

Seeing the Forest and the Trees: A Historical and Conceptual Look at Danish Forest Schools

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ABSTRACT

This narrative review examines the history and future implications of Forest School, a pedagogical approach to early years outdoor education. Forest School is considered a philosophical perspective towards learning outdoors that values holistic development. There are numerous benefits to Forest School and the opportunities that it presents for young children to learn within a natural environment and to engage with nature. Due to the significance of a region's culture and history, the consideration of education and outdoor learning differs greatly depending on the geographical context. The theory of social constructionism allows for a more precise analysis of Forest School's history as it developed first in Scandinavia, then in the United Kingdom and North America. Forest School is a relatively new phenomenon within the realm of outdoor education that has taken on unique characteristics unique to the cultural setting. Forest School is becoming popular, yet more research is needed to understand the complexities of standardization and Forest School's application within distinct cultures.

Keywords: forest school, nature preschool, outdoor education, outdoor learning, social constructionism

A five-year-old bounds through the forest, dragging a stick along the muddy ground. She pauses momentarily to assess the steepness of a ravine slope, then begins walking purposefully downwards, sliding expertly over fallen pine needles. Her friends are waiting for her at the bottom, ready to continue building their secret den next to a large rock. They gather supplies methodically, stacking semi-decaying logs and fallen branches. The young girl proudly hands over her stick to two other children who contemplate how to wedge it between the rock and a tall stump for structure. One boy is twenty feet up a nearby tree, collecting acorns to be used as a loose-part building material. He offers to help, shimmying down with care, excited that his peers find his climbing skills useful. The teacher/caregiver – known in Denmark as the pedagogue – stands watching his young charges, comfortable in their ability to assess risks thoughtfully and to choose their own outdoor activities. This is Forest School.

Due to the amount of time that children are now spending in school and the lack of time they are spending outdoors, many industrialized nations are beginning to further explore outdoor learning opportunities (Bentsen, Jensen, Mygind, & Randrup, 2010). This narrative review will cover the arch of Forest School (FS), a subset of outdoor education (OE), looking back at the history as well as towards future implications. This study will use both a historical and conceptual outline to weave the story of FS from the very beginning up until the present day. Additionally, this review will analyze the future trajectory of FSs and what implications this style of learning will have on OE, principally within North America (NA). Because the pedagogy of FS is steeped within cultural and social norms, its history is best analyzed through the social constructionist lens (Waite & Goodenough 2018). Thus, this study will address the general inception of FS, and then follow its development within Scandinavia, the United Kingdom (UK), and NA. In an attempt to portray both the forest *and* the trees, the details of FS's history will be constructed alongside of the general OE big-picture.

Literature Review

FS is a pedagogical approach (Waite & Goodenough, 2018) that exists within the greater context of OE. Within the literature, there is a great debate regarding the term *outdoor education*, some arguing that it “defies definition” since it is a changing, growing concept strongly dependent on time and place (Nicol, 2002a, p. 32). Opposing views on the nature of OE do not agree on whether it is a methodology or content, a formal or informal practice, or even if it is an actual discipline with a distinct approach (Nicol, 2002a; Potter & Dymont, 2016). Dillon et al. (2005) posits that there are “differing possibilities about both priority and process” in regards to OE, particularly in the approach and emphasis within various contexts (p. 3). There are clearly many underlying philosophies about OE that prevent it from being homogenously defined across cultures (Nicol, 2002b). While the report of Rickinson et al. (2004) states that the idea of OE is “broad and complex”, researchers also point out that outdoor learning can have distinctive foci, outcomes, and locations while still being considered OE. In its most basic sense, many researchers quote Donaldson and Donaldson (1958) when applying a wide meaning to the concept of OE as being “education *in, for, and about* the outdoors” (p. 17).

