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THE EVALUATION OF OUTDOOR LEARNING ACTIVITIES IN PRIMARY SCHOOL

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Abstract

Outdoor learning has become an important part of modern education. It is used as an interactive teaching and learning method, which comes as a completion to formal education situations. It is mainly based on the development of transversal and key competencies, as well as the development of life-skills, which are the basics of modern educations systems and processes. Even if it is becoming more and more known and used in preschools and primary school, there are many unsolved questions about this topic. One of these is the matter of evaluation. Being of great value in the practical field, it is hard to find the right ways to evaluate the activities, the participants and the results. The main instrument used was the focus group, and it was realized among a number of preschool teachers and primary school teachers from Arad. Most of the interviewed teachers, had already been in contact with outdoor learning and its belonging activities but had questions regarding the evaluation methods and instruments they should use. This is very important because if there isn't a proper evaluation, the method may not reach the wanted finalities. Also, we have presented some of the most often used evaluation methods and instruments of outdoor learning.

Keywords: Outdoor education, evaluation, interactive learning, transversal competencies, life skills.

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1. Introduction

The society we live in, is in a constant process of changing. Generations of people come and go, and society's demands are becoming more and more numerous. A modern educational system is therefore under the pressure to cope with these social requirements, and to prepare young scholars, autonomous ones, able to make decisions and integrate and adapt easily to society. New times demand new people, and they must be trained in an open educational system to develop with society, or why not, to be one step ahead of its demands.

Rapid social development, technology, speed, and increased lifestyle add to the need for quality, pupil-centred education based on their needs and interests. This implies more rigorous training of teachers, the use of interactive learning methods to develop competences that go beyond the barriers known to date. Learning to learn, learning to be, competence to take decisions for oneself and others, communication, sharing, independence, collaboration, autonomy, innovation, initiative, creativity have become a 21st century must-have. A big critique of school in general is that the socio-emotional needs of children have been ignored, while their cognitive needs have been strongly emphasized ... it would seem that the role of schools is to educate good citizens. They should be friendly, cooperative, to the same extent as they are literate (Pellegrini, 1991).

Outdoor learning has become an important part of modern education. It is used as an interactive teaching and learning method, which comes as a completion to formal education situations. It is mainly based on the development of transversal and key competencies, as well as the development of life-skills, which are the basics of modern educations systems and processes. Even if it is becoming more and more known and used in preschools and primary school, there are many unsolved questions about this topic. One of these, is the matter of evaluation. Being of great value in the practical field, it is hard to find the right ways to evaluate the activities, the participants and the results.

2. Problem Statement

Although there are a multitude of activities through which the educational process can take place, too few teachers choose to use and adapt outdoor activities to their daily routine. Outdoor games as well as learning in the natural environment have ancestral origins around the globe. In educational units of the fundamental procurement cycle, nature was seen as a "raison d`être" and kindergartens and schools always had a secured outer space (Bilton, 2010). Nature has always been an environment conducive to learning, addressing all children's needs: social, emotional, physical, linguistic and cognitive. This environment should be available daily through activities, not just at young ages, but throughout the years of study. This does not necessarily mean adapting the whole curriculum so that it can only be done in the form of outdoor activities, but rather the introduction of such hours as a complement to classroom activities.

3. Research Questions

Evaluation is frequently discussed as if it were a separate education entity. Moreover, the assessment of transversal competences raises some questions because they are based on attitudinal and behavioural changes, which are often difficult to verify and especially quantify in current education

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systems, where great emphasis is still placed on verifying knowledge. In order that the educational evaluation to be valid, its interdependence with its associates - curriculum and pedagogy - must be understood. The evaluation not only gives information to the educational process, school and teachers, students and parents, but also reflects the educational objectives, as does curriculum and pedagogy. A learning situation that facilitates the development of pupils' skills involves their sequential, gradual involvement in the following types of activities:

- Exploring the resources made available through learning
- Internal and external action
- Interaction for research, analysis and understanding
- Engaging in reflexive activities
- To deal with new, problematic situations
- Structuring new acquisitions
- Co-evaluative activities
- Integration into transdisciplinary contexts
- Creating meaning
- Preparing the transfer possibilities (Roman, 2014).

Because of the fact that outdoor education is grounded mainly on the development of transversal competencies, the evaluation of outdoor learning activities will be done according to the criteria that we take into consideration when we evaluate competencies.

