

PLACE-BASED LEARNING: MAKING USE OF NATURE IN YOUNG CHILDREN'S LEARNING IN RURAL AREAS IN NORWAY AND SCOTLAND

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ABSTRACT: Two case studies in outdoor learning from Norway and Scotland illustrate ways in which communities can help in developing and shaping their Early Childhood Education and Care (ECEC) services and schools. Presented in their geographical and historical context, including a descriptive analysis of their preschool and education systems, it is argued that their creative use of rural environments in the learning of young children illustrate the power of partnership with communities. However, creative “democratic experimentalism” of this kind requires flexibility within the curriculum and a supportive educational culture.

Keywords: Place-based learning. Outdoor learning. Nature. Democratic experimentalism. Child and community agency.

Aprendizagem baseada no lugar: utilização da natureza na educação de crianças pequenas em áreas rurais na Noruega e na Escócia

RESUMO: Dois estudos de caso de aprendizagem ao ar livre, da Noruega e da Escócia, ilustram maneiras pelas quais as comunidades podem ajudar no desenvolvimento e na conformação

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de suas escolas e serviços de educação infantil. Apresentados em seus contextos geográficos e históricos, incluindo uma análise descritiva de seus sistemas pré-escolares e educacionais, argumenta-se que o uso criativo dos ambientes rurais na aprendizagem de crianças pequenas ilustra o poder da parceria com as comunidades. No entanto, o “experimentalismo democrático” criativo desse tipo de educação requer flexibilidade no currículo e uma cultura educacional de apoio.

Palavras-chave: Aprendizagem baseada no lugar. Aprendizagem ao ar livre. Natureza. Experimentalismo democrático. Criança e agência comunitária.

INTRODUCTION

Place-based learning is an approach to education that makes use of local economic, social and cultural activities to engage more effectively with children and young people in the context of their lives. It has a long history and is a broad movement (COHEN & RØNNING, 2014; COHEN & KORINTUS, 2016; GRUENEWALD & SMITH, 2008; SMITH & SOBEL, 2010; WATTCHOW & BROWN, 2011). In this article, we will explore one aspect of place-based learning: how preschool services and primary schools in rural areas in the north of Norway and Scotland are adopting pedagogical approaches that use local outdoor environments and resources.

Both Norway (5.2 million people) and Scotland (5.3 million) have long established education systems and have, over the last half century, developed their Early Childhood Education and Care Services (ECEC) as part of these. We will look first at these systems, the form they take and the levels of provision they offer in rural areas, before examining some of the ways in which nature and outdoor environments are being used to promote young children’s learning. Our examples will be drawn from two areas: the county of Nordland in Norway and four local authority areas within the Highlands and Islands of Scotland.¹ Both areas have population densities well below their national average. The coun-

ty of Nordland, in Norway, has just over 240,000 inhabitants and a population density of 6 people per square kilometer over an area that includes a large number of islands, both small and large. The four local authorities that we examine in the Highlands and Islands of Scotland have a combined population of just over 300,000 inhabitants and a population density of 11 people per square kilometer, also including many islands. Both Norwegian and Scottish areas include some urban areas. In Nordland, the county's capital, Bodø, has over 50,000 inhabitants, and in the Highlands and Islands of Scotland, there is one city of over 60,000 people and a number of small towns. The great majority of the population in both areas are ethnically white Norwegian and Scottish, but, in addition to their national languages of Norwegian and English, both have indigenous language groups. All three official Sami languages of Norway's indigenous people can be found in Nordland, whilst the "heritage" languages in the Highlands and Islands include Gaelic and Scots and Shetlandic and Orcadian dialects. Both areas have seen small but significant increases in migration, bringing some further diversity to the population (COHEN & RØNNING, forthcoming).

Notwithstanding these similarities, the examples we will examine here have, to some degree, been shaped by the historical, socio-economic, political and cultural settings in which they have developed, and drawn on their own pedagogical traditions. They enable us to see different ways in which preschools and schools make use of local environments and economic, social and cultural activities, not only as tools for learning, but also as a way of contributing to wider societal goals, including rural development, community building, and aesthetic and environmental awareness. Although they reflect local experiences and concerns, they may also be seen, as argued here, as examples of services arisen from their respective communities within education systems which support, in some measure, child, family and community agency and experiment. Outdoor learning receives support in both countries, but these examples have arisen from, and in a number of ways been shaped by, communities themselves. They reflect their engagement with nature in its wild and managed forms, and are examples of partnership between preschools, schools and community in enabling children to understand and engage with the local natural environment and those who inhabit and manage it. They may be seen as arenas where "community

identity is forged” (DELGADO, 2009, p. 117), examples of “democratic experimentalism”, in some senses at least, of the phrase that Moss (2011, p. 143) borrows from Unger (2005) to conjure up “an expression of a community taking collective responsibility for the education and up-bringing of its young children”.

