PRACTICAL TEACHING MODELS THROUGH OUTDOOR EDUCATION IN THE CORE PROCUREMENT CYCLE

Henrietta, TORKOS, University Assistant, PhD, Aurel Vlaicu University of Arad <u>torkos_henriette@yahoo.com</u> Editha, COŞARBĂ, University Assistant, PhD student, Aurel Vlaicu University of Arad ecosarba@yahoo.com

- Abstract: Learning outside the study hall is educational plan-based instructing and learning exercises that go past the dividers of the homeroom. It incorporates any educational programbased movement that happens outside the school running from a gallery or field visit, to a games trip, or open-air instruction camp. It is based on the curriculum, and also on the imagination of teachers, who have to properly and wisely combine the curricular contents, methods and resources in order the get the most efficient results. These results are not just based on school grades, but also regarding transversal competencies and emotional intelligence. In the present article, we would like to present a set of outdoor teaching and learning practical models, based on the core procurement cycle curriculum in Romania, in order to help primary school teachers in organizing similar activities for their classes, based on different school subjects. We would also like to present a main model of planning outdoor learning activities and its outcomes.
- **Key words:** *outdoor education; teaching; model; practical; core procurement cycle.*

Introduction

Teaching and learning outside the classroom portray school educational program learning, other than with a class of understudies sitting in a room with an educator and books. It envelops science field trips and looking for creepy crawlies in the school garden, just as indoor exercises like watching stock control in a nearby shop, or visiting a gallery. It is an idea at present appreciating a restoration due to the acknowledgment of advantages from the more dynamic style. (Kellert, 2005)

It is based on specific aims that can be evaluated at the end of each outdoor educational activities. These are presented as it follows:

- figure out how to conquer misfortune
- improve individual and social turn of events
- build up a more profound relationship with nature.
- raise fulfillment through better educating and learning encounters.

Open air training is regularly utilized as a way to make a more profound feeling of spot for individuals in a network. Feeling of spot is showed through the comprehension and association that one has with the zone wherein they dwell. Feeling of spot is a significant part of environmentalism just as ecological equity, since it makes the significance of supporting a specific biological system substantially closer to home to a person. (Wells & Evans)

Theoretical foundation

There is a lot of narrative proof in scientific articles about the advantages of outdoor education encounters; educators, for instance, regularly discuss the improvement they have involved with understudies following an excursion. Nonetheless, hard proof indicating that open air training has a verifiable long-haul impact on conduct or instructive accomplishment is more enthusiastically to recognize; this might be to some extent in light of the trouble engaged with directing investigations which separate out the impacts of outside instruction on significant results. (Munoz, 2009)

Various studies have recorded expanded school execution through outdoor education. Exploration has report expanded government sanctioned grades, upgraded mentality about school, improved in-school conduct, improved participation also, in general improved understudy accomplishment when understudies learn in and about nature. Also, outdoor learning successfully utilizes a more prominent scope of youngsters' insights. Numerous scientists contribute the expansion in execution to expanded significance and hands-on understanding of adapting outside.Adapting outside is dynamic and builds understudies' physical, mental and social wellbeing. A few examinations have even shown development (e.g., non-school) physical action increments with open air learning. Admittance to nature has likewise been appeared to diminish the manifestations of ADHD. Open air learning and admittance to nature additionally diminish feelings of anxiety of both pupils and educators.Outside encounters assist understudies with expanding their comprehension of their common and human networks which prompts a feeling of spot. (Peacock, 2006) Through association with place, pupils create more grounded natural mentalities and metro practices. Outside learning encounters are the establishment of raising the up and coming age of dynamic residents who deal with their common and human relationships. (Bell &Dyment, 2006)

Recent perspectives

Outdoor education, whether used as a single form of learning or as a learning strategy in traditional education, brings with its positive changes both in terms of learning styles and in terms of how to adapt existing methods in various situations. The most common way to use the outdoor approach is by using methods already established and known in outdoor contexts. In this way, outdoor education becomes efficient and easy to use by every teacher, regardless of the age of the group they work with. (Coşarbă&Torkos, 2020)

In outdoor education, both traditional learning methods and interactive methods that develop the level of group cohesion can be used. Depending on the objectives set, the number of participants, the aims and the chosen framework, the methods that will be used can be established, but also how they will be adapted, so as to correspond to the needs of the group and for the whole activity to lead to learning.