4. Purpose of the Study

The society is changing very fast, so education has to keep up with its requirements. Pedagogy has to be a science that is also looking forward in order to identify the establishments of an unconventional learning, to prepare new generations to deal with future situations and unpredicted events. Integrated learning, transdisciplinary and innovative learning methods based on information techniques, learning for a knowledge society, learning based on aspirations and yearning of young students can be themes for the science of education. In the same time, pedagogy has to retain its rank as a science, with persistent care to sustain its basic and also its terminological coherence, so as the core science status capable of theorizing the aspects of humanity into the general evolution of every person (Ilica, 2013).

Transversal competences are acquisitions of value and of attitudes that work beyond a specific sphere or study sector and are presented through these elements: professional development, autonomy, responsibility and social interaction. These are capacities that transcend the specialization of evaluating public policies and programs and are of a transdisciplinary nature: teamwork skills, oral and written communication skills, respect and development of professional values and ethics, IT use, problem solving and decision making, recognition and respect for diversity and multiculturalism, learning autonomy, entrepreneurship and initiative and willingness to learn for the whole life (Stevahn, King, Ghere, & Minnema, 2005).

Transversal competencies can form: teamwork skills, communication skills and critical thinking skills, use of information and communication technology - ICT, problem solving and decision making, interculturality skills, independent learning, entrepreneurship, respect and development of professional

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values and ethics, ability to work in an interdisciplinary form with strategies and themes that are part of the real and social sciences or the field of artistic creation. According to the same skill grid "Evaluation of Public Policies and Programs" within the project "Development of a Professional Evaluation Community", a structure of the transversal competencies was made as follows: role transversal competencies, autonomy and responsibility (application and compliance with standards, ethics and demonstration of honest and conciliatory behaviour), social interaction (practicing a communicative, participative, responsible, equitable and inclusive working style, assuming roles and leadership functions of professional groups or institutions), personal and professional development skills (self-control of the teaching-learning task, diagnosis of educational requirements, reasoning investigation of own competent motion).

According to the 2016 transversal competency assessment paper (Care & Luo, 2016), the problem of transversal competences starts from a brief description of them, and then describes their main forms of assessment. The description of transversal competencies can be made according to the above mentioned authors, based on the same document, as follows:

- Inter-personal skills
- Intra personal skills
- Critical and innovative thinking
- Intercultural citizenship spirit.

We are looking for innovative methods to meet these educational ideals, encompassing and fulfilling the transversal skills described above. New times call for new methods that are appropriate for achieving these goals. No new results can be reached using the same steps. Modern pedagogy must be adaptable and innovative in this respect through the use of new education and sustainable learning methods.

5. Research Methods

The introduction of cross-curricular competences into education systems requires a change in thinking about how they are taught and how learners learn. Evaluation can drive this change. Educators take into account active instructive approaches that may be more appropriate to develop skills and aptitudes, curricula being reformulated to be required to demonstrate understanding and application of knowledge, and assessment methods should be designed to support these practices. Measurement of behaviours and changes taking place in this regard as well as attitudinal changes and innovative spirit can be measured first by observing students who participate in activities where they can be active and can be actively involved either in the classroom or outside of it, by granting the maximum freedom in choosing the desired theme, but also by accessing resources to support it. Subsequently, individual value comparisons can be made between the initial and the latter aspects of the participants.

There are very few instruments based on research that reflect innovative responses to the requirements of cross-curricular competences assessment used in education. Although there have been intense skills assessments such as solving problems efficiently (OECD PISA), and problem solving through collaboration (Griffin & Care, 2015) and the skills of information and communication technologies (ECDL, 2016; Claro et al., 2012; Fraillon, Ainley, Schulz, Friedman, & Gebhardt, 2014) on

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a large scale, in the education field, other competencies didn't get this kind of attention. Most attempts to measure the social side, or transversal skills, such as communicating, socializing, self-control, and so on, have appeared in the field of psychology. Other, such as organizing skills, collaborating with others and team-work, have appeared in the human resources environment or in the field of organizational psychology. These attempts of measuring have primarily focused on diagnosing interactions or professional routine rather than approaching education or development. These tests related more to the cognitive part of transversal skills, such as problem solving, which already has a developed framework. (Polya, 1973) Large-scale applications for the assessment of inter-curricular problems are not sufficient evidence.