SCHOOL AND PRESCHOOL SYSTEMS IN NORWAY AND SCOTLAND

NORWAY

School education in Norway dates back to the Protestant Reformation and the teaching of religion. The Danish legislation of 1739 required Norwegian children from the age of seven to learn religion and reading in Danish for five years in schools and required a locally funded, Church-supervised school to be established in every parish (COHEN; RØNNING, 2015). Schools developed separately in rural areas, often taking the form of *omgangsskole* (peripatetic) schools whilst urban schools had their own school buildings. Non-sectarian public education was established across all areas from the late 19th century. Legislation of 1889 established the *folkeskole* (peoples’ school), which developed following Norwegian independence into the *enhetsskole* or unity school concept. This is based on the premise of ensuring equitable education provision irrespective of local economic, geographical and demographic circumstances. Children in a designated area receive their education in a common public school on a basis aimed at accepting and adapting the system to accommodate individual and group differences (COHEN; RØNNING, 2015).

Services for young children prior to attending school took somewhat longer to become established, starting in larger Norwegian cities in the late 19th century as “children’s asylums”, followed by some public kindergartens in the early 20th century, mostly for children living in poverty. Although the immediate post-war period saw the development of its welfare state, it was not until the late 1960s, when maternal employment rates began to rise and the women’s movement strengthened, that attention began to focus on improved leave provi-

sion and services (COHEN; RØNNING, 2015). A Commission set up to examine the services required by children and to support women's employment led to the 1975 Kindergarten Act, which established a unitary system. The name “*barnehage*” or “*kindergarten*” was adopted as a common new name for separate care and education services it brought together, but also reflected a Froebelian emphasis on free and creative play that influenced some of the early services, remaining very important still (COHEN; RØNNING, 2015).

Kindergartens were developed through a partnership between the local *kommune* (municipality) and national government, initially the Ministry of Children and Social Affairs and, from 2006, the Ministry of Education and Research, where they constitute the first stage of the education system. National government has legislated for entitlements to services, set targets and provided earmarked funding to municipalities to support expansion whilst the *kommune* (with support from the county governor level of administration) have taken the lead in developing services. Since 2003, this has involved increased responsibilities for the *kommune*, including financial support to services to subsidise around 85-90% of running costs and lower parent fees through a maximum parental fee. The municipalities also monitor and control all services. Around half of them are privately owned, receiving the same subsidies as public services but with legislative underpinning of quality through regulations covering staff qualifications, staff-child ratios and governance and, in private for profit nurseries, controlling profit levels (ELLINGSÆTER, 2014).

Norway's welfare system shares the “Nordic model” characteristics of comprehensive state responsibility, universal coverage, high employment and high quality, often public, services with other Nordic countries (KVIST & GREVE, 2011; ESPING-ANDERSEN, 1999). Norway has strong democratic traditions based in part on a progressively extended system of land ownership and political franchise from the early 19th century and what has been described as a “culture of egalitarianism” surviving from the old Lutheran peasant society (BRYDEN *et al.*, 2015). It has a strong sense of local identity, supported over recent decades by decentralization based on the principle of devolving decision making down to the lowest effective level (BRYDEN *et al.*, 2015). In 2016, Norway had 426 *kommuner*, varying in size between Utsira —

with a population of 205 inhabitants — and Oslo — with a population of 658,000 people —, but with nearly half of them with fewer than 20,000 inhabitants (STATISTICS NORWAY, 2016). The *kommune* is responsible for education as well as health, social protection, housing and community amenities, economic affairs, environmental protection and general public services. They have tax-raising powers of their own to add to central government block grants but, more significantly, fiscal equalization policies transfer resources from richer to poorer municipalities to compensate, amongst other factors, for higher costs of service delivery associated with remote and scattered settlements (BRYDEN *et al.*, 2015). This enables families throughout Norway to access their entitlements to preschools and schools, with no difference in terms of access between rural and other areas. Nine out of ten children attend kindergarten in Norway from the age of one until the age of six, when they start school. Of these, 94% attend it fulltime, and kindergarten attendance is in fact slightly higher in Nordland than in Oslo, where rates of attendance by children from immigrant families are slightly lower (UTDANNINGSDIREKTORATET, 2016). There are some differences in the type of service; for instance, there are open kindergartens where the parent or caretaker accompanies the child, mostly found within larger municipalities. “Family” kindergartens — small kindergartens attached to homes — used to be quite common, but are decreasing in number (UTDANNINGSDIREKTORATET, 2016, p. 12). The average size of kindergartens in Nordland is 35 children, lower than the national average of 47 ones (STATISTICS NORWAY, 2016). Schools are also smaller. In Nordland, for example, about 10% of the schools in the region had less than 20 pupils and just under half of them had fewer than 100 pupils (STATISTICS NORWAY, 2016).