Although OE is an agency that is difficult to define, FS is a much more clearly delineated approach that falls within its parameters. Knight (2018) recognizes that “good outdoor and environmental education and experiences can and should take many forms” (p. 23), suggesting that FS is *one* of these methods that is both valuable and appropriate for a suited setting. Although it is commonly seen within an early year setting, the FS philosophy has also been applied to a variety of ages and environments. According to the Forest School Association (2018), a UK non-governmental organisation (NGO), FS is a unique early childhood approach to learning that emphasizes a holistic development of young students within a natural woodland setting. To be considered a FS, children must have access to the forest setting on a permanent basis, at all times; some FSs have on-site forested areas, while others provide daily transport to an outdoor site (Bilton, 2010). The ultimate aims of FS are not merely academic, but rather integral in nature, seeking to use the outdoors to develop the whole child, including character, social proficiencies, and critical thinking ability (Williams-Siegfredsen, 2012). Specific skills and competencies are intentionally targeted and nurtured: self-esteem, self-confidence, independence, and risk-taking (Maynard, 2007). Experiential learning is a key component of FS, as well as general environmental education objectives. FS pedagogy is not very recent, but until lately, the majority of FS research was not available in English, making it difficult for many in NA to fully understand this element of OE (O'Brien, 2007). Within the past couple of years, the quantity of and quality of FS research in the English language has grown, making it possible for English-speaking countries to comprehend this particular style of OE pedagogy: early childhood education and development within a natural, outdoor space.

FS, like other types of OE, takes place in an outdoor learning environment, allowing children many experiential opportunities and a multitude of mental and physical benefits (Louv, 2008). Research has demonstrated the importance of the outdoors, specifically in young children. Fresh air, sunlight-sourced vitamins, physical peace, rest, general exercise, and motor development are some of the documented benefits of regular outdoor engagements (Bilton, 2010). Studies have also shown an increase in physical movement prevalent in FS settings, as well as a growth in cognitive development and critical social skills, such as language and attention (Williams-Siegfried, 2012). Even attention deficit hyperactivity disorder (ADHD) and obesity have been reduced by time spent outdoors (Munoz, 2009). Besides the multitude of health and mental advantages of FS, young people gain opportunities to develop a love towards outdoor places and “close allegiances” as they grow in empathy towards the natural world (Sobel, 2008, p. 32). This leads to a nourishing connection to outdoor environments, allowing children to strengthen their compassion towards nature. FS, a philosophy that emphasizes more than simply academic endeavors, has the capacity to move children, teachers, and communities “towards the resolution of environmental questions, issues, and problems.” (Davis, 1998, p. 118). Understanding FS will enable teachers with older students to incorporate FS concepts into their own science classroom within the context of an outdoor setting. A firm knowledge of the FS approach will also empower educators and policy makers around the world to advance their understanding of how to best educate children in an outdoor environment.

Theoretical Framework

The theory of social constructionism states that reality is formed through social exchanges and the way in which a group of people generate meaning (Gergen, 2011). Hence, a certain area's culture and history connect closely to the way in which those people view education, the outdoors, and, subsequently, OE. Social constructionism is an extension of the related idea of social constructivism which asserts that the mind produces through social actions generating a separate meaning in a cultural context (Detel, 2015). In the case of FS, a social constructionist viewpoint is more appropriate, since knowledge is embedded within social relations to and from the outdoors. Using this theoretical framework, one can perceive how a community's outdoor learning is closely connected with its environment, established within interactions between people, places, and activities. As a type of OE, FS is a social construction, unique to each culture based on how a distinct group of people actively and historically view the outdoors (Leather, 2018). Waite and Goodenough (2013) propose the term *cultural density* to describe the significance of place in impacting learning outcomes, particularly as it relates to OE. Because such educational contexts are unique to a country and a region, models of OE, like FS, are heavily reliant on culture, social setting, and geographic location (Bentsen, 2010).

The idea of social constructionism within OE is also evidenced by the scope of reports that individual nations have commissioned, each focusing on particular aspects of the field relevant to the commissioning nation. These reports demonstrate cultural diversity of OE perspectives. Leather (2018) discusses FSs as being rooted in social norms, pulling from what is considered normal within Scandinavian culture where it has its origin. Waite and Goodenough (2018) agree that FS is a sociocultural construct, and notes the dissonance between its historical philosophies and its current introduction into UK culture. The values and customs of Denmark's culture have "shaped the use of the outdoors in kindergartens in their own unique and cultural way" (Williams-Siegfredsen, 2012). Historically, a sense of connection with the land has been embedded within the Scandinavian culture which contrasts the UK's colonial outlook on land governance as well as its structural control of schooling (Leather, 2018; Waite & Goodenough, 2018). According to the FS philosophy, outdoor interactions are meant to be an extension of everyday life – a cultural norm – as opposed to a novel, adjunct experience. Despite major differences within cultural constructs of FS, there are commonalities across cultures and geographical areas: a natural setting, experiential learning, and student-led engagements. Understanding the social constructionist nature of FS properly frames this subfield of OE within *each culture*, leading to a better understanding of its complex socially layered history.

