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EXPERIENCING HERITAGE THROUGH OUTDOOR LEARNING: AN ERASMUS+ FRENCH AND ROMANIAN STUDENTS' PERSPECTIVE

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Abstract

This article sheds light on how nonformal learning approach is needed to promote heritage education within the Romanian and French learning process. Thus, this paper presents findings from a European study conducted during an Erasmus+ project on preserving National Heritage. The study aimed at pointing out the French and Romanian youngsters' perception about the importance of various outdoor heritage activities in the context of globalization. A survey research based on mixed research methods was administered to both Romanian and French pupils. The survey was conducted to collect and analyse data about the students' perception of experiencing nonformal education so as to learn about heritage and different cultures. Data analysis and interpretation were carried out by using Sphinx Lexica program through a Principal Component Analysis (PCA) method, as a multivariate analysis based on geometric interpretation of the multiple relationships between the variables to be studied. Thus, relationships between students' experiential learning activities, their involvement in a European project and their interests in studying about national and European heritage were identified. Findings revealed that there is a students' strong demand of promoting cross-cultural outdoor learning activities, and further Erasmus+ projects on heritage. Results also inform new curricula developers, and spur further educational research.

Keywords: Erasmus+, French and Romanian, heritage, nonformal learning, youngsters' perception

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1. Introduction

This article addresses the need of a contextual shift in the European curricula in order to bridge the gap between school, society and sustainability principles or practices in the Anthropocene Era (Steffen et al., 2007), whose arrival was announced by Morin (1999), and whom Nicolescu (2016) named The Panterrorism Era. Hence, educators have to equip students with knowledge, skills and emotional competencies to help them reach wellbeing and be resilient. Therefore, promoting Progressive Education for Sustainability is the backbone of the contemporary education success (European Commission [EC], 2019). Or, Heritage Education is one of the key elements for implementing and sustaining Sustainable Development Goals [SDGs] in Europe, as past and recent research (European Commission, 2017; European Commission, 2019; European Commission, 2021) has shown. However, implementing a successful heritage education implies a change in the learning strategies. Obviously, the Outdoor Innovative Learning Environment (OILE) is an experiential learning pathway to the implementation of National Heritage learning in the curricula. Furthermore, the main EU's pedagogical tool, pillar of education policy, and source of funding to promote Outdoor Education (OE) remains the Erasmus+ Programme (EP), which was grounded in 2013. Henceforth, the EC often financially supports the outdoor learning activities which rely on promoting heritage education via the Erasmus+ project between only European schools. As a result, the Erasmus+ project, named Preservation of National Heritage through the eyes of pupils of secondary education (European Commission, n.d.), which emerged from the partnership between the Romanian Romulus Ladea Fine Arts High School in Cluj-Napoca and the Sainte Jeanne d'Arc High School in Gourin, France, took place from 2017 to 2019. This project was carried out together with another three European schools, e.g., a German school, a Hungarian high school, and a Spanish one, respectively. Hence, key bridges were built between schools across Europe by experiencing heritage through extracurricular learning activities.

2. Problem Statement

2.1. An overview of the EP

The primordial goal of the EP is to connect students to the real-life experience through rising awareness on the complexity of the European societies, cultures and civilisations, under the slogan "Enriching lives, opening minds" (European Commission, 2017). One of the most successful project implementation approach of the EP is "through non-formal learning activities, which aim at enhancing the skills and competences of young people as well as their active citizenship" (European Commission, 2017, p. 5).

Therefore, all Erasmus+ courses and learning activities based upon Outdoor Education (OE) are designed to equip teachers and other education staff with basic educational skills. Thus, educators will be able to set off a wide range of team building exercises and outdoor knowledge-sharing workshops, challenging problem-solving games, experiential activities in nature, on school sites, in local parks, as well as in urban settings (European Commission, 2021).

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As a matter of fact, teaching OE during each Erasmus+ project between schools is a major task which aims to promote sustainable education by means of a large array of nonformal learning activities as follows: numerous joint learning, teaching, training activities, students' travels abroad, extracurricular leisure activities and out-of-school study trips between peers (European Commission, 2021).

2.2. Epistemological insights into outdoor education. A heritage-based learning approach

Some scholarly studies trace the origins of the concept of OE to different kinds of school trips or to school camp activities dating from the 19th century. At first, they were organized in Italy, Germany and France.

Then, OE was in fact implemented worldwide through two school systems. On the one hand, it was Kurt Hahn's ingenious idea to create the Outward-Bound School in 1941 (James, 2000). These schools were designed as survival and practical learning pathways. Their major goals were to teach youngsters to be honest, helpful to the community, moral and hardworking via coping with real-life problems. On the other hand, the second outdoor worldwide recognized school system, which stems from the first one, was called "Expeditionary Learning" (Hanford, 2015, para. 1). The first expeditionary school was opened in the United States in the nineties.

These outdoor learning activities aimed at "promoting valuable new learning strategies so as to nurture children learning outcomes" (Theodorou & Karakatsani, 2007, p. 14). This approach is in line with the theories of learning described by Rousseau (1762), Piaget (1962) or David Kolb (1984).

The term of outdoor education was coined in 2000s, by the Organization for Economic Cooperation and Development (OECD, 2009). Furthermore, OECD also coined the concept of Innovative Learning Environments (ILE). Hence, OILE deals with outside areas of the school grounds design in schools as a way to contribute to improving learning (Afshar & Barrie, 2020), as well as with the open-air educational contexts. This out-of-school education has plenty of benefits for children's health (Cosco et al., 2014), who are "growing up green" in a challenging "outdoor learning environment" (Moore & Cosco, 2014, p. 168), which belongs to world's heritage.

From that perspective, both OE and heritage-based education are based on the triad of experience, community of practice-learning, and a retroactive productive mechanics of co-constructing new knowledge in the logic of the learning cycle of Kolb (1984). To sum up, formative experiential learning activities will be prioritized and carried out as special events within specific community of practice (Verquin Savarieau, 2017). Obviously, OE involves an active learning pedagogy, whose aim is not only to enrich students' real-life learning experiences focused on their both social and personal fulfilment (Bocoş et al., 2020), but also to master long-life learning skills in the long-run, i.e., the modern technological competencies. Thus, "technological developments in highly sophisticated outdoor "hardware" (Payne & Wattchow, 2008, p. 26) can also be included in our future common heritage learning subjects.

