ResearchGate

See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/232950580

Inclusion through access to outdoor education: Learning in Motion (LIM)

Article *in* Journal of Adventure Education & Outdoor Learning · December 2009

DOI: 10.1080/14729670903004340

CITATIONS
3

READS
1,066

1 author:

Jane Brodin
Stockholm University

255 PUBLICATIONS **812** CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Project I.R.I.S. View project

Project Children in precarious living situations View project

All content following this page was uploaded by Jane Brodin on 19 December 2014.

The user has requested enhancement of the downloaded file.

Journal of Adventure Education and Outdoor Learning
Vol. 9, No. 2, December 2009, pp. 99–113

Routledge
Taylor & Francis Group

Inclusion through access to outdoor education: Learning in Motion (LIM)

Jane Brodin*
Stockholm University, Stockholm, Sweden

Learning in Motion (LIM) was a European project involving seven partners in five countries: Sweden, Finland, Latvia, Germany and Greece. The project focused on inclusion and access to outdoor education and was financed by the European Commission within the framework of the Socrates-Grundtvig Programme. The aim of the project was to explore if and how outdoor education can be used for physical and sensitivity training of children, adolescents and adults with intellectual disabilities and to develop, examine and disseminate ideas on this topic. There is a shortage in the literature of outdoor education for persons with intellectual disabilities. Our starting point is that persons with disabilities have the same rights to education as other citizens, and participation and equal opportunities are the keywords for all. The team members from the five participating countries used different methods to collect data. The Swedish data collection included both typical and atypical children and adolescents and adults with intellectual disabilities and was based on literature reviews, interviews with some of the participants and on questionnaires answered by 163 administrators responsible for disability issues in the municipalities. The other partners focused exclusively on activities with adults with intellectual disabilities, except for the Greek contingent, who worked with adults with mental illness. This paper is mainly based on the Swedish studies. The result showed that inclusion is still a faraway concept, especially for many adults with intellectual disabilities. The results also showed that the municipalities were interested in increasing outdoor education for the target group but the main obstacles were a lack of educated staff and the present financial climate.

Introduction

Outdoor education is known in most European countries as a teaching method in the ordinary educational system for children and young persons. The method is often used as a complement to the regular classroom situation. Wellhousen (2002) implies that within the acceptance of childhood as a separate period of life, we also understand the meaning of outdoor activities. Nature and open-air activities can be used as a classroom where curiosity and will to explore nature automatically

*Disability and Handicap Research Group, Stockholm University, SE-106 91 Stockholm, Sweden. Email: jane.brodin@buv.su.se

ISSN 1472-9679 (print)/ISSN 1754-0402 (online)
© 2009 Institute for Outdoor Learning
DOI: 10.1080/14729670903004340

increase. Through play, children are constantly learning and exploring who they are as they develop physical attributes important to their overall health and well-being. A classroom or outdoor play environment (e.g. a pre-school yard) created and developed to meet the sensory, motor, behavioural, social and emotional needs of each child has the potential to enrich and extend all children's opportunities. Outdoor education is often, as in the Scandinavian countries (Engdahl, 2005; Sandberg, 2008), strongly connected to learning in nature and to environmental contexts. Concepts such as 'learning by doing' or 'hands-on activities' are often used to express the basic idea of outdoor education. However, the enthusiasm of the outdoor educator and the activity *per se* are also of importance for children's learning. For adolescents and adults outdoor education is often connected to lifelong learning and as a method outdoor education makes it possible to bring 'conceptual, theoretic, and experiential knowledge together' (Dahlgren & Szczepanski, 2005).

Gair (1997) states that any open-air educational activity in rural and urban areas can be regarded as outdoor education. He stresses the relationship between outdoor education, adventurous activities and experiences that give young persons challenges in life. Gair also states that outdoor education is an ongoing process where mutual support is standard and that it is rare that young persons are excluded in these contexts. One reason for this may be that many activities are based on problem-based learning and team-work. Based on that statement, and on research on inclusion in the disability field (MacKay, 2002; Magnusson, 2006) it is of interest to investigate if outdoor education could promote inclusion in social life and hinder exclusion of persons with disabilities. Inclusion can be defined in many ways. Generally, inclusion means to be a natural part of, for instance, a group, class or community, accessibility to activities, participation and equal opportunities. Depending on the objective of the activity, it is reasonable to believe that the educator can support inclusion by collaborative work, experimental tasks and problem-based learning. When children with disabilities are involved many studies have shown that outdoor activities promote inclusion (Doctoroff, 2001; Spencer, 2003). Both researchers have worked in playgrounds and highlight the necessity for adaptation and a high-quality design of outdoor environments, and Doctoroff stresses the need for creation of high-quality inclusive play environments. There is, however, in our studies no evidence that the outdoor educators have successfully promoted inclusion, although the choice of activity and a good leadership is of importance (Brodin & Lindstrand, 2006).

