# WHAT CAN WE LEARN FROM NATURE:
# VALUES-BASED EDUCATION FOR THE DEVELOPMENT OF HOLISTIC EDUCATION AMONG MODERN AND FOREST SCHOOL LEARNING

by

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**Abstract**

This research seeks to better understand the principles of Indigenous Peoples and teachings, as it applies to the growing field of holistic education, specifically focusing on Forest Schools. Holistic education, dedicated to nurturing the comprehensive development of the whole child through the mind, body, emotion, and spirit domains, responds to concerns about an overemphasis on academic contexts. In addressing this issue, values-based education emerges as a relevant approach, focusing on non-academic avenues to foster learning and holistic growth. The study explores how values-based education contributes to a holistic learning experience within both modern educational systems and Forest Schools within North America. Through a systematic, meta-analysis review of existing literature, this research identifies and discusses five key values – compassion, honesty, perseverance, respect, and responsibility – integral to values-based education in both settings. A comparative analysis is employed to discern the similarities and differences in the identified values between modern educational systems and Forest Schools. The findings shed light on which values-based system prioritizes learning across all four domains of holistic education. In conclusion, this study recommends areas for future research, highlighting the imperative for primary research to delve into the influence of culture and language on values-based education principles and practices, as well as advocating for multidisciplinary research collaboration to incorporate Indigenous teachings and perspectives to enhance understanding of holistic education.

*Keywords*: Holistic education, Values, Values-based education, Modern education, Alternative Education, Forest School, Nature pedagogy

## Dedication

*To the mountains, the trees, and my community in Kamikatsu, Japan.*

*Thank you for being my greatest teacher.*

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It truly takes a village to write this research and I couldn't have done it without mine.

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## Chapter One: Introduction

Holistic education emerged in North America in the mid-1980s as a response to the dominant and prevailing mechanistic or Cartesian worldview in education (Mahmoudi et al., 2012). The Cartesian philosophy placed an emphasis on rational thinking, reason, and logic to understand and retain knowledge, while neglecting experiential or physical methods of learning (Watson, 2020). While there is a current move away from a strict Cartesian principle of education (Mahmoudi et al., 2012), research shows that the Cartesian education model still influences subject-specific curriculum and standardized testing, placing an emphasis on rote memorization to meet academic standards and a rigid learning environment that prioritizes dominated subjects within the Maths and Sciences (Douglass, 2022; Goslin, 1968). This approach, criticized for its limited emphasis on creativity, diversity, and self-expression in learning (Armstrong, 2013), results in the disregard to the exploration of curiosities (Mahmoudi et al., 2012), social and emotional skill development, authentic relationship building, and effective communication of feelings (Cree & Robb, 2021). By adhering to the Cartesian philosophy of education, the current national curriculum tends to prioritize the development of the mind, with little attention towards the emotional and spiritual development of a child (Cree & Robb, 2021; Tanaka, 2016).

In response to concerns of schools overemphasizing academic learning at the cost of other significant ways of knowing and learning, the United Nations Educational, Scientific and Cultural Organization (UNESCO) declared, in 2016, a need for a new education approach to prepare for, address, and transform global challenges and unite fragmented societies (UNSECO, 2016; Miseliunaite et al., 2022; Tanaka, 2016). Based on this declaration, a renewed vision and mission for education focused on creating a “comprehensive, holistic, ambitious, aspirational and

universal, and inspired by an idea of education that transforms the lives of individuals, communities, and societies, leaning no one behind" (UNSECO, 2016, p. 24) arguing that the solution for a changed education is rooted in holistic education (Miseliunaite et al., 2022).

Drawn from Indigenous Peoples and their teachings, holistic education is seen as a solution with three main aims to educate the whole child, treating the child as a whole, and recognizing the child as part of a larger whole (Mahmoudi et al., 2012), seeking to discover meaning and purpose in through self-exploration and reflection, as well as in relationship with the earth and universe. Grounded in person-centred perspectives of holism (Miller, 1992), holistic education seeks to develop individuals cognitively, affectively, and psychomotorically to their full potential, to adopt a dynamic, connected, and cohesive teaching practices and view students as active, participatory, and critical learners in the learning environment (Mahmoudi et al., 2012). This shift towards holistic education challenges the traditional purpose and philosophies of education to actively move away from preparing individuals solely for the workplace competition and consumerist culture (Mahmoudi et al., 2012).

UNESCO's declaration on holistic education, grounded in the concept of educating the whole child, strives for the comprehensive and equitable integration of the mind, body, emotion, and spirit of individuals in the pursuit of learning and development (Lovat et al., 2010; Miseliunaite et al., 2022). The incorporation of values-based education as the foundational principles of holistic education aims to transform individual's relationship with themselves and others, transcending intellectual potential by fostering balance, inclusion, and interconnectedness within all domains (Miseliunaite et al., 2022). The four components of holistic education concentrate on understanding the mind, emphasizing the development of an individual's intellectual and cognitive skills for knowledge retention, mastery, and responsibility for their

learning (Calgary Board of Education, 2022). The body domain centres on the physical aspect of learning, employing the physical body and environment to promote an individual's physical well-being through movement, nutrition, and the cultivation of habits conducive to healthy living (Calgary Board of Education, 2022; Syaukani et al., 2013). The emotion domain delves into an individual's emotional intelligence, exploring ways to foster and strengthen relationship while managing emotions positively and appropriately for healthy inter and intrapersonal connections (Calgary Board of Education, 2022). Lastly, the spirit domain, distinct from religious beliefs, focuses on an individual's understanding of their inner self, values, and beliefs to encourage reflection and a deeper understanding of their purpose, worth, and connection to something or someone greater than themselves (Alberta Education, 2009; Calgary Board of Education, 2022). Thus, effectively integrating holistic education into current curricula and teachings necessitates a strong emphasis on values-based education programs to support the holistic growth and development of a child, fostering a well-rounded, balanced, and whole individual (Cree & Robb, 2021). This literature review aims to explore how values-based education curricula is taught within various educational philosophies and programs, promoting holistic student development in all areas of learning, while achieving an equitable balance of the mind, body, emotion, and spirit (Cree & Robb, 2021; UK Legislation, 2020).

### *Research Question*

In response, the primary research question guiding this study is as follows: What is values-based education, and how is it taught to promote and facilitate a holistic educational experience of the mind, body, emotion, and spirit, for students across various education systems? Additional sub-questions aimed at furthering this understanding include:

- What values are important for students to learn?

- In what varied ways are these values taught within the learning environment?
- How do these values encompass holistic education for students?

***Research Aims and Objectives***

This research aims to explore values-based education in their similarities and differences between modern and alternative education programs, specifically Forest Schools by conducting a comparative analysis of how values are both taught and modeled in these diverse learning environments to promote holistic education. Furthermore, the research seeks to:

- Gather information on the history and evolution of modern and alternative education
- Provide a comprehensive definition and understanding of Forest Schools and their philosophy of education
- Articulate how key values are defined and taught to students within both modern and alternative education settings

It is important to underscore that the objective of this research is not to take an evaluative stance in determining which values-based education system is better. Instead, the study strives to enhance the understanding of how values are defined and taught through diverse methods and means within the learning environment. The aim of this research is to contribute to the discussion of holistic education from the lens of values-based education programs in supporting the understanding of how to best support the holistic development of students.

***Rationale***

In the process of completing this research, I had the opportunity to spend majority of the writing process in Kamikatsu, Japan – a rural, mountain village located on Shikoku island. It was through my experience living in this village that challenged my understanding and biased beliefs about how education should and ought to be conducted for the benefit of children. As my

educational background focuses primarily on attending a private school from kindergarten to grade 12, completing a post-secondary education, and eventually teaching within the modern education school system resulted in a lack of understanding regarding the role, significance, and benefit alternative forms of education can and continues to have on child development and learning.

Nestled within a forested mountain, Kamikatsu became known as the first village in Japan to declare itself as a zero-waste village in 2003, with an average population size of less than 1,500 people (INOW, n.d.; WHY, n.d.). As my time in Kamikatsu grew, I was able to witness the ways in which children learned through methods and philosophies outside of the mainstream, modern educational context. I witnessed the ways in which being and living in direct contact with nature can, and should, play a pivotal and fundamental role in how children learn. Although this study will not be localized within the Japanese education system and Japanese Forest Schools, in particular, the time I spent within this setting added much to my understanding of a broader view of education.

David Sobel, an environmental educator and author on place-based education, children's relationship with nature, and nature-based early childhood education (Sobel, n.d.), once stated, "If we want children to flourish… to become truly empowered, then let us allow them to love the earth before we ask them to save it" (Dimensions Educational Research Foundation: Nature Explore, 2005, p. 2). As a result of this study, I hope to expand my teaching practices by including and drawing on the philosophies and teachings from alternative and environmental education philosophies to accomplish the goal that David Sobel advocated for – to allow children the opportunity to learn from and love the earth in our ongoing journey to protect it.

***Overview of the study in chapters***

The structure of this research is organized into the following sections. The introduction provides readers with a comprehensive overview of the background, definition, and aims underpinning this study. The methodology section discusses the procedures used for data collection and analysis. The literature review serves a tri-fold purpose in this study: discuss the historical and contextual foundations for diverse education systems , define the key values in the study, and provide a comparative analysis on how such values are taught between modern and Forest School's values-based education program. The results section provides a detailed discussion of the key findings from the literature review. Lastly, the student concludes with a summary of the research, its limitations, and recommendations for future research.

## Chapter Two: Methodology

### *Research Design*

This study conducts a literature review research methodology to provide a comprehensive exploration of the current research and knowledge (Mertens, 2020) pertaining to values-based education and Forest Schools to inform educational practices. Using a meta-analysis approach, this research seeks to identify and synthesize diverse findings from relevant studies, both historical and current, to discuss and draw informed conclusions regarding effective values-based teachings in relation to holistic education.

The literature review focuses primarily on peer-reviewed research, incorporating both quantitative and qualitative data, to "provide insights into the effectiveness of interventions… [and] answer questions [about] the nature of the problem, what causes it, and how… the intervention [is] being implemented" (Mertens, 2020, p. 115). Utilizing a meta-analysis approach from quantitative and qualitative data facilitates a secondary analysis of primary findings to examine data across multiple research sources and disciplines. This comprehensive approach is used to understand and answer the overarching research question and objectives of this study.

Additionally, this study looks at published textbooks and articles covering the history and teachings of nature pedagogy and Forest Schools. Articles obtained from personal accounts and websites focus on incorporating first-person narratives to highlight the experiences, personal perspectives, and teaching practices of educators, both past and present, when teaching values-based education in classroom settings. By including a diverse range of sources, alongside peer-reviewed articles, allows for this study to utilize a more extensive sampling of contemporary strategies and activities relevant to values-based education in both modern and Forest School learning environments.

***Sample***

The research collection process involved accessing library databases from Trinity Western University, the University of Guelph, and the University of Oslo, utilizing research databases from EBSCO (www.ebsco.com), JSTOR (www.jstor.org), Sage Journals (www.journals.sagepub.com), ScienceDirect (www.sciencedirect.com), and Taylor & Francis Online (www.tandfonline.com).

Descriptive keywords and terms were used to gather relevant data and information. Keywords included: *Values, Values-based education, Traditional education, Modern education, Alternative education, Forest Schools,* and *Nature pedagogy.* A secondary set of data focused specifically on the understanding of five values referenced in this research: *compassion, honesty, perseverance, respect,* and *responsibility*. Initial searchers involved reviewing abstracts and introductions to assess relevance.

Further refinement of the data collection involved applying a selection criteria, whereby the literature chosen had to:

1. Provide relevant information on values-based education, modern education, and/or Forest Schools within the Kindergarten to Grade 12 setting
2. Have a publication date within the past 20 years, unless discussing the history and progression of education.
3. Be literature published in North American and Europe

The reference sections of selected articles were also utilized to identify additional research for review. Materials meeting the selection criteria were downloaded and saved, while blogs, websites, and news articles were retrieved, documented, and saved. Initial research on values and values-based education prompted an extension of the original publication date range

from 10 to 20 years to comprehensively capture the historical and evolving definition of values. This range of data comprises of quantitative and qualitative studies, case analyses, book chapters, and website content to support the comprehensive literature review undertaken in this study.

***Organization and Analysis of Data***

As previously mentioned, this study involved the examination of two sets of data. The first set concentrated on values and values-based education in modern education systems, while the second set focused on the historical content of alternative education, specifically Forest Schools, and values-based education within the Forest School setting. Following a detailed gathering and selection of relevant articles and research materials, a research matrix was constructed, incorporating APA7 in-text citations for each article. Each article was then assigned a rating ranging from 1-3 check marks, with 1 representing relevance and 3 signifying the highest degree of relevance. This process helped emphasize the importance and significance of each article in relation to the overarching research question of this study. Articles meeting the literature selection criteria, but deemed irrelevant for this study, were shaded in grey, indicating their exclusion, as illustrated in Appendix A and B on pages 119 and 120 respectively.

This process was valuable in identifying the most frequently referenced value within the literature, thereby streamlining the selection of key values for in-depth discussion in this study. The five values – compassion, honesty, perseverance, respect, and responsibility – were chosen based on their recurring importance and frequency in the initial literature research. Notably, honesty, respect, and responsibility emerged as prioritized values within educational ministries and school boards across North America, South America, Europe, and Asia (Chapman, 2000; Department for Education, 2019; Drake, n.d.; UNESCO Principal Regional Office for Asia and the Pacific, 1998).

To further enhance the organization of the literature review, a mind map was constructed to categorize the research into subtopics, seen in Appendix C and D, pages 121 and 122. This approach served as a helpful tool for maintaining focus and outlining the primary sections of the study to support the main research question and objectives. Throughout the process of this research, the subtopics initially outlined in the original mind map were reorganized and were structured as follows:

1. Values-based education
    - Definition of values
    - Values education versus values-based education
    - Values-based education in schools
2. Values
    - Definition of compassion
    - Definition of honesty
    - Definition of perseverance
    - Definition of respect
    - Definition of responsibility
3. Modern education
    - History of modern education
    - How key values are taught
4. Alternative education
    - History of alternative education
5. Forest Schools
    - History of Forest Schools

- Characteristics of Forest Schools
- How key values are redefined and taught

***Validity and Ethical Considerations***

There are no conflicts of interest and the study does not present any ethical concerns. The primary objective of this study is to ensure the representation of all literature data in an unbiased, systematic, and ethical manner by considering the trustworthiness, credibility, dependability, and authenticity of the research (McGregor, 2018), achieved through proper documentation and referencing practices. This approach not only supports the validity of the research, but also establishes a transparent paper trail, guiding readers and other researchers in replicating the study or conducting future studies (Nowell et al., 2017). The study places a strong emphasis on detailed explanations and organizational processes, providing readers with evidence of the decisions and choices made throughout the research, creating an unbiased and trustworthy presentation of data (McGregor, 2018).