In the current conception and comprehensive in terms of effects in use, the teaching method according to the definition given by Ionescu, is a way of action, a tool with which students, under the guidance of the teacher or independently, acquire and deepen knowledge, develops and develops intellectual and practical skills and abilities, abilities, competencies, behaviors, aptitudes, attitudes, etc. (Ionescu, 2003). According to this definition, it can be stated that outdoor education is an educational strategy that develops skills, and can be used in multiple learning situations.Outdoor education operates with all kinds of known methods, traditional, established, used mainly in the classroom, but also with modern, interactive, used in any environment where learning situations can be organized.

The organization of outdoor learning activities

In the organization and description of outdoor activities, it is usually specified:

- \checkmark the title of the activity,
- \checkmark the disciplines involved,
- \checkmark the number of participants,
- \checkmark the number of organizers,
- \checkmark the date,
- \checkmark the time required to carry out the activity,
- \checkmark a brief description of the steps followed,
- \checkmark methods used

✓ how in which the teacher adapted them to the respective activity. The latter action depends on the creativity and openness of each teacher organizing outdoor activities. Equally important is the correlation of the method with the framework and the contents pursued. In external education, interactive group teaching strategies are used, which favor the interrelation exchanges between the participants in the activity through interpersonal processes of cooperation and constructive competition, because this approach is allowed, even facilitated by the easy space in which activities can take place.

The personality of students in a class is constantly shaped by the processes of communication and interaction exercised within it. According to the literature (Roman&Balas, 2010), life in the classroom has as a constituent element cooperation in activity. This action is carried out by relating the students, involving participation in solving a common task established by the class, a group of students or the teacher. Through cooperative learning activities the student can amplify his relationships with colleagues because engaging in a common activity allows information to flow faster. Through outdoor activities that involve the use of interactive methods in combination with traditional ones, learning is achieved through dialogue, cooperation and has the effect of improving individual intellectual performance. The light and open environment offered by outdoor education challenges the teacher to resort to methods that are not exclusively frontal, offering students opportunities to interact. At the same time, teachers who choose outdoor education as a way of carrying out instructive-educational activities are put in the situation of thinking about various activities using various learning methods.

The conceptual scheme of the model proposed (Fig. 1), contains the following elements:

- Outdoor education activities
- Curriculum of the fundamental acquisitions cycle
- The transversal competencies pursued
- Deployment environment
- Materials and tools used
- Actors involved
- Evaluation method

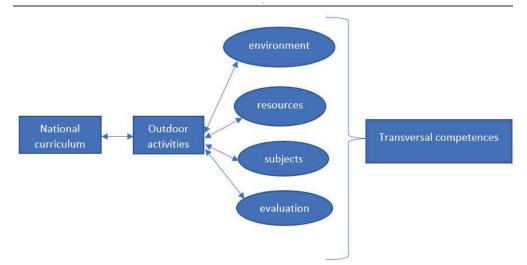


Fig. 1. The outdoor learning activity preparation model

Examples of outdoor learning activities

In some educational systems, the National Curriculum includes directions for the participation of students of all ages in a series of outdoor, planned, progressive and creative learning experiences. These are challenging opportunities that occur throughout and outside of school. In Romania, following the analysis of the National Curriculum, we notice the encouragement of this type of activities and learning experiences even if they are not mentioned in documents as activities belonging to outdoor education. If there are so many motivations and positive directions in this regard, all that remains is to face the challenges of ensuring that outdoor education is strongly anchored in the curriculum, so that it becomes a reality for students in Romania. This approach becomes a responsibility of each teacher, who will have to plan and integrate outdoor education activities in the instructional-educational process, in the form of interdisciplinary projects and in the form of cross-curricular activities. Each curricular area is molded to outdoor education, because each discipline has specific benefits in this regard. When planning outdoor activities, connections with educational activities undertaken in the classroom should be taken into account in the context of using the curriculum as a whole. Instead of offering a week of outdoor learning or a special day of outdoor workshops, it is more desirable that formal activities that take place in the outdoor environment be part of a holistic teaching-learning approach that is linked to a process. educational complex in progress.