In short, as previously stated, there are multiple dimensions of OE, which also underpin the heritage-based education, and in specialize literature it is common to find

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- the natural or ecological outdoor education, including even open-air schools which addresses children's "educational and architectural venture in Twentieth-Century Europe" (Châtelet et al., 2003, p. 3);
- the social OE, which "involves people living together" so as to develop "active citizenship and participation" (Jeronen et al., 2017, p. 23); and
- the pedagogical engineering perspective of OE, which summarizes the educational main learning goals of OE, including "specialized areas of learning and transdisciplinary teaching projects" (Theodorou & Karakatsani, 2007, p. 19).

In the education field, the Romanian Law of National Education (2011) stated that learning in non-formal contexts should be seen as an "integrated learning in planned activities, with learning objectives, which do not explicitly follow a curriculum and may differ in duration […]" (p. 239). Research shows that nowadays OE is not only seen as an essential part of non-formal education, but it also presents an interface between informal or even formal education based upon complementarity (Riese & Vorkinn, 2002) inside a complex cultural relationship, as past research (Hannerz, 1992; Nielsen, 1993) has pointed out. Accordingly, non-formal education encompasses "all actions organized intentionally, systematically, carried out in an institutionalized framework, but outside the education system, in institutions which do not have an explicit educational destination" (Bocoş & Jucan, 2008, p. 16). These educational actions can be achieved within the framework of both after-school or extra-curricular programmes through diverse outdoor learning activities, i.e., field trips, study trips, travels, leisure learning activities, etc. Most of them can be easily adapted to the heritage education as well. Likewise, learning in the outdoors meets the need for "mobility projects in the field of education, training and youth [...] workshops, exercises, debates, role-plays, simulations, outdoor activities, etc." (European Commission, 2017, p. 13). Moreover, many educational practices in northern Europe are now relying heavily upon living in the open air (Rigolon, 2010).

In a nutshell, there are important experiential and collaborative strategies that yield outdoor learning activities, e.g., adventure and outdoor recreation trips, outdoor expeditions or environmental trips, as past research (Jeronen et al., 2009; Palmberg & Kuru, 2000) has shown. Several good features of outdoor learning activities have also been coined in The French Education Code (2020), which is currently promoting nonformal learning activities, e.g., round-trip journeys, leisure activities, and out-of-school study trips. Hence, OE will foster both learners' "creative imagination, creativity, the sense of responsibility and positive thinking" (Catalano, 2014, p. 548).

In addition, outdoor-based learning may be spontaneous or organized and it refers to three main social settings, which exploit sociological phenomena, as follows: professional milieu, parents' environment, and the existing phenomena of the public sector, as recent research (Păun, 2017; Suoranta, 2000; Şerban, 2014) has demonstrated. Thus, dealing with both heritage learning problem-solving and real-life problems will also be amplified.

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3. Research Questions

While participating in an Erasmus+ project European, youngsters are being given the opportunity to both learn about the European transnational identity in diversity, and to break prejudice via experimenting new outdoor learning pathways.

Therefore, this study mainly aims at identifying and describing the French and Romanian perception of the useful out-of-school teaching learning methods in contemporary curricula to be implemented in heritage education.

From this standpoint, the study is guided by the following main research questions:

1. What are the French and Romanian youngsters' favourite extracurricular outdoor learning activities?

2. Which kind of outdoor activities in France and Romania are fostering the heritage-based learning outcomes in the participant students' view?

3. What kind of relationships are between nonformal activities, participating in an Erasmus+ project and increasing the students' interest in studying about national heritage?

To get answers to the research questions, we analysed and described the perception of the French and Romanian students on outdoor learning activities in the heritage learning process, via a European study survey. This study was based on a survey research design, and it was conducted during an Erasmus+ project on preserving National Heritage in the school year 2017/2018.

4. Purpose of the Study

This paper investigates the question concerning the perception of heritage education by the French and Romanian students of secondary education in the light of OE as a pathway to experiential heritage learning. Hence, the aim of this paper is to identify the French and Romanian students' need for new learning activities in the outdoors for promoting heritage education in different learning contexts.

This study explores OE from an ethnographic perspective. Its main aim is to investigate French and Romanian pupils' opinions and awareness about practising OE through putting "an emphasis on understanding the perceptions of the heritage-based learning through outdoor learning activities". From this perspective, Cormier (2017) stated that it is in the outdoors that children's social and cultural networking through experiencing will be boosted. Thus, pupils will also be taught to live together, and to break prejudice

Thus, the study survey focuses on finding the European youngsters' perception of learning about European cultural identity and diversity via an experiential outdoor learning approach in the context of an Erasmus+ project. Furthermore, new creative outdoor learning pathways to study more about students' own national heritage, and that of their European peers are being questioned. The results are targeted to develop curricula of heritage education in both Romanian and French schools by fostering the outdoor learning approaches. In addition, insights into the study results can undoubtedly be a starting point for further educational studies.

In this view, curricula optimization by implementing nonformal heritage education in both Romanian and French schools is being targeted.

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5. Research Methods

5.1. Main stages of the research

An empirical research based on a mixed research method approach was adopted as a suitable framework for our study. Thus, students were addressed a complex semi-structured questionnaire which were filled out anonymously by all European students (No = 579), including both Romanian students (N1 = 104) and French pupils N2 = 104). The items were designed to survey the most important factors affecting the impact of outdoor education on heritage learning development only in relation to the French and Romanian groups of students. In fact, in total there were five European high schools involved in the Erasmus+ project *Preservation of National Heritage through the eyes of pupils of secondary education* (European Commission, n.d.) and its research, as follows: a German, a Spanish, a Hungarian, a Romanian and a French high school, respectively. As for this study, the research population consisted of only 208 French and Romanian students of a total of 579 European students involved in the whole Erasmus+ project study, pupils ages 14 to 18.

The in-house single questionnaire was administered during the month of November 2017 in five separate locations, i.e., each high school involved in the study. At first, all raw data were collected centrally in Brittany, France by the French high school. Then, these centrally-collected data were followed by data analysis on computer processing by using the Sphinx Lexica software in 2018. This research phase consisted of quantifying and analysing data via the use of PCA, which is a statistical method of geometric interpretation. Next, the main survey research findings were presented to the European project participants. Finally, there was an interpretation of the main research results. These findings were supposed to shed light on the main research hypotheses, which only cover the French and Romanian participating pupils in the project. In fact, they constitute the main research sample.