Whilst there is little difference in the form of ECEC or schools, the overwhelming majority of all preschool children attend a kindergarten and subsequently their local primary school. The Norwegian national preschool and school curricula has long encouraged the use of “local” environments and resources, cross-curriculum working and close relationships with communities. More recently, this has been supported in schools by national programs, including the Cultural Rucksack — which brings arts and artists to schools — and the new Natural Rucksack — focusing on the use of the outdoors (COHEN & RØNNING, 2015). All kin-

dergartens, however, have a lot of outdoor activities and about 10% of Norwegian kindergartens define themselves as “outdoor” kindergartens, with 3% of farm kindergartens (UTDANNINGS-DIREKTORATET, 2016). A small number of Sami language kindergartens exist for the Sami community, and about 200 kindergartens report a particular focus on arts, music and culture. Another important aspect of the Norwegian education system, both at preschool and school level, is the focus on democracy and development of democratic values in children and youth. Children’s participation in decision-making is ensured through legislation both for kindergartens and schools, in the Kindergarten Act (*Barnehageloven*) and the Education Act (*Opplæringslova*) (LOVDATA, 2017), as is the case for parental participation in the development of the kindergarten and the school. Democratic values also play a central role in the national curricula for both kindergarten and school, and in the International Civic and Citizenship Study (ICCS) from 2009, which measured democratic knowledge and skills in 38 countries, Norwegian 15-year-olds were ranked fifth (FJELDSTAD *et al.*, 2010).

SCOTLAND

Early industrialization and the influence of the French and Scottish enlightenments in Scotland saw one example of ECEC, established in 1816 by the mill owner and educational reformer Robert Owen, in what is now the World Heritage site at New Lanark. With a curriculum that offered nature walks and singing and dancing, it combined care for families working at the mill with an education inspired by the philosophies of the French and Scottish Enlightenment of the time (COHEN, 2015). New Lanark became an inspirational memory as services developed slowly in a fragmented form with separate services providing early education, care, and play. In 1998, the Blair Labour government initiated partial integration, bringing together departmental responsibilities for education and childcare and other early years services within education departments in both Scotland and the UK, and committing to part-time nursery education for all three- and four-year-olds (COHEN & RØNNING, 2015). The establishment of a Scottish Parliament in 1999, and, since 2007, a Scottish National Party government,

have led to some distinctive policies and a substantial expansion in provision. The full integration of education and childcare services has been impeded by the use by government at a UK level of demand-side tax credit policies to expand childcare, raising the opportunity costs of a comprehensive public service, and constraining the ability of Scotland and the other devolved UK administrations to choose this option (COHEN, 2013). The hours of what in Scotland is called Early Learning and Childcare (ELCC) are now being progressively extended. Currently, all three- and four-year-olds and some two-year-olds are entitled to 600 hours per year (16 hours for 38 weeks) of free ELCC. By 2020, this will increase to 1,140 hours, or 30 hours for 38 weeks (SCOTTISH GOVERNMENT, 2016a). The entitlement enables nearly all three- and four-year-olds to access free preschool education for these hours, most often through publicly provided school-based nursery classes. However, additional hours of care required by parents in paid employment and education, including school-age childcare, are generally provided by the private sector (for-profit and non-profit). Its cost is high with net childcare costs (after benefits) estimated by the Organization for Economic Cooperation and Development (OECD) as making up 27% of family income in comparison to 11% in Norway (NAUMANN *et al.*, 2013).

Scotland largely shares the UK's neo-liberal welfare system, but with some modifications and growing divergence with England in terms of ECEC and its education system. This reflects not only its different history but also increased legislative powers to follow different policies². The emphasis on progressively extending the hours of early education, initiated in Scotland and now being followed in a different form in England, is one of its examples and constitutes, with its well-established universal school system, an important provision for Scotland's rural areas. Scotland's local authorities are larger, but less powerful than those in Norway. They range in population size from 20,000 to just under 600,000 and nearly two thirds with a population over 100,000, they currently receive most of their funding (86%) from the Scottish Government, and lack Norway's clear and transparent fiscal equalization system (SCOTTISH GOVERNMENT, 2012; BRYDEN *et al.*, 2015). However, as in Norway, universal entitlements are an important means of supporting access to services in rural areas. Data from a major longitudinal research study — “Growing up in Scotland”³ — has found that