Hopkins and Putnam (1993) highlight three components of importance in outdoor education: self, others and the natural environment. 'Self' includes the individual participant and how the adventurous activities will enhance and increase the self-conception and self-awareness. 'Others' includes group development and co-operation in the group, as well as forging effective underlying social structures. 'Natural environment' provides adventure education with many challenges at the same time as the participants gain knowledge and awareness of nature. Hopkins and Putnam (1993) highly stress the value of outdoor education primarily as a learning resource. They emphasize leadership, team-building and problem-solving as some of the benefits.

Knowledge and awareness of nature will grow at the same time as the participants get physical challenges. Scouting is an arena where young persons create their own adventures, learn different things in co-operation with others, develop leadership skills and meet friends (Westberg, 2007). Nature is always nearby and many of the activities take place outdoors. Westberg states that the scout movement is global and gathers people from all social classes and ethnic groups. Scouting is a way of living—close to nature and closely connected to outdoor learning and education (Westberg, 2007). Another voluntary organization enhancing outdoor education is *Friluftsfrämjandet*, the Swedish organization for promotion of outdoor activities. The organization also runs 'all-weather schools' where nature is the classroom and outdoor education the aim. Both the above-mentioned organizations welcome all persons who are interested in outdoor activities and inclusion is a self-evident goal.

To move a traditional learning space, such as the classroom, to an outdoor environment creates new opportunities and challenges for both the learner and the teacher. Using nature as a tool for facilitating learning and as a free source of teaching material can thus be beneficial in many ways (Brodin & Lindstrand, 2006). One example of this is gardening (White, 2006). White has been working with maths in the garden. Gardening can also be used as a therapeutic tool in rehabilitation (Grahn, 1992), and it is a good example of where outdoor education is both a method to learn and a rehabilitative goal. Outdoor education can therefore be regarded as a complement to traditional teaching methods, involving the use of outdoor environments to broaden and deepen the understanding of nature, social life and special phenomena in a wider perspective. Another often-stressed reason for being outdoors is the beneficial effect on the individual's health and well-being. People in Scandinavia have a very high regard for nature in general (Brodin, 2007). Outdoor education can thus be regarded both as a method to learn about nature and an aim *per se*, for example the 'all-weather schools'. The health aspects with fresh air and physical activities are obvious aims.

Some concepts frequently recur in outdoor education, viz. *learning by doing* and *play for learning* and these concepts are closely related to outdoor education (Brodin & Lindstrand, 2006). For these reasons opportunities to play and learn in outdoor environments have been included in many countries in the curriculum of early childhood education (Björklid, 2005). However the value of outdoor education for children and adults with intellectual disabilities has sometimes been overlooked and underestimated, even though lifelong learning for all citizens has been highlighted by the European Commission for many years.

There are few papers in scientific journals (Cuvo, May, & Post, 2001; Holman, McAvoy, Rynders, & Goldenbe, 2003; Magnusson, 2006; Todd & Reid, 2006) on outdoor education as a learning tool for adults with intellectual disabilities and the previously mentioned papers only partly involve this population. Not all places used in outdoor education literally need to be *outdoors* or *out-of-doors* but they must provide new experiences, impressions and incentives for learning, thus empowering the learners to make progress and overcome whatever learning obstacles or blocks they may have.

Indoor activities are not in focus for this study, even if these can also offer new experiences, impressions and incentives for learning. A majority of the day centres for adults (and children) with intellectual disabilities in Sweden have 'Snozelen' rooms for sensory stimulation. These rooms give opportunities for play, exploration and relaxation, e.g. through stimulation with sound, music, light, textiles (like 'a white room'), tactile experiences. These rooms are primarily used for persons with profound intellectual and multiple disabilities. However, both indoor and outdoor activities are of importance for this target group, but focus in the LIM-project is on outdoor education.

Outdoor education and the LIM project

The concept of outdoors can thus be defined in many different ways and in the Learning in Motion (LIM) project two concepts have been used. My definition of outdoors means out in nature, in the open-air, and out-of-doors, which was used by the Greek and German partners used the concept for going out through the doors of an institution, workshop or group home, and to go to a nearby park, airport, grocery, market, library or museum (Eriksson-Dobrovich, 2007). Outdoor education is also used to assist individuals in gaining a proper self-image. Interaction between the physical experience and book learning is stressed in the LIM project. It is reasonable to believe that outdoor education can be a challenge for many teachers but it will probably also break down barriers between the learner, the peers in the class/group and the teacher, and thus support inclusion and social interaction, i.e. inclusive education.