5.2. Methods

PCA is a variant of sparse correspondence analysis which is based on geometric interpretation, according to the specialized literature. Therefore, PCA is primarily focused on finding relationships between different nonformal activities, between participating in an Erasmus+ project and interests in studying about national and European in this study. Thus, a mixed methods approach of both quantitative and qualitative data was integrated to obtain a triangulation perspective, and to gain more in-depth insights into refined understanding of the targeted phenomenon (Creswell, 2014).

It has been emphasized that PCA is a multivariate method of analysing a data table which contains information from the study survey in our case, whose observations rely on multiple “inter-correlated quantitative dependent variables” (Abdi & Williams, 2010, p. 433). Similar patterns, as well as multiple variables – regarded as principal components - are represented at first as points in maps. Then, all quantitative or qualitative correspondence analyses handle heterogenous variables which are graphically visualised. Consequently, Liu et al. (2020) reported that this technique is featured as a statistical and graphical method of data analysis focused on dimension reduction. Furthermore, PCA is seen as “as an optimal solution for a lot of apparently different problems” (Abdi & Béra, 2014, p. 275), especially due to

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the maximization of the variance of the factor scores and to minimization of information loss (Greenacre, 1984). Given the factor scores of the observations and variables, correspondent maps and visual graphs can be then displayed, and the connexions between variables can be visualized as homogenous factors or components with the same variance, as important research (Abdi & Béra, 2014; Saporta & Niang, 2006) has shown.

The major advantage of this technique in terms of validity is due to the use of "cross-validation techniques" such as "bootstrap and the jack-knife", which extract the vital information from the table and make it visual according to the distributional equivalence principle (Abdi & Béra, 2014, p. 279). According to some recent research (Liu et al., 2020), another advantage of PCA is to make the interpretation of the principal components easier. However, the main disadvantages of this method are the following: the difficult choice of non-zero and, in terms of components, some loss of orthogonality (Liu et al., 2020).

Furthermore, new principal components emerge from the linear combinations of the original variables. Their values, are in fact components (coordinates) or dimensions, which "are called factor scores, these factors scores can be interpreted geometrically as the projections of the observations onto the principal components" (Abdi & Williams, 2010, p. 436).

In this study, PCA analyses have been essentially carried out by crossing the preliminary results and variables with other heritage and outdoor influential factors and interpretation of new results. The main issues which have been analysed using the PCA method are concerned with finding connexions between multiple variables. Thus, relationships between nonformal and informal activities, cultural and heritage-based learning outdoor learning experiences, and French and Romanian students' interest in participating in an Erasmus+ project on European heritage are being examined.

6. Findings

Recent educational research has shown that OE is first and foremost an experiential learning discipline, which leads to the "internalization of the learning situation, personal experience generated by a learning situation, experience that can be objectified in changes in cognitive, affective or psychomotor structures" (Bocoş et al., 2016, p. 175).

On the one hand, OE is currently reflected in education as a crucial recreational learning tool, as relevant research (Nielsen, 1993; Riese & Vorkinn, 2002) has demonstrated. For instance, there are many French and Romanian national green extra-curricular projects, whose aim is to teach students to preserve natural heritage, i.e., the national OE project "Let's do it Romania".

On the other hand, it is a mixture of nature and culture that is highlighted through OE. According to Payne and Wattchow (2008), trips, expeditions, and other journeys in culture and nature, are attractive and efficacy elements to boost pupils' OE learning skills. While exploring these valuable representations of "nature and cultural images of what it is like to be in nature" (Payne & Wattchow, 2008, p. 26), heritage skills may also be gained.

Henceforward, recent research (Du Bois-Reymond, 2011; Payne & Wattchow, 2008) has yielded evidence that OE is a way of boosting students' respect both for their national identity and for cultural otherness via fostering their reflection on cultural, and technological appearances. Consequently, OE

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meets the needs of heritage education, given that they both are "anthropocentric in their focus on the self and/or […] national pride, taming of the wild and civilizing of the other" (Payne & Wattchow, 2008, p. 26).

Furthermore, it has been emphasized that OE often "circumscribes the learning activities organized under the guidance of teacher […] in cultural locations (theatres, cinemas, museums etc.)" (Catalano, 2014, p. 547) in conjunction with the informal education (Law of National Education, 2011).

In addition, there are mainly two types of OE travel to be carried out in the French educational system: school organized study trips or tours in the after school or informal learning contexts, and extracurricular journeys. The latter type is usually planned only during the students' leisure-time, as an autonomous learning pathway (French Education Code, 2020).

According to the specialized instructions for reading a PCA that scholarly work (Biderbost, 2018; Prashant, 2018) has recommended, this analysis is focused on crossing the hypotheses and interpretation of the results. Thus, in order to read the Figure 1 below, Biderbost (2018) points out the following instructions for reading a PCA as follows:

- Acute angle indicates a positive correlation (more of one = more of the other).
- Right angle at 90 ° means that there is no correlation between these elements.
- Obtuse angle (> 90 °) illustrates a negative correlation (more of one = less of the other).
- The longer the radius (therefore closer to the correlation circle) is, the more important this variable will become.

Firstly, to get answers to the research questions we aimed to identify relationships between many nonformal activities such as travelling abroad, interrelated to variables featuring other OE activities, i.e., students' leisure activities, and European extracurricular heritage learning projects. Furthermore, specific cross-comparisons with other variables have been conducted, e.g., the importance of national heritage to the students, their preference in terms of leisure activities, and their desire to be fully involved in further Erasmus+ projects to study more about heritage. Then, the results were analysed. Finally, the resulting deductions and conclusions have been discussed.

