



A History of the UK and US Forest School Movement

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INTRODUCTION

"It is strange that such a movement is necessary. It would seem to be the natural, and almost inevitable, thing that the education of the child should be such as to place it in intimate relation with objects and events with which it lives. It is a fact, however, that our teaching has been largely exotic to the child, that it has begun by taking the child away from its natural environment, that it has concerned itself with the subject-matter rather than with the child. This is the marvel of marvels in education."

- L.H. Bailey

If you're familiar with Forest School, you would be easily forgiven if you thought the quote above was directly written about the modern day Forest School movement. Forest School is a learner-centered educational approach based on frequent and regular hand-on experiences with the natural world. In actual fact, the quote is not about the Forest School movement at all. It was written in 1903 by Liberty Hyde Bailey, the Director of the College of Agriculture at Cornell University in Ithaca, New York (p. 79). Bailey was referencing the Nature Study movement, a movement in the late 1800s/early 1900s encouraging teachers to take children outdoors to learn from first-hand experiences with nature (Kimberley, 1994).

Since the Forest School movement seems to be a relatively modern phenomenon, what would be the benefit of bringing up the Nature Study movement, which happened over a century ago? The answer to that question is based on the premise that what happened *then* is part of what has got us here *now*. Thus, the events of history are what set the context for the modern world; perhaps a dive into the past might help better our understanding of what's happening today and why.

With that, I invite you to join me on a journey through more than a century of complex and compelling historical movements in both education and nature connection in the United States (US) and the United Kingdom (UK). In doing so, I aim to highlight the cultural precedents and context in which the Forest School movement has emerged today. I'll start with discussing the aforementioned

Nature Study movement within the context of the Progressive Education movement, both of which developed from the late 1800s through to the 1930s. I'll also describe the Woodcraft movement, which began in the early 1900s and arguably still continues on a small scale today. I'll then introduce the Environmental Education movement, which began in the 1960s and finish with a discussion about the Forest School movement, which first emerged in the 1990s.

I've restricted my discussion of these movements to historical events that took place in the US and the UK. I recognize this imposes limitations, as the influences on and impacts of Forest School reach beyond these two nations. However, as an American who lived in England, I chose to focus my research on just the US and the UK for my own relevancy as well as for conciseness. Additionally, the histories of the US and the UK are intimately intertwined and the cultural and historical events of the past and present, including the modern day Forest School movement, seem to have occurred almost simultaneously in both places, give or take a few years. I found this historical tandem deeply fascinating and worthy of investigation. I also want to acknowledge the histories and influences that do not get mentioned in this document. That is why it is titled A History of the Forest School Movement, so as to emphasize it is just one version of the story within a multitude of perspectives that exist on the matter.



THE NATURE STUDY & PROGRESSIVE EDUCATION MOVEMENT

We're going to return now to the Nature Study movement, where we will begin our historical journey. There's discrepancy on exactly when the Nature Study movement began, but some sources attribute Louis Agassiz, a zoologist at Harvard University, with initiating the movement in the 1870s. Agassiz promoted teaching natural history through direct experience and discouraged learning from textbooks (Lorsback & Jinks, 2013). It's said that his motto was, "Study nature, not books" (Kimberley, 1994, p. 2). By the 1890s, Nature Study as an educational approach had gained momentum in both the US and the UK (Marsden, 1997). Books like *Nature Study for the Common Schools* (1891) by American Wilbur Jackman, and *Handbook of Nature Study* (1911) by Anna Botsford Comstock of Cornell University, along with Liberty Hyde Bailey's writings, such as the 1903 article mentioned above, *The Nature Study Movement*, helped inform the practice of Nature Study and "revolutionized elementary science education" (Monroe & Krasney, 2016, p. 11; Bailey, 1903).

Much like today's Forest Schools, Nature Study is a challenging concept to define and its practice differed from person to person and place to place. However, generally speaking, Nature Study curricula had some of the following characteristics and aims:

- Promoted first-hand observation and sensory experience;
- Child-centered, based on the interests of the children;
- Involved learning about interdependence and how all things are interconnected;
- Aimed to integrate the curriculum as a way to build knowledge across all disciplines;
- Hoped to encourage appreciation for the natural world and a desire to safeguard it (Bailey, 1903; Kimberley, 1994; Walter, 1904).