children living in remote and accessible rural areas have been slightly more likely to attend preschool provision than those in large urban areas. At age 4, 96% of children living in remote or accessible rural areas had attended a preschool, compared with 91% in large urban areas, although in 2008/2009 they were far more likely to attend it for only 12.5 hours a week or less, the more limited statutory entitlement at that time (BRADSHAW, 2016). The majority of preschool children in Scotland make use of public services, but these are most extensively used by children in rural areas. They were most likely to attend nursery classes attached to primary schools and less likely to attend a private nursery. Whilst 19% of children in large urban areas attended a private for-profit provider, only 9% of those in remote rural areas attended private nurseries, with the longer hours provided by them (at a high cost) for those in fulltime employment (BRADSHAW *et al.*, 2014). However, the Scottish Government is now piloting ways in which hours can be extended to meet the needs of parents in paid employment. In the islands' authority of Eilean Siar, this involves extending morning-only term time nursery provision to full day and year round provision, integrated with out of school care to meet the "whole family needs" (SCOTTISH GOVERNMENT, 2016b).

Rural ECEC services are generally much smaller. Forty percent of services in remote rural services and 25% in accessible rural services are registered for 20 or fewer places, compared with 4% in large urban areas (BRADSHAW *et al.*, 2014). Scotland's rural children are also more likely to attend a smaller primary school. The Legislation of 2010⁴ has made it more difficult for local authorities to close rural schools without full consideration of community impact as well as educational benefits, requiring them to carry out rigorous consultation with children, as well as their families and community before they can do so (SCOTTISH GOVERNMENT, 2015). In the Highland Council area of Scotland, about 20% of primary schools had fewer than 20 pupils in 2014/2015. (HIGHLAND COUNCIL PRIMARY AND SECONDARY SCHOOL ROLLS SESSION, 2014).

The reestablishment of the Scottish Parliament in 1999 (SCOTTISH PARLIAMENT, 2016) has allowed more parliamentary time and promoted discussions on the Scotland's education system. This has underpinned an increasing focus on child agency with a leg-

islative entitlement for their views to be taken account of by education authorities and further provision for pupil and parent councils. One of the outcomes has been the development, from 2004 on, of a new non-prescriptive curriculum, the Curriculum for Excellence (SCOTTISH GOVERNMENT, 2004). Envisaged as a framework for active learning for children and young people aged three to eighteen years old, it emphasizes the use of relevant contexts and experiences that offer opportunities to observe, explore, experiment and play. It has led to the increased use of the outdoors and the natural environment in preschools and primary schools (COHEN & RØNNING, 2014; 2015).

NATURE AND THE OUTDOORS IN THE CURRICULUM

Preschool and primary school curricula in both countries enable and encourage the use of outdoor environments. The 2011 Norwegian Framework Plan for the Content and Tasks of Kindergartens highlights the multitude of experiences and activities offered by nature “at all times of year and in all weathers”.

Nature allows children to experience beauty, and inspires aesthetic expression. This learning area helps children become familiar with and gain an understanding of plants and animals, landscape, seasons and weather. The aim is for children to begin to understand the significance of sustainable development. (NORWEGIAN MINISTRY OF EDUCATION AND RESEARCH, 2011, p. 38).

Staff are required in order to include outdoor activities and to play in the daily routines of kindergartens as well as to use the local neighborhood, so that children can observe and learn about animals, fish, birds, insects and plants, gain an insight into food production and “an incipient understanding of birth, growth, aging and death” (NORWEGIAN MINISTRY OF EDUCATION AND RESEARCH, 2011, p. 38). Whilst all kindergartens spend a considerable amount of time outdoors, there are also kindergartens that have made areas such as farming, out-

door life, nature, sports and culture a specific profile. In Nordland, there are a total of 29 such kindergartens, 8 of these being farm kindergartens, and 7 nature and *friluftsliv* kindergartens. The National Curriculum for Knowledge Promotion for Primary and Secondary Education (UTDAN-NINGSDIREKTORATET, 2016) requires schools to cooperate with their local community and make use of the learning resources that exist.

For under threes in Scotland, guidance similarly states that being outdoors, defined as the immediate environment attached to the setting, the local community and beyond, “has a positive impact on mental, emotional, physical and social wellbeing” and “staff should ensure that regular and frequent outdoor experiences are integral to everyday practice with children” (LEARNING AND TEACHING SCOTLAND, 2010a, p. 68). Its Curriculum for Excellence, covering children from 3 to 18 years of age, points to the benefits of outdoor learning, describing it as “enjoyable, creative, challenging and adventurous”, and envisaging that all children and young people should participate “in a range of progressive and creative outdoor learning experiences which are clearly part of the curriculum” (LEARNING AND TEACHING SCOTLAND, 2010b, p. 5-7).