6.1. Learning heritage through travelling abroad

The PCA analyses, which are visualized in the two graphs presented in Figure1 and Figure 2 below, are graphical representations of French and Romanian pupils' perceptions of the role of travelling abroad in learning about heritage through OE. The two graphs presented below (see Figure 1 and 2) take on all their importance for these aspects. In addition, the graphs have been composed by cross-tabulating the following variables: pupils' sex, their weekend's main activities, students' opinion on intangible heritage, and their concept of culture, as well as the number of their journeys abroad. The analyses eliminated these non-, or little-, significant variables. The presence of the acute angle between the targeted components in the Figure 1 and 2 below from both the French and Romanian students' perspective shows a positive correlation between the variables aimed at. Thus, a large majority of the two countries' participating students in the Erasmus+ project agree that the more students are travelling abroad, the more they are committed to learn about heritage at school (see Figure 1 and 2 below). Moreover, as shown in Figure 1, according to the Erasmus+ reports of the EC (Commission Européenne,

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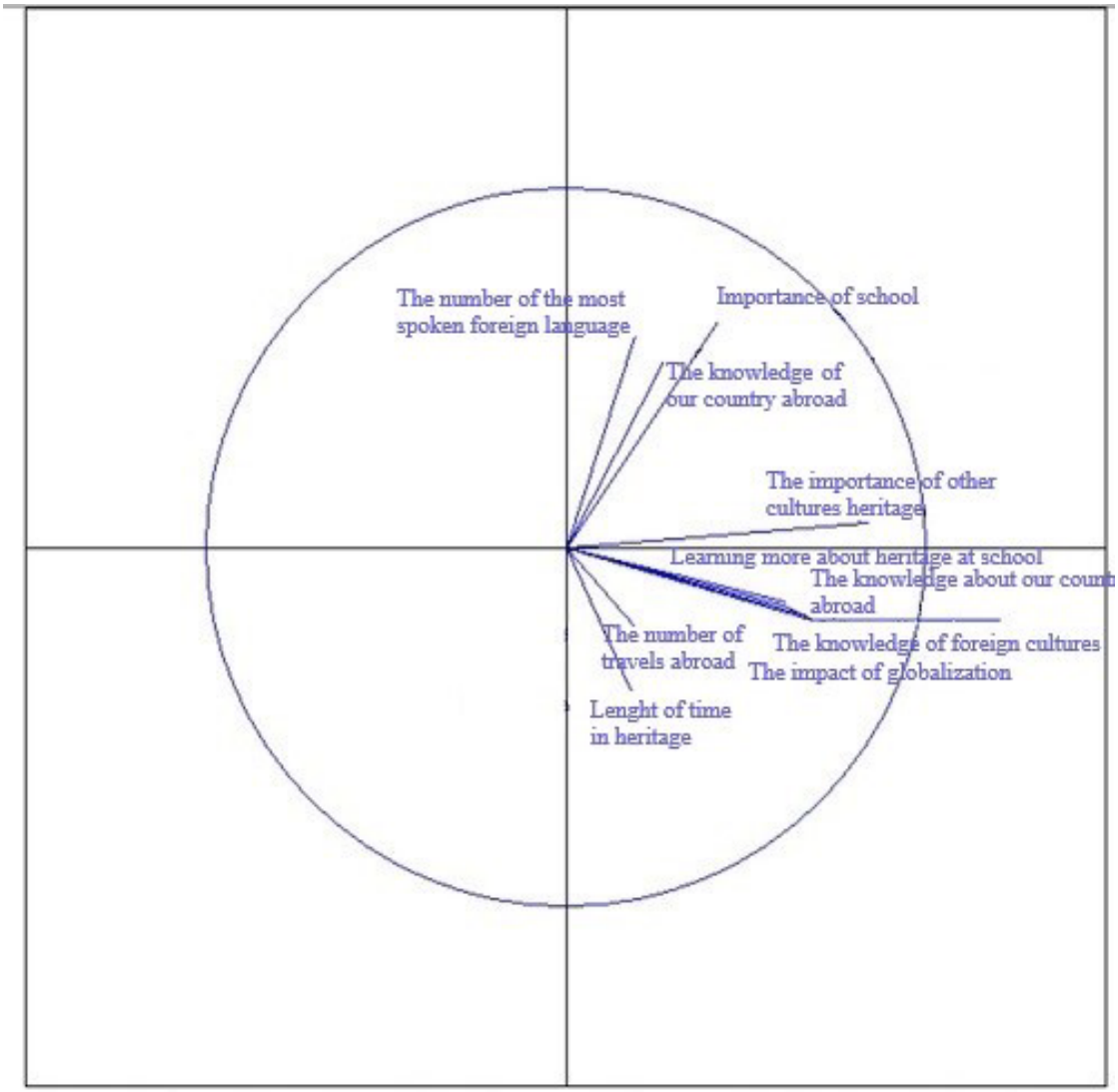
2019), travelling abroad can enhance the knowledge about the culture of otherness in French pupils' view, who also want more school-grounded learning activities. Thus, this OE provides pupils with cultural and technical insights into the principles of the experiential heritage-based learning.



The graph shows the position of the 10 new variables regarding the impact of various learning activities on the importance of heritage education
61 French students' surveys were not taken into account given the lack of at least one answer to each question which is reffered to as an acceptance criteria
41.40% of the variance is explained through a two-axis representation model of the coordinate plane
This figure is based upon the coded data analysis of the strata size representative of the French students' group (n=106)
The French students' sample distribution is shown in tabel 'Country of residence' in this study as a caption '36: France'.

Figure 1. Correlation between the importance of heritage and outdoor learning: French students' views
Note: Adapted from Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage, by M.-A. Biderbost, 2018,