## Chapter Three: Literature Review

The following literature review chapter will focus on three main purposes of discussion in this study: providing the historical and contextual foundations of values-based education, modern education, alternative education, and Forest Schools, defining the five key values in the study, and providing a comparative analysis on how the following values are taught similarly or differently between modern and Forest School's values-based education program.

### *Values and Values-based Education*

It is argued that the establishment of shared values within a society, that govern individual behaviours and interactions, is essential for fostering peaceful and harmonious relationships with one another (Gökçe, 2021). Throughout history, communities and societies have articulated, enacted laws, and explicitly or implicitly defined common values that citizens are expected to uphold (Gökçe, 2021). Thus, the defining of values serve as criteria to assess the moral or ethical nature of specific actions, situations, ideas, or individuals that form of the basis for managing behaviours collectively agreed upon within a society (Gökçe, 2021; Shaver & Strong, 1976). Recognizing the significance of values for societal well-being, societies have emphasized the passing of cultural and personal values to future generations through educational processes, for the purpose of persevering traditions, teachings, language, and stories (Titus, 1994). Over time, the responsibility of defining and transmitting values shifted to both the family unit as well as governing bodies and authoritative adults, with the aim of instilling cultural, social, and personal values onto children, so they would grow to embody those values for the preservation and maintenance of society (Korch, 2009). Advocates of public education systems in the Western world emphasized the importance of teaching values to future generations,

whereby educators assumed a greater role in defining and imparting such values (Korch, 2009). This led to the emergence of values-based education programs.

Values, as defined by educator and research Kirschenbaum (n.d.), refers to the "conscious attempt to help others acquire the knowledge, skills, [and] attitudes… that contribute to more personally satisfying and socially constructive lives" (Kirschenbaum, 1995, p. 14). British philosopher, Gilbert Ryle, distinguishes two ways in teaching values: teaching 'that' and teaching 'how', distinctions that are important in understanding the similarities and differences between values education and values-based education (Cam, 2014).

Initially, educational programs predominantly embraced values education, focusing on 'teaching that', which placed an emphasis on conveying values as factual definitions with clear parameters between right and wrong (Values-based Education International, n.d.). However, the emergence of values-*based* education, pioneered by Dr. Neil Hawkes, extends this paradigm by emphasizing 'teaching how' (Cam, 2014). Values-based education prioritizes experiential learning over rote memorization of values as facts and definitions, while encouraging students to apply values in diverse situations, facilitated by educators (Thornberg & Oğuz, 2016). This instructional structure fosters an environment where students not only identify and define values, but are actively experiencing, understanding, expanding, and practicing them throughout their schooling and within their community (Hawkes, 2018; Values-based Education International, n.d.).

From this perspective, three foundational elements underlining effective values-based education are: defining and explicitly teaching values to enable student to articulate and discuss them, adults modeling chosen values, and created dedicated time and space for students to actively engage with and reflect upon these values throughout their day (Values-based Education

International, n.d.). Additionally, effective values-based education should empower students to inquire, question, wrestle with, and autonomously determine how they will apply societal values, contributing a positive standard of care for the benefit of society, others, and themselves (Cam, 2014).

### *Values-based Education in Schools*

Values play a crucial role in shaping a child's character. While families hold significant influence in instilling and preserving values for their children, it is important to recognize the impact of other social groups, beyond the family unit, on character development (Larkins, 1997). Schools play a crucial role in child development, serving as the second primary environment during their formative years, with children typically spending approximately twelve to thirteen years in various educational programs and institutions (Tālivaldis Ozoliņš, 2010). Thus, teaching values is no longer seen as the sole responsibility of the family unit; rather, it is a shared responsibility with society, including schools and educators, to impart values deemed essential for character development (Korch, 2009; Suh & Traiger, 1999).

Since the nineteenth century, public education has served as a conduit for academic education and instilling moral and social values in future generations with the goal of producing educated and socially committed citizens to contribute to the well-being of society in accordance with governing bodies of power (Gökçe, 2021; Titus, 1994; Wynne, 1986). Historically, values-based education focused on two general approaches: the traditional and the progressive approach (Thornberg & Oğuz, 2013). The traditional approach focused the responsibility on adults to directly transmit societal values to children through direct teaching, discipline, reward, and punishment, focusing on values of "being honest, hardworking, obeying legitimate authority, being kind, patriotic, and responsible" (Jones, 2009, p. 39) to conform children to the develop

good character and behaviour as future citizens within society (Thornberg & Oğuz, 2013). The progressive approach, on the other hand, focuses less on adults transmitting values and more on the active roles of children determining their own definition, understanding, and decisions about which social and moral values are worth following (Thornberg & Oğuz, 2013). The progressive approach focuses instead on values that promote fairness and respect, with a greater concern for the welfare of others (Solomon et al., 2001), to "promote moral autonomy, rational thinking, moral reasoning skills, and democratic values and competence among [children]" (Thornberg & Oğuz, 2013, p. 50).

Currently, values-based education programs are transitioning away from singular approaches, evolving towards a values-based education that incorporates elements from both traditional and progressive frameworks (Thornberg & Oğuz, 2013). This shift results in a comprehensive integration of principles from both approaches to effectively teach values to children, promoting long-term retention and behaviours into adulthood (Berkowitz, 2011). This approach also teaches values that address the growing and evolving concerns in schools, focusing on values that address the instability of teacher-student and peer relationships, lack of safety within schools, communities, and society, decline of civic engagement, and poor academic achievement (Winton, 2008). Given the weight of responsibility placed on schools and educators, current education systems in North America and Europe are tasked with defining and establishing values and norms in their students held in society, while simultaneously fostering skills of ethical-decision making, respect for others, and rejection of oppression and harm to individuals or groups (Thornberg & Oğuz, 2013). It is argued that values-based education should not be treated as a separate subject within the curriculum, but ought to be integrated into all subjects, as well as taught through informal education opportunities, including classroom

management expectations, teacher-student interactions, conflict management and resolution, and rule-setting used to establish and maintain safety and security (Thornberg & Oğuz, 2013). Thus, the successful implementation of values-based education necessitates schools to identify, define, and ensure that values become an integral part of the learning process and environment (U.S. Department of Education, 2005).

### *Which Values are Taught?*

The current challenge with values-based education programs is found in the diversity of values considered essential to teach, with varying emphasis observed across different societies (Cam, 2014). For example, the British Columbia Ministry of Education prioritizes values related to social and personal responsibility, empathy, diversity, cooperation and respect (Chapman, 2000), whereas the Department for Education in the United Kingdom focuses on values such as honesty, generosity, integrity, humility, and justice (Department for Education, 2019). In contrast, the Ministry of Education, Culture, Sports, Science, and Technology in Japan emphasizes values related to freedom, happiness, honesty, humility, tolerance, and unity (Drake, n.d.), while the United Nations Educational, Scientific, and Cultural Organization for the Asia-Pacific region highlights values of respect, trust, compassion, tolerance, and gratitude (UNESCO Principal Regional Office for Asia and the Pacific, 1998).

Despite the recurrence of similar values across global educational ministries, the influence of diverse cultural, ethnic, and political beliefs on the determination of which values are taught in the curriculum, plays a critical factor (Eskew, 2004). Thus, it is imperative for schools to engage in discussions and evaluations to identify the core values essential for nurturing good character among students during their years in the school environment. For the purpose of this study, this literature review will analyze five values – compassion, honesty,

perseverance, respect, and responsibility – based on their recurring importance as prioritized values taught within educational ministries and school boards across North America, South America, Europe, and Asia (Chapman, 2000; Department for Education, 2019; Drake, n.d.; UNESCO Principal Regional Office for Asia and the Pacific, 1998).

***Compassion***

As humans express care towards others, empathy allows individuals to experience another's joy and difficultly as if they are experiencing it for themselves (Cree & Robb, 2021). Empathy, perceived as both a learned skill and attitude, enables an individual to comprehend and understand another's experience or feeling (Halpern, 2003) by 'entering' into another person's situation to visualize and feel what it is like for them, with the aim of collaboratively solving challenges in the situation (Cree & Robb, 2021). Research defines empathy as consisting of three main components: cognitive aspects that allow for perspective-taking abilities, emotional aspects to physically feel another person's emotions, and compassion, centred on the desire to alleviate suffering (Dou, 2020; Pfattheicher et al., 2015). Given this multidimensional definition, this research emphasizes the term "compassion" to specifically address the ways in which an individual response to a given situation, compelling them to take action to alleviate someone's suffering.

Compassion is defined as a "sensitivity to the pain or suffering of another, coupled with a deep desire to alleviate that suffering" (Shea et al., 2016, p. 1). It represents a form of emotional labour in which the giver manages and utilizes emotions to act considerably towards the practical and/or emotional needs of the receiver (Clouston, 2018). While empathy focuses on establishing an emotional connection to an individual, compassion goes a step further as an emotional

response to empathy with a desire to help to relieve another person's suffering (Greater Good in Education, n.d.-b ; Hougaard, 2020).

Research indicates a pressing need to cultivate compassionate and caring behaviours to address current psychological and physical suffering among students as social conflicts, such as exclusion, bullying, violence, loneliness, and societal anxiety, become more prevalent within schools that impact the overall health and well-being of students (Kappelmayer et al., 2022; Moyano et al., 2019). Emphasizing compassion as an important value not only enhances individual well-being, but also promotes a greater sense of connection, kindness and collective well-being of the learning environment and community (Brown & Brown, 2015; Carro et al., 2021; Kappelmayer et al., 2022).

However, the development of compassionate students relies not only on the carer's ability to perform direct actions towards the person being cared for, but also on their personal intentions and motivations to provide such care (Clouston, 2018). Arlie Hochschild, an American sociology professor specializing in understanding how human emotions guide moral decisions and practices (University of California, 2019), argues that compassion, driven by external expectations and pressures, can lead to a negative sense of obligation for the carer (Hochschild, 1983). This obligation may result in both physical and emotional distress, leading to compassion fatigue and burnout, where constant exposure to another's suffering becomes overwhelming and distressing, causing exhaustion with the act of compassionate care (Lee et al., 2013). Thus, the challenge in teaching compassion as a value extends beyond student understanding of the concept, but to also help students develop intentions and motivations that genuinely care for the emotional well-being of others and a desire to alleviate their suffering (Lee et al., 2013).

***Honesty***

Honesty, characterized as the deliberate action of individuals telling the truth to uphold fairness and abstain from engaging in acts of lying, stealing, or deceiving others (Cambridge Dictionary, 2019), stands as a fundamental value and trait in human communication (Talwar et al., 2015). It involves a dual commitment by individuals to seek and live by the truth, while also rejecting the fabrication and spreading of untruthful facts as truth (Appiah et al., 2022; Mauri, 2011). Philosophers argue that honesty is paramount among human values, not only offering personal benefits but also contributing positively to the broader socio-cultural society that becomes a foundational element to shape human interactions (Appiah et al., 2022; Mauri, 2011). By adhering to the principles of honesty and leading a honest life correlates with greater happiness, improved health, positive energy, healthier relationships, community goodwill, and mental tranquility (Appiah et al., 2022).

In contrast, upholding values of dishonesty, particularly engaging in behaviours such as a lying, stealing, cheating, breaking promises, and deceiving others, is viewed as indicative of a lack of integrity, rendering an individual untrustworthy and lacking respect within society (Appiah et al., 2022). Acts of dishonesty, especially lying, can result in negative effects on interpersonal relationships (Talwar et al., 2015) and significantly undermine an individual's moral character and development (Mertz, 2004). Philosopher Immanuel Kant argued that dishonesty is inherently morally wrong as it goes against an individual's duty as citizens to value oneself and others as ends rather than means, to avoid damage, interference, or misuse of relationships within society (Mazur, 2015). A less stringent perspective argues that dishonesty hinders one's character development and falls short of the expected standards and virtues that

diverts individuals from the path of becoming the best versions of themselves (Mazur, 2015). Thus, teaching students the values of honesty, and the harms of dishonesty, is crucial.

Research by Evans and Lee (2011) reveal that lying tendencies and behaviours in children are emerging and developing more rapidly and frequently during their preschool years, with internal and external factors, such as punishment avoidance, social pressure, or a desire to please, can influence a child's decision to act either honestly or dishonestly (Talwar et al., 2015). Understanding the factors that promote honesty in children is essential as educators identify and address how to promote and maintain honesty, explicitly teach students what it means and looks like to behave honestly, and support open and sincere communication, establish boundaries, and build trusting relationships among children (Greater Good in Education, n.d.-a).

***Perseverance***

When evaluating success factors among individuals, researchers have examined both internal and external elements, including intelligence, creativity, self-confidence, external attractiveness, socioeconomic status, and racial privilege, to discern their impact on achieving goals (Halperin & Regey, 2021). However, research by Duckworth et al. (2017) proposes a specific trait shared among successful individuals across academic, social, and physical domains – the power of grit. Coined by Angela Duckworth, a scientist and professor at the University of Pennsylvania (Duckworth, 2013), grit emerges from a combination of passion, characterized by a strong liking or desire towards a specific object, concept, or action (Halperin & Regey, 2021), and perseverance, defined as the extent to which a person persists in working towards a goal over an extended period of time (Duckworth et al., 2017). Individuals with grit are attributed as high achievers, approaching their goals as a marathon, acknowledging the dedicated time and effort required, in contrast to those lacking grit who perceive their goals as a spring, often changing

course when faced with challenges or boredom, leading to a tendency to abandon the original goal (Duckworth, 2013). Thus, the value of grit lie in an individual's innate desire to not only achieve but commit to achieving their goals, regardless of the time and effort involved (Duckworth et al., 2007). This research will specifically focus on the second key component of grit – perseverance – highlighting its definition and significance for students within a values-based education context.

Perseverance, as defined by Middleton et al. (2015), is "the continuance of effort, carried out in a thorough and diligent manner, towards some perceived goal while overcoming difficulties, obstacles, or discouragement along the way by amending one's plan of attack (pp. 4-5). Thus, perseverance is a series of repeated choices rather than a fixed ability, where individuals consistently and consciously choose to sustain their effort and remain focused on challenging tasks, with the anticipation of achieving their goals (Bettinger et al., 2018). In addition to the sustained effort and focus, perseverance also places value on the process of the activity, emphasizing deeper learning and mastery of a goal over accomplishing it quickly (Wilburne & Dause, 2017). Therefore, perseverance is an important value that fosters skills enabling individuals to stay focused and tenacious in working through problems and difficulties, encouraging different approaches, utilizing strategies and resources, and deepening their understanding of problems for foundational knowledge and future problem-solving (Bettinger et al., 2018).