So, where did the Nature Study movement come from? What was the context that inspired it to take root? Answering these questions is complex, but there are several factors that contributed to the movement's emergence. Firstly, it rose to prominence in the wake of an economic and agricultural depression in the 1890s in both the US and the UK. There was great concern over the state of agriculture and many felt it was imperative to develop a citizenry that would be more aware

of farming practices. Around the same time, Darwin and his theories about evolution and ecology were gaining popularity. Thus, there was a growing awareness of the ecological complexity upon which human survival depended upon and a growing desire to protect 'nature'. Conservation was viewed as a means to address this and remained an aim of the Nature Study movement (Kimberley, 1994; Monroe & Krasney, 2016).

There was also another related and overlapping movement arising around the same time, calling for 'progressive education' with goals of pedagogical and social reform (Kimberley, 1994; Walter 1904). The Progressive Education movement, generally associated with the decades between the 1880s and the 1930s, began at a time of increasing urbanization. Focus turned to a means of improving services and social institutions, including that of public education. Around the turn of the 20th century Edward L. Thorndike and his colleagues at Columbia University developed methods for measuring student "achievement" in subjects like arithmetic, hand-writing, and reading. They promoted the "science" of educational testing to prepare and sort students for the workforce (Levin, 1991, p. 73). This was the dawn of standardized testing (Levin, 1991).

Meanwhile, others were challenging the widespread view that public school's role was to "provide a workforce for society *as it* is," and rather viewed education as a means for social reform in order to create a "society *as it could or should be*" (Levin, 1991, p. 73). The later school of thought was led by American educational and social reformist, John Dewey. Dewey's influential theories about education inspired pedagogical approaches that celebrated individual differences, prepared students for democratic participation, and promoted interdisciplinary learning that took place through handson and often collaborative experiences (Levin, 1991; Zimiles, 2008). The Dewey-inspired form of Progressive Education called for educational goals to shift from establishing habits, discipline and social control, to cultivating curiosity, independence, and resourcefulness through active methods of learning. Teachers were viewed more as guides or facilitators who would build upon the students' interests and prior knowledge (Jackson, 2007; Conner & Bohan, 2014; Levin, 1991).

It was within the context of the 'Progressive Education' reform that the Nature Study movement was developing. One can find themes of this progressive educational thought in the 1904 writing of R. E. Walter who described Nature Study as

"supplying the essential elements of the so-called new education, which, among other important and distinctive characteristics, holds education to be a process of life-growth rather

than a means of formal information, and which makes its aims practical and ethical as well as intellectual... It consequently places the child and his development above subject-matter, method and appliances in all rational teaching, and realizes that he is to attain development according to natural laws by his own activity and the influence of the environment" (p. 501).

Thus, it seems Walter (1904) viewed Nature Study as contributing towards the greater Progressive Education movement that was occurring at the same time.

So what happened to the Nature Study movement? Like all educational approaches, it arose as a direct reaction to the social, economic, and political contexts of the time. It also declined in much the same way. The devastating impact of World War I (1914-1918) marked a shift in educational philosophy. Ultimately World War I led to the demise of Nature Study by changing thoughts about nature and conservation. Rather than perceiving a duty to protect the natural world, focus turned towards the efficient exploitation of its resources. The war also encouraged perceptions of education as a method for social control. Order and behaviorism (most notable exemplified by rewards and punishments systems) became more valued. In the 1920s and 1930s, many felt methods like demonstration and the use of textbooks were more efficient and effective modes of knowledge transmission (Kimberley, 1994). The student-centered and hands-on learning promoted by Nature Study was incompatible in such a climate (Lorsback & Jinks, 2013).

Though the Nature Study movement only lasted a few decades, we shouldn't discount its influence. Millions of students were involved in Nature Study during its time and some of the values upheld by the movement have carried right through to modern day (Lorsbac & Jinks, 2013). One can find the push for child-centered, experiential, and outdoor learning experiences that were promoted by the Nature Study movement alive and well in the Forest School movement today. Thus, the Nature Study movement could be viewed as an integral predecessor for today's Forest Schools.