Outdoor education is used in schools all over the world, at all curricular levels. The practice of outdoor activities within the core subjects reflects the confidence of teachers in the fact that curricular objectives can be met through this approach. The members of the management of the schools where this type of education is constantly used also state that they have visibly intensified the effects of learning, motivated the students and encouraged the teachers to be innovative. The University of Plymouth, England, published a guide report in 2016, in which it presented the main valences of using outdoor education:

- Inspiring creativity in the area of language and communication, through the first-hand experiences they received from nature, because starting from real experiences in nature you can reach real compositions that greatly develop children's vocabulary and writing.
- Supporting the main concepts in the area of mathematics and science, transforming the difficult ones into realities (for example the concepts of perimeter, area, lengths, quantities)
- Ensuring experience and admiration, which transforms the entire curriculum into a living one, by leaving the science laboratories and putting students in direct contact with the natural environment. (Plymouth University England, 2016)

As specified above, outdoor education is based on various topics, is focused on the main curricular areas, integrating several disciplines and even more curricular areas. In the following we will present some ideas that illustrate the potential of putting outdoor education into practice with the related activities, on curricular areas or large study topics.

Outdoor education models in teaching language and communication

Most Romanian authors, writers of poetry, prose or drama, use nature as inspiration or as a place for events in their works. Some students who are shy to express themselves in writing in the internal environment will find the external environment less formal and will be motivated to do so there. Also, the involvement of children in practical outdoor activities helps them to build a specific vocabulary, and when returning to class, outside experiences will be useful in understanding the contents to be studied and in understanding the texts read. Nature can become a source of inspiration for young authors, and they can learn about the process and purpose of writing in real society.

Outdoor activities that develop students' desire to communicate and write are done starting with finding ways to leave traces, regardless of the surface and the tool used. You can use different types of soil, dust, air, water or different leaves. It is encouraged to write short lyrics on any of the surfaces mentioned above, which are then photographed to keep the memory of the work done, but also to be able to evaluate.

You can choose different objects from nature, by each participant, after which you can create stories including one of the chosen objects. The object is passed on, the story can continue with another participant who in turn adds another object. The line continues until all the ideas are exhausted. An activity that stimulates the desire to read and is specific to any age, is to choose a book or story, and read it in a chosen location outside. Spaces can vary, starting from a corner of the school grounds, to the school yard, or even in a tree, it is important that the chosen location is related to the title of the book or story. It is recommended here, as an evaluation, to observe the emotional connections of the subjects with the chosen place and story. The teacher's reading can be done by a campfire or in a shady place, where students can sit relaxed, and listen to the story sitting on a stone, in a calm and noise-free environment.

Forms of outdoor education in education for society subject

Learning about the world and society is a fundamental experience that every student needs to understand the present and future directions. He must also be aware of places and environments rich in history and tradition. As mentioned in previous chapters, knowing the environment in which the child lives and develops can help him become more connected to the local community. Social and historical content becomes more relevant when students come into direct contact with different people, hear more opinions and can ask questions. The use of various places in the social environment gives students the opportunity to empathize with the communities of the past and those of the present, especially by visiting historical sites they study in textbooks, comparing images with the realities they discover, analyzing objects from the historical past, etc. In order to develop a sense of perception of space and time, it is recommended to create maps, either of the local community or of tourist destinations with educational values in terms of history.

Students can create a replica of a museum, or even an outdoor museum. Students can participate concretely in this activity through their own contributions, bringing from home an old object to discuss, describe the story of the object, play with objects, share the history of their own family, even involve family members, presenting and inviting them to the activity.

Other activities can be carried out around old photos, they can be placed in chronological order, assumptions can be made about the place and time they were photographed, about the significance of each. Maps can be made of the school or of some places present in the local community, which hide tradition, which show respect for human nature and for the rights of each individual.

Visits can be made to historical or archaeological sites, and even to famous places of battle or places where the nation's heroes are honored, with the specification to give each student enough time to develop empathy for the events and people who participated. Discussions can be organized about how these events have influenced religion, culture, history, traditions today. Journal Plus Education, ISSN: 1842-077X, E-ISSN (online) 2068 - 1151 Vol XXVII (2020, No. 2, pp 7-19

This curricular area also includes religious education, or more recently moral education. Within these activities, real opportunities arise to explore the existing beliefs and values in the world. Being in the external environment, the soul is calmer, and the individual can ask personal questions: Who am I? What is the purpose of life? Who rules the universe? Where are we going? and so on,the great religious traditions of the world, the differences in spirituality and the varied way in which each person seeks to connect with the divinity, are topics that can be debated in these activities. Outdoor environments, be they places of worship, temples, churches or even nature in its very simplicity, are resources meant to encourage personal reflection and development from a religious or spiritual point of view. Freedom of expression, communication, choice of discussion partners, the joy of touching, touching, smelling, feeling, speaking are just fragments that offer rich learning experiences. (Torkos, 2018)