The LIM project, started in October 2004, was a three-year transnational co-operation project financed by the European Commission and co-ordinated by the Study Promotion Association, Uppsala, Sweden. The partners were: Stockholm Institute of Education (now Stockholm University); The Swedish association for persons with intellectual disabilities; the Finnish association for persons with intellectual disabilities; Livani Association (a non-governmental organization, NGO); 'Balta Maja', Latvia; Hamburg Folk High School, Germany; and the University Mental Health Research Institute, Greece. The partner organizations had both researchers and practitioners; the main reason for this was to guarantee that theory and practical work would go hand-in-hand. The German team organized courses outdoors for young adults with intellectual disabilities, and the Swedish NGO team arranged outdoor activities based on sensory stimulation, e.g. visual, auditory, motor, tactile and kinaesthetic impressions. Most of the Swedish participants had severe intellectual disabilities and had to rely very much on the group leaders.

Aims of the LIM project

The overall aims were to improve the quality of life for persons with intellectual disabilities through outdoor education and to find out whether access to outdoor education can be regarded as a tool for enhancing inclusion and promote communication and social interaction in a wide perspective. Another aim was to promote lifelong learning. The aims were applicable both as individual and societal goals and lifelong learning

is, as mentioned above, a European goal. The aims were many but seven partners contributed to the results and had sometimes diverse priorities about what were the most important issues to be tackled. This is according to my experiences from international co-operation quite normal in extensive projects such as the LIM.

The overall questions in the project were:

- Is education outdoors more powerful than traditional education?
- What are the challenges, for whom and how can we meet them in a society for all?
- Why and in what respects can outdoor education be regarded as a tool for inclusion?

Target groups

The target groups for the Swedish studies were children and adolescents (with typical and atypical development) and adults with intellectual disabilities. The main reason why children in general were included in the study was that we were interested in finding out when exclusion starts in order to discover when some of the children were barred from participation in the peer group. The target group in Greece was adults with mental illness, and for the other partners the focus was mainly on adults with intellectual disabilities.

Persons with intellectual disabilities do not form a homogeneous group. There are differences between individuals, but there are also functional differences within the same individual, i.e. a person can be very good at perceiving sensory impressions but lack the ability to organize and interpret the impressions (Granlund, 1993; Göransson, 1995). Many persons with intellectual disabilities also have multiple disabilities. In order to understand the consequences of multiple disabilities the difficulties should not be added but multiplied. Generally, persons with intellectual disabilities have difficulties in receiving, processing and storing information. They need more time for learning, have limitations on how much they can learn and have a lower level of abstraction than the average person (Brodin, 2008). They also have difficulties in understanding concepts concerning time, space, quality, quantity and cause-effect. None the less they have the same feelings and basic needs as all human beings.

In order to facilitate participation and inclusion in everyday life they need structure, repetition and continuity in time and activity. They also need adaptation of technical aids, learning material and methods, but most of all they need an understanding and supportive social environment (Göransson, 1995; Brodin, 2007).

Our task in the project was to focus on access to outdoor education and inclusion. Inclusion is often highlighted in research on outdoor education as a goal *per se* and therefore we started by reviewing literature on outdoor activities for typical and atypical children and adults with intellectual disabilities.

Methods

The reviews were conducted in the *ERIC* and *Libris* databases and on the internet by using *Alta Vista* and *Google*. Searches were also done in scientific journals. Our

starting point was to find out when exclusion of children generally starts. The shortage of research on outdoor education for atypical children and young persons was evident. The results of the surveys were published in two reports (Brodin & Lindstrand, 2006, 2007; Magnusson, 2006).

We also developed and distributed a questionnaire to municipalities in Sweden (N = 290). The municipalities in Sweden are responsible for schools and social services for all citizens. The municipalities are also responsible for daily activities for persons with intellectual disabilities (pre-schools and schools, and daily activities for adults, e.g. day care centres and sheltered workshops). There are 20 county councils in Sweden and they are responsible for health and medical care for all citizens.

