. Teachers most often organise outdoor education in the park, around the school and on the playground (Table 3). At the same time, there is no statistically significant relationship between the variables (Table 4). The respondents' preference for places in the immediate vicinity of the school is consistent with the idea that the organisation of outdoor education, as a fundamental

concept of education, cannot generate additional time and material costs and is available at any time in the teaching-learning process.

Table 3. Frequency of using outdoor education in places selected by the responders working in schools in rural and urban areas

Place	School location	Frequency of using outdoor education												
		Less often / not used		Applies		P	Once a month		2-3 times a month		1-2 times a week		3 times per week	
		N	%	N	%		N	%	N	%	N	%	N	%
School Garden	Village	12	9.68	112	90.32	<0.001	19	15.32	47	37.90	39	31.45	7	5.65
	Town/City	68	44.74	84	55.26		42	27.63	34	22.37	6	3.95	2	1.32
Playground	Village	0	0.00	124	100.00	0.002^Y	12	9.68	35	28.23	46	37.10	31	25.00
	Town/City	13	8.55	139	91.45		19	12.50	68	44.74	41	26.97	11	7.24
The Area around the School	Village	1	0.81	123	99.19	0.570 ^Y	19	15.32	60	48.39	31	25.00	13	10.48
	Town/City	1	0.66	151	99.34		42	27.63	88	57.89	21	13.82	0	0.00
Park	Village	1	0.81	123	99.19	0.919	15	12.10	66	53.23	38	30.65	4	3.23
	Town/City	0	0.00	152	100.00		21	13.82	122	80.26	8	5.26	1	0.66
Forest	Village	24	19.35	100	80.65	0.003	69	55.65	14	11.29	17	13.71	0	0.00
	Town/City	54	35.53	98	64.47		75	49.34	22	14.47	1	0.66	0	0.00
Meadow	Village	77	62.10	47	37.90	0.965	43	34.68	4	3.23	0	0.00	0	0.00
	Town/City	94	61.84	58	38.16		55	36.18	3	1.97	0	0.00	0	0.00
Field	Village	105	84.68	19	15.32	<0.001^Y	19	15.32	0	0.00	0	0.00	0	0.00
	Town/City	151	99.34	1	0.66		1	0.66	0	0.00	0	0.00	0	0.00
Orchard	Village	121	97.58	3	2.42	0.179 ^Y	3	2.42	0	0.00	0	0.00	0	0.00
	Town/City	152	100.00	0	0.00		0	0.00	0	0.00	0	0.00	0	0.00
Cemetery	Village	121	97.58	3	2.42	0.179 ^Y	3	2.42	0	0.00	0	0.00	0	0.00
	Town/City	152	100.00	0	0.00		0	0.00	0	0.00	0	0.00	0	0.00
Institutions	Village	113	91.13	11	8.87	<0.001	11	8.87	0	0.00	0	0.00	0	0.00
	Town/City	64	42.11	88	57.89		87	57.24	1	0.66	0	0.00	0	0.00

Y – Chi-square analysis with Yates correction

Table 4. Descriptive statistics for the use of outdoor education in places preferred by the responders working in the village and in the town/city

Place	Village				Town/City				p
	M	Me	SD	Mean rank	M	Me	SD	Mean rank	
School garden	3.08	3	1.04	182.3	1.89	2	0.97	102.8	<0.001
Playground	3.77	4	0.94	164.6	3.12	3	1.01	117.2	<0.001
The area around the school	3.29	3	0.88	159.3	2.85	3	0.65	121.5	<0.001
Park	3.23	3	0.73	157.4	2.93	3	0.46	123.1	<0.001
Forest	2.19	2	0.91	155.2	1.80	2	0.70	124.9	0.001
Meadow	1.41	1	0.56	138.7	1.40	1	0.53	138.4	0.970
Field	1.15	1	0.36	149.6	1.01	1	0.08	129.4	<0.001
Orchard	1.02	1	0.15	140.3	1.00	1	0.00	137.0	0.055
Cemetery	1.02	1	0.15	140.3	1.00	1	0.00	137.0	0.055
Institutions	1.09	1	0.29	101.2	1.59	2	0.51	168.9	<0.001

F. The frequency of using outdoor education methods and techniques preferred by the responders

The properly understood essence of outdoor education, in which the learner acts as a researcher and constructor of personal knowledge, favours the use of methods based on the multilateral involvement of the student and attractive forms of their work. The range of these methods and forms is huge and it is distinguished by the creation of conditions for students to gain direct, first-hand, and collaborative experiences.