Transversal competences are based on concepts, theory and psycho-educational practices. This is part of the provocation of modern educational systems, namely how to integrate into education, the assessment of capacities that existed in specialized or clinical programs rather than in basic educational policies. (UNESCO, 2015)

Evaluating outdoor learning activities and through them the changes in the acquisitions of cross-cutting skills can be achieved from several perspectives:

• From a quantitative perspective (the type of materials used and the number of actors involved)

• From a qualitative perspective (the extent of the pupils' involvement in the activity and the multitude of acquired skills)

• From the perspective of valuation methods and tools used (questionnaires, organization of focus groups, discussions, interview, observation or debates)

• From the feed-back perspective (receiving an overview of the participants' opinions, either positive or negative)

Usually feedback from outdoor learning forms a circle around it, starting from identifying ideas, planning activity, setting practical details, identifying risks, running the activity, evaluating the results, and new needs are identified.

Observation has a defining role in the initial, final, and final assessment of outdoor learning activities. Using this method, various student behavioural problems can be identified, their mode of action being relevant in identifying aggressive behaviours or integration issues.

Systematic observation of student behaviour during didactic or non-formal activities is an evaluation technique that provides useful information that is difficult to obtain through other methods or forms of assessment. This method seeks to educate learners in their knowledge and capabilities. There is talk, listening, performing experiments, drawings, dances, musical or sports skills. It also counts on behaviours that relate to the attitude toward doing an activity, such as planning efficiency, efficient time use, and the use of equipment in the right way. Observing those behaviours that address social behaviours or social attitudes such as perseverance, self-confidence, initiative, creativity, concern for the well-being of others, respect for the law, for the goods of others, sensitivity to social issues are very important in the development unitary of the individual. Nor do they look at behaviours regarding the development of scientific attitudes, such as openness to curiosity, interest in different educational, scientific, aesthetic, vocational, leisure, cause-effect relationships. Observing some characteristics of satisfaction and

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appreciation for nature, art, reaction to criticism and praise, respect for the authority of the teacher, emotionality and social adaptation (Stoica, 2003).

As tools or instruments used to record the information gathered following systematic observation, the evaluation sheet is used as a quality data collection tool, classification scale and control list. In the case of the evaluation sheet, factual data are reported on some important events in relation to pupils experiencing difficulties. It should be noted that observation will be limited to a limited number of behaviours. The classification ladder brings together students' behaviours according to a number of categories according to Likert's scale: never, rarely, occasionally, frequently or always (Stanciu, 2003). The checklist is similar to the classification scale, but it records whether a feature or action is present or absent. Answers of yes or no type are used (Stoica, 2003).

Transversal competencies can also be measured using formative assessment. It attests to the evolution of knowledge as opposed to the normative one attesting the conformity of knowledge with a certain norm. This type of assessment can be a veritable practice different from that of the normative assessment if it complies with three principles: the principle of stable states, the principle of equivalence and the principle of irreversibility. The first principle relates to temporarily stabilized knowledge, the second recognizes that there is no cause-to-effect relationship between the initial knowledge and the knowledge produced, and the latter considers any knowledge produced as a future initial knowledge and, at the same time, a breakthrough to prior knowledge (Meyer, 2000). The success or failure of an outdoor activity is measured by checking the expected effects by:

Questionnaires applied to both the teachers involved and the pupils according to the profile of each participant, using closed questions to make a quantitative assessment as well as open questions to perform the qualitative assessment of the activity. Open questions will be formulated on the degree of engagement in activity, motivation and measures or proposals to improve future activities. Closed questions may be relevant if they are formulated in particular, including the number of participants, the resources used, the disciplines involved, and the type of activity.

Complex questionnaires addressed to parents of participating students because they can provide an overview of observed behavioural changes. Through this tool, permanent contact with them can be maintained by providing valuable information on the future activities of their children.

Free and interactive discussions with all the actors involved. The Activity Coordinator can collect useful information on the level of involvement of students if during these interactive discussions engage each participant to be involved in the discussion and give them the opportunity to ask questions and express themselves on the work done (Consiliul…, 2012).

6. Findings

In our research, the main method used was the focus group, and it was realized among a number of preschool teachers and primary school teachers from Arad. Most of the interviewed teachers, had already been in contact with outdoor learning and its belonging activities but had questions regarding the evaluation methods and instruments they should use. This is very important because if there isn’t a proper evaluation, the method may not reach the wanted finalities. There had been 4 sessions of focus group, where the main theme was the evaluation of outdoor learning activities, but being known that it belongs

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to the category of activities that are based on the development of competencies, the first meeting was about the measurement and grading of those activities that develop transversal and key competencies, and also life skills.