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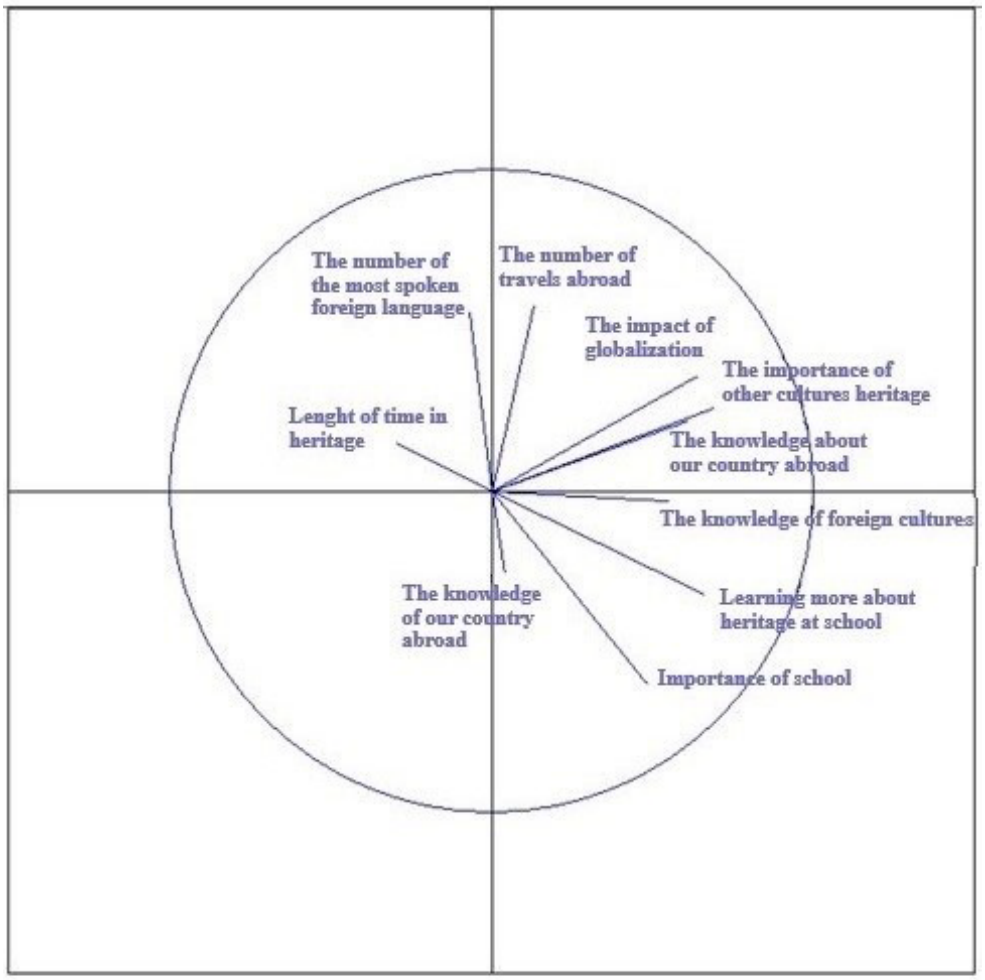
In contrast, this OE activity only foster the learning of foreign languages for the Romanian pupils, who definitely need more extra-curricular learning activities (see Figure 2 below). Notwithstanding, both French and Romanian students want to travel in order to learn much more about heritage. Undoubtedly, they need outdoor heritage learning activities, because travelling is obviously to them a genuine "spontaneous learning" (Bocoş & Jucan, 2008, p. 16).



The graph shows the position of the 10 new variables regarding the impact of various learning activities on the importance of heritage education
5 Romanian students' surveys were not taken into account given the lack of at least one answer to each question which is reffered as an acceptance criteria
38,80% of the variance is explained through a two-axis representation model of the coordinate plane
This figure is based upon the coded data analysis of the strata size representative of the Romanian students' group
(n=107)
The Romanian students' sample distribution is shown in tabel 'Country of residence.' in this study as a caption '36: Romania'.

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Figure 2. Correlation between the importance of heritage and outdoor learning: Romanian students' views Note: Adapted from Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage, by M.-A. Biderbost, 2018 , https://ec.europa.eu/programmes/erasmus-plus/project-result-content/02a46b01-c308-4a9d-ba3f526c4521323/rapport%20interm%C3%A9diaire-compressed %20(5).pdf

In a nutshell, these PCAs confirm one element of the hypotheses which has been put forward: there is a strong link between the number of travels made abroad and the fact of knowing our country abroad (there is an acute angle between the two variables). In other words, the more students travel abroad, the more their own country and national heritage are known abroad. To them, travellers are therefore real ambassadors of their country.

6.2. Outdoor learning activities and heritage education through entertainment

Obviously, new generations are much more interested in technological out-of-school learning activities, given the importance of the newest forms of entertainment on the Internet and in the media. As Figure 3 below illustrates, cross-tabulation between our question research no. 20 (about students' leisure activities on weekends) and question no. 22 (about students' favourite journeys) has been fruitful. Hence, it is easy to notice that video games and "other" activities appear to be prioritized by the youngsters during their spare time. These leisure activities are in fact new forms of recreational out-of-school activities of today's youth. Thus, both analysed categories of French and Romanian youngsters' outdoor free time activities definitely represent important findings. Accordingly, leisure activities can be seen as further pedagogical strategic outdoor learning activities to be creatively exploited in order to make pupils acquire heritage learning competencies (see Figure 3).