History of FS

Tilling the Soil

The events and philosophies that led to the development of FS were steady in nature, a growing awareness that took place over many decades, gradually culminating into a current social construct. People, events, and cultural subtleties helped prepare the soil, so to speak, for the idea of FS to take hold. As Western nations moved towards industrialization in the 1800s, the outdoors shifted away from an adversary to battle or entity to endure into a "positive aesthetic experience" (Williams-Siegfredsen, 2012, p. 7) Individuals and families found more time for fun and leisure in an outdoor environment once labor moved primarily indoors during this time of industry growth (Williams-Siegfredsen, 2012). Shortly after Western nations began looking at nature as a free-time activity, early childhood educators – Vygotsky, Piaget, Montessori, etc. – started exploring and writing about best practices in early childhood education. In the late 1800s and early 1900s, the work of researchers and philosophers focused on young children's cognitive development, helping prepare the way for the inception of FS philosophy. FS has been influenced and "supported by numerous theorists from around the world" (Williams-Siegfredsen, 2012, p. 9). It is significantly rooted in the pedagogy of Friedrich Froebel, a German educator who felt that the early years should occur in natural places, yet FS can also trace its ideas back to a variety of theories during this time. In this way, a combination of a growing interest in outdoor engagements and a rising understanding of early childhood development through expert educators laid the groundwork for FS to take root in many Western nations. The foundation for FS was established by a combination of work carried out by philosophers, naturalists, and educators that developed into the current concept of FS learning (Forest School Association, 2018).

Tending the Seedling

While the majority of Western nations were growing in their awareness of early childhood development and nature-based experiences, FS officially began in Denmark. There were a couple factors that allowed this conceptual seedling to develop steadily and to flourish within this country. First, in the 1950s and 60s, women were entering the workforce in large numbers due in part to the women's liberation movement and a general need for more workers (Williams-Sieghfredsen, 2012). Denmark was faced with an immediate shortage of childcare facilities, particularly for children who were not yet of school age. In a grassroots fashion, Danish pedagogues began using readily-available woodlands as a childcare and educational site. Around the country, cohorts of three- to six-year-olds became the first group of children to enter FS.

Additionally, since Denmark had recognized the general health and leisure benefits from an outdoor environment from a very early period, FS became a natural extension of a cultural norm. (Williams-Sieghfredsen, 2012). Time spent outdoors engaging in rest, leisure sports, and contemplation has been and continues to be a core value in Danish culture. Placing young children in need of supervision and learning engagements into an outdoor setting was in line with the country's general outlook towards nature. Across Denmark, educators and stakeholders worked on cultivating a place where young children could develop positively and gain an appreciation of a natural outdoor setting.

At this point in the timeline, FS as both a philosophy and an early years educational program was young but developing rapidly across Denmark. The changing workforce and rising societal outdoor connection created an ideal setting for the new idea of FS to grow steadily in the 1970s and 80s. The development of environmental concerns was also a contributing factor to the beginnings of FS in Denmark. This will be further explored within the context of Scandinavia and the history of FS philosophy in countries like Norway and Sweden. It took some time for FS ideas and practice to spread to other parts Westernized nations, beginning first in the rest of Scandinavia, and then moving to the UK and NA. In the past few years FSs have extended rapidly within these Western nations (Knight, 2013), being grafted onto to other cultural foundations within the realm of OE.

Grafting the Branches

Due to the nature of outdoor learning, its important to analyze the history of FS through the lens of social construction. This allows one to see the individual components of FSs that differ between countries and regions. The narrative of FS history is very place-dependent; each country's interpretation of the original Denmark FS differs due to geography, customs, and social constructs. This section will delve deeper distinct areas of the world, noting key historical moments, timelines, and present-day interpretations of this type of OE.