The preliminary results show the following: (Figure 01)

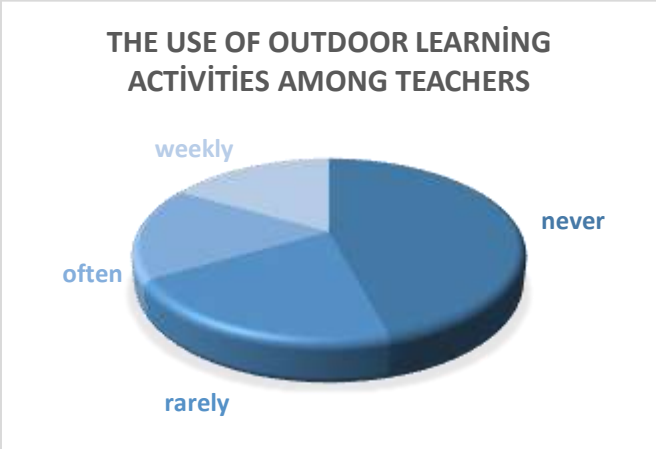

Figure 01. General use of outdoor education

From a number of 24 total participants, preschool and primary school teachers, 11 of them never use it with their classes, even if they know the benefits of it, mainly because they don't actually have the knowledge on how to evaluate the activities in an objective manner. A number of 5 teachers, claim that they use outdoor activities rarely, because the lack of time. An even number of teachers, say they integrate outdoor learning in their weekly activities and often, without being sure if they have a methodologically correct evaluation or not, but they continue using it because of its benefits.

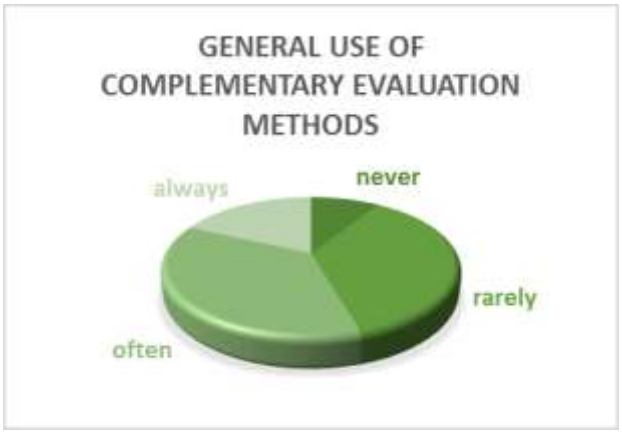

Figure 02. The use of evaluation methods

Further results show (Figure 02) that, even in the daily activities, teachers don't use modern, complementary evaluation methods and instruments, because they consider the results as being subjective and hard to explain to parents or even to themselves.

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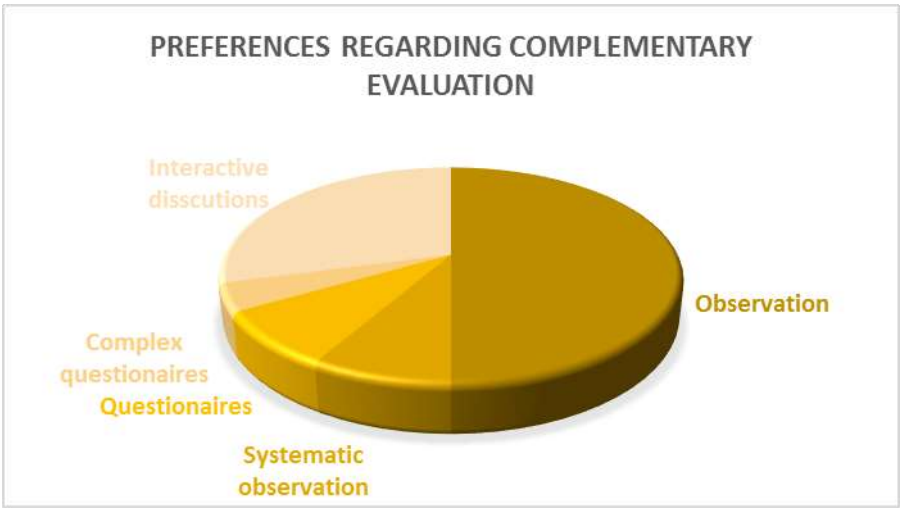

Figure 03. Preferences in the use of complementary methods and instruments

When teachers were asked about their preferences regarding complementary evaluation, they answered that most of them used observation because they didn't know very well what else they could use. Also, they claim that they don't know how to collect the results and how to use them in a fruitful way. Interactive discussions are on the second place in the rank of preferences, because it is used as formative evaluation and gives immediate feedback. Questionnaires and systematic observation are at equal place in the preferences of teachers. Questionnaires are easy to make but it is more difficult to use at younger ages. Preschool teachers, don't use it that often, but in exchange they claim that they use systematic observation and they collect data in a personal portfolio of the preschool children. Complex questionnaires are very rarely used, because in preschool and primary school it is hard to have a valid result, given being the fact that children don't know how to read yet (Figure 03).