Literature surveys on inclusion

The literature surveys covered typical and atypical children from 0–18 years and were divided by age into three subgroups: 0–6, 7–11, and 12–18 years (Brodin & Lindstrand, 2006); young adults 18–25 years (Magnusson, 2006); and adults with intellectual disabilities (Brodin & Lindstrand, 2006). The databases used were *ERIC* and *Libris*. The keywords were: outdoor education + outdoor education and children (25 hits in *Libris* and when pre-school was added only four hits were given). In *ERIC* outdoor education and children gave 1426 hits and 260 hits when pre-school was added. When education and nature and wilderness were used three hits in both databases were given and when adventure and children and outdoor education were used, we got three hits in *Libris* and 22 in *ERIC*. When disability was added all hits decreased; in *Libris* we found none and in *ERIC* there were four hits, mainly conference papers (Brodin & Lindstrand, 2006; Magnusson, 2006). In 2009 an additional survey was conducted at Stockholm University, covering all available research databases, in order to check the present situation. The same keywords as in 2006 were used but also new related keywords as the vocabulary has sometimes been changed. An example is 'mental retardation' which is not used in texts today, but there are still several papers in scientific journals where this concept is used. In Sweden intellectual disability is used while developmental disability and learning disability is used in some other countries. Nevertheless, the lack of research in outdoor education for adults with intellectual disabilities is still evident (Brodin, 2009).

Interviews with the participants

An interview guide was developed and four young adults from Germany with intellectual disabilities were interviewed by Michaela Ehlers (German partner). The four German participants (two men and two women) had participated in an outdoor activity organized within the LIM-project and we wanted to get their experiences of the outdoor activity. The interviews had the character of a dialogue, and when interviewing persons with intellectual disabilities the questions need to be adapted and asked in many different ways in order to be sure that the participants have understood the questions. The interviews were made in German, and written down as

notes and translated into English. We realized that there is a difficulty in translating interviews with persons who use few words but used bodily expressions and gestures when communicating and there are also many ethical issues related to this kind of study, but this issue will not be discussed in this paper. I refer to an earlier published paper on ethical reflections in research on persons with intellectual disabilities (Brodin & Renblad, 2000).

Questionnaire to the municipalities

A questionnaire concerning outdoor education for adults with intellectual disabilities was developed and distributed to the administrators in the municipalities in Sweden (N = 290). The aim was to find out whether the municipalities organize outdoor activities for this population and how it works. The questionnaire was both quantitative and qualitative and consisted of ten questions. Both open-ended questions, rating scales and a selection of alternative answers in tick-box style was used. Of these 163 municipalities answered. The questionnaire involved a number of items about daily activities, health, learning, recreation and if and why the municipality arranged outdoor activities for adults with intellectual disabilities. If they arranged any activities, they were asked to report what kind of activities they arranged and for what reasons. The questionnaire involved whether the activity was an individual or group activity, where it took place, who was responsible, to what extent the administrator believed it contributed to participation, to what extent it contributed to learning, if they wanted to increase the activity and which efforts from society would facilitate and increase outdoor activities.

Results

Inclusion of children in outdoor education

The results from the surveys on inclusion of children in outdoor education (Brodin & Lindstrand, 2006) showed that children normally participate in outdoor education from the early years in pre-school (0–6 years) and that most pre-schools have a playground for outdoor activities (Engdahl, 2005). Playing outdoors stands as a concept of freedom for most children. During the early years most children in Sweden attend preschool and spend a lot of time outdoors in the playground; running, jumping, climbing; exploring the richness of nature is a natural challenge for all. The pre-school is an inclusive setting and all children (typical and atypical) are part of it. Outdoors means freedom, joy, plenty of room to move and act and few restrictions. Therefore disability is seldom an obstacle for participation and most children are included. Up to the age of 4 years a majority of the children are accepted as they are and their differences create few problems. One reason for this might be that children develop differently and that differences between children are common (Sommer, 2005). After that period, the child is likely to experience a sense of being different and the peers in the immediate environment become aware of the variety of differences (Sandberg, 2008).

When children start school at 6 or 7 years of age, the differences between them appear to become more visible. During the first school year children with disabilities often recognize that they have limitations compared to their peers. In play this is evident and when they have breaks during the school day, they experience difficulties taking part in different activities outdoors. Children continue with the same or similar activities outdoors (7–11 years) but outdoor play has changed and is now directed more towards sports and competition. Nature is still important but the specialized interests in peer groups cause some children to be excluded. During leisure time the number of friends can decrease. Many children attend some sort of leisure time activity and then have to choose activities that they can cope with, which means that they are not always doing what they want to do most of all (Brodin & Fasth, 2000). Exclusion becomes more and more common although outdoor education stimulates co-operation and understanding of friends with limitations of different kinds.