Scandinavia. Although most documentation indicates that FS first originated in Denmark, sources indicate that other Scandinavian countries were approaching early years OE in a similar fashion and at the same time (O'Brien & Murray, 2007). In fact, this "mutual inspiration between Norway, Sweden and Denmark" (Bentsen, Mygind, & Randrup, 2009, p. 39) suggests that Danish FS concept were quickly adopted by other Scandinavian countries who were already doing similar practices. This is not surprising, considering the closely connected cultural norms in Scandinavia. This region of the world has been heralded as the exemplary standard of school-based outdoor learning, and still serves as a model for other nations seeking to emulate their practices (Bentsen et al., 2010). Both Norway and Sweden have their own versions of compulsory school-based outdoor education, with many commonalities across the Scandinavian socio-cultural context (Bentsen et al., 2010).

Since the 1970s all the Scandinavian countries have sought to educate children and the general public on the outdoors, consistently producing OE research, some of which has focused exclusively on FS (Jensen, 1999). The 70s saw the rise of the Energy Crisis, leading to an increased awareness of environmental issues (Williams-Sieghfredsen, 2012). The progression of knowledge regarding the benefits of outdoor engagements encouraged the steady growth of recently established FSs. The OE movement in Denmark, Sweden, and Norway, and, subsequently, the growth of FS, followed the trend of caring about the natural world.

In the 1990s, it became clear that the strong outdoor recreational roots of Scandinavia were a critical component of the culture that also helped promote environmental protection and awareness (Jensen, 1999). This was also when the Danish parliament introduced the “care guarantee” that ensured parents of preschool-aged children full-time care (Williams-Siegfredsen, 2012). The need for quality education of this age group increased, and the number of FSs within the country more than tripled within the daycare sector (Jensen, 1999) Likewise, Norway encouraged the movement of regular school locations towards trails and camps, and Sweden focused on nature-culture schools (Jensen, 1999).

In the early 2000s, Denmark placed into law a general curriculum for all preschools, yet gave each individual setting the autonomy to create a curriculum plan based on specific areas of learning set forth by the government (Williams-Siegfredsen, 2012). This autonomy allowed and supported freedom for Danish educators to develop an OE curriculum that met the needs of each region and community (Williams-Siegfredsen, 2012). Sweden underwent a similar reform at this time; the decentralization of school led to free-choice for stakeholders and gave teachers more independence in how to interpret curricular goals (Wermke & Forsberg, 2017). At the turn of the century, the relative freedom of Scandinavian teachers guided the development of many grassroots educational ventures in the respective school systems (Bentsen et al., 2010). Within these Scandinavian countries, FS continues to be a unique construct that depends greatly on the area, context, and individual goals of both the parents and educators.

United Kingdom. While FS was developing in Scandinavia throughout the latter part of the 20th century, it did not reach England until 1993. Brought to the country by a group of students from Bridgewater College, the FS philosophy was officially introduced, eventually leading policy makers and authorities around the country to develop the idea for the UK (Forest School Association, 2018; Williams-Siegfredsen, 2012; O’Brien & Murray, 2007). The Bridgewater students who first noticed this particular innovative OE approach recognized the potential for college’s Early Years Learning Centre (O’Brien & Murray, 2007). This style of learning was also very much a response to the recently introduced national curriculum in the UK, offering an alternative to the outcome-centered approach (Forest School Association, 2018). Thus, FS began to take hold in the country, beginning in 1995 with course offerings and certifications at Bridgewater College (Forest School Association, 2018).

A couple years later, the UK government began a push to both understand and implement OE practices (Rickinson et al., 2004 and O’Brien & Murray, 2007), which naturally led to a greater interest in FS. British policy makers commissioned an extensive report covering the existing research on OE with intent purposes of reconnecting young people back to the land and of understanding the value of learning in an outdoor environment (Dillon et al., 2005; Rickinson et al., 2004). At the same time, NGOs sought to evaluate FSs in the early 2000s as they became more prevalent and widespread around the country (O’Brien & Murray, 2007). The body of research focusing on outdoor learning in the UK grew due to both government sanctioned reports and NGO interest and evaluations. Across the UK, the importance of OE and FSs became evident to educators and policy makers: “There is strong evidence that good quality learning outside the classroom adds much value to classroom learning” (Department for Education and Skills, 2006, p. 5).

