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Representations of the Benefits of Outdoor Education for Students with Learning Disabilities: A Thematic Analysis of Newspapers

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Abstract

Outdoor Education (OE) has been described as an education taking place in a natural environment where the students learn about their natural surroundings (Torkos, 2017). Outdoor education was one of the precursors of Environmental Education (EE). Outdoor education is a non-formal education and is classified as an educational approach which occurs outside the classroom and with a wide range of subjects such as the natural environment, culture, mathematics, music, physical science. This study adopts a qualitative paradigm in order to explore the integration of Outdoor Education in the philosophy of inclusion. Eight newspaper articles representing stances and opinions of stakeholders in education, were thematically analysed into explore popular representations of benefits of outdoor education for students with learning difficulties. The themes which emerged from the data were: an active attitude towards learning, a holistic approach—transferable benefits, Inclusion, Edutainment, and Experiential Learning. The key themes identified, indicate that learners within an outdoor education context seem to be active participants of the learning process. Moreover, outdoor education is expandable to the learners' environments, while it seems that academically and/or socially less able pupils in particular, can benefit out of outdoor education.

Keywords

Outdoor Education, Environmental Education, Edutainment, Inclusion, Learning Difficulties

1. Introduction

Outdoor education draws from the practices and the philosophy of both expe-

riential learning (EXE) and environmental education (Priest, 1986); hence outdoor education is a multidisciplinary approach to education (Nash, 1976). Outdoor education is "both a place and a topic" (Stavrianos, 2016), which appears to be supportive (Bauer et al., 1998; Green, 2007) of Wilson's (1994) to the hypothesis that there is an innate need of human interaction with their natural environment. In addition, outdoor education has been linked to caring for oneself and others (Campbell & Moyers, 1988). More simplistically, outdoor education is experiential learning that happens in, about and for the outdoors (Lund et al., 2002).

However, there seems to be a trend to avoid teaching sessions in nature which are supported by the fact that outdoor education can sometimes be mistakenly confused by teachers, students and parents (Lund et al., 2002; Peterson, 2011; Quay & Seaman, 2013), as an adventure programme, exploration or even environmental education. This confusion seems to occur as it is often based upon the previous elements. The emphasis of those three different areas distinguishes one educational approach from the other. Outdoor education focuses on experimental, hands-on learning in real-life environments through the senses, e.g., through visual, auditory, and tactile means, improving students' learning and retention of knowledge as a result (Palavan, Cicek, & Atabay, 2016).

Several researchers have identified the possible benefits of outdoor education. It is considered to be an approach that can potentially increase student self-esteem and participatory motivation, increase self-perception and lower anxiety levels (Duindam, 1996; Farnham & Mutrie, 1997; Thomas & Glenny, 2000). Naturally, such benefits could be promising to all students; however, vulnerable students could benefit the most out of outdoor education. Previous research has indicated that addressing the academic difficulties of Special Educational Needs (SEN) students through nature-based programmes can improve the students' academic achievement, empathy, self-esteem, creativity, and ecological (e.g. Louv, 2005: pp. 203-211; Stavrianos & Spanoudaki, 2015).

The limited number and scope of studies regarding outdoor education's role in SEN and their outdated nature (Fox & Avramidis, 2003; Gill, 2014) suggest that many questions regarding how SEN students can engage with outdoor education are still unexplored. Hence, exploring potential links between Special Educational Needs (SEN) and outdoor education highlights the need for the present research, which aspires to bring to the surface current and popular representations of the benefits of outdoor education for vulnerable students.

1.1. Research Question

As mentioned previously, the interpretations of outdoor education can differ due to the varying cultural values or philosophical assumptions (Donaldson & Donaldson, 1958). This differentiation, makes it challenging to achieve a general definition for outdoor education.

As definitions of outdoor education are commonly confused, one way to estimate its current meaning is to move away from canonical studies and look at

its popular representation. For this reason, this study aspires to explore the common representations of the benefits of outdoor education for students with learning difficulties that appear in the UK.

1.2. Methodology

In order to answer the above, we adopted Gubrium & Holstein's (2009) suggestion about story narratives and searched for newspaper articles interviewing educators, experts in the field of outdoor education and pupils related to SEN and outdoor education. Gubrium & Holstein (2009) suggest that newspaper articles can be treated as a tool to discover how people see their world as they reproduce representations of stances and views.

There were no real issues with obtaining clearance for this study, as the data used have been printed in newspapers and exposed to the general public in previous years. Moreover, they have been stored in an online database accessible to the public.