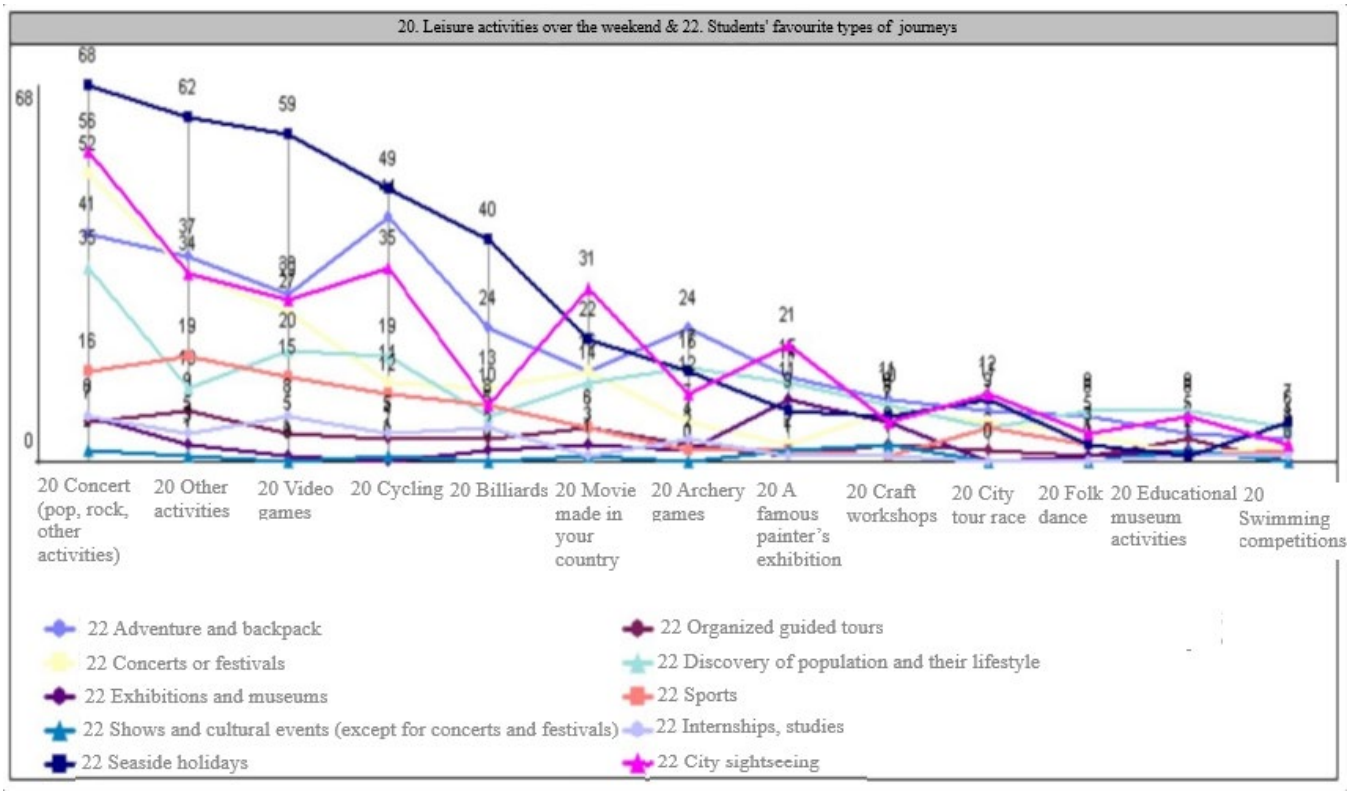

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Figure 3. Students' preferred leisure activities on weekends and favorite travels Note: Adapted from Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage, by M.-A. Biderbost, 2018, https://ec.europa.eu/programmes/erasmus-plus/project-result-content/02a46b01-c308-4a9d-ba3f-3526c4521323/rapport%20interm%C3%A9diaire-compressed%20(5).pdf

It can be noticed in Figure 3 above that there are a few emerging types of students' favourite out-of-school journeys and leisure activities on weekends on the outskirts. As for the pupils' preferences in terms of hobbies, it is clear that the following activities were mostly appreciated: concerts or festivals, adventure and backpacking, discoveries of populations and their lifestyles, going to exhibitions and museums. In addition, there is also a strong relationship between the OE and the informal learning context, because they are two sides of the same coin. Thus, informal education refers to the systematic and cumulative aspects of learning linked to everyday collaborative experiential learning (Feşteu & Humberstone, 2006). Obviously, this informal learning approach also refers to some quasi-instructional OE background i.e., an Erasmus+ project framework, including planned mobility trips and thematic visits, as research (Calamel, 2012; Torkos & Roman, 2019) has revealed. When youngsters leave their country, they are rather intrinsically motivated by going to the sea, by being involved in adventurous trips, and by city sightseeing. In fact, this students' keen awareness of their interests in this outdoor heritage learning activities coincides exactly with their innate anthropological and cultural sensibility (Somé, 2017).

6.3. Relationships between OE, the Erasmus+ programme and the heritage-based learning

As shown in Table 1 below, French and Romanian youngsters are quite interested in participating in the EP, especially via outdoor projects and learning, teaching, training activities, when compared to their other European peers. Hence, approximately two thirds of the Romanian participating students, and more than 60% of the French ones are willing to take part in the outdoors activities of the Erasmus+ project, i.e., the learning mobilities across Europe. In short, taking part in these international OE activities allows them to learn more about their own heritage and that of their pairs from hands-on experience than they did at school. Thus, it is through some Erasmus+ projects on culture and national heritage that they can gain more heritage learning outcomes. According to Dewey (1938/1963, 1915/1966), OE fosters learner-centred education, as well as both pupils' collaborative learning pathways. Furthermore, it is obvious that Romanian pupils are much more eager to be involved in Erasmus+ projects, which may feature not only an original kind of classroom ethnography (Stan & Humberstone, 2011), but also heritage labs in naturalized settings (Moore & Cosco, 2014; Savoye, 2003).

One explanation of their commitment to this kind of OE might be their belief that these collaborative educational exchanges between European schools are fostering the knowledge about the Romanian cultural heritage, and its universal traditions orally transmitted (see Figure 2). In other words, the more the Romanian students participate in an EP, the more they learn about Romanian national heritage. Hence, according to the Romanian pupils this project-based learning could implicitly lead to be better known abroad.

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Table 1. Participating interest in the ERASMUS+ programme

Country of residence	Yes (%)	No (%)	Total number of participants
France	60,4	37,7	104
Romania	71	26,2	104
Hungary	51,8	47,7	113
Germany	58,8	41,2	97
Spain	75,5,	25,5	100
TOTAL	33,2	57,9	518

Note. Percentages were calculated from valid data. Khi 2 =19,35, 1-p= 99, 93%, V de Cramer=3,34 Adapted from *Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage,* M.-A. Biderbost, 2018, p. 54. Retrieved from https://ec.europa.eu/programmes/erasmus-plus/project-result-content/02a46b01-c308-4a9d-ba3f-3526c4521323/rapport%20interm%C3%A9diaire-compressed%20(5).pdf

However, there are only 25,5 % of Romanian students and 37, 7% of French students who don't want to be part of this kind of out-of-school European program (see table 1). This is mostly due to some parents' reluctance to let their children travelling abroad or, also probably caused by their lack of solid knowledge of the Erasmus+ programme rules and conditions.

7. Conclusion

This article has explored the French and Romanian pupils' perception of the main outdoor learning activities as a useful way to gain heritage learning outcomes via an Erasmus+ study survey. By taking control over the curriculum design, and by creating new collaborative Erasmus+ projects between the French and Romanian schools in the future, teachers will enable pupils to experience cultural, natural and technological life challenges while learning about heritage through OE. Hence, both French and Romanian students can gain heritage learning outcomes. They can deal with the challenges of the contemporary society.

All in all, the main takeaway messages of this study are very meaningful. First, there is a students' strong demand of promoting cross-cultural outdoor learning activities, and of participating in further Erasmus + projects on heritage. Accordingly, French and Romanian teachers' awareness to prioritize extracurricular learning activities in order to boost heritage-based competencies has been raised. Then, the EP approach can also bring development benefits to school environments through international collaboration. Finally, students can acquire heritage competencies in the outdoor, they develop a sense of belonging so as to understand European cultural identities, as clear learning pathways to well-being in education.