***Respect***

With the rise of increasing disrespectful behaviours among students towards their peers and teachers (Brown et al., 2011; Mokracek & Ali Mohammed, 2022), research by Thompson (2018) reveals a surge in negative and harmful relationships, an overall lack of safety within the

school environment, and an increase in incidents of bullying and harassment. Allan and Davidson's study (2013) found that individuals subjected to constant disrespectful behaviours experience "greater psychological distress, shame, and impaired performance on routine and creative tasks" (p. 345), resulting in increased avoidance of others, loss of trust, and feelings of injustice, heightened hostility, and aggression towards others (Allan & Davidson, 2013; Taylor, 2010). With the escalating prevalence of disrespectful behaviours, there is an urgent need to teach and cultivate behaviours of respect within the learning environment.

When examining respect as a value, research argues that most, if not all, societies have explicit and implicit rules dictating expectations and behaviours that constitute respect across cultures and societies (Brown & Levinson, 1987; Lo & Howard, 2009). As respect encompasses a wide range of meanings without a universal definition, researchers often define respect based on certain behaviours and expectations individuals ought to uphold according to the context and situation presented (Allan & Davidson, 2013). For instance, recognition respect focuses on acknowledging and valuing the dignity, worth, and qualities of an individual, whereas appraisal respect examines an individual's duty to respect others based on their position and status within society (Allan & Davidson, 2013).

Within the educational context, respect is assessed and defined based on the expectations and behaviours a student exhibits towards their peers, teachers, educational staff, and oneself to uphold a positive learning environment (Eurich, 1995; Mokracek & Ali Mohammed, 2022). Teaching and upholding educational respect that ensures the rights to safety for all members in the learning environment results in a more positive and trusting learning space, fostering collaboration, creativity, problem-solving, innovation, and open communication among peers and and between teacher-student relationships (Mind Tools Content Team, 2022; Mokracek &

Ali Mohammed, 2022). Placing an emphasis on respect can support students in developing the self-control to not only listen to, but appreciate, adults and peers, interact in ways that validate their role in the learning environment, treat others with dignity and esteem, and respond without fear, anger, or avoidance of punishment (Mokracek & Ali Mohammed, 2022).

***Responsibility***

As schools focus on developing policies and systems to create more effective education programs that meet the demands of growing social and cultural expectations (Lewis, 2001), the theme of responsibility takes center stage (The Loyalsock Township School District, 2015). Despite attempts to define responsibility, it remains an ambiguous term, often defined by using the word itself (Albin, 2017), such as “responsibility is to be responsible” (Chamberlin & Chambers, 1994, p. 1994) or "responsibility is the state or fact of being responsible" (Dictionary.com, 2019, para. 1). Additionally, responsibility can encompass multiple sub-sections, such as social responsibility, ethical responsibility, economic responsibility, and legal responsibility (Stobierski, 2021), suggesting that the definition of responsibility is influenced by the context in the given situation and the actions an individual chooses in response to it (Chamberlin & Chambers, 1994; Lewis, 2001; Stobierski, 2021).

Educational responsibility, specifically for students, is emphasized not only in how students take ownership of their actions, decisions, duties, and goals within the educational setting, but also in their actions to ensure the protection, safety, and well-being of themselves and their peers in the learning environment (Lewis, 2001; Matteucci & Helker, 2018; The Loyalsock Township School District, 2015). Research by Ayish and Deveci (2019) indicates that educators argue students “lack a sense of personal responsibility for their learning and are unaware of how their attitude and [behaviour] impacts the learning of others [resulting in] poor interpersonal

communication, negative teaming experiences, and unproductive learning opportunities" (p. 224), warranting increased attention towards developing student responsibility (Matteucci & Helker, 2018).

Recognizing the interconnectedness of student responsibility and learning, educators play a pivotal role in fostering a sense of accountability in students to support their overall well-being and self-esteem. This empowerment enables individuals to take ownership of their learning, overcome educational challenges, and engage in deeper, more meaningful learning experiences and opportunities (Ayish & Deveci, 2019). Students who develop a sense of agency over their learning, acknowledging their role in putting effort and engagement into their studies, not only become active learners but also exhibit a greater interest and passion for their subjects (Soilemetzidis et al., 2014). Therefore, the school and its educators play an important role in facilitating meaningful opportunities for students to not only take a greater role in their actions and behaviours and influence their learning, but to also seek their personal motivation and commitment to fulfil their student duties, as opposed to mere external factors, like discipline and punishment, to create long-lasting responsible behaviours (Ayish & Deveci, 2019; Lauermann & Karabenick, 2011; Lewis, 2001).

As the following values constitutes a substantial component of values-based education, the following section will examine how modern educational programs, grounded in these five values, define and implement strategies within the school environment to teach their students, as facilitated by educators.

### *History of Modern Education*

The field of education and its structures and systems continue to progress and evolve in response to direct or indirect indicators of societal development and its needs (Wang, 2022).

Historically, traditional education, deeply rooted in longstanding customs and traditions, adopted a teacher-centred, lecture-style learning approach, where educators held an authoritative role in imparting knowledge to passive student listeners (Wang, 2022). Despite opposition from educational experts, traditional education prioritized a one-way transfer of knowledge, choosing subject-specific teaching to cover a broad range of materials to reach a larger student population at a lower cost (Leverage Education, 2022; Wang, 2022).

Over time, education underwent a shift towards modern education, characterized by a student-centred learning style that prioritizes both academic-specific teachings and the development of values and skills in students (Wang, 2022). Characteristics of modern education classrooms focus on technology integration, individuality, flexibility, personalization and educational strategies that inspire and guide learning with educators assuming the role of facilitators of knowledge and students receiving greater autonomy to explore topics of interest and enhance their abilities (Heick, 2013; Leverage Education, 2022; Wang, 2022). In discussing the teaching of five values present in this study, this literature review will focus on the methods and strategies employed in the modern education perspective, shedding light on how educators and learning environments cater to the development of these values.

### *How Compassion is Taught*

Research by Clouston (2018) asserts that cultivating compassion and care in students requires the development of critical thinking, problem-solving skills, and metacognitive reasoning. Critical thinking and problem-solving in the context of compassion involve understanding a situation's impact on the individual(s) involved, formulating action plans, and alleviating suffering (Clouston, 2018). Metacognitive development focuses on students' awareness of their strengths and limitations, their ability to explore situations from multiple

perspectives, and their identification of strategies, which includes planning, monitoring, evaluating, and adjusting behaviours, to address problems and act in compassionate care (Cambridge Assessment International Education, 2014; Clouston, 2018).

Strategies and activities used to teach compassion include:

- Reading and acting out social scenarios: Engaging students in scenarios involving friends, family, or strangers to facilitate discussions and brainstorm ways to show compassion (O'Connor, 2016; Having Fun First, 2014).
- Peer connection: Creating opportunities for peer connection and relationship building within the classroom community (Davis, 2022).
- Explicit teaching of themes: Focusing on themes like inclusion, active listening, kindness, and specific behaviours that demonstrate care (Bohrer, 2014; Roose, 2019).
- Targeted academic content: Incorporating specific book studies, such as "Fish in a Tree," "Wonder," "Out of My Mind," or "Rules," to teach students about compassion and care (Khan, 2019).

The goal of teaching  compassion is the provide students with meaning opportunities of reflection, allowing them to process, explore, and understand how to understand another individual's situation and appropriately support them to alleviate their suffering, while developing the emotional capacity of students to interact with others maturely and wisely (Clouston, 2018). Educators teaching compassion can foster collaborative, trusting, and respectful relationships, creating a safe space for modeling caring values and behaviours, while allowing students to practice compassion in their daily interactions (Clouston, 2018). This results in fostering kindness, recognizing the emotional aspects of care, and developing techniques and strategies to build resilience in students for sustained compassion without burnout and fatigue.

### *How Honesty is Taught*

Teaching honesty within the educational context underscores the significance of academic integrity, defined by the commitment of all members of the academic community to act with honesty, trust, fairness, respect, and responsibility (Tertiary Education Quality and Standards Agency, 2021). The surge in academic dishonesty, characterized by "deceitful or unfair act intended to produce a more desirable outcome on an exam, paper, homework assignment, or other assessment of learning" (Miller et al., 2017, p. 121), has prompted educators to allocate additional classroom time to address and explicitly teaching expectations, rules, and consequences related to academic misconduct (Taylor & Bicak, 2019).

While academic dishonesty is sometimes perceived as a victimless crime, the growing prevalence of cheating and dishonesty among students raises concerns about how educators are approaching the teaching and enforcement of academic integrity in all assignments and assessments (Miller et al., 2017). This situation compels educational systems and educators to instill honesty among students by:

- Improving understanding: Enhancing students' comprehension of academic dishonesty and the various forms it can take.
- Establishing clear rules: Setting explicit rules and teaching them when discussing assessment expectations.
- Controlling testing environments: Creating a classroom environment that minimizes opportunities for cheating during assessments.
- Enforcing consequences: Implementing consequences for students engaging in academic dishonesty.

However, educators should not solely focus on preventing and penalizing acts of academic dishonesty, but equally concentrate on teaching students about honesty, its importance, and the merits associated with it. Educators can teach honesty by (Talwar, 2022):

- Acknowledgment and praise: Recognizing and praising students when they exhibit acts of honesty to reinforce truthfulness and similar behaviours.
- Explicit communication: Engaging students in explicit conversations about the significance of honesty and the expectations of the classroom and school environment.
- Consequences discussion: Discussing the repercussions that follow if an individual chooses to engage in dishonest actions.
- Modeling honesty: Serving as role models by demonstrating honesty in their own actions as adults.

Learning how to be honest and understanding the fundamental importance of engaging in honest behaviours are essential skills and virtues for children. These skills contribute to building positive peer relationships and maintaining integrity in academic learning.

***How Perseverance is Taught***

Given that perseverance is considered a predictive factor for an individual's success in both education and the workforce, understanding how to develop, foster, and maintain perseverance is important for values-based educational teaching. Traditional motivation and self-regulation programs, while showing positive effects with young children, often yield weaker or null effects with adolescents due to their heavy reliance on direct instructions and repetitive practice, which may result in passive learning over time (Bettinger et al., 2018; Durlak et al., 2011). As a result, educators must adopt alternative approaches that focus no only on explicit teachings, but also on shaping a student's internal beliefs about themselves and their abilities.

Rather than viewing perseverance as a fixed ability, research by Dweck (2014) suggests building a growth mindset in students – a belief that abilities can be changed with effort and developed over time. Individuals with a growth mindset are more "likely to thrive in the face of difficulty and continue to improve, while those who hold a more fixed mindset may shy away from challenges or fail to meet their potential" (Yeager & Dweck, 2020, p. 1270). Developing a growth mindset has become an area of interest for researchers and educators seeking effective ways to implement and teach such perspectives to students, fostering internal motivation and perseverance (Yeager & Dweck, 2020).

The relationship between perseverance and growth mindset suggests that educators can use growth mindset strategies to support students in developing a commitment to working towards goals, despite the presence of challenges. Growth mindset beliefs associate perseverance with usefulness rather than uselessness, shaping students' perspectives to value effort and time as indicators of hard work to improve their abilities (Mrazek et al., 2018). This instills a positive mindset when faced with setbacks or obstacles, viewing mistakes as a result of insufficient effort rather than lack of ability, further encouraging and nurturing perseverance (Mrazek et al., 2018). In contrast, students with a fixed mindset are more likely to reduce efforts and quit when faced with obstacles, seeing challenges as limitations of their abilities and demonstrate a lack of willingness to seek help (Miele et al., 2011; Mrazek et al., 2018).

Educators play a pivotal role in developing a growth mindset by employing strategies that:

- Normalize struggle: Encourage a positive perspective on challenges, viewing them as opportunities for learning (Rissanen et al., 2018).

- Explain brain plasticity: Share the science behind the brain's plasticity, emphasizing how repetitive actions and practice strengthen neural connections and support learning new skills (Yacoub, 2023).
- Utilize language that praises effort: Focus on acknowledging sustained effort rather than praising innate intelligence (School of Education, 2020).
- Encourage collaboration: Foster cooperative exercises where students work together to solve problems, emphasizing collaborative praise over individual outcome (School of Education, 2020).

However, the development of perseverance cannot be effective through growth mindset alone, but also relies on the external environment, particularly the classroom setting, to support the cultivation of these values and skills. Fixed-mindset educators who emphasize the importance of abilities, intelligence, high grades, or perfectionism may inadvertently reinforce the belief that students are evaluated based on their skills and abilities. Conversely, growth-mindset teachers can steer students towards mastery, emphasizing the value of building knowledge and celebrating progress (Duckworth, 2013). As educators, creating a learning environment that redefines success in the context of perseverance is essential, focusing on characteristics such as hard work, asking for help, learning from mistakes, and valuing the learning process can foster greater perseverance, encourage students to value the learning experience over the result and enable them to set and achieve long-term goals more positively (Duckworth, 2013; Kroeper et al., 2022; Rissanen et al., 2018).

### *How Respect is Taught*

Teaching respect in the classroom has become an increasingly important focus for educators, parents, and community members, driven by concerns about the safety of students

within the school environment and the rising incidents of bullying and cyberbullying with long-term implications for victims (Langland et al., 1998; Thompson, 2018). The detrimental effects on the physical, social, and emotional safety and well-being of students through acts of disrespect underscore the need for educational strategies to counteract such behaviour and promote respectful relationships among peers (Frey et al., 2005).

While anti-bullying programs like Steps to Respect: A Bullying Prevention Program, Dare to Care, European Antibullying Network, and PACER's National Bullying Prevention Center offer valuable resources, research by Thornberg et al. (2016) emphasizes the importance of the classroom's climate and culture in building respect among students. Therefore, addressing and fostering respect within the learning environment involves a multifaceted approach including:

- Clear rules and expectations: Developing explicit rules and expectations that demonstrate respect, along with consequences for non-compliance (Victoria State Government, 2021).
- Prosocial learning environment: Creating a prosocial, school-wide learning environment where common language regarding anti-bullying behaviours, respect, and expectations is used by all members of the school community (Langland et al., 1998).
- Cooperative learning opportunities: Implementing cooperative learning opportunities to enhance social support, boost self-esteem, promote collaborative work, and encourage acknowledgement of differing opinions and thoughts while working towards shared goals (Bullard & Bullock, 2004).
- Communication skills: Engaging in private or open classroom discussions to teach students effective communication, fostering an atmosphere that acknowledges difference of opinions without devaluing the perspectives of others (Mauriseen et al., 2020).

Teacher-student relationship built on mutual respect also play an important role in preventing and resolving incidents of bullying (Di Stasio et al., 2016). Goodman (2009) distinguishes between respect out of submission, a unilateral form where respect is demanded based on authority, in comparison to respect as equality, a reciprocal form freely given based on acknowledging the dignity, equality, and autonomy of both individuals, regardless of status. Thus, to establish a culture of teacher-student respect as equality involves:

- Working alongside students: Collaborating with students, considering their opinions, supporting their decision-making abilities, and engaging in healthy communication, fostering a culture of respect based on equality (Goodman, 2009).
- Modeling respectful behaviour: Demonstrating respect, ensuring fair and equal treatment for all students, actively listening during discussions or conflict resolutions, and continually assessing and improving teaching practices (University of Massachusetts Amherst, 2016).
- Trust and open communication: Building a teacher-student relationship where students view their teacher as a caring adult who respects them as individuals, leading to increased trust and willingness to seek help when witnessing or experiencing bullying (Di Stasio et al., 2016).

