TIME, SPACE AND RESOURCE MANAGEMENT IN OUTDOOR EDUCATION

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Abstract: Outdoor education has become more than a modern type of education, it has become a useful tool that teachers all around the world’s educational systems can use on a daily basis. Every day, all around the world, teachers use it in order to develop different competencies, to achieve different educational goals, to complete the traditional methods and also to achieve a healthier educational lifestyle. No matter which is the main educational purpose of outdoor learning, it is important to be used at a weekly basis, in order to achieve the preselected educational purposes. There have been discussions about how outdoor education can be used at its most efficient rate, and regarding to these questions, came this article, that follows the lead of three most basic elements that can create the perfect outdoor education activity at any level: time, space and resource management. The following article, presents a brief theoretical approach to the elements presented above, and how can teachers use them in the most efficient ways.

Key words: outdoor education; time management; resources; space; efficient;

Introduction

From an etymological point of view, outdoor education refers to an organized learning situation, which takes place in the external environment. Activities in outdoor education can often involve travel-based experiences in the immediate environment, by participating in a variety of outdoor adventures and activities, such as hiking, climbing, boating, rope racing or group games. Therefore, outdoor education is based on the philosophy, theory and practices of experiential education.

Outdoor education is a concept that takes into account an entire education program based on experience and practical activity, which takes place outside the classroom, in the natural environment. It is based on the theory, philosophy and practice of experiential education, ecological education and environmental education. It helps people to understand themselves better, to perceive the surrounding world more correctly and, above all, and to gain a better knowledge of the people around them. It is considered a modern learning strategy having strong educational effects having the benefits of developing the innovative spirit, leadership, communication and other aspects of modern life.

The concept of outdoor education draws attention to an education based on experience and practical activities that take place outside of the classroom, and which are aimed at understanding the self, those around and the surrounding world. It is a relatively new type of education, producing long-term effects in terms of mastering complex learning situations and especially developing skills needed for modern life: innovation, leadership, team spirit, communication, autonomy and creativity. In our country, outdoor education belongs to the branch of non-formal education through extra-curricular activities organized outside the school environment, but it is also used in formal education as a learning strategy or as a new type of education. (Serban, 2014)

Theoretical foundation
Outdoor education does not achieve its objectives unless it is achieved in a well-defined space and time. There are certain activities that are typical of the internal environment, and some that can be achieved only by using resources from the external environment. None of these aspects should be forced, but a balance must be found in carrying out educational activities so that they reach their maximum efficiency. Outdoor education does not involve performing all the learning activities in the external environment, but only for those that have more benefits if they are carried out abroad.

The interior environment, as well as the external environment, must be seen as a single space, half being represented by the internal environment and half by the external environment, together forming a whole. The problem often arises when the internal environment is given a bigger role, the latter being responsible for hosting all educational activities, and the external one is intended solely for play or recreation. Outdoor education provides learning through the advantage it offers, and should be considered a plus in educational systems.

Specialists who plan educational activities should consider the two spaces as being linked, not as separate spaces, and especially to allow educators to move from place to place, through interchange, using resources and equipment in function of the needs of each student. (Lasenby, 1990)

Direction and causes of the problem

The role of space in carrying out outdoor activities

Outdoor education, through the various environments in which it operates, offers major educational and recreational benefits, contributing to the harmonious development of the human being. Many believe that the only place where outdoor activities can take place is nature. It offers the most diverse range of materials and natural resources, which are available to everyone, but in addition to the natural environment, outdoor education also uses other outdoor environments, which are as varied and abundant in terms of educational resources offered.

The simplest and most handy form of outdoor education can take place in the school space, on the school grounds or in the school yard. As a rule, teachers claim that they do not have the time or resources to move very far from the school in which they operate. The land or the school yard is the best option in this regard. This is due to the fact that the two spaces are very close in distance and moving different materials from one environment to another can be easily achieved. Also, no special requests should be written to the School Inspectorate or different sheets signed by the parents through which the teacher asks to leave the institution. The disadvantage would be that there is not a great variety of natural resources or equipment specific to outdoor education that could be used in this regard.