Between 12 and 18 years of age, the interests vary even more. Peers take over and more time is spent with peers than with family. Teamwork and competition increase. In this age group children in general are still interested in sports and some play football, soccer or ice hockey, while others take up horse riding, singing, dancing or drama. Many activities take place indoors but still activities such as scouting, sailing and winter sports are outdoor activities. It appears from our survey (Brodin & Lindstrand, 2006) that adolescents with diverse disabilities were previously often excluded mainly due to physical limitations but at present efforts are made to give all accessibility to these activities. To sum up, we noticed that the first stages of being excluded are already apparent when the child starts school. Later on between the ages of 12 and 18 years signs of exclusion accelerate rapidly.

The review of young persons between 18 and 25 years of age (Magnusson, 2006) showed that there is little research reported through the annotated and validated retrieval systems regarding outdoor education for young persons with intellectual disabilities or disabilities in general. The review also showed that little research is age-specific. Focus is on the educational, psychological and therapeutic aspects of outdoor education. The target group is described as a group in a process of transition and change. A large amount of information is available on the internet on resources such as centres, sites and courses. However, that information is not validated and therefore not as reliable as research material. The report presents a few examples of resources on the internet that might be of interest for future studies but the final results show that there is a lack of research on outdoor education for all age groups, i.e. children, adolescents and adults and especially for those who have intellectual disabilities.

Results from the interviews

The four participants were Daniel, Tobias, Liane and Kiki. The answers on what they liked most, what they did not like, if they wanted to take more courses outdoors

are exemplified below. In the outdoor course they made visits to the park and once to the airport.

What did you like most about the course, what was the best?

Daniel: Airport.

Tobias: That's a good question. What the others say. The plane thing. When I was sitting in the plane (smiles and nods).

Liane: When we went by bus onto the runway (thinks a while). Going to the park.

Kiki: Taking photo.

Can you tell me why?

Daniel: Hm … yes … the … engine, hmmm … pilot (moves his hands as if holding the control lever, beaming all over his face).

Kiki: The plane. Holding the control lever. But that was unfamiliar.

What did you not like, what was no good?

Daniel: Everything was good.

Tobias: Sometimes I got gooseflesh before lessons and during lessons. There was so much new.

Would you like to take more courses outdoors?

Daniel: Yes. Learned a lot. Fun.

Tobias: (thinks a while) Yes.

Liane: Yes. We were outside a lot.

Kiki: I don't know. I'd rather do more reading and writing.

Summary

The participants seemed to be satisfied with the outdoor activity. They were positive and the two male participants highlighted the visit to the airport as the most interesting. The two female participants talked about going to the park and taking photographs. Their limited language made it difficult for them to express what they really wanted to say and in this case it was of great importance that the educator really had a good knowledge of them and could interpret what they said. That they liked the outdoor activity is confirmed by the fact that they have taken more outdoor courses afterwards. Daniel attended the course in three terms of the LIM-project and after that he booked the next course. He is an eager student, ready to learn more.

Results from the questionnaire

The county councils in Sweden ($N = 20$) are responsible for health and medical care, while the municipalities ($N = 290$) are responsible for schools and social services for

all citizens. This means that the municipalities are responsible for daily activities for children and adults with intellectual disabilities. The questionnaire was distributed to all municipalities and 163 answered within the stipulated response time. Of these 130 arranged outdoor activities for adults with intellectual disabilities. It appeared that they arranged the activities outdoors as a daily activity with emphasis on work (77) and as leisure time activities (52). The reasons for arranging the activities appear in Table 1.

The daily activities differed and from the replies it appears that common activities included gardening, working in the forest, farming, sawing wood, taking care of pets such as chickens or dogs, reclaiming rubbish in the environment, washing cars, clearing snow, delivering post to pre-schools and schools, and helping senior citizens. The most common activities were gardening in summer and clearing snow in winter. Outdoor activities were often connected to leisure time. A majority of the municipalities arranged nature excursions, took daily walks and conducted nature circles (which were defined as outdoor education). A small number of municipalities arranged summer camps and horse-riding, citing healthcare as reasons for doing so. The places mentioned for outdoor education included nature in general, a forest in the immediate environment, a nearby park or a nearby open-air recreation area. Visits to museums, airports and swimming pools were also mentioned. The activities took place all year round although summer and spring seasons were more frequently mentioned. As seen in Table 1, other reasons were also mentioned, including learning, pleasure, recreation and social reasons, e.g. to promote communication skills. Most activities are arranged as group activities and only a limited number as individual activities.