THE WOODCRAFT MOVEMENT

Now we'll explore a different movement that had been developing around the same time as the Nature Study movement, but outside the realm of public education. It was called the Woodcraft movement and it was first initiated in the US by Ernest Thompson Seton in the early 1900s (Chalmers & Dancer, 2008). Seton was an artist, author, storyteller and naturalist who was born in England, but moved to Canada as a child and then settled in Connecticut, US in 1896. Seton lived in close proximity to Native Americans and this exposure led him to deeply value their traditions and practices. Seton shared his enthusiasm about his perception of the Native American way of life by starting up a group for local boys, first known as 'Seton's Boys' and later called 'Woodcraft Indians'. The Woodcraft Indians promoted an outdoor lifestyle and survival skills. They also appropriated elements from Native American traditions and cultures, including the formation of tribes and integration of Native American names, tribal wear and objects. The Woodcraft Indians became an organization that was later absorbed into the Boy Scouts of America, which was established in 1910. Seton acted as Chief Scout for the Boy Scouts from 1910 until 1915 when he left due to his distaste for the Scout's militaristic aim to prepare boys to become soldiers. He then reestablished the Woodcraft Indians to promote a more peaceful organization for learning outdoor and survival skills (Chalmers & Dancer, 2008).

Seton's Woodcraft Indians inspired a UK man named Ernest Westlake who founded a similar youth organization in 1916 called the Order of Woodcraft Chivalry. Like Seton, Westlake distinguished his group from the Boy Scouts by valuing pacifism and a return to a natural outdoor lifestyle. The Woodcraft movement spread throughout the UK and soon other branches formed, including John Hargrave's Kibbo Kift in 1920 and the Woodcraft Folk in 1925 (Marsden, 1997). All together, these organizations attracted thousands of adults and children to the Woodcraft movement during the years between World War I and World War II (1919-1938). The movement's mission was to restore a connection to the natural world and promote social harmony, which were seen as key for rebuilding society after the devastation of World War I. Of these organizations, the Woodcraft Folk still exists today (Pollen, 2017).

Ernest Westlake wished to extend the values exhibited by his Order of Woodcraft Chivalry

organization by establishing a school. This idea was realized by Westlake's son, Aubrey, in the founding of a school called Forest School in New Forest, Hampshire in 1929. Principles of children's freedom and access to a wild woodland environment were central to the school's philosophy. As such, lessons were optional, they were held outside, children helped govern the school, and the curriculum was project-based, emphasizing autonomous learning and self-expression. These attributes were seen as necessary for the creation of a more fair and just society. There were only a select few who attended the Forest School. Most were children of middle-class people who preferred its philosophy over that of the public schools. The lifespan of Westlake's Forest School was relatively short-lived. The school was forced to close in 1940 as a direct consequence of World War II (1939-1945). The teachers were drafted and the buildings were taken over to use for war purposes (Shields, 2010).

World War II shifted mindsets towards mobilizing nations for war. This resulted in governments increasing their control over public education (Connor & Bohan, 2014). Programs or pedagogies that upheld the ideals of Progressive Education were seen as a threat during this time because they promoted critical thinking that challenged the status quo. This was viewed as divisive at a time where social unity and nationalism were deemed necessary. This trend in education persisted into the 1980s as the climate of fear and unrest continued with the Cold War and threat of nuclear attacks (Connor & Bohan, 2014; Marsden, 1997).



THE ENVIRONMENTAL EDUCATION MOVEMENT

Our journey now brings us to the start of the Environmental Education movement that arose from growing public concern in the 1960s and 1970s about environmental pollution and degradation (Stevenson, 2007/1987). This 'new' educational movement carried forth values attributed with movements of the past, but with perhaps a different emphasis. Rather than promoting education that was just about or in the environment, it also called for education for the environment in order to correct what was viewed as environmental abuses (Marsden, 1997). International discussion about Environmental Education generated significant documents, such as The Belgrade Charter of 1975 and The Tbilisi Declaration in 1977, which established "an internationally recognized definition, objectives, and action steps" for Environmental Education (Monroe & Krasney, 2016; The Tbilisi Declaration, 1977/2005). Notably, the movement sparked political action and in 1970 the United states was "the first country to establish EE policy through the Environmental Education Act and creation of the Office of Environmental Education to award grants for the development of EE curricula and to provide professional development for teachers" (Monroe & Krasney, 2016, p. 14). Environmental Education has evolved and diversified over the decades and has been incorporated into a variety of contexts (e.g. schools, nature centers, zoos, aquariums, and community programs) (Braus, 2009; Aguilar, Price, & Krasny, 2015).