Mutual respect between teachers and students based on equality becomes a fundamental element in cultivating student participation, contributing to a positive learning environment, reduce behaviours of bullying, and create a safe and supportive environment that among all members of the school community.

***How Responsibility is Taught***

The tradition and hierarchical nature of education often requires educators to explicitly and repeatedly invite students to take responsibility, emphasizing that students cannot assume it without guidance (Cook-Sather, 2010). When educating students about the importance and value of responsibility, techniques to teach responsibility for students to use include:

- Diversity of behaviours: Recognizing a wide range of behaviours that demonstrate responsibility in different contexts and situations (Cook-Sather, 2010).
- Communication: Utilizing positive verbal and non-verbal communication tailored to the student's abilities and understanding (Chamberlin & Chambers, 1994).
- Encourage discussions: Promote active listening skills, engage students in discussions, negotiations, and compromise (Cook-Sather, 2010).

The classroom environment also plays a crucial role in fostering student responsibility, encouraging initiative, ownership of personal belongings, advocating for personal space and safety, and understand the impact of their actions on shared spaces with peers (Chamberlin & Chambers, 1994). Modern education school boards emphasize specific behaviours and environmental changes that foster student responsibility including:

- Accountability: Attending class regularly and being on time with necessary supplies required to learn and taking care of school property (Burnaby School District 41, n.d.; Ministry of Education, Culture, Sports, Science and Technology, 2008).
- Completion of assessments: Completing all assignments and assessments given in a timely manner (Vancouver Public Schools, n.d.).
- Adhering to rules: Following the rules outlined in the school's code of conduct that includes, but is not limited to, demonstrating honesty and integrity, treating others fairly,

using respectful language, and must not engage in violent or harmful behaviours that affect the safety of students and staff (Simcoe County District School Board, 2019).

- Skill development: Building effective time management, goal-setting, and organizational skills to prioritize, track, and accomplish goals (Duke Estroff, 2019; Wagner, 2019).

As educators work to create a classroom environment that promotes student responsibility not only mitigates behaviours of resistance, mistrust, isolation, and confusion, but also replaces them with a greater sense of accountability, purpose, and compassion towards the learning environment. By providing a space for students to makes mistakes, accept the consequences for their behaviours, and learn from them, students are able to develop a greater understanding of responsible behaviours for the safety of themselves and others in the learning space.

***History of Alternative Education***

In 1965, the Elementary and Secondary Education Act was enacted in North America, allocating funds to alternative education settings, primarily correctional facilities, aimed to facilitate academic instruction for incarcerated children and youth both before, during, and after their incarceration (Elementary and Secondary Education Act, 2015). Since then, educational institutions across North America have employed alternative education settings for students, specifically those exhibiting severe and persistent behavioural concerns, necessitating removal from traditional or modern classroom environments (Slaten et al., 2015). Despite discussions to define alternative education, a universally accepted definition remains elusive (Atkins & Bartuska, 2010). This lack of consistency in definition arises from the diverse range of what qualifies and constitutes as ‘alternative’ settings and the various reasons leading to student placement in these alternative settings (Kumm et al., 2020).

In Canada, alternative education programs focus on offering "support through differentiated instruction, specialized program delivery, and enhanced counselling services based on students' needs" (Ministry of Education and Child Care, 2009, para. 1). In the United States, the Department of Education defines alternative education as schools addressing students' needs that cannot be met in regular school, providing non-traditional education programs and studies (Kumm et al., 2020). Whereas in the United Kingdom, alternative education or 'pupil referral units' serves children unable to attend school due to short- or long-term illnesses, exclusion, or awaiting placement in a mainstream school (Department for Education, 2014).

The creation of alternative education aimed to provide school districts with an option to place students when modern educational settings could no longer effectively and safely meet their needs (Kumm et al., 2020). Historically, alternative education programs were categorized into three types: expulsion disciplinary school alternatives, residential facilities, and juvenile justice facilities (Kumm et al., 2020). Expulsion disciplinary school alternatives primarily focused on students displaying severe, dangerous, and/or disruptive behaviours that necessitated immediate expulsion, catering to students from multiple schools and districts, posing challenges for educators to teach students with divese education and behavioural management backgrounds (Kumm et al., 2020; Simonsen & Sugai, 2013). Residential facilities, also known as out-of-home placements, provide 24-hour individualized care and education based on a students' behavioural, mental, and/or addiction needs, offering specialized psychological and/or psychiatric support, with limited attention given to the student's educational needs (Kumm et al., 2020). Lastly, juvenile justice facilities focus on short- or long-term education for students involved in legal disputes, where the court system deems it inappropriate for the student to return to the mainstream school setting (Kumm et al., 2020). The goal of juvenile justice alternative education

programs is to change the student's behaviour through incarceration while ensuring the delivery of fundamental subjects during their sentencing to prevent falling behind in their education once released (Raywid, 1999). Despite claims of these three settings as constructive educational alternatives, these facilities were openly punitive, highly structured, and aimed to change student's behaviour and attitude towards authority figures prior to providing quality learning (Kumm et al., 2020; Raywid, 1999; Texas Juvenile Justice Department, 2022). Given the history of such programs and the student demographic they serve, alternative education has been defined and viewed negatively in contrast to the positively defined and viewed traditional educational environment (Engelmann, 2022).

As the civil rights movement gained momentum in North American in the 1970s, a new form of alternative education emerged, often referred to as a free schools or street academics, challenging the structure and purpose of both traditional and alternative education settings (Magadley et al., 2019). Free schools, organized by community members and parents, focused on developing an educational model mirroring traditional academics while equally prioritizing non-academic teachings such as mentorship, drop out recovery, community outreach programs, team collaboration, and tutoring services for at-risk students (Meador, 2020). The educational values of free schools set them apart as small educational communities that "were free from state control and were free to think and engage in interactions according to their own authentic needs and passions" (Magadley et al., 2019, p. 86). Thus, by the 1970s, the uniqueness of free schools introduced a new definition of alternative education that placed greater focus and attention on providing quality education, choice, and autonomy over the operations, structure, and purpose of education for children (Magadley et al., 2019; Meadow, 2020; Raywid, 1999).

Despite the increasing rise and success of free schools, in 1974, lawmakers in North America began issuing educational policies and altering funding allocations, targeting the self-governance that free schools had (Meador, 2020). As the federal government assumed more control over education, resulted in an overall restructuring of alternative schools that required defined curriculum benchmarks, pedagogy standards, and government approved accreditation to be an alternative school (McGuinn, 2015). These policy changes further shifted the definition and reach of students eligible to attend alternative schools by including students failing academically or behaviourally in traditional education settings, but also supporting families from lower socio-economic backgrounds, and/or individuals with special needs (Aron, 2006; Meador, 2020).

As alternative education facilities expanded, the focus shifted to providing differentiated academic, behavioural, and mental health services to meet the needs of the students they served (Kumm et al., 2020). Offering flexible schedules, smaller teacher-to-student ratios, innovative learning methods, and modified curricula became important factors in its definition (Fortems et al., 2023). Research by McGee and Lin (2020) found that the primary characteristic of a successful alternative education program focused on addressing and altering the systemic factors within traditional schooling that hinder educational growth for students deemed at risk. Thus, the goal for alternative education programs is to the change classroom culture and atmospheres that offer curriculum differentiation, teach life skills, and offer opportunities for students to recover credits, improve grades, and prepare students to return to traditional classroom settings or enter into post-secondary placements (McGee & Lin, 2020). Characteristics that arguably, should be part of the modern education system of schooling today.

### *History of Forest Schools*

With the onset of industrialization in the 1800s, as the labour and education movement transitioned toward indoor settings, families and individuals increasingly reported having more time to engage in outdoor play and leisure, as opposed to viewing the outdoors as a part of labour and responsibilities (Williams-Siegfredsen, 2017). Over time, the outdoors became recognized as a space for play, prompting early childhood educators to explore and document best practices in early childhood education (Dean, 2019). This focus on the relationship between cognitive development and the natural world laid the groundwork for the philosophies and foundational principles behind Forest School education.

In the 1950s, the Forest School movement originated in Demark as the first country to acknowledge the health and leisure benefits of outdoor environments, promoting the use of outdoor spaces for educational purposes (Dean, 2019; Williams-Siegfredsen, 2017). This movement rapidly spread to other Scandinavian countries where a shared understanding and appreciation for nature, outdoor play, and their positive impact on health and wellness paved the way for the adoption of similar, albeit unofficial, educational practices (O'Brien & Murray, 2007). During the 1970s, these Scandinavian countries expanded Forest School programs, conducting research and studies on the effects of outdoor education to educate the public about the benefits of Forest Schools as an alternative outdoor-based learning environment (Dean, 2019).

As research expanded and greater awareness of the need for full-time, quality education for preschool-aged children grew, the Forest School movement gained momentum in Scandinavian countries while also emerging in the United Kingdom in 1993, coinciding with changes in the United Kingdom's national curriculum that recognized and embraced alternative

education approaches (Forest School Association, n.d.-b). While Scandinavian countries allowed for Forest Schools to retain autonomy in creating lesson plans and interpreting curriculum goals set by the government to fit their own needs and philosophies, the United Kingdom's government and ministry of education took a more regulatory approach, enforcing standards to ensure quality and uniformity among all registered Forest Schools (Dean, 2019; Wermke & Forsberg, 2016). This lead to the definition of what constitutes as a Forest School to evolve into different styles from the original Danish model.

As the philosophies, research, and knowledge of Forest Schools reached North American in the 1990s. Canada and the United States initially focused more on camps and outdoor adventure learning as opportunities for children to engage in outdoor play experiences as a form of learning (Education Endowment Foundation, n.d.; Knight, 2018). As effective as these one-day or summer outdoor adventure learning programs were, the absence of formal academic education lessons failed to match the quality of education Forest Schools were providing throughout Europe (Education Endowment Foundation, n.d). Over time, the United States witnessed grassroots movements of Forest Schools in 2006, often referred to as nature schools or forest kindergartens, mirroring structures similar to those in the United Kingdom (Dean, 2019).

In Canada, a growing interest in nature-based pedagogy shifted the focus of alternative education away from outdoor adventure learning to Forest Schools, where the first Forest School in Canada was established in 2007, setting the stage for the formation of the Child and Nature Alliance of Canada (Boileau & Dabaja, 2020; Dean, 2019). Similar to the Forest School Association in the United Kingdom, this organization "seeks to systematize the outdoor educational approach within the country, focusing also on incorporating Indigenous groups' land and practices" (Dean, 2019, p. 58). Supporting approximately forty-five full- and part-time

Forest Schools across the country, the Child and Nature Alliance of Canada reports a significant increase in interest among families and future practitioners, that underscore the growing and high demand for Forest School education in Canada (Boileau and Dabaja, 2020; Nelson et al., 2018; Paikin, 2018), reflecting a shift and interest towards nature-based programs as an alternative form of education for children's future.

### *Key Characteristics of Forest Schools*

A growing body of research indicates a rising trend among current generations of children adopting a indoor, sedentary lifestyle, leading to a disconnection from the outdoors (Coates & Pimlott-Wilson, 2019; Dabaja, 2022; O'Brien, 2009). Various factors, including parental concerns about outdoor safety, excessive reliance on digital technology, and the availability of indoor activities, contribute to a decline in the time children spend outdoors, raising apprehensions about their physical, emotional, and mental well-being (Dabaja, 2022). This shift has given rise to the concept of nature deficit disorder, a non-clinical condition describing the adverse effects from insufficient outdoor exposure, manifesting in a range of physical, behavioural, and mental health concerns (Warber et al., 2015; Cudworth & Lumber, 2021). In contrast, research underscores the positive impact of consistent exposure to nature, linking it to enhanced cognitive functioning, reduced attention deficit disorder, and heighted self-awareness that improves academic performance, critical thinking skills, fosters creativity, imagination, and various aspects of child development (Dabaja, 2022; McArdle et al., 2013; Warber et al., 2015). Additionally, spending time in nature contributes to stress reduction, improved perceptual skills, enhanced motor coordination, and creative play to foster a strong sense of belonging and connection to the natural world and communities (Roberts, 2009; Cumming & Nash, 2015; Warber et al., 2015).

In response to the growing nature deficit disorder, Forest Schools have emerged with key characteristics designed to facilitation children's reconnection to nature, particularly during their early childhood and primary school years (Waite, 2010). Defined by the Forest School Association, six key principles underpinning Forest Schools' philosophy focus on (Cree & Robb, 2021; Dean, 2019; Forest School Association, n.d.-a; Forest School Association, n.d.-b; Forest School Association, n.d.-c):

1. Long-term process: Regular, ongoing sessions, emphasizing planning, observation, adaptation, and review in each session.
2. Natural environment: Sessions take place in woodlands or natural environments, fostering a lifelong connection between learners and the natural world.
3. Learner-centred process: Utilization of various learner-centred processes to create a community for being, development, and learning.
4. Holistic development: Aiming to promote holistic development, cultivating resilient, confident, independent, and creative learners.
5. Support risks: Providing learners with opportunities to take support risks appropriate to the environment and themselves.
6. Qualified practitioners: Teaching conducted by qualified Forest School practitioners committed to continuous professional development.

When Forest Schools adhere to these six principles enables learners to discover themselves and their environment, experience appropriate challenges, and cultivate positive relationships with themselves, others, and the natural world (Forest School Association, n.d.-c; Knight, 2018). In addition to these key principles, other organizations of Forest Schools have incorporated supplementary core elements, such as conducting learning sessions in all-weather types, viewing

children as competent learners, employing play-based and inquiry-driven teaching methods, utilizing natural materials for open-ended play, and prioritizing community building through considerations of access and equity (Child and Nature Alliance of Canada, n.d.; American Forest Kindergarten Association, n.d.).

### *Values-based Education in Forest Schools*

Values-based education in Forest Schools share similarities with modern education systems, teaching values through experiential, hands-on learning to understand and apply concepts in various situations (Cam, 2014). However, Forest Schools distinguish themselves in values-based education by placing nature as the primary teacher, emphasizing the source of teaching values through the lens of the natural world (Cree & Robb, 2021). Consequently, this shifts the definitions of values from modern education to better understand the application of the value in and through the perspective of nature (Cree & Robb, 2021; Ryan, 2013). The following section delves into how each of the five values – compassion, honesty, perseverance, respect, and responsibility – is redefined and imparted through the principles, perspectives, activities, and experiences of Forest Schools, offering a comparative analysis with values-based education in modern educational settings.