As the national interest in OE grew, the UK concept of FSs began to develop into a more standardized approach similar to National Curriculum already in place (Department for Education, 2018). In contrast with Scandinavian countries, the UK has developed a highly structured, regulated construct of FS (Waite & Goodenough, 2018). At the National FS Conference in 2002, the UK definition of FS was developed; six governing principles were agreed upon to define this learning approach (Forest School Association, 2018). The principles that were developed in 2002 listed the key features of FS as follows:

It is run by qualified level 3 practitioners.

It is a long term process with regular contact with a local wooded environment (preferably over the seasons).

It follows a child-centred pedagogy where children learn about and manage risk.

It has a high adult:child ratio.

Observations of the learners are key to enabling scaffolding of the learning.

Care for the natural world is integrated. (Forest School Association, 2018, "History of Forest School, para. 6).

Since their formation, these governing principles have been reviewed and published, becoming part of the national standards within the Forest School Association (2018) as a governing body (Leather, 2018). The UK developed a system for regulating FS to ensure quality and conformity to the six agreed-upon principles (Leather, 2018), which is very different than the non-hierarchical mindset of Scandinavia. Yet Waite and Goodenough (2018) argue that these FS principles are still in discord to more conventional UK educational practices, the whole-child development approach contrasting to the traditional outcome-centered focus. The play-based philosophy that is a hallmark of the original FS educational model in Denmark seems to become hard-pressed development when translated to a UK environment and pre-existing educational model (Waite & Goodenough, 2018).

Because of its socio-constructionist nature, FS within the UK has evolved into a different style, its implementation taking on a different format than the original Scandinavian versions. Lloyd, Truong, and Gray (2018) recognize the value of learning in the outdoors, but argue that a "drag-and-drop" approach for FS does not work; one *must* take into account the "cultural-ecological context" and specific attributes to each geographical region (p. 46). From a social constructionist perspective, it is evident that the development of FS within the UK has diverged from the Scandinavian prototypes. For some, FS within the UK becomes a novel approach that is an alternative between more traditional schooling methods. The disconnect between home and school in a British FS directly contrasts the continuity experienced within the Scandinavian model and mindset (Waite & Goodenough, 2018). In March 2018, the Journal of Outdoor and Environmental Research published a special issue focusing on FS, particularly within the UK. Multiple authors – Leather, Lloyd et al., Knight, Waite and Goodenough – addressed the growing concern that FS within the UK had become commercialized and "McDonaldized", deviating from the original Danish approach (Lloyd, et al., 2018, p. 46). Although it continues to grow in popularity, the future of FS within the UK is unsure. Some researchers are concerned about the integrity of OE and FS as they are transferred to other nations, and note the overt procedural focus of FS within the UK that differs from its foundational Scandinavian philosophies (Lloyd et al., 2018).

North America. The standardization of FS within the UK progressively led to the spread of this philosophy to North American nations. After the UK adopted FS ideas from Scandinavia, the quantity and quality of UK research and publications on FS appealed to other countries, like Canada (Knight, 2018). Before this, as early as 1982, American researchers were identifying the need for wild places and natural spaces as a critical part of childhood development (Hart, 1982). Although trailing the Scandinavian environmental conservation trend, the United States (U.S.) began growing in its awareness of the changing environments and limited resources, particularly in the early 1990s (Jensen, 1999). While at first this led to an increase in outdoor educational pursuits, researchers identified that learning about the environment does not need to be the only objective of OE (Munoz, 2009). By 2004, at the time of Rickinson et al.'s OE literature review report (2004), the U.S. and Canada had produced a large portion of outdoor *adventure* education research literature. Although adventure-based outdoor learning and FS are substantially different, both exist under the construct of OE. This demonstrates a commonality between all three regions – Scandinavia, UK, and NA – that OE is a much-needed and significant form of learning, regardless of its distinct format.