The two countries have drawn on different historical traditions in their pedagogical approaches to outdoor learning. Norway’s educational philosophy (in common with other Nordic countries) has drawn on the *Bildung*⁵ theory developed by the German philosopher William von Humboldt (1767-1835) and the sociocultural theory of the Russian psychologist Lev Vygotsky. Humboldt’s focus on nature (RØNBECK & GERMETEN, 2014) as an arena for what is required for personal growth and developing integrity, independence and autonomy was echoed by the Swiss psychologist Jean Piaget, for whom active interaction with nature and the environment was also an important vehicle for assimilating and accommodating new information and knowledge (SOLSTAD, 1995). These ideas, with the constructivist educational ideas of the late 19th century American educator John Dewey, helped to embed the use of natural environments within the Norwegian education system⁶ and contributed to an ecological paradigm (LOYNES, 2002) that underpinned the Scandinavian-wide concept of *friluftsliv*⁷, a tradition rooted in cultural and historical approaches to nature and the outdoors and, in Norway, a reflection of the extent to which “nature” is seen as part of the national

identity (COHEN & RØNNING, 2014). Vygotsky's contribution has mostly been the focus on collaboration and learning together, something which is enabled and focused in outdoor environments.

Outdoor learning in Scotland in its earliest form, in Robert Owen's pioneering school, shared in some measure Dewey's focus on making learning meaningful through connecting to communities, with younger children from 5 to 10 years of age spending some hours a day gardening and activities for older children including "all the productions required from the soil; from the mines; from fisheries; the art of manufacturing food the art of working up the materials to parade them for garments, buildings, furniture, machinery instruments and implements for all purposes" (OWEN & LECTURE, 1969, p. 205). Over a century later, Margaret Donaldson, in her seminal book "Children's Minds" echoed some of this when emphasizing the importance of children learning about "real-life' meaningful situations in which they have purposes and intentions ..." (DONALDSON, 2006, p. 121). Donaldson drew on her observations of education from a child's perspective, sharing other cognitive constructivists' perceptions on providing opportunities for children to engage actively with the world around them, drawing on the child's life and environments outside the school. Donaldson (2006, p. 11) uses her observation of children in a school courtyard to make her point about the agency of children in such environments:

The scene is a small open courtyard, within a school building. There are paving stones, warm in the sunshine, and tubs bright with flowers. On top of a low wall a child is lying, propped up on her elbows, looking at a book with intense concentration. Near her, a child is carefully watering flowers, while a third is sitting with his back against the wall and a notebook on his knee. He appears to be drawing or writing something. Like the first child, he is lost in his task (DONALDSON, 2006, p. 11).

A more extensive use of the outdoors developed in other contexts. Scotland, in common with the rest of the UK, has had a long tradition of adventure education associated with empire-building. Its leg-

acy within military training has long presented what has been described as an “algorithmic” paradigm of outdoor learning with, amongst other characteristics, an uncritical stance to the social context in which it takes place and, in some instances, lending itself to concepts of learning as marketable commodities (LOYNES, 2002; BEAMES & BROWN, 2016). Some of the traditional organizations and schemes developed from this can be found in Scottish secondary schools, though for younger age groups, as seen earlier, outdoor learning has developed at a national level around health and welfare and educational use in the curriculum. It has also been encouraged in the Highlands and Islands through a schools’ program called Crofting Connections, run by the Scottish Crofting Federation and the Soil Association Scotland to develop awareness of the crofting heritage (COHEN & RØNNING, 2014).

The two cases we present here reflect the extent to which nature and natural environments have become accepted within services in both countries, particularly at a preschool level. They are also developments that have come from the communities and schools working in partnership and may, as noted earlier, be viewed in a number of respects as examples of “democratic experimentalism”. Within systems that recognize the rights to children’s agency and encourage close involvement with families, they depict ways in which education models have been developed from within communities, engaging children in understanding their “place”, past, present and future and drawing upon the community as a powerful resource.

NORDLAND, NORWAY - MEDÅS FARM KINDERGARTEN

The kindergarten is on a farm of some 250 decares (62 acres) outside Fauske, a small town with a population of 6,000 people on the shores of a *fjord*. It has 104 kindergarten places for children from the ages of one to six, but usually has no more than 70-75 children, since children under the age of three take up two places due to the need for more staff in order to support the youngest children. The kindergarten was established in 1999 by a farming couple, Anita and Jostein Hunstad, and is one of around 150 farm kindergartens in Norway. In 1999, it was the first to be set up in the county of Nordland.