### *Redefining Compassion*

Compassion, rooted in individuals adhering to moral goals and guiding principles, encompass an individual's acknowledgment of the pain and suffering of others, propelling them to take actions for the alleviation of such suffering for the well-being of others (Pfattheicher et al., 2015; Shea et al., 2016). This definition of compassion traditionally associates action focused on addressing and alleviating human suffering. However, from the perspective of Forest Schools, compassion expands beyond human-centric concerns to further encompass the alleviation of the

suffering of all other species within the natural world (Pfattheicher et al., 2015; Tam et al., 2013). As environmental decisions have historically been motivated by human desires and alleviating their sufferings, a trend that persists to the present day, this expanded perspective of compassion guides individuals towards engaging in pro-environmental behaviours alleviate suffering and prioritize the well-being of the ecosystem and the organisms that inhabit it (Geiger & Keller, 2018; Pfattheicher et al., 2015). Thus, Forest Schools advocate for a broader definition and interpretation of compassion to encompass the suffering of nature to facilitate long-term connections that foster mutual compassionate care towards individuals and the natural world.

### *How Compassion is Taught*

Research underscored the positive impact of individuals with a strong connection of care to the natural world, not only manifesting in pro-environmental attitudes and behaviours, but also contributing to practices that persevere ecosystems needed for human survival (Lumber et al., 2017). Recognizing humanity's profound impact on the environment, there is a growing need for the cultivation of love and care for ecological systems through a more profound and hands-on engagement with nature (Cree & Robb, 2021). Forest Schools teach the value of compassion in an environmental context by emphasizing and encouraging frequent interactions and observations in nature to strengthen an individual's understand and connection to nature and living organisms. This approach is in contrast to teaching environmental compassion in modern education context that often rely on books, images, and videos to demonstrate environmental suffering, lacking the experiential depth Forest School programs offer in building compassionate care in nature (Cree & Robb, 2021).

Teaching compassion through the lens of nature pedagogy involves guiding students to learn about the natural world through embodied experiences, fostering a deeper understanding of

environmental suffering and how to alleviate it (Cree & Robb, 2021). In particular, Forest Schools prioritize plants as fundamental organisms in developing awareness, employing detailed, long-term observation strategies that anthropomorphize plants to instill a sense of care and protection (Cree & Robb, 2021). Outdoor learning activities used in Forest Schools to teach compassionate plant care to facilitate meaningful connections with plants and nurture compassion for the non-human world include (Cree & Robb, 2021):

1. Identifying smells: Preparing different plants and instructing students to cup their hands to create a container for the plant and identifying the plant's smell and its uniqueness from others.
2. Drawing from memory: Using any drawing materials, students draw a plant, incorporating as much details of the plant from memory; afterwards students revisit their plant, noting any missing details and the intricacies of their plant to enhance their original drawing.
3. Duplication game: The educator presents various natural objects on a main board, allowing students a specific time to observe them. After the observation period, students search for and find each object in the woods to build connections by comparing the similarities and differences of each object to the main board, emphasizing the uniqueness of nature, even among the same species of plants.
4. Sit spot: Designating a special place outdoors where students can be alone, becoming observers of nature and providing a moment for students to listen, observe, think, and be quiet in nature, fostering a deeper connection and kinship with the natural world.

As students engage in these activities and recognize how plants exist, survive, and thrive in the natural world, but also learn how plants are used as food, medicine, and other practical uses for

human survival, their appreciation and compassionate motivations to care for and protect nature are heightened (Cree & Robb, 2021; Lumber et al., 2017; Tam et al., 2013). The value of compassion, within the Forest School teachings, extends student's awareness and alleviation of suffering, resulting in a greater attentiveness and concern for both humanity and for other species within the natural world, promoting a positive and sustained connection to compassionate care.

***Redefining Honesty***

Adopted by the United Nations General Assembly, the United Nations Declaration on the Rights of Indigenous Peoples set a global standard for the "survival, dignity, and wellbeing of the [I]ndigenous [P]eoples of the world" (National Centre for Truth and Reconciliation, n.d., para.1), becoming the framework for reconciliation by ""[expanding] on existing human rights standards and freedoms, as they apply to the specific situation of Indigenous Peoples" (United Nations: Department of Economic and Social Affairs, n.d., para. 1). In response, schools and curricula began focusing on accurate and truthful teachings of history about and towards Indigenous Peoples, aiming to take actionable steps towards reconciliation with Indigenous groups in North America (Ministry of Education, n.d.). Educational curriculums in Canada were revised to incorporate age-appropriate content regarding Indigenous Peoples, their culture, language, teachings, and history, with a specific focus on the truth and trauma of residential schools towards Indigenous Peoples. This resulted in Indigenous history becoming a mandatory educational requirement for students in kindergarten to grade 12 (Ministry of Education, n.d.).

Despite the educational shift towards educational reconciliation, reports among Indigenous Peoples express challenges to current modern education curriculum on Indigenous history, as it operates through a lens of cognitive imperialism, defined as "the imposition of one worldview on a people who have an alternative worldview, with the implication that the imposed

worldview is superior" (Gorecki & Doyle-Jones, 2021, p. 120). By denying accurate teachings of the worldviews and perspectives of Indigenous Peoples reinforces the tendency to cast Indigenous Peoples as part of prehistory, undermining Indigenous sovereignty and failing to acknowledge them as stewards of the land, now occupied by settlers, and teachers of knowledge of the land passed down through generations (Ka'nhehsí:io Deer, 2021; Lambert et al., 2021)This results in the lack of Indigenous voices and teachings, integration of Indigenous perspectives, and a failure to acknowledge the influence of Indigenous knowledge that guides the teachings of current curriculum and information (Gorecki & Doyle-Jones, 2021).

Teaching and modeling honesty in Forest Schools begins by acknowledging and addressing Indigenous sovereignty over the teachings, pedagogy, and land ownership of local Indigenous cultures that make up the model and foundation of Forest School educational practices (MacEachren, 2018). Thus, defining honesty moves beyond the actions of an individual towards another individual, focusing also on the actions Forest Schools have to both their students and Indigenous Peoples to acknowledge and be held accountable to the origins of knowledge, teachings, and pedagogy regarding the natural world and humanity's relationship with it (Cree & Robb, 2021; Lambert et al., 2021; MacEachren, 2018).

### *How Honesty is Taught*

In light of the growing movement of Forest Schools, it is imperative to assess how honest Forest Schools are with Indigenous land-based teachings, histories, and practices, of whether they inadvertently perpetuate, steal, and falsify the origins of their educational teachings and practices (Koller & Rasmussen, 2021). Nature pedagogy, which is the foundational teachings within Forest Schools, cannot be discussed without honouring and crediting the teachings and actions of Indigenous Peoples who not only understand land-based knowledge, but also have an

intimate and familiar relationship with the earth, that actively guide the practices and curriculum development used within Forest Schools (Cree & Robb, 2021). As Forest Schools inherently rely on natural outdoor spaces as the cornerstone of their learning foundation (Cree & Robb, 2021), it becomes pivotal for educators to engage in discussions that convey accurate truths about the origins the land, its rightful stewards, and the historical repercussions of colonization that facilitated the utilization of the space for Forest School purposes (Johnston, 2020). Often employing educational practices rooted in historical origins and traditions among Indigenous communities, constituting Indigenous pedagogy, drawing on the history and teachings of Indigenous Peoples to comprehend one's relationship and connection to the natural world (MacEachren, 2018), Forest Schools can instill honesty in learners by actively engaging in conversations about the Indigenous roots of environmental learning practices that include:

1. Storytelling and oral teaching: Forest Schools favour oral teachings within the learning space, a practice deeply ingrained in the traditions of Indigenous Peoples, where history, stories, rituals, and knowledge are transmitted through spoken word from one generation to the next (National Museum of the American Indian, n.d.).
2. Singing, movement, and dancing: Incorporating movement as a means of learning through play, community building, and fostering enjoyment reflect the historical use of music and dance in Indigenous cultures as part of their cultural identity for storytelling, mimicking nature sounds, and fostering social connection with others (Alberta Teacher's Association, 2019).
3. Traditional Ecological Knowledge: Forest schools, emphasize the importance for learners to journey with plants, as edible and non-edible, and animals to understand the cycle of nature and behaviours (Cree & Robb, 2021). This knowledge, accumulated by Indigenous

Peoples over centuries through direct contact with the environment, is used for life-sustaining practices and teachings to create an informative and safe learning space (National Park Service, 2023).

4. Nature as teacher: By constructing educational lessons around Indigenous connections to the natural world, Forest Schools gain insight into facilitating long-term programs that foster deeper and caring nature connection for leaners as a form of kinship and intimate connections with the earth (UNSECO, 2021).

As educators engage in discussions with learners regarding the ways in which Indigenous cultures have laid the foundational knowledge and teachings guiding Forest Schools' work, allows for the building of reciprocal relationships based on mutual trust with Indigenous communities that align with actions towards truth and reconciliation (Government of Canada, 2021; Johnston, 2020, p. 230; UNESCO, 2021). Forest Schools extend their efforts beyond teachings of residential schools and its history by focusing on all aspects of Indigenous history and teachings that encompass culture, traditions, teaching practices, knowledge, and resilience that shape the relationship students have with the land they learn from (UNESCO, 2021). Forest Schools strive to instill honesty in learners by allowing children to learn from Indigenous Elders and teachers about environmental respect, land connection, and teachings that foster honest, authentic, and inclusive experiences from Indigenous worldviews and perspectives Johnston, 2020).

### *Redefining Perseverance*

Although both Forest Schools and modern education settings adhere to similar definitions of perseverance, research reveals distinct approaches and behavioural priorities influencing student's ability to build perseverance in tasks or goals (Yeager & Dweck, 2020). Modern

education defines perseverance as the sustained effort involving repeated choices, despite encountering obstacles or challenges, aimed at achieving a specific goal (Bettinger et al., 2018; Middleton et al., 2015). Forest Schools expand on this definition by emphasizing behaviour over the mere attainment of a set goal stating that perseverance can be taught by enabling students to participate in play and risk-taking activities within the physical environment as natural barriers act as valuable and tangible teachers in the development of building perseverance (Harper & Obee, 2021).

Harper (2017) defines risk as engagement in behaviours or situations where the potential for loss or harm coexists with opportunities for gain and reward. Over time, the concept of risk has become synonymous with ‘danger’, carrying a negative connotation and judgement for behaviours associated with a higher likelihood of experience more loss than reward (Brussoni et al., 2015). This evolution has led to the categorization of play among children as either safe or risky, with greater preference for the former, due to concerns about physical injury during more risky or free play (Tremblay et al., 2015). While there is no universal agreement on the definition and management of risk and risky play, research suggests the need to reconsider the role and importance of risk in the development of a child’s well-being and character (Harper, 2017; Harper & Obee, 2021).

In Western societies, there is an increasing aversion to allowing children to engage in risky play, resulting in a shift in parenting styles towards overprotection rather than autonomy granting, manifesting itself through excessive regulations and monitoring of children’s activities and routines to prevent potential harm (Gere et al., 2012; Harper & Obee, 2021). Regulatory measures include the removal of equipment deemed ‘dangerous’ and ‘unsafe’, lowering the height of swing sets and slides, and increasing floor cushioning to soften landing areas (Harper,

2017; Herrington et al., 2007). Despite the well-intentioned focus on child safety, studies argue that overprotection and excessive caution create conflict in children's perception of risk, impacting their overall development, sending false messages that the natural world is inherently dangerous, fostering anxiety-provoking responses and discouraging children from engaging in risky play (Gere et al., 2013; Harper, 2017).

In the context of perseverance, which involves the sustained effort of repeated choices despite obstacles (Bettinger et al., 2018; Middleton et al., 2015), Forest Schools assert that risk-taking within a safe framework is not only important but also encouraged to cultivate persistence and commitment in tackling challenges and achieving goals (Cree & Robb, 2021' Harper & Obee, 2021). This approach fosters creativity, confidence, and reduces the likelihood of phobias and anxiety-related responses (Gere et al., 2012; Tremblay et al., 2015). Common forms of risky play found in Forest Schools include, but are not limited to (Cree & Robb, 2021; Sandseter, 2009):

1. Great heights: Climbing trees and structures to gain a bird's eye view of the world.
2. Rapid speeds: Swinging on vines, ropes, playground swings, sliding down sleds, skis, skates, slides, logs, boats, and other devices fast enough to produce the thrill of almost losing control.
3. Dangerous tools: Handling knives, bows and arrows, farm machinery, and other tools known to be potentially dangerous.
4. Dangerous elements: Playing with fire and in and around deep bodies of water.
5. Rough and Tumble: Voluntary, reciprocal role-playing that often includes aggressive make-believe themes, actions, and words among children, without the intent to harm individuals (Storli, 2021).

6. Disappearing and/or getting lost: Experiencing the thrill of temporary separation from companions through hide and seek, and exploring new and unfamiliar spaces with imagined and potential dangers.

As Forest Schools view risky play in outdoor environments as an integral part of a child's learning process, providing opportunities for curiosity, competence, problem solving, and a sense of purpose (Cree & Robb, 2021), as opposed to the removal of play and risky play from a child's learning environment that results in the development of poor decision-making and problem-solving skills, limitations in acquiring new life skills, reduced independence, and diminished learning, perception and judgment (Be You, 2022, Cree & Robb, 2021). Thus, the act of shielding children from risk is posited to run counter to the natural environment and essential elements needed for child development of perseverance, to sustain continued effort and achieve their goals despite physically or emotionally challenging and stimulating spaces (Harper, 2017; Sandseter, 2007).

***How Perseverance is Taught***

In examining the relationship between perseverance and play, research by Sandseter (2009) emphasizes the pivotal role of a child's activity and engagement during play, prioritizing these characteristics over the accomplishment of end results or goals that play facilitates. Play, according to Sandseter (2009) is an "inner directed activity not motivated by pursuing outcome goals… that serves the opportunity to actualize one's potential, providing an optimal experience of arousal, excitement, fun… joy, and lightheartedness" (p. 3). Forest School employ risky play as a tool for teaching and fostering perseverance, utilizing the learning zone model developed by Tom Senninger, which is a social learning model that illustrates how practitioners can create rich

and engaging learning situations requiring risk and risky play for the development of sustained effort towards goals (Cree & Robb, 2021).

The learning zone model comprises of three concentric circles representing comfort, learning, and panic zones, with the comfort zone at the centre (ThemPra Social Pedagogy, n.d.). The comfort zone, encompassing familiar elements that make a child feel safe and secure, serves as a space for reflection, reset, and sense making (ThemPra Social Pedagogy, n.d.). However, to facilitate growth and perseverance, children must venture beyond their comfort zone into the learning zone, gradually expanding their limits and boundaries as they become more familiar with their environment (Cree & Robb, 2021). Exploring the learning zone enables children to embrace new challenges, test their abilities and limits, and recognize the potential to persist through difficulties (ThemPra Social Pedagogy, n.d.). Importantly, the act of expanding and exploring the learning zone is integral to engaging in play and risky play as a form of learning. Conversely, the panic zone signifies an area where learning is impeded due to fear, often resulting in traumatic experience and an immediate need for escape (Cree & Robb, 2021). Therefore, the goal is to explore the boundaries within the learning zone, approaching but not entering the panic zone. Allowing children to engage in risky play within their learning zones can cultivate qualities and skills that contribute to the development of perseverance. This includes overcoming challenges, building resilience, learning from failure, enhancing decision-making and problem-solving skills, setting and achieving personal goals, and increasing self-efficacy and self-esteem (Cree & Robb, 2021; Little, 2020; Sandseter, 2009).