An extensive online journal search reveals that the majority of FS research in the English language originates from the UK or Canada. Some has been translated into English from Scandinavian countries as researchers and stakeholders seek to expand the body of literature into English-speaking nations. It is interesting to note that there is a key lack of U.S. research on FS philosophy or practice compared to many other Western countries. Canada, for instance, opened its first contemporary FS in 2007, and a couple years later *Forest School Canada* launched (MacEachren, 2018). *Forest School Canada* is an organization that seeks to systematize the outdoor educational approach within the country, focusing also on incorporating Indigenous groups' land and practices. Peer-reviewed articles, like those from MacEachren (2018) and Power (2015) are available on these types of FSs in Canada. This is also a prime example of how outdoor learning has a strong cultural basis, as evidenced by Canada's rich Indigenous people's history and current social norms (Child and Nature Alliance of Canada, 2018).

While minimal FS research has come from the U.S., there is still a steady grassroots movement of FSs emerging around the country framed by the nation's specific cultural background. Often called *nature school* or *forest kindergarten*, these centers have loosely based structures or organizing bodies, all of which have come about within the past fifteen years. Cedarson in Washington state was the first FS within the U.S., opening in 2006; its founder also began the Forest Kindergarten Association (2018) to unite stakeholders around the country. Long before the Forest Kindergarten Association was developed in the U.S., The North American Association of Environmental Education (NAAEE) began in 1971 (Disinger, McCrea, & Wicks, 2001). Its purpose was to play a leadership role within the North American field of OE, growing out of a general concern of environmental issues. While FSs were appearing in Scandinavia during this time, the NAAEE started using conferences, publications, and networking to promote environmental education in NA (Disinger et al., 2001). Although the NAAEE began as a uniting force for OE within NA, comparatively very little of its work has focused on FS. In comparison to Scandinavia and the UK, NA has been years behind in acknowledging or adopting FS philosophy.

Finally, in 2015, the NAAEE recognized the need and importance of FS within this region of the world. The National Start Alliance (2018), an offshoot of the NAAEE, very recently developed The Council of Nature and Forest Preschools in response to a growing need *and* a growing trend of this style of OE pedagogy. "The Council for Nature and Forest Preschools began to form in 2015 at a meeting at the National Conservation Training Center to explore how the Natural Start Alliance could help accelerate the nature-based preschool movement." (Natural Start Alliance, 2018, "Nature Preschools", para. 4). This movement is still in its beginning stages, and, noticeably, the actual term *forest school* is absent from the literature and reports that are put forth by this North American NGO. The NAAEE also identifies the problem of semantics and nomenclature when defining and implementing OE concepts (Disinger, et al., 2001). An in-depth reading reveals that the general philosophy and approach of the National Start Alliance nature-based preschools are comparative in OE philosophy and approach to that of the original Danish FS.

The history of FS is rich and nuanced, showcasing unique cultural characteristic as the idea has been grafted into tracing the history of FS from its inception in Denmark, through Scandinavia and the UK, across the Atlantic, and then to the continent of NA. Figure 1 illustrates the non-linear timeline of FS, showcasing its unique cultural fluctuations and regional characteristics. Due to its social constructionist nature, FS has grown and changed as the idea has been grafted into these other cultures. There are countries not mentioned in this review that have also begun to incorporate FS concepts, and some that already have a large number of established schools. Australia has a rigorous OE curriculum, so FS has naturally taken hold within the country. FSs can also be found in South Korea, Japan, Germany, and New Zealand (Child and Nature Alliance of Canada, 2018; Chait, 2016). Covering the entire history of FSs around the globe would be complex and time-consuming; the concept is growing and being assimilated in new ways into new cultures. Although no one can be certain of the future of FS, there are many implications and possibilities that exist.