In this sense, some clear examples are presented that can be used in outdoor activities that have as their theme religiosity or spirituality. For example, you can visit well-known places that have a strong religious charge, where you can discuss religious objects, or you can participate in various religious events, festivals, traditions. You can analyze different types of letters or documents; you can study religious texts or other symbols. In outdoor education, small gardens can be created to serve meditation and selfdiscovery, they can be decorated with different plants, decorations, wooden benches or statues. Interculturality can be practiced at the most intense levels, and the degree of respect and acceptance of students increases with each other by knowing the culture of all members of the group. They can share different games or religious songs, dances or traditions, and others can get actively involved and try to play them, thus fully integrating and empathizing with the person in question. You can write or draw different symbols, drawings on asphalt or in earth and sand, representing the culture or religion of each people. Artifacts can be painted or even made of clay or ceramics, which are then used to decorate the study area. Usually you can make paintings on glass, create different murals, make collages of glass or porcelain, etc.

Romania is a rich country and from this point of view, temples, places of worship, splendid courtyards of churches, exceptional monasteries, all these contributing to the discovery of the self, and the discovery of each individual's place in society and history, in nature. Living a simple and satisfying life can lead to great satisfaction on all levels of life. Through outdoor education in combination with modern curricular requirements, authentic, multi-cultural, integrated, holistic learning is designed for the needs of each student. Journal Plus Education, ISSN: 1842-077X, E-ISSN (online) 2068 - 1151 Vol XXVII (2020, No. 2, pp 7-19

Examples of outdoor activities used in teachingmathematics and sciences Every student needs to develop a deep understanding of mathematical concepts and numerical skills, so they must engage in value contexts in which these abstract concepts can be applied to real life situations. In order for this approach to take place, it is recommended to use outdoor education in this curricular area as well. Numbers serve to make people's lives easier, and this must be understood even from an early age. Mathematics or science should not be difficult and should not scare students. Children can benefit from learning mathematics using outdoor strategies through the access that nature or the outdoor environment offers to various resources. Practical work as well as teamwork help students to develop communication situations through which they independently develop their mathematical language.

There are many activities in this regard, which can be used at any age. Especially at the level of the fundamental acquisition cycle, when students are eager to learn and curious to experiment, the mathematical and scientific activities carried out outside the classroom are more than beneficial, streamlining learning and the pace of accumulation of educational experiences leading to learning. Distances, measurements, comparisons with different objects collected from nature, calculations or the use of mathematical or physical formulas are much easier in nature, when students have the opportunity to experiment in a practical, direct, and not abstract. For some students this is a real help, because abstract concepts are harder to understand. At the preschool level, as they are used to learning through the use of different tools, it is more difficult for them to adapt to school age, where the use of these educational resources is increasingly rare.

A useful exercise in calculations is the one in which the students sit in a single row, one behind the other, and at the organizer's whistle, they run one by one, on a distance of 400 meters. At the end of the race, each student will hear a simple operation with two terms, addition or subtraction, and will choose the result from a lot of posters that will be placed in front of him on the ground. The strong points of this exercise are: spending time in nature, physical exercise, a minimum of competitiveness, enough time to think about the exercise, fun, learning through play, etc. If such an exercise were done in the classroom, there would not be enough time for each child to go to the blackboard, on top of that there would be embarrassment and fear that he has to answer correctly or he will be laughed at in front of colleagues. During this exercise, each child has the opportunity to come forward, even several times in 15 minutes allocated to the exercise, and teachers have the opportunity to add other exercises at that time and capitalize on other content.