The material obtained from the study of teachers' preferences regarding methods and forms of conducting activities outside the classroom showed that at least 3 times a week teachers use book work, conversations and discussions. Educational trips and experiments are the least frequently used during outdoor activities. The analysis of the data (Table 5) revealed differences between the responses of teachers working in village schools versus urban schools. A statistically significant difference was revealed in the preference for such methods as: „experiments” ($p = 0.049$), „exploration” ($p = 0.042$), „educational trips” ($p = 0.005$), “spontaneous wandering” ($p = 0.002$) in favour of teachers from village schools. This means that these teachers more often use research methods that favour independent search and discovery of knowledge than teachers from urban schools (Table 6).

All the respondents stated that they use all of the forms of organisation of students' work although with different frequency. Statistically significant

differences between the preferences of the teachers from village and urban schools concern working in pairs and small groups of pupils. Those working in village schools much more often use these forms of organising the educational process. The location of the school may therefore influence the choice of methods and forms.

Table 5. Frequency of using outdoor education methods and techniques by teachers working in village and urban schools

Work methods and techniques	Workplace	Frequency of using outdoor education												
		Less often / not used		Applies		p	Once a month		2-3 times a month		1-2 times a week		3 times per week	
		N	%	N	%		N	%	N	%	N	%	N	%
Experiments	Village	45	36.29	79	63.71	0.049	43	34.68	25	20.16	7	5.65	4	3.23
	Town/City	73	48.03	79	51.97		64	42.11	14	9.21	1	0.66	0	0.00
Conversation	Village	0	0.00	124	100.00	-	0	0.00	16	12.90	47	37.90	61	49.19
	Town/City	0	0.00	152	100.00		0	0.00	8	5.26	40	26.32	104	68.42
Work with a book	Village	0	0.00	124	100.00	-	0	0.00	1	0.81	54	43.55	69	55.65
	Town/City	0	0.00	152	100.00		0	0.00	1	0.66	21	13.82	130	85.53
Discussion	Village	0	0.00	124	100.00	-	1	0.81	28	22.58	70	56.45	25	20.16
	Town/City	0	0.00	152	100.00		2	1.32	45	29.61	86	56.58	19	12.50
Observation	Village	0	0.00	124	100.00	-	3	2.42	8	6.45	62	50.00	51	41.13
	Town/City	0	0.00	152	100.00		39	25.66	62	40.79	25	16.45	26	17.11
Exploration	Village	16	12.90	108	87.10	0.042	45	36.29	46	37.10	17	13.71	0	0.00
	Town/City	34	22.37	118	77.63		54	35.53	44	28.95	20	13.16	0	0.00
Educational games	Village	12	9.68	112	90.32	0.157Y	41	33.06	50	40.32	19	15.32	2	1.61
	Town/City	7	4.61	145	95.39		55	36.18	78	51.32	12	7.89	0	0.00
Teaching trips	Village	56	45.16	68	54.84	0.005	62	50.00	6	4.84	0	0.00	0	0.00
	Town/City	44	28.95	108	71.05		48	31.58	46	30.26	14	9.21	0	0.00
Spontaneous wandering	Village	2	1.61	122	98.39	0.002Y	40	32.26	48	38.71	34	27.42	0	0.00
	Town/City	19	12.50	133	87.50		71	46.71	40	26.32	21	13.82	1	0.66
Individual work	Village	0	0.00	124	100.00	-	5	4.03	67	54.03	42	33.87	10	8.06
	Town/City	0	0.00	152	100.00		8	5.26	67	44.08	59	38.82	18	11.84
Work in pairs	Village	0	0.00	124	100.00	-	0	0.00	9	7.26	55	44.35	60	48.39
	Town/City	0	0.00	152	100.00		3	1.97	53	34.87	64	42.11	32	21.05
Working with a small group	Village	0	0.00	124	100.00	-	2	1.61	29	23.39	73	58.87	20	16.13
	Town/City	0	0.00	152	100.00		4	2.63	62	40.79	71	46.71	15	9.87
Work with the whole group	Village	0	0.00	124	100.00	-	0	0.00	0	0.00	0	0.00	124	100.00
	Town/City	0	0.00	152	100.00		0	0.00	0	0.00	0	0.00	152	100.00