Another environment for outdoor education activities may be the village or city space. The two environments offer a wide range of educational resources that can be easily used in outdoor education activities. They are also a good way to make students aware of the space in which they develop socially. The activities related to the outdoor education carried out in the urban or rural space represent bridges between the school institution and the society. The members of the society can observe the efforts of the teachers to get actively involved in the social life, and thus to be involved in the education of the children. Holistic learning is also an advantage of choosing urban or rural space, as a wide variety of disciplines can be combined through this approach. You can use map and compass orientation activities, you can use different buildings to study history, art or architecture, and you can study geography by using maps and comparing them with the different elements that are found on the spot. One can easily study mathematics, arithmetic and geometry, comparing the different geometric forms that are identified in the socio-cultural environment. The new educations find their place in the space of the city or the village, because through the varied resources they offer, one can easily study nutritional education and health education. Nutrition education as well as the different
disciplines that are based on the health of the students, have become fundamental in the present century, because the problem of obesity and stress in children has become more and more significant.

Also the problem of healthy eating as well as different food groups, the nutritional values of the products are curiosities that appear in children with growing age. Students show a high interest in the different diets that would lead to optimal weight and a healthier lifestyle. Certain advertisements seen on TV or on the Internet raise more and more question marks about different food supplements and where they can be found. To this end, visits to pharmacies or naturalistic stores, to medical offices or to nutritionists, may be proposed to explain the uncertainties. There are areas in which the problem of drinking water must be studied in school-age students, because it can represent an interdisciplinary study material. The city or village has a lot to offer in this regard. We propose in this chapter the elaboration and materialization of the numerous activities that support the educational outputs and the use of as many of the places and the instrumental resources offered by the local community. Through education the individual is prepared in the sense of being viable also for the social life, making great contributions in this direction.

The outdoor environment, or the place where the outdoor activities take place, must be organized and chosen in such a way that it is efficient in its use. In this regard, it is proposed to go through some practical ideas, because in organizing the activities related to outdoor education, difficulties may arise in the sense of finding a suitable place. This depends on factors such as: number of participating children, size of available areas, weather conditions, lack of equipment or selection of the appropriate ones from existing ones, choosing natural materials or promoting some of them, establishing contexts or frames in which they will take place. Outdoor education can take place in multiple spaces, from school grounds to historical sites, from villages to cities, in local or national parks, residential experiences in the city or hometown, but also expeditions to other countries, providing a wealth of resources, educational resources waiting to be discovered. Each outdoor learning opportunity gives children and young people the chance to explore new places and share these experiences. Educators can show creativity in the use of local areas, which were not included in the plan made by the teachers.

According to the Scotland’s curriculum for excellence in outdoor learning, developed in 2010, there are some questions that help those planning such activities to make the right decision about choosing the most suitable place for learning. These are the following:

- What experiences and goals do the schools address?
- Who can offer guidance on the places available locally and nationally?
- What are the places frequented by other schools or centers?
- What are those places that can be accessed on foot, so that outdoor learning experiences are sustainable and systematic?
- Are the proposed learning contexts motivating enough for the students involved?
- What are the spaces that can be used several times to add essence to the learning process?
- What are the right places to visit in different seasons to reach different ends? (Curriculum for excellence through outdoor learning, 2010)

There are significant benefits to using the school or school grounds for learning. Usually these areas represent the first outdoor space that connects the school as a building and the outdoor area, providing quick access to planned or spontaneous activities, the connection between outdoor and indoor activities being facilitated and immediate. Becoming familiar with the concept of qualitative learning in school through outdoor education means offering opportunities to develop skills and confidence, which will allow the use of outdoor spaces in the future. Children and young people can develop a closer relationship with the school environment they belong to, both during breaks, with breaks, and during hours, by participating
in outdoor activities, without being interrupted. This is important, because the sooner you become familiar with the learning environment they belong to, the more educational experiences will be more effective. Students see the school grounds and courtyards as their own development space, and by using them they are offered opportunities to be administrators of their own learning environment. Although, in most cases, the school grounds were intended for physical education or sports, even breaks between hours, they can be adapted to other uses as well. In the Scandinavian countries, the design of these spaces is done together with the students, starting from their needs and desires, being consulted in this regard, even for the smallest details.