Another exercise designed to ensure the practice of mathematics is that in which each student stands with his feet apart in front of a tree and moves his gaze from the top of the tree to the base. When the student can clearly see the top of the tree, he will ask a colleague to measure the distance between the child and the tree. Then, to this distance is added the number that represents the length of the first student's leg. The end result is actually the height of the tree. (West Lothian Primary School, 2017)

Choose a place on the school grounds and mark it with chalk. Students spread over the entire surface of the field and choose different ways to reach the marked place. Beforehand, they estimate how many of the chosen moves will be needed to reach the marked place. The estimate is tested by the actual implementation of the movements. The exercise can be repeated by choosing other movements during the time allotted to the activity. (Education Scotland, 2011)

Introductory exercises in mathematical activities, with short duration, can be the choice of stones of different sizes and the choice of a partner. It will be calculated who has more and who has fewer elements. With a chalk, draw the representative signs (<,> or =) to measure the quantities or sizes of the objects found. The activity can continue with the change of partners and with the performance of other measurements using the same representative signs. (Education Scotland, 2011)

Usually the mathematical exercises performed in the outdoor environment start from the students' curiosities and questions: How tall is the biggest building belonging to the school? How can we measure it? Each student can come up with answers and ideas, and even choose the most appropriate ones and test them. All the exercises are discussed in the classroom, and even some of them are written down in notebooks and thus the educational process is continued, the two spaces complementing each other.

Within the natural sciences, a discipline belonging to the same curricular area, as many outdoor activities can be performed. It has been proven that all disciplines that are based on science are studied much more easily in practice, outside the classroom, where each student can experiment at his own pace. Natural sciences connect biology with physics and chemistry, and studied in the natural environment and out of the ordinary classroom, students have unique learning experiences. In addition to these aspects, the natural sciences studied in the external environment, encourage the correct thinking of children related to the correct use of resources and related to the impact of man on the environment. Moreover, students have the opportunity to interact with the natural environment and its elements, learning freely about plants and animals, climate, cardinal points, etc. The effects of these outdoor activities do not take long to appear, because the respect for the environment and for all those around it increases in this way. Observation, experience, scoring and drawing conclusions are the steps that usually take place during science classes at the level of the fundamental acquisition cycle. Many principles can be observed, understood and applied even on a simple outing in nature or even on a simple walk around the school or on green spaces. (McCoy, 2010)

Suggested activities in this regard include experiences started right in class, when students can germinate some wheat seeds in a jar and can wait for the plant to grow in a jar, this exercise being beneficial in the sense that it is desired to explain the components of a plant. The exercise can continue with planting small trees, plants or flowers around the school or in the school garden. The activity can continue in the classroom, where students can come up with ideas about how to best care for these plants, how they grow or how people can intervene in their growth process. (Nature learning initiative, 2013)

More complex activities can be achieved by sending students to the school yard and encouraging them to find and photograph different plants or insects, discuss identified differences, motivate their choice, make an exhibition with all the photos and especially write down the multitude of questions. which can be born related to everything they observe, hear or feel in the external environment. Together with a partner, or in a small group, you can discuss questions and select those that are connected to the area, discipline, or topic of Science. This exercise can continue if the organizer asks students to choose those questions that can be researched, and together or in small groups to try to find answers.

Students can make short outings in the four seasons and observe the changes that take place in nature. Orientation, or orientation with map and compass is a very good example of this. In order to have a clearer picture of the orientation activities, we want to present the steps necessary for such an activity. Each orientation lesson begins with a plan. As leaders of the orientation activity, we need to know exactly the number of students we will work with. We also need to choose an area, taking into account some of the following aspects: size, placement, age of the children involved in the orientation activity and the difficulty of the terrain. The next step is the map. If there is no map of the desired area and the leader cannot borrow or print it, he must create it himself. (McNeill, 1996) There are several applications that may be useful in this case, but if there is no other possibility, the leader can adapt an existing map to the needs of the group. The leader can also present different maps to the students, so that they can get a more obvious picture of the types of maps they can work with. Explanatory discussions should be made about the elements that can be found on a map, for example the colors of the relief forms, how they are represented, what each means, the measures on the map versus their meaning in reality, where the dangerous areas are, where there are areas slippery or damp, what areas should be avoided, etc. All maps should include the following: ladder, north arrow, legend and title. For starters, you can make maps of the classroom, of the school, of smaller areas, and you can study with the class before the longer outings. (Bagness, 1995) There are three types of orientation activities: with compass, map and compass, and only with map. (Kjellstrom, 1994)

There are certain steps that should be taken into account when planning guidance activities, with reference to safety and risk. Students should have a general knowledge of the plants and wildlife they may encounter along the way. They should know what they can touch, what they can pick and what they can eat. (Palmer, 1998) They should be aware of poisonous plants and animals and all the dangers involved. They should have first aid equipment on them and should know how to use it in case of accidents. Clothing is another important aspect of this type of activity. Each student should be responsible for dressing appropriately and bringing their own watch. The participant in well-equipped orientation activities must have a whistle, a long-sleeved shirt, a wristwatch; wrist compass, durable and comfortable boots or sneakers, tear-resistant old pants. (Bratt, 2002) They should also have a backup plan in case of sudden changes in the weather, and the group must stay together at all times and act responsibly at all times of the activity. Perhaps the most important aspect is the experience during these activities, because observation and living are the main aspects of orientation activities. You can analyze plants, animals, geographical areas, spaces and land. All these experiences are rich in learning situations, which can only take place outside.