As Forest Schools encourage children to engage in all forms of play that include height, rapid speed, proximity to 'dangerous' elements, such as fire and water, tools, rough and tumble play, and the potential for getting lost or disappearing (Tremblay et al., 2015), Forest School

practitioners adhere to risk-benefit assessment processes that necessitate practitioners to (Care Inspectorate, 2016; Cree & Robb, 2021):

1. Recognize and know each child as an individual: Assess an environment's safety within the child's capabilities while challenging them to develop their skills and confidence (Care Inspectorate, 2016).
2. Allow space for the child to identify, assess, and solve risks or risky situations: Involve children in the risk-benefit assessment process to develop their own knowledge and self-awareness, empowering them to make personal safe decisions and set boundaries (Cree & Robb, 2021).
3. Set and push boundaries of natural elements: Provide access to natural elements, with a specific focus on fire, to support students in engaging with challenges that facilitate the learning of new survival skills to encourage experimentation and adjustment of techniques for activities such as collecting, igniting, tending, and extinguishing a fire (Educated by Nature, 2020).
4. Foster curiosity: Emphasize curiosity as a potent motivator for learning that encourages students to investigate and overcome challenges and unfamiliar situations with curority to expand knowledge and understanding, while discovering new skills that can be applied in future situations (Cree & Robb, 2021).

Despite concerns about the perceived dangers of allowing children to engage in such form of risk and risky play, Forest Schools provide opportunities for achievable tasks within risky environments that allow for personal experimentation and learning experiences, enabling children to move into and enjoy their learning zone, while retreating to their comfort zone when necessary (Cree & Robb, 2021). Forest School practitioners prioritize individualized choice and

opportunities, empowering children to determine and set steps and challenges within the natural environment, gradually increase their confidence, resilience, and desire to learn and achieve goals (Cree & Robb, 2021). As a child confidently and repeatedly take actions and chances, through play, that push them out of their comfort zone into their learning zone, they develop the ability to ask for help, build healthy boundaries, cultivate a greater sense of perseverance to bounce back from challenges, and build mastery to try challenging tasks until they achieve success.

***Redefining Respect***

Engaging in respectful behaviours towards others revolve around the treatment or abstention from certain actions, acknowledging the dignity and worth of individuals, and treating them as equals (Bognar, 2011; Eurich, 1995).While Forest Schools adhere to these fundamental principles of respect, they extend this definition to encompass environmental respect, emphasizing the ways individuals should engage with the natural world and all living organisms with high regard and courtesy (Cree & Robb, 2021).

The current human-nature relationships is encompassed by three perspectives and worldviews that shape how environmental respect is imparted and upheld. A narrow perspective perceives humans as distinct from nature, viewing it merely as a resource and tool for human use (Ärlemalm-Hagsér, 2013). In contrast, a wide perspective emphasizes the interrelation and connection between humans and the natural world, transcending hierarchical positions (Ärlemalm-Hagsér, 2013). Lastly, a mixed perspective acknowledges humans as separate cultural entities from nature, while recognizing their connectedness to the natural world (Ärlemalm-Hagsér, 2013). Environmental respect, within the mixed perspective, involves the understanding of how individuals perceive themselves in nature and how their position

influences the respectful relationships they have for others and nature (Brooks, 2011). Thus, environmental respect entails acknowledging the dignity, worth, and rights of the natural world as integral components of life, to be treated with responsibility, care and protect, just the same as human respectful relationships (Ianos et al., 2009).

When exploring and teaching environmental respect, Forest Schools focus on key components vital for the development respect, including but not limited to:

- Conservation: Actions that protect, preserve, and increase current biodiversity and natural landscapes for sustainable development and maintenance (Ianos et al., 2009).
- Sustainable practice: Practices that support the ecological, human, and economic health of society without compromising the ability of future generations to meet their own needs (University of California, 2023).
- Responsible consumption: Understanding the finite nature of natural resources and moving towards reducing or minimizing the use of finite resources, while also transitioning towards renewable energy resources (United Nations, 2023).
- Climate action: Addressing and changing human actions that impact climate change, working on personal and international levels towards lowering carbon footprints and emissions (United Nations, 2018).
- Environmental education: Involves teachings that focus on environmental issues, helping individuals develop a deeper understanding of the environment, raise awareness, and engage in responsible and informed actions to improve the environment (United States Environmental Protection Agency, 2018).

Respect for the environment necessitates acknowledging it as an essential and connected part of human life and development, understanding that all human actions have consequences for the

environment as a whole (Ianos et al., 2009). Respect, in this context, entails recognizing that the interests and needs of human beings are not superior to, but equal to, those of other organisms within the natural world. By attributing dignity, value, and worth to the natural world, Forest Schools prompt individuals to explore, experiment, and act in ways that enhance care for, and provide opportunities for the well-being of the natural world, both individually and collectively (Martin et al., 2016). Focusing on environmental respect allows Forest Schools to contribute to the longevity and flourishing of nature and its living organisms, ensuring the survival and maintenance of the natural world.

***How Respect is Taught***

The development of environmental respect within Forest Schools is intricately linked to the principles of nature pedagogy, specifically employing models of circles, cycles, and wheels rooted in Indigenous teachings and practices (Cree & Robb, 2021). These models afford children the opportunity to utilize their senses, fostering exploration and understanding of their surroundings while emphasizing the interconnectedness of humans within the circle of life (Cree & Robb, 2021), building a foundational understanding, through experiences, perspectives, and activities, to foster connection and relationships with the natural world. While conventional environmental education often adopts  disembodied approach, relying on books and material that lack meaningful connections to understanding the impact of human behaviour on the natural world, Forest Schools advocate for a more embodied experience (Cree & Robb, 2021; Ianos et al., 2009).

Research by Veselinovska et al. (2010), asserts that children have an innate interest in exploring their world through sensory observation and encouraging embodied learning opportunities through their senses results in heightened environmental awareness and

acknowledgement, nurturing a deeper connection that extends to the treatment, care and protection of the natural world. The sensory systems play a pivotal role in providing feedback that informs individuals about their surroundings, guiding how they feel and act in various situations and environments (Cree & Robb, 2021). Drawing a comparison between indoor and outdoor spaces, Cree and Robb (2021) argue that indoor environments often lead to greater sensory disorganization, eliciting a 'fight or flight response' due to excessive stimuli in the learning space. However, regular exposure to the outdoors is posited as essential for preventing sensory underuse and atrophy (Giusti et al., 2018), allowing individuals to positively process sensory feedback, maintain focus, and respond appropriately to environmental stimuli (Cree & Robb. 2021).

Within the framework of nature pedagogy, Forest Schools prioritize the development of children's five survival senses, shaping behavior and enhancing their capacity to engage with and respond to nature and each other (Cree & Robb, 2021). This is achieved through (Cree & Robb, 2021):

- The tactile system: Encouraging touch through activities like digging, scooping, barefoot walking, and exposure to various textures in nature to develop a healthy tactile system.
- The auditory system: Providing opportunities for exposure to a diverse range of nature-based sounds and promoting rich sound-based activities like creating instruments from natural materials, tapping, humming, singing, and clapping.
- The visual system: Supporting the visual system's development by engaging children in activities that explore the natural environment, enhance colour distinction, depth perception, and patter recognition, reducing the risk of developing myopia and vision loss from increasing exposure to screen devices (Dolgin, 2015).

- The olfactory system: Allowing children to explore smells in nature through sensory smelling games and experimenting with combining scents to develop the ability to distinguish and enjoy various smells.
- The oral and gustatory system: Involving children in hands-on experiences of making their own food, foraging for seasonal plants and berries, and tasting natural, unprocessed foods to connect them to the richness of natural foods.

Research by Giusti et al. (2018) underscores the efficacy of regularly engaging people's senses with the natural world to instill a deeper appreciation and respect for nature. As Forest Schools engage children in embodied experiences in nature fosters connection and appreciation for the beauty and complexity of the natural world, recognize the delicate balance within the ecosystem and how human activities can positively or negatively impact the environment, and create an emotional connection to nature that cognitively challenges individuals to care for and protect it (Eba, 2021; Giusti et al., 2018; Veselinovska, et al., 2010). This approach transcends teaching respect solely in human-to-human relationships, expanding to encompass all living and non-living organisms to recognize the need to protect the natural world for current and future generations, learn how to effectively and respectfully interact, without harming, the ecosystem, and support the well-being of the self, the family, the community, the land, the spirits, and the ancestors (First Nations Education Steering Committee, 2006).

***Redefining Responsibility***

Within education, two teaching philosophies, namely teacher-centred and child-centred learning, significantly shape the dynamics of student responsibilities and the roles assumed by educators in imparting knowledge (Akello et al., 2016; O'Neill & McMahon, 2005; Stanford Teaching Commons, n.d.). The traditional teacher-centred approach positions the teacher as the

central authority, assuming the role of an expert who imparts knowledge to students viewed as novices (O'Neill & McMahon, 2005). The curriculum in this paradigm is structured around educators determining subject content, instructional methods, and assessment strategies, with learning objectives established subsequently (Stanford Teaching Commons, n.d.). Consequently, teachers are tasked with presenting subject matter, monitoring student progress, correcting, answering queries, and evaluating performance to gauge master of the material (Lathan, 2019). While effective to a certain extent, this method fosters a passive learning environment, where students receive information without a clear understanding of its relevance or significance to their interests (Lathan, 2019; Stanford Teaching Commons, n.d.).

In response to these limitations, a paradigm shift influenced by the educational philosophies of Dewey, Piaget, and Vygotsky led to the emergence of child-centred learning, envisioning knowledge constructed by students, with teachers adopting the role of facilitators rather than mere presenters of information (O'Neill & McMahon, 2005). Modern education now centers on a mix of teacher and child-centric curricula and pedagogy, emphasizing student-drive exploration and intentional structured lessons chosen by the teacher regarding the specific knowledge context and boundaries in adherence to the curriculum standards and requirements (Nicholas et al., 2021; TEAL Center Staff, 2010).

Derived from the child-centred philosophy, Forest Schools embrace a child-led learning approach in the development of student responsibility, prioritizing activity over passivity, where learning is not solely for mastery, but is rooted in engagement, interest and experience, achieved through social activity and interaction (Akello et al., 2016; O'Neill & McMahon, 2005). In this context, the educator transforms into a motivator, facilitator, and architect of a supportive learning environment, aiming to inspire a child's discovery and pursuit of knowledge without

presenting the topics of knowledge the child should learn and explore in the learning space (Akello et al., 2016). In the realm of child-led curriculum design and development, student responsibility no longer focuses on the tasks and actions students ought to complete in the learning environment, but shifts fully to the student, where they are tasked not only with identifying their curiosity and interests, but also with actively seeking answers through autonomous learning, collaborative experiences, self-control, and creativity (Akello et al., 2016). Thus, learning transforms into an active process, where students take full ownership of their educational journey, shaping personal learning objectives and goals, without the direction of an educator's agenda on knowledge and assessments (Akello et al., 2016; O'Neill & McMahon, 2005).

***How Responsibility is Taught***

Forest Schools employ a 'nature play cycle' structure to navigate child-led learning and the various responsibilities children have through various developmental stages, dictating the balance between child and adult leadership and autonomy in a learning session (Cree & Robb, 2021). This framework, based on Mandy Andrew's conception of play as a continuum, categorizes play-based learning into four distinct models, emphasizing the responsibility children and adults have in initiating, learning, and facilitating decisions in play and education (Cree & Robb, 2021). The nature play cycle is categorized as follows (Cree & Robb, 2021; Veraksa et al., 2021):

- Adult led and direction: The adult structures the program, activities, and learning goals, employing an instructional approach where the adult not only demonstrates the learning but also dictates the right and wrong way to complete the activity. This approach may limit input, creativity and choice for students.

- Adult initiated: The adult offers a choice of materials and resources to guide the play experience, emphasizing the child's uniqueness and creativity. The focus is on providing direction to the learning process while accommodating the child's energies and needs.
- Child initiated: The child takes charge of the learning experience, utilizing the natural environment and their creativity to set the stage for play, inviting the adult to participate. This approach explores the child's curiosities and imagination, fostering collaboration in seeking answers and exploring interests.
- Child led and directed: The child fully interacts with the space, with minimal influence from adults. This grants the child a sense of control over their actions, responding to nature-based situations using their skills and strategies. The emphasis is on the experience rather than the end goal and mastery, encouraging the child to explore curiosities and seek answers independently. In this stage, the adult assumes a passive role, intervening only when invited by the child.

Cree and Robb (2021) assert that Forest Schools do not aim to eliminate adult-led, directed, and initiated learning from the nature pedagogy, but view learning as a cyclical process, transitioning between different states of the nature play cycle. As Forest Schools encourage movement across the nature play cycle, with a greater emphasis on child-led learning, it fosters a sense of student responsibility as they take ownership in navigating, exploring, and engaging in the learning process based on their own interests and curiosities (Cree & Robb, 2021). This responsibility given to students results in greater self-reflection, autonomy and independence, recognizing consequences and being held accountable for their learning, respond appropriately to nature-based situations, and uphold a learning mindset that is continuous and self-directed to remain curious in and outside the learning setting (Cree & Robb, 2021; O'Neill & McMahon, 2005).

This shift away from adult-directed approaches allows learning to transcend conventional standardized assessments, emphasizing the return of control and creativity to the child that empower the child to take ownership of their learning and in their own education (O'Neill & McMahon, 2005; Nicholas et al., 2021).

### *Conclusion*

This literature review delves into a comprehensive exploration, providing an overview and explanation of the historical and contemporary evolution of both modern and Forest School education programs, shedding light on the noteworthy similarities, differences, and the presentation of values-based education within each context.

Throughout the review, five specific values – compassion, honesty, perseverance, respect, and responsibility – take centre stage, underlining their significance in shaping the educational landscape. The chapter critically examines the nuances in the definition of each value within both modern and Forest School environments. Moreover, an in-depth analysis of the teaching goals and strategies employed by educators to instill these values in their learners is outlined.

This comprehensive exploration aims to contribute to the broader understanding of holistic education and values-based learning by addressing the distinctive approaches and shared objectives within modern and Forest School educational frameworks. The following chapter will present the results derived from the study. The analysis will be conducted in alignment with the three main principles of holistic education with the overarching goal to unravel the distinctive approaches and strategies used by each educational program in fostering a sustained and comprehensive values-based education in students.