The idea for the kindergarten came from Anita Hunstad who, in addition to farming, was working part-time as a substitute in a kindergarten in the area and was enjoying it very much. Many farmers in Norway have a variety of occupations, and their own farm, that had been running for 16 years, had been experiencing difficulties as a result of losing sheep to predators such as lynxes and wolverines while they were grazing in their summer pastures. On occasion, she took children from the kindergarten home to the farm with her and other kindergartens also used to come on visits. An idea formed in her head that making the farm a learning arena for young children might provide an alternative living for her and her husband. She knew there was a shortage of kindergarten places in Fauske *kommune*. She undertook a survey and found that her county of Nordland had no farm kindergartens. The closest one she could find was several hundred kilometers away, which she went to visit; a visit that not only furnished lots of ideas but also a belief that they could succeed in this. After discussing the idea with representatives from the municipality, she contacted Innovation Norway, a state-owned company that helps entrepreneurs set up new businesses and was offered some financial support to prepare one of their kindergarten houses and an outdoor play area, and to buy equipment. The education office at the County Governor administration in Nordland, the ministry's representative at regional level that supports the *kommune* and helps with planning, as well as having responsibility for more specialized services such as children's residential homes, advised over such requirements as transport, health and safety, staffing and curriculum.

The kindergarten opened with only six children in August 1999, but soon expanded to fill the 20 places they had permission for. As the Norwegian government fulfilled its commitment to provide a kindergarten place for all children aged between one and five years old⁸, demand for places increased, and two more kindergarten houses were opened in 2005 and 2010.

The children belong to groups of 10 to 20 children using the three kindergarten houses as their base, however making use not only of the farmland nearby but also of the surrounding area with its fields, forests and lakes, as well as other farms. The traditions and practices at the farm are at the core of the kindergarten's activities. The farm has horses, sheep, cats, hens, rabbits, guinea pigs and a cow, and children take part

in feeding and caring for the animals every day; they also collect, wash and sell the eggs the hens produce every day. With more than 70 children in the kindergarten, they have had to develop a good system to ensure that all children get the same opportunity to participate in the everyday activities on the farm. Each autumn, the children experience the process when sheep are slaughtered to provide food for the family and the children in the kindergarten, and they help take care of the meat and prepare traditional meals such as the *fårikål* (sheep in cabbage, translated literally). This is part of the natural cycle of life at a farm and, as such, an important part of daily life at the kindergarten, says Jim, the head teacher. When asked about the year cycle in the kindergarten he explains:

We follow the rhythm of the farm and what happens on the farm. So when the sheep are taken to their summer pastures, we follow them, we plant, we get the potatoes in the ground and we take them out of the ground in the autumn, so we sort of follow the year at the farm. And the aim is that the children should participate in all the different activities on the farm, during the seasons. Actually, the only thing they don't do is going up into the mountains searching for sheep that have got lost, but they take part in getting the sheep down from their summer pastures.

The children also pick berries in the forest close to the farm and make preserves they eat with their home baked bread. The kindergarten has its own minibus which allows them to take the children to interesting areas not within walking distance. The vehicle is also very useful when, in autumn, the children go into the town's market place to sell eggs, potatoes, vegetables and preserves at the local Farmer's market. The money they earn is used to cover expenses for an excursion at the children's choice. A close relationship with families and other people in the local community offers other opportunities. They invite people to a *café* in the kindergarten and they also invite those with particular skills to the kindergarten to help with the production of traditional food such as *lefse* (thin pastry), flatbread, making sausages, spinning yarn from the sheep's wool that they have helped shear. Many of the people they invite are elders who enjoy being with the children, and the children enjoy these

visits a lot. The aim of the kindergarten is not only to encourage healthy, happy and active children but also to ensure they learn how to take care of their local environment and their animals, to make their own food and to know, respect and value local traditions and culture. These are aims shared between the kindergarten and community. This is seen as helping to lay a sound foundation for the children's future into responsible and environmentally aware adults, who identify and make use of the challenges and opportunities in their local environment. Empowerment is at the heart of the kindergarten's philosophy. When asked whether economic reasons were the main basis for establishing the kindergarten, Anita answers:

No, we don't do this just for economic reasons... We also have more idealistic reasons, wanting to do something good for children, making an important contribution. I also believe strongly that children benefit from being with old people, so we have activities here where we invite our elderly neighbours on visits. I have a plan that in the future we can have more services, also for old people, more systematically, bringing young and old together on the farm. It is also very important that children understand where food comes from, and to respect, to see how it is grown and made.

When asked about how she sees their kindergarten ten years from then, Anita says she very much hopes there are elders on a more permanent basis on their farm, taking part in the daily activities with both children and animals.

HIGHLANDS AND ISLANDS, SCOTLAND: EVANTON COMMUNITY WOODS

Evanton Community Woods is a 65 hectare (150 acre) area of mixed woodland next to a small village in the Highlands of Scotland. The wood was planted in the 19th century by a private estate owner. In 2012, it was acquired by the Evanton Wood Community Company, a registered charity with about 80 local fulltime members. It has been one of a growing

number of local trusts to take advantage of land reform legislation and funding intended to help local communities acquire land and other assets.