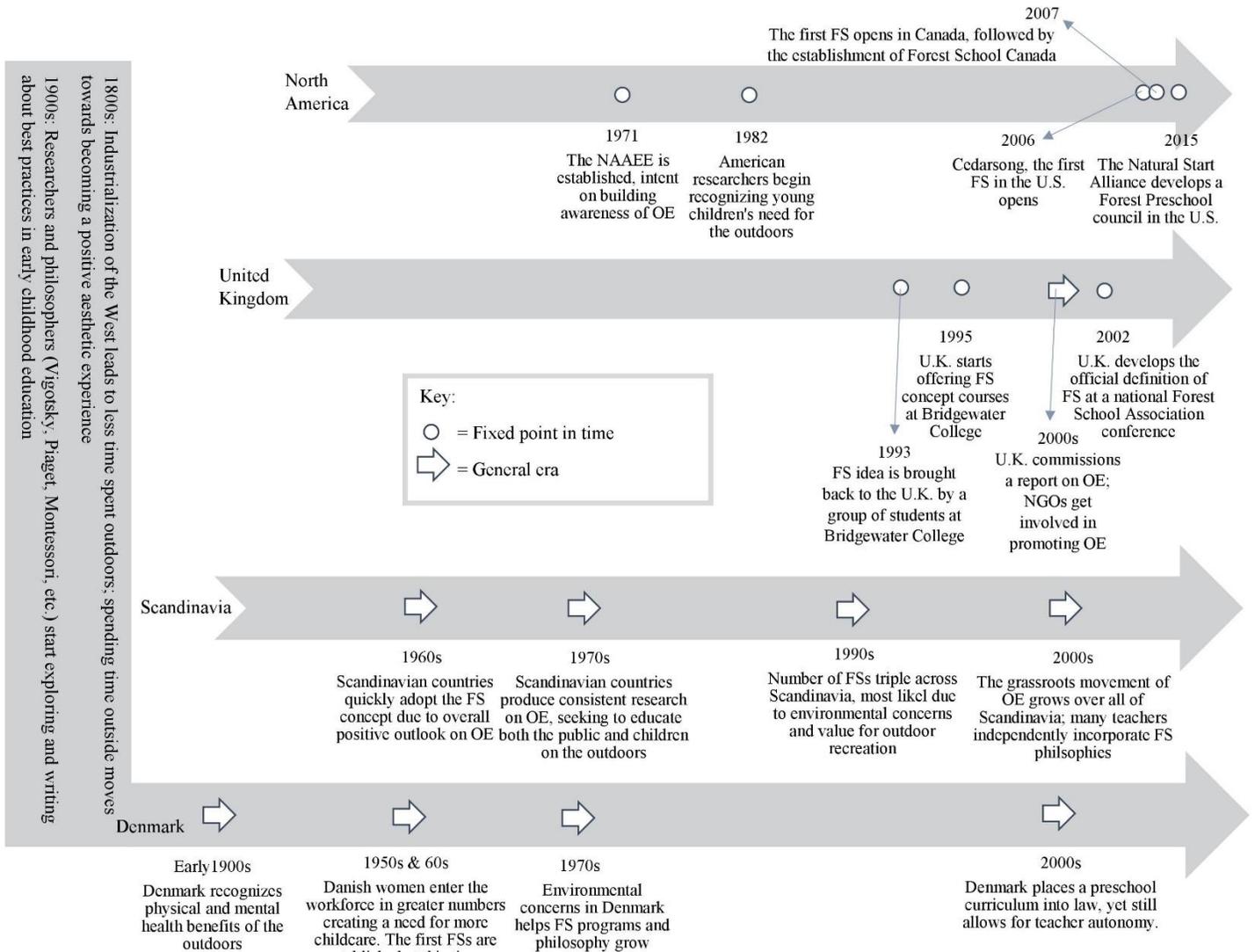


Figure 1. History of FS highlighting significant advances across time and regions

Discussion

Implications

As evidenced by its spread around the globe, FSs are becoming more popular in Westernized nations as they grow in number and in influence. This can be traced, in part, to an international interest in the Scandinavian construct of the outdoors as a place of adventure, education, leisure, and all-around connection (Bentsen et al., 2009). For educators, the implications of this style of learning are prodigious – the benefit of education in the outdoors has been documented extensively. Children who spend time outdoors involved in free play have greater physical movement, more social interactions, and a more prominent nature-connectiveness (Munoz, 2009). Besides the numerous health benefits of outdoor engagements, FS specifically helps build character, risk-taking, and both fine- and gross-motor skills (Bilton, 2010). It is essential for young students to have opportunities to connect with a natural outdoor environment on a regular basis. FS is one promising avenue that educators and care-givers can employ within an early years setting.