Generally Environmental Education promotes hands-on experiences where learners acquire knowledge and skills across a variety of disciplines (Stevenson, 2007/1987; Gruenewald & Offei Manteaw, 2007). Environmental Education is often associated with promoting direct action to tackle environmental problems (Stevenson, 2007/1987). While this can sometimes be the case, it is not always true and some view Environmental Education as a means to connect people to both the natural and built environment in an effort to improve the wellbeing of individuals and society (Chawla, 2012). The Environmental Education movement still continues today and, along with the Nature Study movement and Woodcraft movement, it has laid some of the foundations for the last movement on our journey: the Forest School movement.

THE FOREST SCHOOL MOVEMENT

The Forest School movement has emerged within the context of modern day concerns about the swift and dramatic changes in childhood. Mainly, concerns derive from the fact that children are spending much less time outside than ever before and have significantly less opportunities for free play (Louv, 2005; Gray 2013). The increase of 'screen time' as a result of new technologies along with growing fears about risks associated with strangers, traffic, and violence have all contributed to this trend (Maynard, 2007). Additionally, educational policies have turned towards increased curriculum standardization with a focus on testing as a means to measure academic 'achievement' (Gruenewald & Offei Manteaw, 2007). The decrease in time spent outdoors combined with the growing pressure of standardized testing at schools are having negative impacts on health and wellbeing, including children's physical, social, and emotional development (O'Brien, 2009; Louv, 2005; Knight, 2013). Reestablishing a connection with the natural world is seen as a means to address these concerns as well as those associated with the environmental degradation of our planet. It is within this context that the Forest School movement is gaining momentum.

Today's Forest School movement, as an 'alternative' educational model, was influenced by cultural practices in Scandinavia that promote outdoor experiences as a way of life (called 'frulitsliv'). The Scandinavian early education system is a reflection of this culture and learning is outdoors, childled, and play-based (Knight, 2013; Waite, Bølling, & Bentsen, 2016). In 1993 nursery teachers from Bridgwater College in the UK went to Denmark to observe their pre-schools. The visit inspired the teachers to bring some of the Scandinavian practices back to their own settings. They then called what they were doing "Forest School". In 1995 Bridgwater College started to offer a training qualification for practitioners of early childhood education to learn about and develop their own Forest School programs. From there, it became a movement and Forest Schools started to spread all over the UK and extend to age groups beyond early childhood (Knight, 2013; Forest School Association, 2015). Today there are thousands of UK based trained practitioners and training providers.

Similarly, the US has also embraced outdoor educational approaches, most notable aimed at early childhood. A handful of Nature Pre-schools have been around since the 1960s, but their

popularity has grown exponentially since 2000. Additionally, the US has introduced its own Scandinavian-inspired version of Forest School, starting with Forest Kindergartens. The first forest kindergarten in the US was founded in 2007 by Erin Kenny, called Cedarsong. While Nature Schools spend a mixture of time indoors and outdoors, Forest Kindergartens tend to take place solely outdoors (Larimore, 2016). A 2017 study has indicated there are now at least 250 nature preschools/forest kindergartens operating across the country (NAAEE, 2017).

Forest Kindergartens tend to be privately funded programs associated with providing *daily* outdoor experiences, which differs from the *weekly* experiences offered within public and private sectors in UK based Forest Schools (Larimore, 2016). However, there is growing interest in trying to expand Forest Kindergarten principles into public schools in the US. Starting in 2013, elementary school teachers in Vermont have begun taking their classes outside one day a week on what they call "Forest Days." The formats of these Forest Days are unique to each teacher and setting, but many include activities like making fires, building dens/forts, and opportunities for child-led free play (PEER Associates, 2017). The success of these programs has inspired other schools to try Forest Day programs too and local training networks are currently being developed to support that.

The Forest School movement is continuously evolving, as did the movements that came before it, and brings with it a variety of opportunities as well as challenges. For example, the prevalence of Forest School programs operating within the private sector, particularly in the US, can render them inaccessible to people from lower socio-economic backgrounds. Proximity and access to appropriate natural spaces poses another challenge, especially for those living in urban areas. Additionally, it is not often recognized that there are pedagogical perspectives inherent in the approach that have been influenced by Indigenous cultures. These influences and perspectives were also largely ignored or appropriated in the Nature Study, Woodcraft, Progressive Education, and Environmental Education movements that preceded Forest School (Tuck, McKenzie, & McCoy, 2014).