Landownership has been a major issue in Scotland's political and economic history since the 19th century, when thousands of "crofters" in the north and west of Scotland lost their land and homes. Crofts are small agricultural units held subject to provisions of crofting legislation brought in to protect families from eviction after the Highland Clearances⁹, and progressively strengthened since. This still left largely intact an inequitable system of landownership, and since the re-establishment of the Scottish Parliament in 1999, efforts to address this have increased. The most recent legislation strengthens the rights of local communities to buy land¹⁰, including, in certain circumstances, without the consent of the landowner (LAND REFORM REVIEW GROUP, 2014; SCOTTISH GOVERNMENT, 2016c). Woodland Trusts form part of a wider community landownership movement which is beginning to build new relationships between Community Trusts and the education system (COHEN & RØNNING, forthcoming).

The potential uses of Evanton's wood became apparent to the community and the Community Company as they raised money for the purchase.

As time went on, people came to realise the potential of the wood for involving community in events, doing education in the woods, improving the access to a wider range of people, improving the biodiversity, so there's more wildlife and other creatures in the woods... Getting the kids involved through the schools, doing art projects, Easter events and summer woodland day and so on... helped us to get more people behind the bid...'
(CLARK, 2013, unpublished interview transcript).

The Community Wood's educational activities are led by an Education Coordinator. Initially a woodland ranger, he subsequently qualified in countryside management and a degree in environment and social values before becoming an education officer whilst working in Forestry. His job is wide ranging. In addition to maintaining and de-

veloping contact with local schools and preschools and a variety of other organizations working with vulnerable young people as well as adults, it is about “getting people back into using the outdoors” and understanding the woodland “as an ever-changing environment that needs to be managed” and in which they can be involved (HARRY, 2016, unpublished interview transcript).

I hope they [the young people] end up realising how important the outdoors is in all its forms, from mountains to beaches...just to be able to enjoy the outdoors for what it is... how on earth you can be expected to have any care or reverence for nature if you have never encountered it, I don't know. (HARRY, 2016, unpublished interview transcript)

Evanton Community Wood runs some school activity groups themselves as well as their own events. Currently, funding allows for bringing in storytellers and nature educators, used not only for schools but more generally in activities for families; mountain bike skills courses, “squirrel” days, bird box building, animal puzzle trails, orienteering, bush craft and family walks. These are also supported by a local volunteer network.

The year following its acquisition, the community wood was used on a regular basis by two preschool groups, five primary schools, two secondary schools and one special school with a total of 1,789 child visits a day (EVANTON WOOD COMMUNITY COMPANY, 2016). The local Kiltearn primary school, which has about 131 pupils and 13 in its nursery, uses it extensively and increasingly since it became a community wood. The school uses it weekly for classes for physical exercise, art work, storytelling, writing work and literacy and environmental topics, and some of the youngest children use it for their mathematics “using the natural materials as concrete material for adding and subtraction” (MCKERNIE, 2016, unpublished interview transcript). Preparation takes place in the classroom and activities are followed up on back at the school.

According to the head teacher, “a lot of the children who find it difficult to sit and learn in the classroom excel in the woods... where they have a bit more of a free reign” (MCKERNIE, 2016, unpublished

interview transcript). The Kiltarn school nursery is one of the two preschool groups using the woods. They use it for one day a week along with the first grade of Primary school "... a sort of transition activity as well and it also means that we can have a classroom teacher as well who can lead the activities; it's not just the nursery staff" (MCKERNIE, 2016, unpublished interview transcript). Waterproof red suits are provided for outdoor activities. As nursery children are part-time, parents are able to drop them off and pick them up from the woods. Despite all Kiltarn's school and nursery staff having received some training in outdoor learning — some of it provided by the Community Wood Company — training is one of the identified needs for the staff. The Education Coordinator says he sees quite a range of teachers. "Some of them want to just sit back and others are keen to come out and are quite creative in what they do" (HARRY, 2016, unpublished interview transcript). Outdoor learning is encouraged at both local authority and national levels in Scotland, but has yet to make a real impact on teacher education, although this is part of government's plans on sustainable development (SCOTTISH GOVERNMENT, 2013).

The Community Wood was purchased with help from a variety of funders, the largest of which was the Heritage Lottery Fund¹¹, which also funded over half of its costs over the first five years. The company is optimistic about the viability of the Community Woods beyond this and believes the education program can also be sustained. In 2013/2014 the Education Program cost some £20,000, a relatively small sum and around a half of the Community Woods total turnover. Although, unlike some other community woods, it receives only limited amount of income from timber sales, it does receive support from some local wind farms, via the local community trust and some other funded programs (CLARK, 2016). In addition, the education program itself, particularly through the involvement of older children, contributes to the management of the woods. For example, children themselves help with the thinning of conifer trees, weeding out beech saplings etc. The program has been found to promote family use of the woods. Children who attend through the school are observed to return with their families, reinforcing community support. In this sense, it may be seen as a "whole" community project, resonant of the community solidarity that underpinned initiatives in Northern Italy following the 1939-1945 war or the preschool scheme

at Ciudad Nezahualcóyotl, inspired by Paulo Freire's concept of creating public space for dialogic learning (COHEN & KORINTUS, 2016).