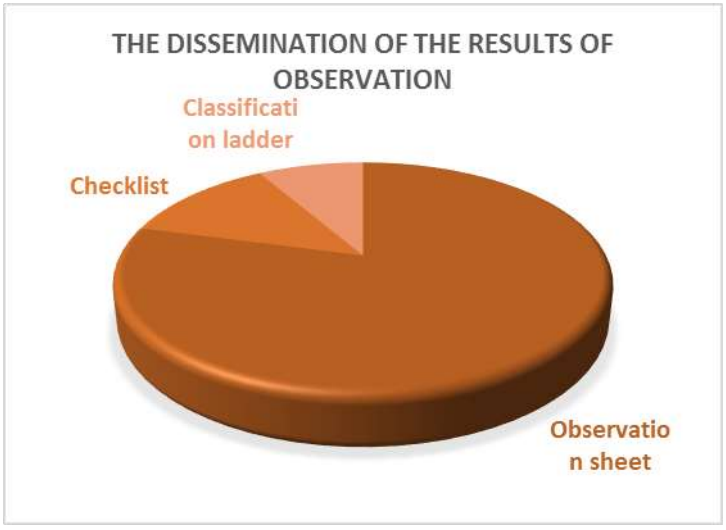

Figure 04. Ways of collecting and using the results of observation within teachers

When we were talking about practical ways of disseminating results of observation in the focus group meetings with the teachers, we have noticed that most of the teachers weren't aware of the valid

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instruments they can use in order to have objective individualized results. Preschool teachers claim that they simply write down what they observe in a notebook but have never used the results in any ways. Primary school teachers, admit that even if they use observation in their daily activities, they don't even write down the results of their observation, but simply try to remember all the facts and behavioural changes they notice in students, in order to decide if an activity is useful or not for the development of children. After getting to know more information about practical ways of writing down and using information they gathered from observation, teachers said they think the most practical and fast of all is the observation sheet. On the second place there is the checklist, which would only be used by 3 teachers of 24. Only 2 teachers consider the classification ladder as being proper to use in primary school and preschool (Figure 04).

7. Conclusion

There have been discussions about other useful ways of the evaluation of outdoor learning activities. One of the modern complementary methods that can be used that has been discussed and suggested by teachers during the focus group meetings, as a completion to those already put into discussion, was the self-evaluation. Self-evaluation helps students develop their self-knowledge skills, to value them both knowledge and attitudes and also behaviours. Students need to know each other. That will give self-confidence and motivate them to improve their school performance. The students get to evaluate their own capabilities by learning first to appreciate their results in their work learning. For this reason, self-evaluation ability is very important for training at pupils of realistic images of their possibilities and limits. The teacher will help the students to develop their self-assessing capabilities, to compare their level of achievement with educational objectives and standards and to impose its own learning curriculum. Self-evaluation is the student's assessment of what he has accomplished and / or its behaviour. Co-evaluation is carried out by several students. The formative character results from the fact that it provides the student with a methodological guide about learning and an instrument of motivation and accountability.

Teachers claim that self-evaluation is not only a modern complementary evaluation method but it is also proper to use in the evaluation of outdoor learning activities. It gives immediate feedback, not only to the evaluator but to all those who are implicated in the process of learning. It is a great way to reflect and measure the developments. Teachers also suggested instruments that can be developed and used with this method, instrument used and created by teachers and also instruments created by pupils to check their own evolution. Teachers can create sheets with simple phrases regarding the activity, feelings, personal development, reflection, or even simple scales, from one to five, where they can express easily how they feel about the activity and even the cognitive acquisitions they have earned during the activity. Classification ladders and self-rating grids can also be used. The questionnaire is also a useful instrument:

- By solving this task I learned: .....
- Difficulties: ....
- I think I could improve my performance if: ....
- The things I liked about this activity were: ....
- Activity can be appreciated with the .....

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The information obtained is compared with that of the teacher, it is placed in the pupil's portfolio and is periodically presented to parents. Using this method, teachers and students can get immediate feedback.

Combination of written and oral evaluation tools with methods of complementary assessment will ensure the achievement of a global image of pupils' capacities. The issue of evaluation methods remains open, and can be continually improved and diversified. The common goal, which must be taken into account, is to develop a self-evaluation capacity in pupils, while changing the vision on the role of evaluation, improvement and correction more than sanctioning

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