However, a Canadian organization, Child & Nature Alliance of Canada, is taking steps to address the historical marginalization of Indigenous cultures. The organization openly recognizes that Indigenous people have been educating their children through land-based education for millennia (Andrachuk et al, 2014; Tuck et al., 2014). Their handbook, *Forest and Nature School in Canada: A Head, Heart, Hands Approach to Outdoor Learning*, states, like Forest School, many "Aboriginal approaches to education emphasize experiential learning, peer-to-peer learning, and require people

to take responsibility for their own learning" (Andrachuk et al., 2014, pg. 13). It is important to note that when educators do not acknowledge other ways of knowing and their influence on their own practices, there is danger in perpetuating systems of power and oppression in which Indigenous people continue to be marginalized while their beliefs and customs become appropriated by the Western world (Cole, 2007; Haluza-Delay, 2001; Tuck et al., 2014). Therefore, it is valuable to recognize how Western perspectives dominate the discussion of the Forest School movement and consider how the approach can be sensitive to the places and people it reaches as it continues to expand on a global scale.



CONCLUSION

Whether it's referred to as Forest School, Forest Kindergarten, Nature School, or Forest Days, programs that promote child-led, outdoor play as the basis for education and holistic development are spreading at a rapid pace. Discourse around the Forest School movement mainly focuses on promoting the health and wellbeing of children, however many also recognize the role outdoor childhood experiences play in participants' future environmental attitudes and behaviors. It seems many agree that healthy people with a connection to and deeper understanding of their environment will be better prepared to face current and future social and environmental challenges.

By looking back through the past century of movements such as Nature Study, Progressive Education, Woodcraft, and Environmental Education, I'm hesitant to say that today's Forest School movement is entirely 'new'. It is rather steeped in the rich cultural history of the outdoor and educational movements that preceded it. For me, acknowledging this greater depth and cultural meaning makes the Forest School movement seem more potent. The ideas are not new, we just keep finding new methods for bringing them to prominence in ways that are adapted to the concerns and aspirations of the times. In spite of devastating wars, economic downturns, and social unrest, the motivation for improving the lives of our children, ourselves, and the places we live through a deep connection to nature has persisted. The reason for this, in the words of Liberty Hyde Bailey (1903), proponent of the Nature Study movement who I also quoted at the very beginning of this article, is because "it is not revolutionary but evolutionary" (pg. 79).

"The movement is well under way. It will persist because it is vital and fundamental. It will add new value and significance to all the accustomed work of the schools, for it is not revolutionary but evolutionary. It stands for naturalness, resourcefulness, and quickened interest in the common and essential things of life. We talk much about the ideals of education; but the true philosophy of life is to idealize everything with which we have to do."

- L.H. Bailey (Bailey, 1903, pg. 79)

REFERENCES

- Aguilar, O., Price, A. and Krasny, M. (2015). Perspectives on community environmental education. In M. Monroe and M. Krasny (Eds.). *Across the spectrum: Resources for environmental educators* (2nd ed), pp. 186-202).
- Andrachuk, H., Edgar, T., Eperjesi, P., Filler, C., Groves, J., Kaknevicius, J., Young, J. (2014). Forest and nature school in Canada: A head, heart, hands approach to outdoor learning. (R. Carruthers Den Hoed, Ed.). Ottawa, Ontario: Forest School Canada.
- Bailey, L. H. (1903). The Nature Study Movement. Journal of Education 58(4), 79.
- Braus, J. (2009). Tools for engagement: How education and other social strategies can engage people in conservation action. In Falk, J.H., J.E. Heimlich and S. Foutz. (Eds.), *Free-choice learning and the environment* (pp. 87-104). Lanham: Alta Mira Press.
- Chalmers, F. G., & Dancer, A. A. (2008) Crafts, Boys, Ernest Thompson Seton, and the Woodcraft Movement. *Studies in Art Education: A journal of Issues and Research* 49(3), 183-199.
- Chawla, L. (2007). Childhood experiences associated with care for the natural world: A theoretical framework for empirical results. *Children, Youth and Environments*, 17(4), 144-170.
- Chawla, L. (2012) Students gains from place-based education (Fact Sheet #2). Children, Youth and Environments Center fro Community Engagement, University of Colorado, Retrieved https://www.colorado.edu/cedar/sites/default/files/attached-files/CYE_FactSheet2_Place-Based %20Education December%202010 0.pdf, 12/12/17.
- Cole, A.G. (2007). Expanding the field: Revisiting environmental education principles through multidisciplinary frameworks. *Journal of Environmental Education*, 38(2), 35-44.
- Conner, C. J., & Bohan, C. H. (2014). The Second World Wars impact on the progressive educational movement: Assessing its role. *The Journal of Social Studies Research*, *38*(2), 91-102.
- Forest School Association (2015) *History of Forest School*, Retrieved http://www.forestschoolassociation.org/history-of-forest-school/, 12/02/2016.
- Gray, P. (2013). Free to Learn. New York: Basic Books.
- Gruenewald, D. A. & Offei Manteaw, B. (2007). Oil and water still: how No Child Left Behind limits and distorts environmental education in US schools. *Environmental Education Research*, 13(2), 171-188.