Table 6. Descriptive statistics of outdoor education methods and techniques used by teachers working in schools in the village and in the town/city

Work methods and techniques	Village				Town/city				P
	M	Me	SD	Mean rank	M	Me	SD	Mean rank	
Experiments	2.05	2	1.04	154.6	1.63	2	0.68	125.3	0.001
Conversations	4.36	4	0.70	122.8	4.63	5	0.58	151.3	0.001
Work with a book	4.55	5	0.52	115.9	4.85	5	0.38	156.9	<0.001
Discussion	3.96	4	0.68	147.6	3.80	4	0.66	131.1	0.056
Observation	4.30	4	0.70	181.4	3.25	3	1.02	103.5	<0.001
Exploration	2.52	3	0.89	147.1	2.33	2	0.97	131.5	0.090
Educational games	2.66	3	0.91	139.8	2.63	3	0.70	137.4	0.793
Science trips	1.60	2	0.58	112.0	2.20	2	0.96	160.1	<0.001
Spontaneous wandering	2.92	3	0.81	161.3	2.43	2	0.90	119.9	<0.001
Individual work	3.46	3	0.70	132.0	3.57	4	0.77	143.8	0.182
Work in pairs	4.41	4	0.62	169.5	3.82	4	0.78	113.2	<0.001
Working with a small group	3.90	4	0.67	153.8	3.64	4	0.70	126.0	0.002
Work with the whole group	5.00	5	0.00	138.5	5.00	5	0.00	138.5	–

Discussion and conclusions

The research material allows to conclude that outdoor education is not present in the everyday work of the Polish school at the primary stage and thus does not facilitate the construction of knowledge by pupils. The research shows the need for transformation, modification of the concept of education so that they become closely related to the everyday problems and experiences of children. Despite the undoubted advantages, noticed to a greater or lesser extent by the surveyed primary education teachers, outdoor education is applied by them incidentally and usually in a trivial, inflexible way and to a small extent consistent with the pupils' development mechanisms, their needs and interests. The surveyed teachers rarely use the methods of activating in the organisation of field activities, of an exploratory nature, and much more often use reproductive methods, strengthening the cognitive passivity of students. The study revealed some differences between teachers working in village schools and those working in urban schools. As it turned out, the location of the school influences the frequency of teachers

using research methods and forms of work in pairs and small teams to the benefit of the rural environment. Moreover, the differences also concerned the topics covered within outdoor education. The data showed that teachers do not feel prepared to conduct this type of education and indicate the lack of appropriate training as well as a deficit of support from the headmaster and parents. Other frequently mentioned factors that make education difficult outside school are poor weather conditions and safety concerns. Similar problems are also noticed by researchers from other countries (Tuuling, et al., 2019; Carrier et al., 2014; Ernst, 2014). In the context of the research results, the potential of the environment seems to be wasted, underestimated by the majority of the teachers and rarely seen as a source of information, cognitive conflicts and means of learning or a context of educational interactions that lead to the accumulation of experiences valuable for the pupils' development. Therefore, outdoor education practised by Polish teachers does not exemplify the concepts embedded in the assumptions of socio-cognitive constructivism and paidocentrism.

Identification and description of variables appears to be an essential factor in initiating a meaningful change in student and teacher education strategies. To achieve a high-quality educational experience, it should be ensured that every child has the opportunity to experience the world and construct knowledge outside the classroom as an essential part of the educational process and personal development. In the process of teacher professionalization, as well as educating future teachers, more emphasis should be placed on creating conditions for them to acquire competences in organising outdoor education. An important factor supporting the popularisation of outdoor education and its presence in the space of children's education is well-conducted cooperation with parents.

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