Two of the questions were based on ratings. The first one focused on participation in society. The administrators indicated on a scale from 1–10 (where 1 stands for a limited extent and 10 for a great extent) what the activity is expected to contribute to participation. The answers showed that the mean value (M) was 5.8, and. slightly more than one-half of the administrators thought that the activity would increase participation in society. The second question focused on learning something new (in this case formal learning) and this question had an M of 6.3. Many pointed out, however, that they learned to communicate, to interact with peers, to observe things

Table 1. Reasons for arranging outdoor activities

Reasons	Number
Daily activity	118
Health reasons	52
Learning	44
Pleasure	39
Recreation	36
Other	10

around them, to co-operate with peers, to recognize different objects, i.e. vital knowledge for increasing quality of life. The administrators confirmed that they were interested in increasing outdoor education for adults with intellectual disabilities. The main obstacles were the present financial climate, lack of assistive devices, difficulties to find suitable places, need for education of group leaders and staff, transportation and accessibility.

Some comments from the questionnaires were that:

- financial resources are required;
- more hands are needed;
- resources and motivation of users and staff to participate;
- knowledge of the value of outdoor activities is needed; and
- there is no demand for outdoor activities.

Back to the questions

Is education outdoors or out-of-doors more powerful than traditional education? I will answer this question with yes and the reasons are stated below. First of all, learning in a playful way without demands is the best way to learn, and research has shown that play has turned out to be the most vital way for all children to learn (Sandberg, 2008). There are fewer restrictions outdoors than indoors (i.e. space enough to move around, not forced to sit still, allowed to explore the immediate environment) (Björklid, 2005; Dahlgren & Szczepanski, 2005; Westberg, 2007), and it is therefore easier for persons with intellectual disabilities to be relaxed and feel comfortable. Another reason is that persons with intellectual disabilities have difficulties receiving, processing and storing information, need more time for learning, have a limitation on how much they can learn, have a low level of abstraction and need a tangible environment, have difficulties understanding concepts concerning time, space, quality, quantity and cause-effect, and finally many of them have multiple disabilities and communication disorders. Exploring nature involves learning with all senses (taste, smell, touch, vision, hearing); it is indeed learning in motion (Brodin, 2002, 2008; Sandberg, 2003).

In outdoor education as well as in indoor education it is also possible to facilitate participation by structuring the tasks and building up routines, by repeating and training what you do and experience, by building up a continuity with regard to time and activity. In order to make the environment accessible, teaching and learning material as well as assistive devices can be adapted in order to facilitate participation (Doctoroff, 2001; Brodin & Lindstrand, 2006). While learning in a playful way is the dominating pattern for typical children, atypical children often need support to be able to participate in play. Both children and adults, especially with intellectual disabilities, need to have routines and structure in their lives. It is important that outdoors and indoors are not regarded as contradictory but as complements. Some experiences can however only be obtained when you leave your group home or day centre. A group of young adults (18–25 years), with moderate

intellectual disability, participated in outdoor education. Their opinions of the event will exemplify this:

> Our class went to Tallkrogen (a recreation centre). The others took the bus but Tim and I went with my dad. We ate before we did some activities. We had turkey baguettes but I did not like turkey so I give the turkey to Tina (a peer). We could not be on the ice and go fishing because the ice was too thin. We tried to shoot with bows and arrows, play bandy, walk a long way and a lot of other things. It was great fun there and I didn't get a bad back.

Another man said:

> We could walk in the wood and be together with others. All of it was fun. They had a very cute dog called Poppe. He was a little bit noisy. But I had the best day at Tallkrogen. I will never forget that day when we were there.

What are the challenges, for whom and how can we meet them in a society for all? First of all it is important to recognize that there are challenges and then that it is a challenge for all persons involved, i.e. the teacher or group leader, the learner and sometimes for everyone they meet, for instance at a museum. Sometimes the participants need to be stimulated to go outdoors instead of doing indoor activities. The group leader/teacher needs knowledge and education to interest the learners in going outdoors and also to offer an activity of high quality. They do not need to know everything but can search for knowledge the learners want to have. It appeared from the replies that sometimes co-operation with voluntary organizations is a way to share the responsibility (Eriksson-Dobrovich, 2007).

Why and in what respects can access to outdoor education be regarded as a tool for inclusion? First of all persons with intellectual disabilities have the same right to education as other citizens. Outdoor education offers opportunities to promote communication and learning of concepts with all the senses in co-operation with others and it supports lifelong learning. Inclusion is a societal goal and outdoor education can be used as a tool towards attaining inclusion. Communication in small groups often facilitates the opportunity to influence daily life and is therefore a value *per se*. Outdoor education also promotes health and well-being, which is important for adults with intellectual disabilities. From research it appears that they are at high risk for developing obesity and becoming overweight (Jobling, 2001), and therefore need to be stimulated to participate in physical activities.