- Haluza-Delay, R. (2001). Nothing here to care about: Participant constructions of nature following a 12-day wilderness program. *Journal of Environmental Education*, 32(4):43–48.
- Jackson, R. L. (2007). Pedagogues, Periodicals, and Paranoia. Society, 45(1), 20-29.
- Kimberley, T. (1994). "Study Nature, Not Books": The Nature Study Curriculum 1891-1932, Paper presented at the Annual Meeting of the American Education Research Association (New Orleans, LA, April 5-8, 1994).
- Knight, S. (2013). *International Perspectives on Forest School: Natural Spaces to Play and Learn*, London: SAGE Publications Ltd.
- Larimore, R. (2016). Defining Nature-Based Preschools. *The International Journal of Early Childhood Environmental Education*, 4(1), 33-37.
- Levin, R. A. (1991). The Debate over Schooling: Influences of Dewey and Thorndike. *Childhood Education*, 68(2), 71-75.
- Lorsbach, A. & Jinks, J. (2013). What early 20th Century Nature Study can Teach us. *Journal of Natural History Education*, 7, 7-15.
- Louv, R. (2005). *The Last Child in the Woods: Saving our Children From Nature-deficit Disorder*, Chapel Hill, NC: Algonquin Books.
- Marsden, W. E. (1997). Environmental Education: Historical Roots, Comparative Perspectives, and Current Issues in Britain and The United States. Journal of Curriculum and Supervision 13(1), 92-113.
- Maynard, T. (2007). Forest Schools in Great Britain: an initial exploration. *Contemporary Issues in Early Childhood* 8(4), 320-331.
- Monroe, M. & Krasney, M. (Eds.). (2016). *Across the spectrum: Resources for environmental educators,* retrieved https://naaee.org/sites/default/files/acrossthespectrum_8-1-16.pdf, 12/10/17.
- North American Association for Environmental Education (NAAEE). (2017). *Nature preschools and forest kindergartens: 2017 national survey*. Washington, DC: NAAEE.
- O'Brien, L. (2009). Learning outdoors: the Forest School approach, *Education* 3-13, 37(1), 45-60.
- PEER Associates, Powers, A.L. (2017). Forest Days Case Studies: Hartland Elementary, VT; Ludlow Elementary, VT; Mount Lebanon Elementary, NH. PEERassociates.net.
- Pollen, P. (2017). Rebel youth: how Britain's woodcraft folk tried to change the world, Retrieved

- https://theconversation.com/rebel-youth-how-britains-woodcraft-folk-tried-to-change-the-world-55892, 12/10/17.
- Shields, P. (2010). Forest School: reclaiming it from Scandinavia. FORUM, 52(1), 53-60.
- Sobel, D. (2016). *Nature preschools and forest kindergartens: the handbook for outdoor learning*. St. Paul, MN: Redleaf Press.
- Stevenson, R.B. (2007/1987). Schooling and environmental education: Contradictions in purpose and practice. *Environmental education research*, 13(2), 139-153.
- The Tbilisi Declaration. (1977/2005). In H.R. Hungerford et al. (Eds.), *Essential readings in environmental education* (3rd ed., pp. 13-16). Champaign, IL: Stipes.
- Tuck, E., McKenzie, M. & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research, *Environmental Education Research*, 20:1, 1-23.
- Waite, S., Bølling, M., & Bentsen, P. (2016). Comparing apples and pears?: a conceptual framework for understanding forms of outdoor learning through comparison of English Forest Schools and Danish udeskole. *Environmental Education Research*, 22(6), 868-892.
- Walter, R. E. (1904). The nature-study movement. Education, 24(8), 501-503.
- Zimiles (2008). A bittersweet appraisal of progressive education. *Society*, 45(2), 164-169.