**The complexity of the resources used during the activities related to outdoor education**

The most difficult step in forming an educational routine that includes activities related to outdoor education is often the first step, namely the exit from the classroom. The initial planning and preparation very well done, can ease this process. There are some practical recommendations for making the preparation process as efficient as possible:

- Students should have on them all year long clothes and shoes for outdoor activities (made of waterproof but lightweight materials that allow free movement), these being stored on the school premises, always at hand.
- Teachers should initiate short outdoor sessions before lunch breaks, before leaving the students at home or in the morning upon their arrival, thus saving time by using fractions of activities, whether they are even spontaneous, thus accustoming students with spatial diversity and openness, compared to the variety of ways of carrying out educational activities.
- Students have prepared a kit with easily accessible outdoor resources, being always prepared for short outings, even if it is decided to follow a spontaneous outdoor activity.
- Conducting an assessment of the risk/benefit ratio together with the students of the class who will participate in outdoor activities, thus the informed and involved participants will be able to make better decisions regarding the risk management mode.
- Making some plans for a series of outdoor activities that are directly linked to the work done in the classroom with the participation of the students involved, initially keeping these activities short and simple so that the students get used to the gradual and easy work with the outside.
- Outdoor activities for beginners will be represented by different socializing or acquaintance games, carried out in nature, and then, after the students get used to the new environment, they will be followed by learning activities (Outdoor Learning Support, 2011).

Outdoor education increases the value of the equipment and tools used during the related activities, and transforms them into didactic means, they serve a well-defined educational purpose and motivate the attainment of proposed aims.

When preparing the activities, a good leader must foresee the entire course of the moments from which the learning process is formed. The curricular content pursued, the objectives, the aims, the constraints that might arise, the offer of the chosen external environment, but also the needs of the participants must be taken into account. As specified above, most materials are already in the chosen outdoor environment, and a good organizer chooses to supplement them by using other pre-prepared tools. As part of the activities related to outdoor education, students will be asked to choose the materials they need to carry out tasks themselves, usually through the gradual transition from using artificial materials to natural ones. It is expected that they will feel extinguished at first, denying in nature everything they think they need, but during the course, being put in a situation of not having everything offered by the educator, they will develop their creativity and make interesting correlations.

Therefore, there are materials found in nature, materials that complement those found outside and artificial materials that support learning from the outside. Natural materials, such
as sticks, stones, shells and leaves, are open, multi-sensory and irregular. These attributes can be used to create experiences that challenge children in a way that synthetic resources do not always succeed. In addition, they are often naturally available in the natural space. Usually, the educator chooses the space that he/she believes would best serve the purpose and where the most varied materials or tools are needed to solve the task. In a study proposed by the Scottish Government on outdoor education, it can be seen that students who were able to choose between a set of 5 cubes and a set of 5 stones to build a tower, recognize that the challenge is more great was represented by the work with natural materials, and these were the ones chosen by most of them. The questions that started were related to the level of challenge of the materials but especially what were the skills involved in completing the activity. There was also a follow-up activity, in which participants were taken to a place with a lot of natural materials and asked to think of a challenging problem or an investigation for a group of students, using only natural materials. The participants worked in small groups and shared their ideas with the whole group. (Outdoor Learning Support, 2011)

Similar exercises are beneficial because observations can be made regarding the roles of each participating member. The role of the teacher decreases significantly, because the students are the administrators of the space in which they work, choosing for themselves the materials with which they prefer to operate and especially those that facilitate their learning. The discovery and the experience is realized by the fact that the educator is put to organize his activity and not only to participate in it, thus increasing the independence, creativity, communication, critical thinking and especially freedom.

Materials such as stones, sticks, twigs, shells, are not uniform, so their use across different areas or disciplines helps in problem solving, critical thinking and communication development. In natural environments, such as forests or beaches with sand and rocks, the opportunities for using natural materials are part of the learning process and learning approach, as the scale and quantity of materials available increase. (Robertson, 2012)

Children should have the freedom to move different equipment from indoor to outdoor space to complete their learning process as they see fit. At the center of the planning of the physical environment must be ensured the existence of sufficient resources within the reach of the participants, especially if more children join than expected. In one of his studies, McLean demonstrated that the lack of educational resources often leads to conflicts between group members or even the unproductiveness of some. (McLean, 1991) Usually, in outdoor education, a list of materials required for each activity is required, so that there is an overview of what the activity involves for all involved. This does not mean that the list of materials is definitive, but it is desirable to supplement the proposed materials with others, found by participants on the spot.

**Ways of organizing and planning time in outdoor education**

In life, as well as in education, time has become a defining constraint. Everything has to be planned according to a defined amount of time, and each member participating in the educational process has to cope with the fast pace of each day in schools. I also know how they divide their time so that they succeed in completing everything they have set as goals, as well as for students who are exhausted under the weight of the disciplines they have to go through after a fixed schedule. Even breaks are scheduled per second, and at the sound of the bell the same process begins again in which students are asked to concentrate and work against time. This cycle is repeated endlessly, if we do not take into account the after-school hours where students have to give high performance and work without stopping. Homework is important, some students participating in meditations or other extracurricular activities, sports competitions or hours in which they can learn languages. Each teacher, in organizing the
instructional-educational activities must take into account the facts presented above, because there is a minimum and maximum number of hours allocated to the study for each age level.