We searched for newspaper articles published in the UK at https://www.lexisnexis.com/uk/legal, which included the terms: "outdoor education and learning difficulties", "outdoor education and disability" and "outdoor education and dyslexia".

To be more specific, two searches were conducted on that database. Each search combined two key concepts. The first concept was "outdoor education" and was kept unchanged in all searches. In the first search, we combined "outdoor education and learning difficulties". In the second search, we combined "outdoor education and disability".

Twenty articles were gathered in total from the above process, which focused on various topics. However, further investigation was conducted only on the articles which included the terms outdoor education and learning difficulties and outdoor education and disability. For example, if an article discussed Adventure Education AND learning difficulties, it would be discarded as it would not fit the purposes of the present study. After the above filtration, we investigated eight articles in total.

Table 1 below presents the eight newspaper articles which were gathered and analysed after the filtration:

2. Analysis

A thematic analysis (TA) was then conducted in order to explore outdoor education's effects on pupils with learning difficulties. This approach was in line with Braun & Clarke's (2006) stages of thematic analysis, who suggest that TA is a method for identifying, analysing and reporting patterns (themes) within data. We chose thematic analysis as our analytical approach as it is a flexible tool that can be used in coalition with the constructivism paradigm (Braun & Clarke, 2006). TA has been successfully used before to support the accurate development of educational research (Webb, 2011). This analysis allows the researchers to search

Table 1. Reviewed articles.

Reference	**Ross, Raymond. "A Chance To Try Life Skills And Mature." The Times Educational Supplement, 30 Aug. 2002, pp. 3-3.**
Story Protagonists	Story Extracts
Philip is a student in secondary education, diagnosed with severe and complex learning difficulties, and Kathleen Keenan is the principal teacher of his school. The school is not a mainstream school and enlists only 15 students.	Extract 1 (Philip) "My knees are knackered!" Knackered or not, Philip helps to load the boats onto the trailer and tie the appropriate knots to keep them there. Here, part of the educational process is learning how to prepare equipment and put it away safely. Extract 3 (Kathleen) "This (experience) can be the pupils' first time away from home and is a very big experience for them," says Mrs Keenan. It's a chance to practise cooking and housework skills, which are part of the access units on life and community skills we deliver. These are skills necessary to prepare them for the time if and when they leave home and move into supported accommodation. Extract 9 (Kathleen) "Outdoor activities build confidence, teach life skills and teamwork and enable pupils to visit areas which they otherwise might not do…. And it's great for the parents. They're completely supportive of these activities and are sometimes surprised by what their children can achieve…Outdoor activities are a major part of this maturing process, providing physical and psychological skills."
Reference	**Frances, McGuire. "A vital lesson in the great outdoors." Yorkshire Post, 27 Nov, 2006.**
Dr Frances MacGuire is an environmental scientist working for the Royal Society for the Protection of Birds on regional policy and comments about providers that offer out-of-classroom experiences for children and educational policies.	Extract 2 "Denying our children access to learning opportunities outdoors threatens not just their skills development and connection to the world around them, but also their interest in science. This is an outcome that none of us should accept." Extract 6 "Mucking about in rock pools identifying the slimiest seaweeds and the ones that pop loudest. Golden times spent out of the classroom and in the real world." Extract 8 "To learn about science without getting your hands dirty in the laboratory or the field is to lose its very essence—inquiry and exploration, creativity and discovery, testing, failure, cooperation and collaboration. These are also the skills vital to personal, social and business development and success… First-hand experience of the natural world and our cultural heritage is one of the most effective forms of education…it is motivating, nurtures social skills and creates a sense of place, nature, culture and history."
Reference	**Tom, Dowling. "EUROZONE FUN". Liverpool Daily Post & Echo Ltd, 10 Dec. 2011, pp.12**
Tom Dowling reports the visit of 12 teachers from across Europe to a Kirkby school that led an outdoor education programme for students with physical disabilities and complex needs.	Extract 10 'Seeing first-hand the range of outdoor education on offer at Springfield School has really inspired the group who plan to go back and share ideas in their own countries."