Conclusions

The majority of the municipalities offer some kind of outdoor education but they have not yet reflected on the many benefits (e.g. health reasons, learning together, social interaction) of outdoor activities for adults with intellectual disabilities. Most municipalities are working under financial pressure and claim that they do not have enough resources for the tasks they are responsible for, for example daily activities for persons with intellectual disabilities. This might explain why some of them have not reflected on the access to outdoor education. However, some administrators stated that the health aspect is very important and that physical exercise makes

people healthier and enhances their well-being. This is important as many adults with intellectual disabilities are very stout and need to lose weight (Jobling, 2001; Marshall, McConkey, & Moore, 2003). This is a health problem for the society as a whole and not only related to this population. Inclusion of children with a diversity of disabilities in pre-schools is not a problem but already when children start school the differences are visible (Engdahl, 2005). Between 7 and 11 years of age exclusion of atypical children starts mainly due to the activities and between 12 and 18 years it is even more evident (Brodin & Lindstrand, 2006). Children and adolescents often participate in mixed groups in outdoor education (age, gender, typical and atypical children, diverse disabilities) and in some way they are included. The review on adults showed that focus is on educational, psychological, and therapeutic aspects of outdoor education but the lack of inclusive education is obvious (Magnusson, 2006). Most groups for adults with intellectual disabilities are segregated. There are also groups with adults with many diverse disabilities. These groups are small with four–five participants in each and for adults with severe and profound intellectual disabilities they are mainly attending special groups. The results of this empirical study highlight a trend. Including children and adolescents in regular outdoor activities is possible if there are interested and competent educators leading the group but when it comes to adults it is still a big problem.

The co-operation between research and practical work in the LIM project was a challenge for all participants but of great importance, although it was sometimes difficult to speak the same language. However, we managed to find a way to respect and appreciate the differences and it is reasonable to believe that a good co-ordinator is a prerequisite for obtaining a positive outcome of European projects.

The conditions for participation in outdoor education are set by average citizens, not by persons with intellectual disabilities. All citizens have the same rights to education, to daily activities, to an active leisure time and to live a meaningful life. As quality of life is for all, the results of these studies give the LIM project an added value as it concerns all European citizens. Future studies on outdoor education need to go more deeply into the topic, as the research field is under-represented in academic research. There are still many questions to be answered with regard to outdoor education for persons with intellectual disabilities. The most important question is, however: how can adults with intellectual disabilities get access to outdoor education and how can they get opportunities to participate in regular groups and be included—not only participate together with other persons with disabilities? There are discussions going on in many countries about inclusion and the importance of involving all citizens, but what we can see today is in many respects a backlash with regard to inclusion. More and more segregated remedial or special groups are established in schools for instance and many adults with intellectual disabilities are isolated in their group homes and day centres. The attitudes against diversities are still extensive in today's society and what can be done to change this? The time for change should be here if we really want to meet all the visions we had during the 1990s. It is time to face the meaning of participation and equal opportunities for all citizens in a broader sense.

Acknowledgements

This paper is based on a presentation at the 21st RI World Congress on Rehabilitation 'Ensuring a society for all' in Quebec, Canada, in August 2008.

Author biography

Jane Brodin is Professor of Child and Youth Science. She is the leader of the Disability and Handicap Research Group, Stockholm University, SE-106 91 Stockholm, Sweden.

References

Björklid, P. (2005). *Lärande och fysisk miljö. En kunskapsöversikt om samspelet mellan lärande och fysisk miljö I förskola och skola* [Learning and physical environment. A survey on interaction between learning and physical environment in preschool and school]. Stockholm: The Authority for School Development.

Brodin, J. (2002, September). Opportunities and obstacles. Computer play for children with profound intellectual impairment. Paper presented at the conference Assistive Technology—Added Value to the Quality of Life, Ljublana, Slovenia.

Brodin, J. (2007). *Inclusion in outdoor education.* Presentation of the LIM-project at the final dissemination conference in Uppsala, September

Brodin, J. (2008). *Att tolka barn signaler. Lek och kommunikation hos barn med flerfunktionshinder* [To interpret children's signals. Play and communication in children with multiple disabilities]. Malmö: Gleerups.

Brodin, J. (2009, April). Equal opportunities and education for all in tomorrow's school. Paper presented at South-West University, Neofit Rilsky, Blagoevgrad, Bulgaria.

Brodin, J., & Fasth, Å. (2000). *Vi vill bara vara som andra* [We just want to be as everybody else]. Stockholm: The Association for Young Persons with Motor Disabilities.