The natural question that follows is about the place of outdoor activities in such a fixed and rigid schedule. Since outdoor education appears as a curricular discipline only in some educational systems in the world, the school institutions that want to implement it in the daily routine of the students, have to adapt the contents and timetables so that the outdoor activities are present as often in the education of the children. Students need a flexible approach to the schedule in that they have to participate as often as possible in learning or play activities with as few interruptions from teachers or time constraints. Participation in frequently discontinued activities induces the inability to focus on a particular task. Instead, if they are encouraged and aware that they have enough time to engage in certain activities, they become more motivated to persevere and complete the tasks they receive. Paley, in one of the studies conducted in this regard, observing the behavior of the students in the working class, concluded that the increase of the time allocated to free play led to more learning-oriented activities, because the students chose to get involved in educational activities, in exchange for the game, without anyone suggesting or inducing it. The students did not choose to use their time for frenetic play, but volunteered for learning activities that started out of curiosity and the need to know each one. (Paley, 1984)

Outdoor education together with its specific activities, due to the lack of space and time constraints, makes the educational-educational process more efficient. The participating students, not being pressed for time, succeed not only in completing the activity started, but in overcoming the barriers encountered, adding more value to the aims pursued, complementing them with new ideas, creativity and innovation. Outdoor activities are usually interdisciplinary and are not divided by hours, the activity having continuity even when returning to classes. The fact that students do not have to be in a fixed sitting position offers a new conception of time. The Early Years Foundation, through the specialists involved, argues that children need time to play and learn, and that practitioners need to be flexible in planning time so that students can pursue a well-defined interest, and if it is necessary, to allow them to come back later on a task. (Practice Guidance for the Early Years Foundation Stage, 2008) In terms of outdoor education, this can be translated into the fact that students do not have to stand in line and wait to leave for a particular activity, but they can use the outdoor space as an extension of the inner one. Teachers need to organize their time so that each content is covered, and the organizational problems are solved in the shortest time. In one of his works, Jago (Jago, 2002) noted that the more time they had, the more active the children were.

When organizing outdoor education activities, each educator must adapt the schedule so that the contents of each discipline from that day or from that time period can be found in the activity performed. Parents must be notified in advance to be able to prepare if it is a more elaborate activity. For spontaneous activities, there is not much training required in terms of time or content. Usually, the time will be organized so that the departure is made early, preferably in the first part of the day, so that the students have enough time to spend on the road but also at the selected place, and especially for the students to return to school until the end of the program. Parents should be notified if the children will leave the school, regardless of the duration of the activity that will be carried out in the external environment. As a duration, outdoor education can consist of short activities as a supplement to an hour, used as study strategies with a duration that can vary between 20-30 minutes, as a complex activity of 2-3 hours, in the form of organized workshops in which complex sets of objectives and goals are pursued.

Breaks are short periods of time, between class hours, generally intended for the students to refresh. They also serve to have a snack, to change the classroom, to talk with colleagues about extracurricular activities, to socialize and get to know each other better. The
breaks are too short to reach all the elements mentioned above. A report by the Nuffield Foundation described the fact that schools have been cut from breaks for children since 2006. (Batchford & Baines, 2006) University teachers and specialists in educational psychology argue that school authorities are trying to maximize time for instruction and minimize learning time. In countries such as Finland, following the educational reform, it is desired to minimize the number of hours and to maximize the rest periods, for the purpose of socialization and recreation. A tired mind cannot be productive. Studies show that there are European schools that offer students the opportunity to take part in additional activities during breaks, before or after school hours. An established benefit of this fact was that the activities made it possible to follow similar interest of the different age groups. In some institutions, students choose to participate in rehearsals or activities of the school choir. This type of activity has enriched the opportunities offered by educational institutions, thus ensuring the students' belonging to the culture and ethos of the school. Also through these activities, the standard of schools in society and their visibility in society increases. At the sport level, the physical activities performed with the class during free hours, have increased the children's participation in sports activities and competitions, thus developing their physical abilities and abilities.