References

Abdi, H., & Béra, M. (2014). Correspondence Analysis. In Alhajj, R., Rokne, J. (Eds.), *Encyclopaedia of Social Network, Analysis and Mining* (pp. 275 - 284). New York, Springer. https://doi.org/10.1007/978-1-4614-6170-8_140

Abdi, H., & Williams, L. J. (2010). Principal Component Analysis. *Wiley Interdisciplinary Reviews Computational Statistics, 4*(2), 433-459. https://doi.org/10.1002/wics.101

Afshar, N., & Barrie, A. (2020, December 14-18). The Significance of Outdoor Learning Environments [Paper presentation]. Future Cities Research Hub of School of Architecture and Planning 2020

APRU Sustainable Cities and Landscapes Conference, University of Auckland, Australia. https://doi.org/10.17608/k6.auckland.13578134.v2

Biderbost, M. A. (2018). *Rapports 1 et 2 du programme ERASMUS+ relatif aux perceptions du patrimoine par les jeunes de cinq pays, consultant technique M.-A. Biderbost* [Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage, technical consultant M.-A. Biderbost]. Retrieved on April 3, 2020, from EC Erasmus+ Project Results. Information website: *https://ec.europa.eu/programmes/erasmus-plus/project-result-content/02a46b01-c308-4a9d-ba3f-3526c4521323/rapport%20interm%C3%A9diaire-compressed%20(5).pdf*

Bocoş, M. D. (Ed.), & Jucan, D. (2008). *Fundamentele pedagogiei: teoria şi metodologia curriculumului: repere şi instrumente didactice pentru formarea profesorilor* [Pedagogical foundation: Benchmarks of curriculum theory and methododology]. Piteşti, Paralela 45.

Bocoş, M. D. (Ed.), Răduț-Taciu, R., & Stan, C. (2020). *Dicționar praxiologic de pedagogie. Vol.5: P-Z* [A Practical Dictionary in Pedagogy. Volume 5: P to Z]. Cluj-Napoca, Presa Universitară Clujeană.

Bocoş, M.D. (Ed.), Răduţ-Taciu, R., Stan, C., Chiş, O., & Andronache, D.-C. (2016). *Dicţionar*

Calamel, C. (2012). Prendre en compte les situations non formelles d'apprentissage [Handling with non-formal learning situations]. *Agora débats/jeunesses, 62,* 33-43. https://doi.org/10.3917/agora.062.0033

Catalano, H. (2014). The Implications of the Elements of Outdoor Education in the Preparatory Class Curriculum. *International Journal of Education and Research, 2*(6), 545-550. http://www.ijern.com/journal/June-2014/45.pdf

Châtelet, A. M., Lerch, D., & Luc, J. N. (Eds.) (2003). *L'école de plein air. Une expérience pédagogique et architecturale dans l'Europe du XXe siècle* [Open-Air Schools. An Educational and Architectural Venture in Twentieth - Century Europe]. Paris, Éditions Recherches.

Commission Européenne. (2019). *Erasmus+ Project Results. Erasmus+ Rapports 1 et 2 du programme ERASMUS+ relatif aux perceptions du patrimoine par les jeunes de cinq pays, consultant technique M.-A. Biderbost.* [Reports 1 and 2 on the ERASMUS+ project concerning the five participant countries youngsters' perception of National Heritage, technical consultant Marc-Antoine Biderbost]. Gourin, March 2018/October 2019. Retrieved May 3, 2020, from https://ec.europa.eu/programmes/erasmus-plus/project-result-content/02a46b01-c308-4a9d-ba3f-3526c4521323/rapport%20interm%C3%A9diaire-compressed%20(5).pdf

Cormier, L. (2017). *Student Independent Projects Environmental Studies 2017: Moving Towards Sustainable Foods: Increasing Food Production on Grenfell Campus.* [Research Report]. Grenfell Campus, Memorial University of Newfoundland, Canada. Retrieved on April 24, 2019, from https://research.library.mun.ca/13116/1/3Moving_Towards_Sustainable_Foods_CORMIER.pdf

Cosco, N. G., Moore, R. C., & Smith, W. R. (2014). Childcare Outdoor Renovation as a Built Environment Health Promotion Strategy: Evaluating the Preventing Obesity by Design Intervention. *American Journal of Health Promotion, 28,* 27-32. https://doi.org/10.4278/ajhp.130430-QUAN-208

Creswell, J. W. (2014). *Research design: qualitative, quantitative and mixed methods approaches* (4th ed.). Los Angeles, CA: Sage.

Dewey, J. (1963). *Experience and education*, New York: Collier Books.

Dewey, J. (1966). *Democracy and education: an introduction to the philosophy of education*. New York, NY: The Free Press.

Du Bois-Reymond, M. (2011). Éducation formelle et informelle : pour des politiques de transition intégrées [Formal and informal education: pleading for integrated transition policies]. *Informations sociales, 3*(165-166), 128-134. https://doi.org/10.3917/inso.165.0128

European Commission. (2017). *Erasmus+ Programme Guide 2017.* Retrieved on March 12, 2018, from: https://ec.europa.eu/programmes/erasmus-plus/sites/default/files/2017-erasmus-plus-programme-guide-v2_en.pdf

European Commission. (2019). *Key Competencies for Lifelong Learning*. Retrieved on April 2, 2020, from https://eulex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52018SC0014&from=EN

European Commission. (2021). *Erasmus+ Programme Guide 2021.* Retrieved on May, 10, 2020, from https://ec.europa.eu/programmes/erasmus-plus/resources/documents/erasmus-programme-guide-2021_en

European Commission. (n.d.) *Preservation of National Heritage through the eyes of pupils of secondary education*. https://preservationofnationalheritage.wordpress.com/contact/

Feşteu, D., & Humberstone, B. (Eds.) (2006). *Non-formal Education through Outdoor Activities Guide*. European Institute for Outdoor Adventure Education and Experiential Learning. https://www.eoe-network.eu/fileadmin/PDFs/NFE_FesteuHumberstone_.pdf

French Education Code, M.N.E., Fra (2020). Retrieved on May 1, 2020, from: http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/76639/80900/F2096698536/FRA-76639.pdf

Greenacre, M. J. (1984). *Theory and applications of correspondence analysis*. London: Academic Press.

Hanford, E. (2015, September 10). Kurt Hahn and the roots of Expeditionary Learning*. AMreports*. Retrieved June, 15, 2019, from https://www.apmreports.org/episode/2015/09/10/kurt-hahn-and-the-roots-of-expeditionary-learning

Hannerz, U. (1992). *Cultural Complexity,* New York, Colombia University Press. https://scholar.google.com/scholar?oi=bibs&cluster=12827303652064750454&btnI=1&hl=da

James, T. (2000). *Kurt Hahn and the Aims of Education.* Retrieved on May 25, 2020, from: https://www.kurthahn.org/wp-content/uploads/2016/04/james_final.pdf

Jeronen, E., Jeronen, J., & Raustia, H. (2009). Environmental education in Finland - A case study of environmental education in nature schools*. International Journal of Environmental & Science Education, 4*(1), 1-23. https://ioern.files.wordpress.com/2012/03/finland_1.pdf

Jeronen, E., Palmberg, I., & Yli-Panula, E. (2017). Teaching Methods. Biology Education and Sustainability Education Including Outdoor Education for Promoting Sustainability—A Literature Review. *Education Sciences, 7*(1), 1. https://doi.org/10.3390/educsci7010001

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, N.J: Prentice-Hall.