Brodin, J., & Lindstrand, P. (2006). Inclusion of children in outdoor education. Learning in Motion. Report 43, Stockholm Institute of Education, Stockholm.

Brodin, J., & Lindstrand, P. (2007). Outdoor education for adults with intellectual disabilities, An empirical study in the municipalities in Sweden. In I. Eriksson-Dobrovich, *Learning outdoors. Handbook for adults with mental disabilities*. Uppsala: Studiefrämjandet.

Brodin, J., & Renblad, K. (2000). Ethical reflections in research on persons with intellectual disabilities. *Technology and Disability*, *13*, 151–159.

Cuvo, A. J., May, M. E., & Post, T. P. (2001). Effects of living room, Snozelen room, and outdoor activities on stereotypic behaviour and engagement by adults with profound mental retardation. *Research in Developmental Disabilities*, *22*(3), 183–204.

Dahlgren, L-O., & Szczepanski, A. (2005). *Outdoor education. Literary education and sensory experience*. Linköping University & Kinda Education Center.

Doctoroff, S. (2001). Adapting the physical environment to meet the needs of 'all' young children for play. *Early Childhood Education Journal*, *29*(2), 105–109.

Engdahl, K. (2005). *Vi vill leva—leva för alltid. En empirisk studie av barns interaktion och lek på två förskolegårdar* [We want to live—live forever. An empirical study on children's interaction and play on two preschool playgrounds]. Report 41, Stockholm Institute of Education, Stockholm.

Eriksson-Dobrovich, I. (2007). (Ed.). *Learning outdoors. Handbook for adults with mental disabilities. Learning in motion*. Uppsala: Studiefrämjandet.

Gair, N. P. (1997). *Outdoor education: Theory and practice*. London: Cassell.

Göransson, K. (1995). *Dom liknade varandra men inte mer än andra* [They were alike but not more than others]. Stockholm: Stockholm Institute of Education.

Grahn, P. (1992). *Människans behov av parker—Amerikansk forskning i dag* [Man's need of parks—Contemporary American research]. SLU Report No. 107: 92. Alnarp: Movium.

Granlund, M. (1993). *Communicative competence in persons with profound mental retardation: Intervention focused on the social context* (Doctoral dissertation, Uppsala University, Sweden).

Holman T., McAvoy, L., Rynders, J., & Goldenberg, M. (2003). Outdoors: An initial report into the experiences of outdoor activities for an adult who is congenitally deafblind. *Journal of Experiential Education*, *25*(3), 353.

Hopkins, D., & Putnam, R. (1993). *Personal growth through adventure*. London: Cassell.

Jobling, A. (2001). Beyond gender and cooking: Health education for individuals with intellectual disabilities. *Mental Retardation*, *39*, 310–312.

MacKay, G. (2002). The disappearance of disability? Thoughts on a changing culture. *British Journal of Special Education*, *29*(4), 159–163.

Magnussson, M. (2006). *Inclusion of young persons in outdoor education. Learning in Motion*. Report 44, Stockholm Institute of Education, Stockholm.

Marshall, D., McConkey, R., & Moore, G. (2003). Obesity in people with intellectual disabilities: The impact of nurse-led health screenings and health promotion. *Journal of Advanced Nursing*, *41*(2), 147–153.

Sandberg, A. (2003). *Vuxnas lekvärld. En studie om vuxnas erfarenheter av lek* [The play world of adults. A study on adults' experiences of play]. Studies in Educational Sciences 189, Acta Universitatis Gothoburgensis, Göteborg.

Sandberg, A. (2008). *Miljöer för lek, lärande och samspel* [Environments for play, learning and interaction]. Lund: Studentlitteratur.

Sommer, D. (2005). *Barndomspsykologi. Utveckling i en förändrad värld* [Psychology of Childhood. Development in a changeable world]. Malmö: Runa Press.

Spencer, A. (2003). *Playground of dreams, parks and recreation*, *37*(11), 64–68.

Todd, T., & Reid, G. (2006). Increasing physical activity in indviduals with autism. *Focus on Autism & Other Developmental Disabilities*, *21*(3), 167–176.

Wellhousen, K. (2002). *Outdoor play every day. Innovative play concepts for early childhood*. Delmar: Thomson Learning.

Westberg, A. (2007). *Den upproriska skötsamheten. Att vara ung och scout* [The rebellious aspect of being well-behaved: To be young and scout] (Doctoral dissertation, Stockholm Institute of Education, Stockholm).

White, J. (2006). *Maths in the garden*. Burlington, VT: National Gardening Association.

View publication stats