CONCLUSION

Both these examples reflect very specific contexts, but share some characteristics. These derive from the value placed by their communities on encouraging their children to engage with their local outdoor environment, cultures and skills. For the community which support and use Medås Farm Kindergarten, this offers not only opportunities for learning but also enables their children to acquire and value the knowledge and skills involved in local farming. The Evanton Wood's educational program has developed out of a community activity and a shared goal of enabling children to understand and value this local asset; what it means, how it can be enjoyed and how it needs to be protected. They have been possible because of the nature of the ECEC and education systems in the two countries. Amongst other elements, they rely on curricular frameworks that place a strong emphasis on the benefits of outdoor learning and allow space for local interpretations. In both areas, other particular ways local communities shape their services can be found in some of the services provided for indigenous groups — for instance the Sami kindergarten, in Nordland. In Scotland, extensive support is given to the indigenous Gaelic language and culture.

Both Norway and Scotland have systems that, in international terms, enable communities to respond to community needs and trigger new and exciting solutions. Medås farm kindergarten was a response both to local and national needs as there was a need for more kindergarten places at the same time as some farmers found it hard to continue their traditional activities. Extensive support systems, both financially and with regard to competence, made the establishment and growth of the kindergarten possible. In Scotland, the land reform program in Scotland was a motivating factor for the establishment and development of Evanton community wood, and the activities that currently take part there are made possible through different support systems. Both cases highlight the benefits from a symbiotic relationship between preschools, schools and communities.

However, there are also differences between the two. The Norwegian ECEC system is more developed, providing integrated, fulltime services for children that allow considerable amounts of time for outdoor learning. Scotland, although in a process of extending its hours, is still offering a more limited universal entitlement at preschool level with less scope for the youngest children for outdoor activities. Globally, there are common pressures on rural education. Small, local schools are being closed and children have to travel long distances to come to school, a situation that can have negative effects on health and can rob them of leisure time and the community of an important local institution. There are, however, high levels of motivation amongst many rural communities to protect and develop their services, and there is a need to develop models and ensure levels of support to help communities in their struggle to remain sustainable and attractive for families. People may not, for financial or other reasons, leave their community because a school or preschool is closed, but it is very hard to attract new families to a community without good quality basic services for young children and young people.

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NOTES

1. The two areas form part of a comparative research project undertaken by the authors in Norway, Scotland and the US. See Cohen and Rønning, forthcoming.
2. Following Scotland's Treaty of Union with England in 1707 it lost its parliament but retained control over some areas including its education and legal systems. The re-establishment of its Parliament in 1999 gave it limited powers over taxation representing less than 10% of devolved expenditure. A Fiscal Framework Agreement signed March 2016 is expected to involve Scotland raising 48% of its own revenue (SCOTTISH PARLIAMENT, 2016).
3. Growing Up in Scotland is a Scottish Government funded longitudinal research study tracking the lives of three cohorts of children totaling 14000, born between 2002 and 2011 from the early years through childhood and beyond.
4. School (Consultation) (Scotland) Act 2010 amended by the Children and Young People (Scotland) Act 2014.
5. *Danning'* in Norwegian, and, as in Germany, central to the development of the education system. Means not only "being educated" but also "formation" "implying both the forming of the personality into a unity, as well as the product of this formation" (WESTBURY, 2000, p. 24).
6. Norway's unimplemented, but influential, 1939 National Curriculum promoted a cross-curricular approach to connecting school with real-life issues using nature as an arena for active learning that would inform later curricula from the 1970s (RØNNING, 2010; COHEN & RØNNING, 2014).
7. Literal translation "free-air life". Used to describe being outdoors in nature.
8. Paid parental leave is one year after a child is born.

9. A period from the mid to late Eighteenth Century and Nineteenth Century when many Highland farm families were forced from their homes by landlords who sought to “improve” their land by replacing farmers with sheep.
10. It is a pre-emptive right to buy. A properly constituted community body (with the support of at least 10% of the community and that can demonstrate positive consequences from community ownership) can register an interest in buying the land and their right is activated when the owner or creditor with the right to sell the land wishes to sell or transfer the ownership of the land or part of the land. This can also apply to salmon fishings and mineral rights to oil, coal, gas, gold or silver on the land. The landowner has to agree — but during the period that the community has registered an interest cannot sell to anyone else. The valuation of the land — and all processes — are subject to ministerial appeal
11. Lottery funding available to support wide range of projects from historic buildings and museums to recording local place names.

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