

OUT-OF-SCHOOL LEARNING IN HUNGARIAN PRIMARY SCHOOLS

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In recent decades, out-of-school learning has received increasing attention among teachers, researchers and education experts throughout the world. Unlike the United Kingdom, Hungary is one of the countries where education policy has not integrated out-of-school learning (OSL) into public education. Neither does Hungary have a network of outdoor learning centres assisting and complementing public education as in Scandinavian countries. This is not to mean that Hungary has no suitable natural or built environments – we have several national parks, educational trails, zoological gardens, museums, etc. and student science centres are being built throughout the country. That is, there is no problem with the supply but how about the demand? It is of crucial importance to map it since in the absence of education policy support, it is mostly the teacher and headmaster attitudes towards the applicability and educational use of out-of-school learning on which the participation of school groups hinges. Therefore in 2016 an online questionnaire was sent to Hungarian primary school students, their class teachers and schoolmasters as a part of a complex OSL research project. Data were collected through the Electronic Diagnostic Assessment platform from a total of 4892 participants with the students being in Grades 3 to 8. The aim of the research is to discover (1) how often, for what reason and in what form primary schools make use of OSL places and (2) what aspects of the out of classroom programmes participants consider to have the greatest educational effects. The results suggest that both teachers/headmasters and students find OSL programmes useful and enjoyable in several respects. However, students very rarely have the opportunity to participate in such activities. A second problem is that when students do participate in a programme, they tend to have a passive role as a spectator, which carries little educational value.

Keywords: Outdoor Education, Non-formal Learning Environments, Primary School

THEORETICAL FRAMEWORK

The most worrying problem of the Hungarian public education system is the steady decline in students' motivation and learning attitudes, especially in unpopular subjects such as physical science (Csapó 2004). In addition, our students' science performance is getting worse both in national and international surveys (OECD, 2016). Education policy has to find a solution to these serious problems, and one way forward could be the broadest possible involvement of out-of-school (OSL) places in formal education, since the effectiveness of these has been demonstrated by several studies (Eshach 2007; Rickinson et al, 2004). We do not, however, have any empirical data providing an overall picture of the situation of OSL in Hungary. Our multi-step mixed-method research project undertakes to fill this gap by looking at curriculum-based and formal teaching sessions held outside the school but organized by the school. Table 1 shows our research structure. Based on the results of international surveys (Orion & Hofstein, 1994), the second phase of the research is organized around three measurement points.

Table 1. The structure of the Out-of-School Learning Research

Study	Sample	Tools	Date
Large-scale	Headmasters (N=76)	Organization Structure of the School	May – June 2016.
	Teachers (N=119)	The Use of OSL Spaces Questionnaire	
	Students (N=4697)	General Attitudes toward OSL	
Small-scale	Observers (N=2/OSL programme)	Measurement diary Measurement scale	Sept 2016 – May 2017. Pre-test – post-test – delayed post-test
	Teachers (N=2/OSL programme)	Attitudes Toward Specific OSL Programme	
	Students (N=20-30/OSL programme)	Knowledge test Mind map Attitudes toward Specific OSL Programme Field report	

Combining Orion & Hofstein's (1994) and Eshach's (2007) models, our research model focuses on five factors influencing the affective and cognitive effects of out-of-school programmes: (1) personal (e.g., a student's prior knowledge and attitudes); (2) physical (e.g., the duration of the programme); (3) social (e.g., social interactions); (4) didactical (e.g., embeddedness in the curriculum) and (5) instructional (e.g., the introduction to the programme). The online questionnaire explores the effects of the didactical and social factors, while the remaining three domains are investigated using the small-scale study. The main aim of the research is to discover (1) the frequency, reasons and forms of primary schools participation in OSL programmes; (2) student, teacher and headmaster attitudes towards OSL in general and in relation to specific places (see Table 2); and (3) the added educational value of OSL activities in participating students' affective and cognitive learning processes. The current paper presents the results of the large-scale survey exploring Research Question (1).

METHOD

The data collection was carried out between May and June 2016. Participants included students in Grades 3 to 8, their class teachers and schoolmasters from 76 Hungarian primary schools that volunteered to participate. The sample was restricted to schools in which at least one class participated in at least one out-of-school activity during the school semester preceding data collection. The online questionnaire was administered via eDia (Electronic Diagnostic Assessment) system (Molnár & Csapó, 2013) in the schools' ICT rooms. Table 2 shows the three sections of the teachers' questionnaire. The schoolmasters' and students' questionnaires were similar.