Continued

Reference	**NewsQuest, Media Group. "Giving dyslexic pupils confidence to learn". Echo (NewsQuest), 13 Oct. 2015.**
Pam Groveham, is head of the dyslexia unit at the Mayflower School which provides sixth form education.	Extract 11 "It's (Outdoor Education) giving them the curriculum but making it more relevant for them."
Reference	**Brooks, Yolanda. "In Amundsen's Footsteps". The Times Educational Supplement, 26 Sep. 2003, pp. 3.**
Gary Dodds is an expedition organiser and head of the Centre for Foundation Studies of West Nottinghamshire College.	Extract 5 "It has made a significant difference in their lives. They have had to look for sponsorship and do interviews with radio and TV."
Reference	**Lewis, Deborah. "Special school pupils go outward bound". Lancashire Telegraph, 14 Jan 2008**
Martin Wyeth is in charge of outdoor education at Crosshill, for an SEN school, taking in students with moderate learning difficulties from East Lancashire. Martin comments regarding his school introducing a series of extra-curricular outdoor pursuits to boost self-confidence and team building.	Extract 4 "It (outdoor education) was a vital tool in educating them…I'm passionate about this sort of alternative curriculum, and try to fit in as much as I can. The feedback I get from them is really positive…Taking kids on these pursuits' means they're not only doing something they enjoy, they're learning communication and interpersonal skills…Importantly, it offers them achievable targets—for young people with learning impairments, academic achievements are often not something they hope for, but this course will also give them a nationally recognised qualification. It's also cross-curricular, linking in with other subjects such as geography and Maths. It helps me as a teacher, because they enjoy the activities so much it impacts positively as an incentive to try as hard as they can on other subjects and modify their behavior."
Reference	**Localworld. "Taking learning outside with new classroom". Scunthorpe Telegraph, 5 May 2016, pp. 24-25.**
Adam Walker is the head of outdoor education at Demeter House School for pupils with emotional, behavioural and associated learning difficulties. Adam is also the chairman of the school's PTA.	Extract 12 "It gives us more space. We have moved towards a more vocational curriculum and we now offer horticulture on the curriculum, so it enables us to teach it more effectively."
Reference	**Elkin, Susan. "The frightening delight". The Times, 22 Aug. 1994**
Susan Elkin, reports on Brathay Hall, which accommodates outdoor education holidays for children and adults. Brathay provides about 9000 training days per year in areas such as personal development, leadership and team building.	Extract 7 "And I've found a sheep's skull," the shabby, chapped-faced 12-year-old enthused in his rich Scouse accent. "You can see where its teeth are still coming through. I'm going to take it home. Like his friend, thrilled by her first glimpse of a deer earlier in the week, this lad from Bootle has had little experience of anything but inner-city life."

for repeating ideas to code the participants' responses and develop themes to demonstrate rigour (Fereday & Cochrane, 2006). The above decision of using

thematic analysis for this study was also influenced by Gubrium & Holstein (2009), who suggest that thematic analysis can be treated as a tool to discover how people see their world. Notably, the articles reviewed give us information regarding the students' awareness of the benefits they can achieve through their outdoor education programmes.

In accordance with Braun & Clarke (2006), we familiarised ourselves with the data (Stage 1), generated initial codes (Stage 2), searched for themes by reviewing the previous codes (Stage 3), reviewed the emerged themes (Stage 4) and finally defined and named the themes (Stage 5). The last step we took was to generate this article. Braun & Clarke (2006) suggest that thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data.

3. Findings and Discussion

In the following section, the findings from the documentary analysis are presented and then discussed. We should note here that we consider the following themes as popular representations of outdoor education qualities exclusively and not, for example, as evidence of qualities in outdoor education.

The thematic analysis indicates five key themes. These are an active attitude towards learning, a holistic approach—transferable benefits, Inclusion, Edutainment and Experiential Learning. The themes are discussed over the following pages.

4. An Active Attitude towards Learning

Fostering an active attitude towards the environment is believed to help children who face low self-esteem or poor social skills, negative attributes that are thought to be experienced by many children with special educational needs (Ernst, 2007).

A key finding of this study (Extracts, 1 and 10) concurs with Psacharopoulos & Patrinos (2004). The researchers mentioned above claim that the educator should understand that nature can be a "tool", which can be used efficiently in learning through regular and planned visits to the outdoors.

This idea corresponds to claims of other specialists, such as Maynard (2007), Roe & Aspinall (2011a, 2011b) and Knight (2009), who suggest that outdoor education experiences can facilitate the positive development of social concepts, internal locus, peer to peer socialisation as well as teacher-student relationships and a positive attitude towards school. Outdoor Education and the pedagogy of inclusion identify the student as the protagonist of a child-centred, pupil-led education (Extract, 2). Outdoor education should be planned in such a way as to provoke students to understand the interactions within nature as well as the interactions between nature and humans.