# Chapter Four: Results and Discussion

## Summary of Results

Employing a meta-analysis approach, this study delves into a comprehensive literature review aimed at uncovering research from historic and current studies. The primary focus centres on understanding research pertinent to values and values-based education, particularly within the realms of both modern educational paradigms and alternative approaches, with a specific emphasis on Forest Schools.

To fulfil the initial objective, the literature review provides an extensive examination of the historical evolution of values-based education through modern, alternative, and Forest School educational landscapes. Significantly, it explains the importance of values, values-based education, and defines five specific values – compassion, honesty, perseverance, respect, and responsibility – as the focal points of the research.

The secondary objective involves defining the teaching methodologies and practices employed for imparting values within diverse learning environments. This is illustrated by dissecting the specific definitions and pedagogical approaches adopted for teaching compassion, honesty, perseverance, respect, and responsibility within the realms of modern and Forest School educational programs.

Given the comparative nature of this literature review, which seeks to deepen understanding regarding the diverse methods of values-based education, rather than evaluating the superiority of any particular system, the following discussion will present key findings organized within a comparative model. The following tables will summarize the similarities and differences among modern and Forest school education programs in its definition and methodology of teaching values to their learners.

**Comparison of Compassion**

In modern values-based education programs, compassion is emphasized as the ability to recognize and empathize with the pain or suffering of others, paired with a desire to alleviate their distress (Shea et al., 2016). Teaching compassion fosters feelings of connection, kindness, and overall wellbeing among students, thereby mitigating social conflicts within the learning environment (Brown & Brown, 2015; Kappelmayer et al., 2022; Moyano et al., 2019). While similar, Forest Schools broaden the scope of compassion beyond human suffering to encompass the recognition and alleviation of environmental distress including the ecosystem and all its inhabitants (Tam et al., 2013). This approach encourages students to develop empathy, value, and establish realtionships with non-human species in nature, promoting mutual respect and pro-environmental behaviours (Geiger & Keller, 2018; Pfattheicher et al., 2015). The following table compares the teaching strategies used in both educational settings when teaching compassion.

**Table 5.1**

*Comparison of Compassion between Modern Education and Forest Schools*

| | Modern Education | Forest Schools |
|---|---|---|
| Teaching Strategies | Build and maintain positive peer community within the classroom environment (Davis, 2022) | Engage in the anthropomorphizing of plants that help learners view plants as human to build connection to the personality, care, and protection of plants (Cree & Robb, 2021) |
| | Explicit teaching and modeling behaviours around topics and themes of inclusion, kindness, active listening skills, and acts of care (Bohrer, 2014; Roose, 2009) | Observe, without disrupting, the micro and macro intricacies of nature to increase knowledge, familiarity, and kinship with plants (Cree & Robb, 2021) |
| | Engaging in role play and social stories, paired with discussions and reflections, on how compassion can present itself among friends, family, or strangers (O'Connor, 2016; Having Fun First, 2014) | Provide activities for learners to engage with their senses to recognize, identify, and differentiate the uniqueness of plants through smell, touch, or sight (Cree & Robb, 2021) |

| | | |
|---|---|---|
| | Utilize specific academic content and resources that focus on the themes and teachings of compassion (Khan, 2019) | Create a space for students to listen, observe, think, and be still within nature (Cree & Robb, 2021) |

**Comparison of Honesty**

Honesty, as defined within modern education, entails individuals consciously adhering to truthfulness, fairness, and integrity in their actions (Appiah et al., 2022), refraining from acts of lying, stealing, deception, and spreading of fabricated facts as truth (Mauri, 2011). This emphasis ensures that student behaviours prioritize the cultivation of healthy, harmonious relationships, fostering community wellbeing and mental tranquility (Appiah et al., 2022). In contrast, Forest Schools expand the concept of honesty to encompass transparent acknowledgement of the origins of land and curriculum knowledge, expending beyond interpersonal interactions to embrace collective accountability (Lambert et al., 2021; MacEachren, 2018). The objective of teaching honesty within Forest Schools is to recognize, attribute, and honour the contributions of Indigenous Peoples in teachings and knowledge that inform and shape the curriculum of Forest Schools (Cree & Robb, 2021). The following table compares the teaching strategies used in both educational settings when teaching honesty.

**Table 5.2**

*Comparison of Honesty between Modern Education and Forest Schools*

| | Modern Education | Forest Schools |
|---|---|---|
| Teaching Strategies | Improve student understanding of the definition and forms of academic dishonesty (Ma et al., 2007) | Utilize Indigenous teachings and practices that focus on:<br>- Storytelling and oral teachings to pass down histories, stories, rituals, and knowledge<br>- Singing, movement, and dance as a means of learning through play, fun, and social connection |
| | Establish and explicitly teach the rules and expectations set in place for each assessment (Mat et al., 2007) | Discuss the on-going accumulation of traditional ecological knowledge acquired by Indigenous communities that Forest Schools rely on and use |

| | | |
|---|---|---|
| | | within the learning space (National Park Service, 2023) |
| | Adjust the classroom environment during assessment situations to control and avoid potential opportunities of academic dishonesty (Ma et al., 2007)<br>Enforce consequences for students who engage in academic dishonesty (Ma et al., 2007) | Build educational lessons on Indigenous teachings and their connection to nature, to facilitate and create long-term connections to nature |

**Comparison of Perseverance**

Perseverance, as defined within modern education, pertains to an individual's sustained effort and determination in pursuing a goal over an extended period of time (Duckwroth et al., 2007). This involves maintaining focus, managing challenges, and overcoming obstacles to achieve desired outcomes (Bettinger et al., 2018). Thus, perseverance fosters the development of resilience and tenacity, enabling students to employ strategies and utilize resources to address present and future challenges when reaching their goals (Bettinger et al. 2018). In contrast, within Forest Schools, perseverance is similarly characterized by an individual's commitment to a goal, but places greater emphasis on the process and progress of the learner rather than solely on goal attainment (Yeager & Dweck, 2020). This is facilitated through the encouragement of play and risk-taking behaviours, which are deemed integral in cultivated persistence, commitment, and independence among learners (Gere et al., 2012; Harper & Obee, 2021). The following table compares the teaching strategies used in both educational settings when teaching perseverance.

**Table 5.3**

*Comparison of Perseverance between Modern Education and Forest Schools*

| | Modern Education | Forest Schools |
|---|---|---|
| Teaching Strategies | Emphasize building knowledge and celebrating progress by using language that provides praise in the form of an individual's effort and progress | Provide direct or indirect support during risky-play opportunities that include (Cree & Robb, 2021; Sandseter, 2009): |

| | |
|---|---|
| towards the problem, as opposed to their traits and 'natural' intelligence (Rissanen et al., 2018) | - Great heights<br>- Rapid speeds<br>- Dangerous tools or elements<br>- Rough and tumble<br>- Experiences of temporary disappearing or getting lost (hide and seek) |
| Praise the process and avoid praising intelligence to emphasize and highlight the effort the student has put towards the task and not focusing on the outcome and end result (School of Education, 2020 | Involve students in the risk-benefit assessment process (Care Inspectorate, 2016) to develop their own boundaries and awareness of what behaviours and feelings are safe for themselves and their comfort zone (Cree & Robb, 2021) |
| Discuss the science behind the plasticity of the brain and its ability to grow stronger neural connections through repetitive practice towards a skill (Yacoub, 2023) | |
| Normalize struggle as part of the learning process to support students to respond positively to challenges (School of Education, 2023) | |

**Comparison of Respect**

In modern education, respect is characterized by demonstrating honour and esteem towards others through care and consideration, taking into account individuals' feelings, wishes, and rights to safety during interactions (Allan & Davidson, 2013; Berkowicz & Myers, 2018). Teaching respect ensures that students embrace the diversity and uniqueness of individuals within society, thereby upholding their dignity, worth, and wellbeing to foster a positive, trusting, and secure learning environment (Mokracek & Mohammed, 2022). While Forest Schools adhere to these foundational principles of respect, the definition Is further broadened to encompass environmental respect. This expanded definition involves engaging with the natural world and its living and non-living organisms with reverence and care (Cree & Robb, 2021). Emphasizing environmental respect encourages children to recognize the value, dignity, and

conservation of nature, fostering pro-environmental behaviours aimed at conserving, preserving, and safeguarding biodiversity and natural landscapes (Ianos et al., 2009; United States Environmental Protection Agency, 2018). The following table outlines the comparison of teaching strategies that are used in both educational settings in the teaching of respect. The following table compares the teaching strategies used in both educational settings when teaching respect.

**Table 5.4**

*Comparison of Respect between Modern Education and Forest Schools*

| | Modern Education | Forest Schools |
|---|---|---|
| Teaching Strategies | Set clear rules and expectations of behaviours that demonstrate respect in the learning space (Victoria State Government, 2021) and enforce consequences for students who engage in disrespectful and harmful behaviours towards others (Victoria State Government, 2021) | Create an embodied experience for learners to connect and understand nature through the senses (Cree & Robb, 2021):<br>- Tactile system: to touch, dig, scoop, and walk barefoot to connect with the natural ecosystem<br>- Auditory system: to interpret sounds, build attention and focus to different noises, and develop active listening skills<br>- Visual system: to distinguish colour, patterns, and methods of camouflage through observations and hiding in nature<br>- Olfactory system: to distinguish safe and unsafe smells and encouraging creativity through mixing and combining smells<br>- Oral / gustatory system: to perceive taste, texture, and temperature that encourage experimentation of seasonal and foraged plants and foods |
| | Develop pro-social, school-wide learning programs that focus on using common language and definitions when discussing bullying and anti- | |

| | |
|---|---|
| | bullying behaviours (Langland et al., 1998)<br>Encourage cooperative learning opportunities for students to work together, acknowledge differing opinions (Bullard & Bullock, 2004), and practice ways to positively communicate with one another (Mauriseen et al., 2020) |

**Comparison of Responsibility**

Responsibility within modern values-based education is defined as the individuals taking ownership of their duties, obligations, and goals in the educational setting, including, but not limited to, social, ethical, economic, and legal responsibilities (Stobierski, 2021). Teaching responsibility aims to foster behaviours and attitudes of accountability, purpose, and empathy towards creating a safe and caring community within the learning environment (Cook-Sather, 2010; Matteucci & Helker, 2018). In contrast, responsibility in Forest Schools emphasizes a child-led learning approach where responsibility means children are actively directing their learning by exploring their interests and curiosities within the learning environment (Akello et al., 2016; O'Meill & McMahon, 2005). This approach prioritizes engagement, interest, and experiential learning over mastery, aiming to develop autonomy, self-regulation, self-esteem, creativity, and intrinsic motivation for learning (Akello et al., 2016). The following table compares the teaching strategies used in both educational settings when teaching responsibility.

**Table 5.5**

*Comparison of Responsibility between Modern Education and Forest Schools*

| | Modern Education | Forest Schools |
|---|---|---|
| Teaching Strategies | Explicitly teaching and setting classroom expectations that encourage students to take initiative and ownership to support their learning through:<br>- Enforcing punctuality and readiness for class time | Encourage the use of child led, directed, and initiated learning whereby the child interacts fully with the learning space with little to no interference from adults and respond to any nature-based situations with their own skills and strategies, only |

| | |
|---|---|
| (Burnaby School District 41, n.d.)<br>- Ensuring the completion of all assignments within a timely manner (Vancouver Public Schools, n.d.)<br>- Taking care of school property (Ministry of Education, Culture, Sports, Science, and Technology, 2008)<br>- Adhering to the school's code of conduct for the safety of themselves, their peers, and staff (Simcoe County District School Board, 2019) | inviting or asking for adult involvement when necessary (Cree & Robb, 2021; Veraksa et al., 2021) |
| Support students in identifying and planning learning goals that are realistic, achievable, and motivating to aid in student's feeling in control of their learning (Tutt, 2022)<br><br>Teach time management skills and resources to help students plan and prioritize their time to ensure the completion of all assessments (Duke Estroff, 2019) | Engage in frequent practices of self-reflection, to not only accept the consequences of their choices and behaviours, but to learn from and expand on their skills in future experiences (Cree & Robb, 2021)<br>Children are held accountable for their learning by recording and demonstrating their progress and understanding of a specific curiosity (Cree & Robb, 2021; O'Neill & McMahon, 2005)<br>Reflect on their learning experience individually and as a group, whereby children will show or teach their learning to others (Cree & Robb, 2021) |

**Discussion**

This study is dedicated to understanding the history and significance of values-based education within modern and alternative educational programs. Specifically, it examines how the intentional teachings of certain values – namely compassion, honesty, perseverance, respect, and responsibility – contributes to fostering a holistic educational experience for students. As previously stated, holistic education places emphasis on nurturing the whole child, considering the child as part of the interconnectedness not only with themselves but also within the broader

societal and natural context (Mahmoudi et al., 2012). The following table outlines the different teaching goals of each value between modern education and Forest Schools, helping to clarify their aims and methods of instruction and how they support students' overall growth and development.

**Table 5.6**

*Teaching Goals of Values between Modern Education and Forest Schools*

| | | |
|---|---|---|
| Compassion | Nurturing students' emotional intelligence to foster positive relationships and address, alleviate, and eliminate the suffering of others (Clouston, 2018) | Fostering connections with nature to instill empathy and awareness of the natural world and all living and non-living species (Cree & Robb, 2021) |
| Honesty | Promoting academic integrity to discourage deceitful behaviours and ensure fair assessment outcomes (Miller et al., 2017) | Integrating Indigenous pedagogy to emphasize reconciliation and community connections to the land and knowledge of nature (Johnston, 2020) |
| Perseverance | Cultivating a growth mindset, encouraging students to view challenges and mistakes as opportunities for growth and learning (Dweck, 2014) | Challenging fears associated with nature by encouraging risky-play in physically and emotionally challenging, yet stimulating, spaces within the natural environment as a means of learning and growth (Gere et al., 2012). |
| Respect | Creating safe, supportive environments through anti-bullying programs and social-emotional skill development to promote healthy relationships within the learning environment (Thompson, 2018) | Emphasizing equality between human and non-human interests to foster behaviours that engage, respond, and value nature and care for its wellbeing (Martin et al., 2016) |
| Responsibility | Empowering students to take control of their learning and cultivate creativity by fostering agency in their motivation and passion for learning (Soilemetzidis et al., 2014) | Utilizing the natural play cycle to prioritize child-led learning experiences by minimizing adult intervention, allowing children to explore, discover, and pursue knowledge autonomously in their own learning journey (Akello et al., 2016) |

Drawing insights from the teaching goals of the five values, the following discussion will analyze and examine how values-based education, as implemented in both modern educational

settings and Forest Schools, aim to comprehensively support the mind, body, emotion, and spirit domains of holistic education to facilitate the development of the whole child, empowering them to realize and achieve their fullest potential.