Law of National Education, M.E.C.T.S., 1 (2011). Retrieved on February 9, 2020, from: http://keszei.chem.elte.hu/Bologna/ Romania_Law_of_National_Education.pdf

Liu, R., Niang, N., Gilbert Saporta, G., & Wang, H. (2020, December 20). Sparse Correspondence Analysis for Contingency Tables. *Statistics > Methodology.* Retrieved on June 1, 2020, from *https://ui.adsabs.harvard.edu/abs/2020arXiv201204271L*

Moore, R., & Cosco, N. (2014). Growing Up Green: Naturalization as a Health Promotion Strategy in Early Childhood Outdoor Learning Environments*. Children, Youth and Environments, 24*(2), 168-191. https://doi.org/10.7721/chilyoutenvi.24.2.0168

Morin, E. (1999). *Seven complex lessons in education for the future*. Paris, UNESCO.

Nicolescu, B. (2016). Technological Singularity – The Dark Side. *Transdisciplinary Journal of Engineering & Science, 7*(1), 43-48. https://doi.org/10.22545/2016/00076

Nielsen, H. K. (1993). *Culture and Modernity*. Aarhus Universitetsforlag.

OECD. (2009). *Education at a Glance 2009 OECD Indicators.* Retrieved on February 15, 2019, from https://www.oecd.org/education/skills-beyond-school/43636332.pdf

Palmberg, I., & Kuru, J. (2000). Outdoor activities as a basis for environmental responsibility*. The Journal of Environmental Education, 4*(31), 32-36. https://doi.org/10.1080/00958960009598649

Păun, E. (2017). *Pedagogie. Provocări și dileme privind școala și profesia didactică* [Pedagogy. Challenges and dilemmas at school and in teaching career]. Iași, Editura Polirom.

Payne, P., & Wattchow, B. (2008). Slow pedagogy and placing education in post-traditional outdoor education. *Journal of Outdoor and Environmental Education, 12,* 25–38. https://doi.org/10.1007/BF03401021

Piaget, J. (1962). *The Language and Thought of the Child*. London, Routledge & Kegan Paul.

Prashant, S. (2018). *Programming in R Principal Component Analysis (PCA) in R. praxiologicde pedagogie. Vol. I* [A Practical Dictionary in Pedagogy. Volume 1]. Pitești, Paralela 45. Retrieved on June 5, 2020, from: https://datascienceplus.com/principal-component-analysis-pca-in-r/

Riese, H., & Vorkinn, M. (2002). The production of meaning in outdoor recreation: A study of Norwegian practice. *Norsk Geografisk Tidsskrift, 56*(3), 199-206. https://doi.org/10.1080/00291950260293020

Rigolon, A. (2010). European Design Types for 21st Century Schools: An Overview. In OECD - Centre for Effective Learning Environments (Ed.), *CELE Exchange, Centre for Effective Learning Environments, 3*, 1-10. Paris, OECD Publishing. https://doi.org/10.1787/5kmh36gpvmbx-en

Rousseau, J.-R. (1762). *Emile, or On Education*. Retrieved on April 4, 2019, from: https://blindhypnosis.com/emile-or-on-education-pdf-jean-jacques-rousseau.html

Saporta, G., & Niang, N. (2006). Correspondence analysis and classification. In: Greenacre, M., Blasius, J. (Eds.) *Multiple Correspondence Analysis and Related Methods* (pp. 371–392). Boca Raton, Chapman & Hall. https://doi.org/10.1201/9781420011319.ch16

Savoye, A. (2003). Écoles de plein air et éducation nouvelle en France (920-950) [Outdoor schools and new education in France (920-950)]. In Châtelet, A.M., Lerch, D., Luc, J.N. (Eds.), *L'École de plein air- Une expérience pédagogique et architecturale dans l'Europe du XXe siècle* [The Outdoor School - A pedagogical and architectural experience in Europe in the 20th century] (pp. 280-288). Paris, Edition Recherche.

Șerban, G. (2014). Un tip de educație nonformală: outdoor education. Resurse teoretice pentru predare-învățare în activitățile outdoor [A form of non-formal education: the outdoor education. Theoretical learning resources for teaching-learning via outdoor activities]. *Revista Învăţământul primar şi preşcolar, 1-2,* 21-26.

Somé, R. (2017). *Anthropologie et philosophie du sensible* [Antropology and Philosophy of Sensibility]. Saint-Denis, Connaissances et savoirs.

Stan, I., & Humberstone, B. (2011). An ethnography of the outdoor classroom - How teachers manage risk in the outdoors. *Ethnography and Education, 6*(2), 213-228. https://doi.org/10.1080/17457823.2011.587360

Steffen, W., Crutzen, P., & McNeill, J. (2007). The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature. *AMBIO: A Journal of the Human Environment, 36*(8), 614-621. https://doi.org/10.1579/0044-7447(2007)36[614:TAAHNO]2.0.CO;2

Suoranta, J. (2000). Narrating the Good Life: Illuminations. *International Journal of Lifelong Education, 19*(4), 357–369. https://doi.org/10.1080/02601370050110400

Theodorou, V., & Karakatsani, D. (2007). *École de plein air et éducation nouvelle et limites d'une tentative au début du xxe siècle en Grèce: influences* [Open-air schools and new education and limits of an attempt at the beginning of the 20th century in Greece: some influences]. *Carrefours de l'Education, 1*(1), 187-203. https://doi.org/10.3917/cdle.023.0187.

Torkos, H., & Roman, A. F. (2019). Complex approach over outdoor learning in the main forms of education: formal, nonformal and informal. *Agora Psycho-Pragmatica, 13*(2), 25-33.

Verquin Savarieau, B. (2017). *Pouvoir d'agir et environnements capacitants, de nouvelles voies de développement professionnel avec les technologies?* [Empowerment to act and enabling learning environments, new paths of professional development through the technology?]. In Ardouin, T., Briquet-Duhazé, S., & Annoot, E., (Eds.), *Le champ de la formation et de la professionnalisation des adultes. Attentes sociales, pratiques, lexique et postures identitaires* (pp. 232-247). Paris, L'Harmattan.