With the advent of new technologies and intense social development, more and more students spend their breaks using smart phones, playing different online games or even checking social media. It is well to remember that every break can be positively benefited by the use of outdoor education activities. These can be realized in the form of workshops, creative workshops, sporting activities, trips, games or household activities, by involving different age groups. These bring new experiences to the child, place him in the situation of finding solutions himself or working with teammates to reach the desired result. As a result of these activities, the students get to love and respect the school institution they belong to, to be involved, even if they would normally be passive in the breaks between hours, to know their colleagues and form educational coalitions, integrating into different groups. In this way, the students will not feel supervised or over-controlled during breaks, but may be involved, at their choice, in different activities. As a result, the delinquency that often occurs due to boredom is observed, and students who were only spectators at the events offered by the bravest or the most popular, may also be participants in the social life of the social micro-group of the school.

Recent perspectives

The most unpredictable component of outdoor education is undoubtedly the weather and weather conditions. This should be seen as normal and operated so that students are not hindered in outdoor activities. Regarding the place chosen for the outdoor activities but especially the design of the area or the work surface, all possible changes of the time that may take place must be considered before engaging in activities. Weather conditions may include extremely low or high temperatures, rain, wind or excessive heat. As we have specified in the previous chapters, outdoor education does not require any force in terms of the degree of use of the related activities, but it comes as a learning aid and complementary to the classroom activities. No organizer of activities related to outdoor education requires attendance at these activities if the weather conditions are not favorable. However, no matter how good the organization may be, the weather may change instantly. It is the responsibility of the organizers to be prepared for such situations, with a well-defined backup plan, so that the participating students do not feel inconveniences and that they can continue their activity as efficiently as possible.

A first step in achieving these goals is to provide protection for the two extreme weather conditions, the cold and the heat. This can be made possible by preparing thick clothing stocks or sunscreen.
The second step can be to protect the space, or to prepare a backup plan regarding the retreat to a protected area of nature. When choosing the space for the activity in progress, the organizer will also pay attention to areas where he can withdraw with the group of participants in case of need. Mandatory, there must be a protected area with more trees or shrubs, regardless of where the activity is conducted. In the Nordic countries, there are areas for outdoor education, which contain wooden shelters, with three walls and a roof, which participants in outdoor activities can use regardless of the weather conditions. This is also the case when the activities take place in the school area, where the teacher must verify very well the environment in which he will work with the students, and decide according to the time of day, which space is best protected from the wind, cold or sun. An unfriendly environment in terms of temperatures, cold, shade or extreme wind can have negative influences on the concentration level and thus not lead to learning outcomes. Even if outdoor learning takes place in the closest environment of the educational institution, it must be protected by buildings or trees. In the case of choosing a forest, hill or plain area outside the city, students will not be able to concentrate on the task, but will struggle with the weather conditions, if the space does not provide protection against excessive heat. In Germany, the courtyards of educational institutions are built in such a way that they are suitable for outdoor education and spending time outdoors, being directed south to receive as much light as possible, but to have sufficient shade. (Bergard, 1995) An outdoor activity organizer checks the space both at the time of organization and a few hours before the activity, to ensure that the activity can be carried out without problems. Also, the land should be checked for not being too humid, which could lead to slipping or excessive dirt, accidents or the impossibility of being able to carry out the planned actions. (Biton, 2010)

In order to overcome the obstacles of the time, covered or protected learning areas are the best answer, because as such, students are not required to give up on outdoor learning activities, but can complete them regardless of weather conditions. Parents can contribute financially or materially if the school does not have the opportunity to create veranda areas for outdoor activities, by purchasing covers that can be used as needed. If an activity has already been planned, and is much more complex than going out around the school, it will be canceled until the safety is guaranteed on all levels.

Conclusions

On the bases of the theoretical approach presented above, as a conclusion, we are going to present the results of a short study, among the teachers from Arad County, on the way time, space and resources motivate the frequency of outdoor education activity use in preschool and primary school in three different geographic areas: rural, urban and urban periphery.

![Graph](image_url)

Figure nb. 1. The frequency of elements vs motivation in outdoor education activities

The results show that in urban areas, all three elements are at its lowest levels. This can happen because of the lack of spaces and natural resources. Time was the only element that
was higher than the other two, but comparing with educational institutions that are situated in the rural area or the periphery area, the levels are at their lowest. In the rural area, resources and space level are at its fullest, but time element is also pretty low, but at equal level with the one in the urban periphery level.

No matter the educational institution situated, it is important to have real management skills for all three levels in order to achieve the best results regarding outdoor education activities.

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