5. A Holistic Approach—Transferable Benefits

Outdoor activities and games can easily be applied within the natural environment in any urban or rural area. Outdoor Education is an opportunity that allows a more holistic education that can be planned and prepared by the school

itself. It is becoming clear that outdoor education can be used to promote self-respect, social relationships and environmental awareness. Children within an outdoor setting are learning hands-on; using a hammer, for example, to practice woodwork, can stimulate and support motor coordination. As many children with special needs need to train their motor skills to better cope with their physical disabilities, outdoor education can increase their physical skills while they learn. This seems a valuable benefit, particularly for children with special needs. It would seem (Extract, 3) that apart from household environmental practices, such as water conservation or even recycling, outdoor education can help pupils with difficulties become more prepared regarding domestic skills.

Lidström (2002) claimed that it is essential that these experiences be structured and planned in such a way that would allow the students to use their senses to explore nature (Extract, 10). It becomes clear that the participation of students in outdoor activities can positively contribute to the cultivation of transferable benefits and life skills. It would seem that an outdoor learning environment can provide the context in which the learner experiences opportunities for exploration and connection to the cultural, the historical and the natural inheritance of the community (Stavrianos, 2016). In addition, traditional learning methods, where learning occurs inside of the classroom, can bring to the surface disturbing behaviour of pupils with SEN while at the same time decreasing the pupils' academic achievements (Peterson, 2011).

Having a multi-sensory environment (Extract, 4) in schools has been found to be beneficial for both teachers and pupils as it provides a two-way learning process. This idea matches the findings of previous researchers (Titman, 1994; Lucas et al., 1996; Sharples et al., 2005; Hussein, 2014) who concur with beliefs that outdoor learning can give children a stimulating experience and influence their behaviour their development in terms of social relationships. This notion has received further support from Barbara Dunne of the Royal School for the Deaf and Communication Disorders, Manchester, who states "pupils are most likely to succeed when they are involved in 'doing' activities rather than traditional learning. In addition to this, the research findings of Rohde & Kendle (1994), have found that providing school grounds with sensory stimulation can encourage mental development, health improvements, emotional growth and social integration, in addition to increasing the learning motivation of the pupil, especially being in contact with animals and plants.

The healing effects of nature are not new, but it seems modern society needs to rediscover this phenomenon. For centuries people used healing plants found in nature to heal (Stigsdotter & Grahn, 2002).

6. Inclusion

Priest (1986) claims that outdoor education works with the individual pupil, the learning team, and the natural environment where learning occurs. The emphasis of those three core areas varies from one programme to another based on its

target goals. In particular, Lund et al. (2002) can distinguish within outdoor education, goals of developing survival skills in the outdoors, problem-solving skills, reinforcing teamwork, leadership skills, understanding our natural environment, and promoting self-confidence and promoting one's spirit. The interdisciplinary approach of outdoor education can also motivate learners to improve their social skills. The participants of an outdoor education programme (Extract, 5) feel more connected to each other as a group in the outdoors than when they learn indoors (Passarelli, Hall, & Anderson, 2010).

As the concept of inclusion asks for a high level of participation and collaboration within the group, when pupils learn together in the outdoors, they co-operate more within a teamwork context. Massey & Rose (1992) have previously discussed other benefits of outdoor education, which lay with the physical and emotional development of the students. The previous researchers suggest that learning in an outdoor environment can help pupils cultivate a sense of trust but also increase their muscular strength. In this view, learners with learning difficulties can benefit from an outdoor learning environment in various ways and increase their community presence, active participation, and competence (Massey & Rose, 1992). In addition, group work allows for more intimate interactions, which can be an essential method of bringing children together. Group work and collaborative tasks in an outdoor setting can promote team building and allow children to work efficiently and collectively towards a common goal (Gilbertson, 2006). The spirit of an inclusive education seems (Extracts, 5 and 10) to broaden horizons in reviewing the curriculum and the values it includes. In contrast, environmental education aims to form active citizens by participating in every aspect of social life (Giordan & Souchon, 1991). This process is often linked, traditionally within the classroom. Despite this, learning requires new approaches and new educational environments that effectively promote teaching (Smith, 2007). The outdoor natural environment is offered as an alternative educational place that provides a broader spectrum of opportunities for learning and inclusion.