In his book, *Last Child in the Woods*, Richard Louv (2008) laments the severe decrease in time spent outdoors in young people. Louv (2008) points out the significant restorative and therapeutic capacity of nature and then admonishes educators to “improve the situation” even without an “official sanction” (p. 139). When children are educated outside of the classroom, they are able to grow in stewardship, leading to academic gains, as well as key problem-solving and critical-thinking skills (Louv, 2008). Thus, a child who attends FS at a young age will be able to grow in his or her ability to relate to nature. This will inevitably lead to a joy towards natural and wild spaces that is founded upon academic knowledge (Louv, 2008). Williams-Siegfredsen (2012) explains the beneficial implications of FS based on an in-depth 1997 study comparing an indoor kindergarten to an outdoor FS. Students who attended a FS had: (1) “better concentration”, (2) “better physical and motor development”, (3) “more varied and imaginative types of play”, and (4) were sick less often (Williams-Siegfredsen, 2012, pp. 93-94). Advantages of FS are found within a physical, social, psychological, linguistic, holistic, didactical, and parental perspective (Williams-Siegfredsen, 2012).

Planting the Future

Although the importance of FS is clear, there are still many questions and gaps within the research regarding this OE approach and how it might be specifically applied to the U.S. There have been numerous FS studies within Scandinavia that are not available in English for the U.S. or other countries to access. Additionally, the social constructionist nature of FS means that the history and values of a country, or region within a country, will have a great effect on a FS’s characteristics, greatly reducing the generalizability of available studies. According to Bentsen et al. (2010), this “socio-cultural perspective on pedagogy and learning are almost absent from the literature” (p. 242). Rickinson et al. (2004) also agrees that a key “blind-spot” in the current OE literature involve “the historical and political aspects of outdoor education policy and curricula” (p. 8). Indeed, the U.S. needs country-specific research that will enable this method of OE to be understood and implemented effectively. The No Child Left Inside campaign of 2009, later amended in 2013, demonstrates the country’s growing awareness in learning outside the classroom. Future research needs to concentrate on FSs within the country and their relationship to other OE endeavors.

There are some evident gaps within *all* the available FS literature, particularly when trying to apply it to a specific nation, such as the US. First of all, how can we, as a country, incorporate the philosophies of a Danish FS without pushing child development, as Waite and Goodenough (2018) mention in the UK model? There seems to be an inevitable clash to the culture of schooling within highly standardized countries – the UK and US – as opposed to Scandinavian countries wherein teachers have more autonomy. This “demand for standardisation” and “curriculum objectives” can usurp the student-centered framework through which students have the locus of control (Waite & Goodenough, 2018, p. 42).

Another timely question involves the range of FS and how these philosophies may impact older students. Namely, how can we extend FS to include elementary and high school students while maintaining rigor? Scandinavian schools have already begun incorporating nature and outdoor engagements on a regular basis that are tied into the compulsory curriculum (Williams-Siegfredsen, 2012). Known in Denmark as *udeskole*, translated as “outdoor school”, this form of OE is closely related to FS, but revolves around older students. Many of the same FS principles apply: whole-child focused, experiential learning, etc. (Bentsen et al., 2010). Due to its grounding in cultural constructs, an idea like *udeskole* would look very different if applied to an American setting. Further research is needed to look at the implications for FS at an older age range, and how regular school-based outdoor learning impacts achievement and attitude.

The future of FS is certain, yet also unknown. Across the globe, more and more FSs are being opened, yet stakeholders still have countless questions regarding this unique form of education. FS began as a grassroots movement and still continues to develop with little or no endorsement by departments of education or the national curriculum. Some government organizations have recognized the connection between access to a natural environment and good health (Munoz, 2009), yet it is not yet clear how this understanding will impact the field of OE. It is evident, however, that FS will continue to progress as *one* component of OE, maintaining distinct characteristics based upon the surrounding culture and community. Over the past 60 years, FS has developed from

a tiny seedling into a well-established forest replete with unique ideas bearing distinctive regional attributes. These noteworthy details are reassuring, demonstrating how FS has taken hold in a variety of climates. Seeing both the forest *and* the trees also involves looking globally and understanding FS for the big idea it truly is: a childhood approach to learning that emphasizes a holistic development of young students within a natural woodland setting.

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