Conclusions

Teachers who have integrated outdoor activities into the daily routine of students, unanimously say that after a short time it does not matter to be outside, in an outdoor environment, but the learning that takes place there. After a while, the planning of activities did not focus on "outdoor education", but the curricular area and disciplines involved, or even the topics that will be used, because the venue is no longer the main concern, but the experiences that took place in that environment. This really means a learning experience that continues regardless of time or space, an experience that will never depend on boundaries.

References

Bagness, M., (1995), Outward Bound Orienteering Handbook, Lyon's Press

- Bell, A. C., Dyment, J.E., (2006), Grounds for action: Promoting physical activity through school ground greening in Canada, Evergreen. http://www.evergreen.ca/en/lg/pdf/PHACreport.pdf
- Bratt, I., (2002), Orienteering: The Essential Guide to Equipment and Techniques, Stackpole Books

Coșarbă, E., Torkos, H., (2020), The professional values of primary school teachers, Agora Psycho-Pragmatica, Vol 1, nr. 14,

Journal Plus Education, ISSN: 1842-077X, E-ISSN (online) 2068 - 1151 Vol XXVII (2020, No. 2, pp 7-19

Education Scotland, (2011), Outdoor Learning Practical Guidance, Ideas and Support for Teachers and Practitioners in Scotland, http://www.playscotland.org/wp-

content/uploads/assets/outdoorlearningsupport2tcm4-675958.pdf

- Ionescu, M., (2003), Instrucțieșieducație. Paradigme, strategii, orientări, modele, Ed. Presa UniversitarăClujeană, Cluj-Napoca.
- Kellert, S.R., (2005), Nature and childhood development. In Building for Life: Designing and Understanding the Human-Nature Connection. Washington, D.C.: Island. <u>http://www.cnaturenet.org/02_rsrch_studies/PDFs/Kellert_BuildingforLife</u>.pdf
- Kjellström, B., (1994), Be Expert With Map and Compass: The Complete Orienteering Handbook. Hungry Minds/John Wiley & Sons
- McCoy, (2010), Nature Study With The Outdoor Hour Chalenges, Handbook for nature study, http://handbookofnaturestudy.com ,accesat 05.01.2018, 16:54
- McNeill, C. (1996), Orienteering (The Skills of the Game). Crowood Press
- Muñoz, S. A., (2009), Children in the outdoors: A literature review. Sustainable Development Research Centre.http://www.countrysiderecreation.org.uk/Children%20Outdoors.pdf
- Nature learning initiative, (2013), Spring Outdoor Play: Making the Most of the Season, Greendesk, NC
- Palmer, P., (1998), ed. The Complete Orienteering Manual. Crowood Press
- Peacock, A., (2006), Changing minds: The lasting impact of school trips. The Innovation Centre, University of Exeter. This report is available at: <u>http://www.nationaltrust.org.uk/main/w-schoolsguardianships-</u>changing minds.pdf
- Plymouth University England, (2016), Transforming outdoor learning in schools. Lessons from the natural connection project, Department for the Environment, Food and Rural Affairs, Natural England and Historic England
- Roman, A., Balaş, E., (2010), Strategiide instruireșievaluare, EdituraUniversității "Aurel Vlaicu", Arad
- Torkos, H., (2018), Introducing new education types: teachers' opinions on outdoor education, JPE, Vol 20, nr. 2, pp. 198-212
- Wells, N.M., & Evans, G.W. Nearby nature: A buffer of life stress among rural children. Environment and Behavior, 35(3), 311-330. http://www.sagepub.co.uk/journals/details/j0163.html
- West Lothian Primary School, (2017), Outdoor Learning Pack for Primary School Teachers, Woodland Trust Scotland, Forestry Commission Scotland