From a very young age, children form ideas and opinions adopt stances and values for the world they live in (Extract, 6). Rekalidou & Petrogiannis (2012) suggest that the planning and implementation of outdoor education game activities can promote pupils' understanding of environmental issues and cultivate an environmental consciousness. Villaverde et al. (2006) suggested that environmental games can be used to promote a specific outdoor educational learning programme, targeting to awaken the interest, record previous knowledge, and locate questions and issues that require elaboration. Hence, it can be a strong motivation to begin the learning process.

The above findings (Extract, 6) can also be linked to Price's (2015) study conducted about pupils with emotional disabilities. Price (2015) suggests that children with emotional or behavioural disabilities may benefit from outdoor education and can show an increase in school attendance when outdoor education programmes are being conducted at their school. Furthermore, the sense of

achievement described by many pupils can be an essential tool for children with special needs as they are often confronted with failure (Wilson, 1994). As Berger (2008) claimed, a repeated feeling of failure can reduce self-esteem and is connected to a negative perception of mainstream education. Hence Berger (2008) claims that a repeated feeling of failure is directly linked to the motivation of learning. Therefore a particular strength of outdoor education lies in the fact that it is a form of education that can create activities where all children can feel included and participate at their pace (Passareli et al., 2010).

7. Edutainment

A game is a human activity in which real or not real situations are represented. It is a vital element of children's lives in all cultures which provides them opportunities for exercise, entertainment and satisfaction. Huizinga et al. (2014) add that it is a free activity that is applied with specific rules, reinforces team relations and is capable of exciting its participants. The integration of games in formal education gives new dimensions to learning and increases the flexibility of the learning process. Implementing a game (Extract, 7) as a means to learn can be very flexible in class. It can be the starting point of an activity or a whole teaching session or be part of a learning activity. In any case, "Edutainment" (from EDUcation + entertainment) can create a valuable approach in many educational activities free from the heavy barriers of the curriculum (Jones, 2007). Jones' (2007) suggestion about implementing games in learning activities is also supported by Bagust et al. (2008), who adopted the position that if there were a possibility of combining forms of entertainment to all aspects of education and if the rate and time dedicated to games were the same as the rate and time dedicated to learning activities, then the learning result could be significantly improved. Hence, it seems that the use of free time activity and the adoption of edutainment in outdoor education expands traditional educational approaches in the field of outdoor education and increases its flexibility (Extracts, 11 and 12). It becomes clear that outdoor education can be an approach capable of linking the learning process to entertainment.

8. Experiential Learning

Learning can be reinforced within an outdoor education setting. In addition, an outdoor setting can stimulate more senses than those predominantly used in the classroom (Extract, 8). The possibility of stimulating smell, touch and taste in the classroom exists, however within an outdoor environment, all of the learner's senses are naturally stimulated and offer a multitude of experiences in an authentic environment. For example, when students are being taught science, they can hear birds chirping, feel the fresh air on their skin or even touch the grass (Szczepanski et al., 2006).

Learning through action (Extracts, 9 and 11) is a vital element of experiential learning and is also promoted within outdoor education. Children go out of the

school building, are exposed to various stimuli and learning is developed through games and experiences of real life. Through this process, outdoor education can offer skills, knowledge, and values and therefore help promote critical citizens of tomorrow. This strategy is the vital methodology of outdoor education and can be accelerated through outdoor activities and games within the natural environment (Georgopoulos et al., 2011).

9. Conclusion

This study can perhaps shed more light and unravel the possible benefits of outdoor education to promote awareness and training for all involved in the learning process. However, this study has used a small number of newspaper articles regarding stances of outdoor education and hence it will be difficult for its results to be generalisable. This research offers strong indications that the integration of outdoor education, including activities and games, can be an opportunity for a more holistic approach than formal education. At the same time, it can offer valuable opportunities to promote self-respect and social relationships. The participation of all students in outdoor activities can offer benefits that could be very useful to vulnerable students, such as students with learning difficulties.

Outdoor education is based on nature. While it recognizes the pedagogical importance of the learning environment, it also regards the learning community as an integral aspect of the learning experience and redefines the "how" and the "where" learning happens (Lewicki et al., 1998). Outdoor education is, therefore, a holistic approach to education that contributes to the development of an individual with academic, emotional, social and psychological benefits, since through outdoor activities and games, the relationship of an individual with their natural environment can be reinforced (Georgopoulos et al., 2011). Outdoor education offers opportunities for authentic interactions between knowledge and reality (Hattie et al., 1997). Outdoor Education can help students cultivate a positive attitude towards learning, make learning entertaining, use an experiential approach to learning and be inclusive for more vulnerable students.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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