Table 2. Structure of the Out-of-School Learning Survey for teachers

Structure of the Questionnaire	Number of items	Sample items
I. Organizational Structure of the School	7	What type of institution is your school? What kind of employees are supporting the education in your school?
II. The Use of OSL Spaces Questionnaire		
A. The Use of OSL Spaces	5x10*	How many times did an average class visit the location during the last school year? What was the main topic of the OSL?
B. Attitudes toward Specific OSL Programmes	15x10*	In your opinion, how useful was the OSL to achieve the following aims? (social experience, cultural heritage etc.)
III. General Attitudes toward OSL		
A. The OSL programme as a learning tool	12	Learning in the classroom is more effective than learning during an OSL activity.
B. Individualized learning as learning method during OSL programme	3	OSL raises students' interest and encourages them to search for additional information in the literature.
C. The social aspect of OSL programme	12	OSL helps to boost class spirit.

*: The 10 OSL spaces mentioned: (1) zoo, wildlife park, sea life centre, (2) botanical garden, (3) factory, (4) library, (5) laboratory, (6) museum, art gallery, (7) theatre, (8) field trip, national park, (9) science centre, (10) other.

SELECTED RESULTS

The data were analysed using SPSS; descriptive statistics and correlations were computed and factor analyses and t-tests were performed. The most frequently visited places for out-of-school activities were theatres and concerts (2697 mentions by students) with educational trails/national parks (2212), museums/art galleries (2145) and libraries/archives (2066) not far behind. The least popular places in the student questionnaires were science centres (794) and laboratories (848). The classes participated in an out-of-school programme 1-2 times on average during the semester. 34% of the OSL activities took place as a part of the annual class trip. The second most frequent occasion (19%) was the subject matter of a given school subject. The remaining seven reasons for organizing the programme (further education, school project, after-school club, reward, competition, outdoor learning week, field work) applied to 47% of the activities. The most frequently used methods of instruction and

learning were presentations and guided tours (24%) followed by group work (22%). Other recurring forms of activity were individual work (15%) and competition (12%). The least frequently used methods in out-of-school programmes were games, project work, experiments and debates. Most of the programmes were in connection with science (6384 mentions) and the environment (4403 mentions). The all 3 samples considers, that OSL is the most useful in students' social experiences ($\text{mean}_{\text{teacher}}=3.79$; $\text{mean}_{\text{headmaster}}=3.75$; $\text{mean}_{\text{student}}=3.36$, where value 1 was 'I strongly disagree' and value 4 'I strongly agree') and in acquiring new knowledges ($\text{mean}_{\text{teacher}}=3.78$; $\text{mean}_{\text{headmaster}}=3.74$; $\text{mean}_{\text{student}}=3.25$) while the least effective domain is the developing manual skills ($\text{mean}_{\text{teacher}}=2.64$; $\text{mean}_{\text{headmaster}}=2.60$; $\text{mean}_{\text{student}}=2.70$).

DISCUSSION AND CONCLUSIONS

Since our sample is not representative, we cannot generalize the results to the entire country. We can, however, draw conclusions as to specific problems. The data show that our hypothesis was correct: we can only speak about local school initiatives rather than about a national trend, since the classes visit the OSL places just once or twice a year on average. Looking at the responses of headmasters and teachers, the main cause appears to be an over-demanding curriculum, which leaves little room for out-of-school activities. Other problems include financial constraints and difficulties organizing such an event. OSL programmes are most likely to be organized in the context of the annual class trips, which typically have relatively low educational relevance. More promising are activities organized in connection with the subject matter of a school class and after-school clubs. The most frequently used teaching and learning methods in an out-of-class visit were presentations and guided tours, i.e., not student-centred methods. But if we look just at the remaining methods, the picture looks more positive: in 76% of these cases active learning methods were used. On the whole, the results suggest that both teachers/headmasters and students find OSL programmes useful and enjoyable in several respects. However, students very rarely have the opportunity to participate in such activities. A second problem is that when students do participate in a programme, they tend to have a passive role as a spectator, which carries little educational value. Maybe that is the reason, why students' attitudes toward OSL programmes' effect on their learning motivation and science learning are significantly lower than teachers' and headmasters', opposite our hypothesis. With the main difficulties mentioned by teachers and headmasters overcome and with support from education policy, out-of-school learning could become a worthy addition to classroom learning.

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