### *The Mind Domain*

Rooted in Indigenous teachings, the cultivation of the mind domain within holistic education prioritizes learning, emphasizing the nurturing of lifelong learning experiences for all students, guided by children's innate curiosity to instill a genuine love for learning (Toulouse, 2016). In the modern education classroom, values-based education enhances cognitive development and academic learning by concentrating on the teaching of honesty and responsibility as values aimed to not only facilitate knowledge retention but also to foster a culture of knowledge sharing among students (Calgary Board of Education, 2022). The emphasis on teaching honesty from the perspective and focus of academic integrity, instills behaviours that not only counteract deceptive or unfair academic practices, but also cultivates research and information literacy skills. This, in turn, enhances cognitive development, encourages critical thinking skills to generate ideas, and promotes a deeper engagement with and understanding of the subject matter (Miller et al., 2017). Additionally, the incorporation of student responsibility in developing the mind domain empowers students to exercise agency and autonomy over their learning experiences. This approach fosters active learners, allows students to develop personal motivation to focus on their academic interests and passion, and instills a sense of ownership in their learning outcomes (Lauermann & Karabenick, 2011; Soilemetzidis et al., 2014). Encouraging autonomy in this manner supports students developing the skills to set, plan, and achieve their learning goals, while promoting accountability for their actions within the learning environment. The cultivation of both honesty and responsibility develops the mind domain by

nurturing characteristics and attitudes that uphold active learners in the pursuit of knowledge and learning with academic integrity and ownership.

Similarly, within Forest School's values-based education, the development of the mind domain aligns with the teaching of responsibility as a core value, placing an emphasis on child-led learning opportunities to motivate, facilitate, and encourage each child's personal exploration and pursuit of knowledge (Cree & Robb, 2021). Through interactive engagement with the learning environment, Forest Schools promote responsibility in the learning process by promoting autonomy, self-control, and creativity in children as they explore personal curiosities in search for and retention of knowledge (Akello et al., 2016; O'Neill & McMahon, 2005). As Forest School educators act as facilitators and observers in the learning process, the child takes responsibility in the development of the mind domain through inquiry-based, individualize learning processes that explore their curiosities and interests to stimulate cognitive thinking and flexibility in the development of the mind domain of holistic education (Wolpert-Gawron, 2016). By giving children more responsibility in the learning process encourages a sense of ownership and autonomy that supports in the development of a joy for lifelong learning outside of educational settings.

### *The Body Domain*

The body domain within holistic education is dedicated to the physical development of individuals, emphasizing learning through the physical body and environment to encourage regular movement and instill habits conductive to healthy living (Calgary Board of Education, 2022). Grounded in Indigenous teachings, the approach to body development focuses on movement as a learning opportunity to work through or with emotions, sharpens the mind and memory, and connect oneself to the physical environment (Luger & Collins, 2022). The goal of

the body domain is to encourage children to utilize their sense to understand their environment, fostering a connection and understanding of the world and their physical relationship to it (Calgary Board of Education, 2022).

In the context of Forest Schools, the development of the body domain is facilitated through the teaching of perseverance, which involves promoting physical movement and kinesthetic learning (Harper, 2017). This is achieved through engagement in play and risky-play learning opportunities, whereby children are exposed to physically and emotionally challenge spaces within the natural environment, aimed to cultivate stronger decision-making and problem-solving skills, foster independence, enhance creativity, and boost confidence (Gere et al., 2012; Harper, 2017; Tremblay et al., 2015). As children are given opportunities to engage in risky-play that involves fine and gross motor skills, spatial awareness, balance and coordination, such activities encourage body awareness, builds resilience, support coping skills with challenges, and engage in risk-benefit assessments to help children determine safety boundaries, while processing and responding to sensory information within the environment (Gere et al., 2012; Toole, n.d.). Participation in risky-play and movement through the teaching of perseverance not only provides experiential learning opportunities, but also contributes to connecting the body and mind for long term retention of information, facilitating a deeper, more authentic and meaningful understanding of how movement connects to the natural environment as a source of learning (Luger & Collins, 2022; Tanaka, 2016).

### *The Emotion Domain*

The emotion domain within holistic education centres on the cultivation of an individual's emotional intelligence, viewing emotions as not isolated, but interconnected aspects that deepen the relationship to self, other living organisms, and the earth by exploring strategies

to foster and enhance relationships, while managing emotions positively and appropriately for healthy inter- and intrapersonal connections (Calgary Board of Education, 2022; Toulouse, 2016). In modern education, support for the development of the emotion domain is manifested through the teaching of compassion, perseverance, and respect, creating a learning environment that promotes emotional intelligence, expression, and well-being (Calgary Board of Education, 2022). Targeted lessons on compassion builds emotional intelligence by enabling individuals to recognize, understand, and regulate emotions to establish and maintain positive per community within the classroom, enhance understanding of other's perspectives, and facilitate social relationships (Clouston, 2018). Teaching respect as a value emphasizes honour and esteem for others, through the implementation of anti-bullying programs to support the reduction of bullying, foster social responsibility, and create an emotionally safe environment for students to express their emotions and acknowledge the feelings of others (Allan & Davidson, 2013). Lastly, the incorporation of perseverance supports a growth mindset to encourage a positive attitude towards learning amid challenges, normalizing mistakes as part of the learning process (Duckworth et al., 2017). Teaching perseverance helps develop emotional regulation skills, enabling students to cope with emotions in a calm and composed manner, viewing challenges as learning opportunities for growth and fosters greater self-efficacy and sense of accomplishment towards their goals (Miele et al., 2011; Mrazek et al., 2018). All these values support the emotion domain of holistic education as it helps develop awareness and understanding of emotions and its influence on thoughts, behaviours, and relationships with self and others (Toulouse, 2016).

In Forest Schools, the development of the emotion domain also centres on teaching the value of compassion to students. However, compassion extends beyond human suffering to encompass the suffering of nature, the ecosystem, and all species inhabiting it (Tam et al., 2013).

By focusing on activities that promote the understanding of connection and mutuality with the needs of all living organisms, fosters a greater emotional connection and relationship with nature that further develops feelings of empathy, appreciation, and gratitude for the natural world (Cree & Robb, 2021). By utilizing lessons that focus on observing and listening to nature facilitates a mindful experience, emotionally connecting children to the environment in a calming and grounding manner. This approach encourages a sense of place, found belongingness to the natural environment rather than ownership, emotional connection to community, and a heightened capacity to care for the needs of the environment (Cree & Robb, 2021; Geiger & Keller, 2018).

***The Spirit Domain***

Within Indigenous holistic teachings, the spirit domain is distinguished from religion, embodying the self as a spiritual and sacred part of identity to learn more about oneself and purpose (Calgary Board of Education, 2022; Tanaka, 2016). This domain comprises two vital aspects, emphasizing the cultivation of self-awareness and social awareness to develop their cultural and personal identities to reflect upon community teachings and incorporating ancestral wisdom for a deeper understanding of how to act in the present (Toulouse, 2016). This understanding shapes the interactions an individual has with others and all living organisms, molding them into respectful contributors to their world. Forest Schools actively contribute to the spirit domain by imparting values of honesty and respect. In alignment with the spirit domain's emphasis on utilizing community teachings for self and social development, teaching honesty within the Forest School framework involves acknowledging, crediting, and honour the origins of Indigenous knowledge and perspectives. By anchoring Forest School pedagogy in Indigenous cultural teachings, encompassing storytelling, oral traditions, mindfulness and movement

practices, Forest Schools not only preserve Indigenous ecological knowledge but also integrate ancestral and cultural wisdom, forging a deeper understanding of self and environment (Tanaka, 2016).

Moreover, the spirit domain revolves around self-discovery and understanding one's beliefs, leading to a heightened sense of meaning or purpose within relationship with self, others, and nature (Calgary Board of Education, 2020). This domain is grounded in the belief of interconnectedness, emphasizing a reciprocal and intimate connection with nature (Tanaka, 2016). As Forest Schools actively teach the origins of ecological knowledge, they instill environmental respect for the natural environment and all living beings. Through embodied experiences and learning opportunities, children are able to connect with and understand the unique qualities of nature through their sense. This approach fosters children's connection to nature, underlining the sacredness of the natural world and cultivating an appreciation for the interconnectedness of all life (Cree & Robb, 2021). Central to the spirit domain is guiding individuals to understand their roles and purposes within the community and environment. Teaching environmental respect encourages the development of pro-environmental behaviours that recognize the worth, dignity, and rights of nature (Ianos et al., 2009). This, in turn, contributes to an individual's heightened appreciation of the beauty of nature, celebration of its diversity, and promotion of sustainable practices, providing meaning, a sense of responsibility, and inspiration for personal growth and transformation.

Through the dual teachings of honesty and respect, Forest Schools actively guide individuals to understand their interconnectedness with Indigenous wisdom and nature, fostering an in intimate relationship with the natural environment and all living organisms within it. This approach not only develops an individual's spirit domain by instilling a sense of purpose rooted

in environmental stewardship, but also fosters reverence for the interdependence of all organisms, contributing to the steering away from a mindset of oppression towards nature.

### *Conclusion*

Attention to the five values – compassion, honesty, perseverance, respect, and responsibility – explored in this study within the modern education context highlights that values-based education, in its current form, does not comprehensively support the development of the body or spirit domains within holistic education. This assertion does not negate the potential impact modern values-based education has; rather, it underscores a nuanced analysis of the five values, suggesting a limitation in promoting the goals of the body and spirit domains. The findings suggest the need for values-based education within modern educational settings to focus on current or new values that foster and prioritize kinesthetic movement as learning opportunities, connecting with the physical body and environment, and cultivating relationships to oneself and others to establish a sense of place and purpose beyond the academic realm (Calgary Board of Education, 2022).

Upon conducting a comparative analysis of values-based education in both modern and Forest School settings, a distinctive observation emerges. Forest Schools exhibit a discernable emphasis on teaching values that offer a more equitable and balanced attention across all four domains of holistic education, actively addressing the connection between the mind, body, emotion, and spirit within the individual and their broader environment. In contrast to the limitations identified in the modern education context, Forest Schools demonstrate a more inclusive approach to holistic education, thereby fostering an interconnected understanding of teaching values for individuals within the learning setting.

# Chapter Six: Conclusion

## Summary of Project

As education adapts to the evolving demands of society, technology, and learners (OECD, 2016), it becomes imperative for educational frameworks to undergo continual reflection on their philosophies, pedagogical approaches, and practices. This self-examination is important to determine how educational practices focus on aligning with the values of holistic education, rooted in educating the whole child through the integration of the mind, body, emotion, and spirit domains of learning and development. As holistic education continues to integrate itself into pedagogical practices, there is a need to examine how current values-based education programs can further enhance the goals of holistic education by delving into the ways in which non-academic contexts contribute to fostering balance, inclusion, and interconnectedness within all domains of holistic education (Miseliunaite et al., 2022).

A thorough exploration of existing research using a meta-analysis approach encompassing both quantitative and qualitative data, provides a comprehensive understanding of the overarching research question related to the impact of values-based education in facilitating a holistic educational experience. This approach allows for an in-depth investigation across two distinct educational systems: modern education and Forest School education. This literature review offers insights into the historical and current shifts observed in modern and Forest School education systems. It specifically delves into how each educational paradigm conceptualizes and teachings five key values – compassion, honesty, perseverance, respect, and responsibility – in pursuit of holistic education. The review systematically addresses the definitions, significance, teaching goals and practices associated with these values within the respective educational systems and learning environments. This comprehensive analysis provides a foundation for

understanding the multifaceted development of the mind, body, emotion, and spirit within the holistic education framework for the whole child.

**Limitations**

As with all published literature, limitations are inherent and possible in this review. Four major limitations are acknowledged in the current research. First, this study recognizes the absence of universal terminologies for key themes. Terms such as modern education, alternative education, and the give main values lack universally agreed-upon definitions. This variance across disciplines may lead to confusion during the literature review process, potentially resulting in missed relevant research and miscommunication. The study has strived to offer diverse perspectives while acknowledging the inherent possibility of human error and misinterpretation of key terms.

The second limitation focuses on the predominant reliance on education and psychology journal databases, potentially overlooking valuable contributions from environmental and scientific databases. While the focus on education and psychology databases aligns with the research question and objectives, it may limit a comprehensive understanding of the effects of values-based education when considering interdisciplinary studies. However, it is important to state the researcher's background in education and psychology guides this approach, therefore emphasizing the importance of accurate interpretation of data within their expertise to avoid misinterpretation of data beyond the researcher's abilities.

A third limitation lies in the restricted access to non-English, non-Eurocentric systems of values-based education research, posing a notable challenge. This study acknowledges the resultant skewed representation of frequently discussed values, a consequence of the initial data collection based on limited accessibility to global research. Furthermore, despite the historical

overview of Forest Schools outlining their origins and rapid spread from Europe to North America, it is imperative to note that Forest Schools have a global presence, extending to South American, Africa, Oceania, and Asia (North American Association for Environmental Education. 2019). However, the literature review's primary focus on Eurocentric or North American research introduces a gap in understanding cross-cultural variations.

Lastly, the study lacks accurate and current teacher practices of values-based education in both modern and Forest School contexts. Given its secondary nature, relying on media resources, articles, websites, and blogs written by teachers, there is a potential for overgeneralization. Despite employing a variety of resources, the study acknowledges the limited knowledge of the diverse methods used by educators. This limitation underscores the need for future primary research to delve into school curriculum or teacher narratives, providing a more nuanced understanding of current teaching practices in values-based education.

**Recommendations**

This literature review explores and examines values-based education in their similarities and differences between modern and alternative education programs, specifically Forest Schools, by conducting a comparative analysis of how values are both taught and modeled in their diverse learning environments to promote holistic education. The inquiry led to questions that extended beyond the study's scope, specifically addressing how the definition of values undergoes alterations based on varying contexts, populations, and cultural groups under examination.

A limitation acknowledged in this study addresses its narrow focus on Eurocentric, English research. It underscores the necessity of exploring how values-based education diverges in terms of the values imparted in distinct educational contexts and the cultural influences shaping the definition and discourse surrounding these vales. The study also recognizes the

potential for overgeneralization in understanding how schools, teachers, and classrooms individually approach the definitions and objectives of each discussed value. Future research can mitigate these limitations by utilizing this literature as a foundational framework to conduct primary research and gather data on school curricula, philosophies, and teaching narratives related to values-based education. By addressing the generalizability and external validity of findings, future research can enhance comprehension of how current educators and school philosophies instruct and should instruct students on values to contribute to a more holistic understanding of how culture, location, and non-universal definitions of values influence holistic education encompassing the mind, body, emotion, and spirit.

Furthermore, it is recommended for future research to encourage interdisciplinary collaboration, specifically involving researchers from fields such as Indigenous education and history. Given the primary focus of holistic education is founded on Indigenous teachings, culture, and origins, coupled with the roots of Forest School principles and pedagogy, a collaborative effort between education and Indigenous studies researchers is essential. This collaboration can deepen the understanding of the distinct attributes and objectives within each domain of holistic education, assessing whether modern and Forest School values-based education systems effectively align with these goals for the development of the whole child.

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**Appendix A**

Values and values-based research matrix

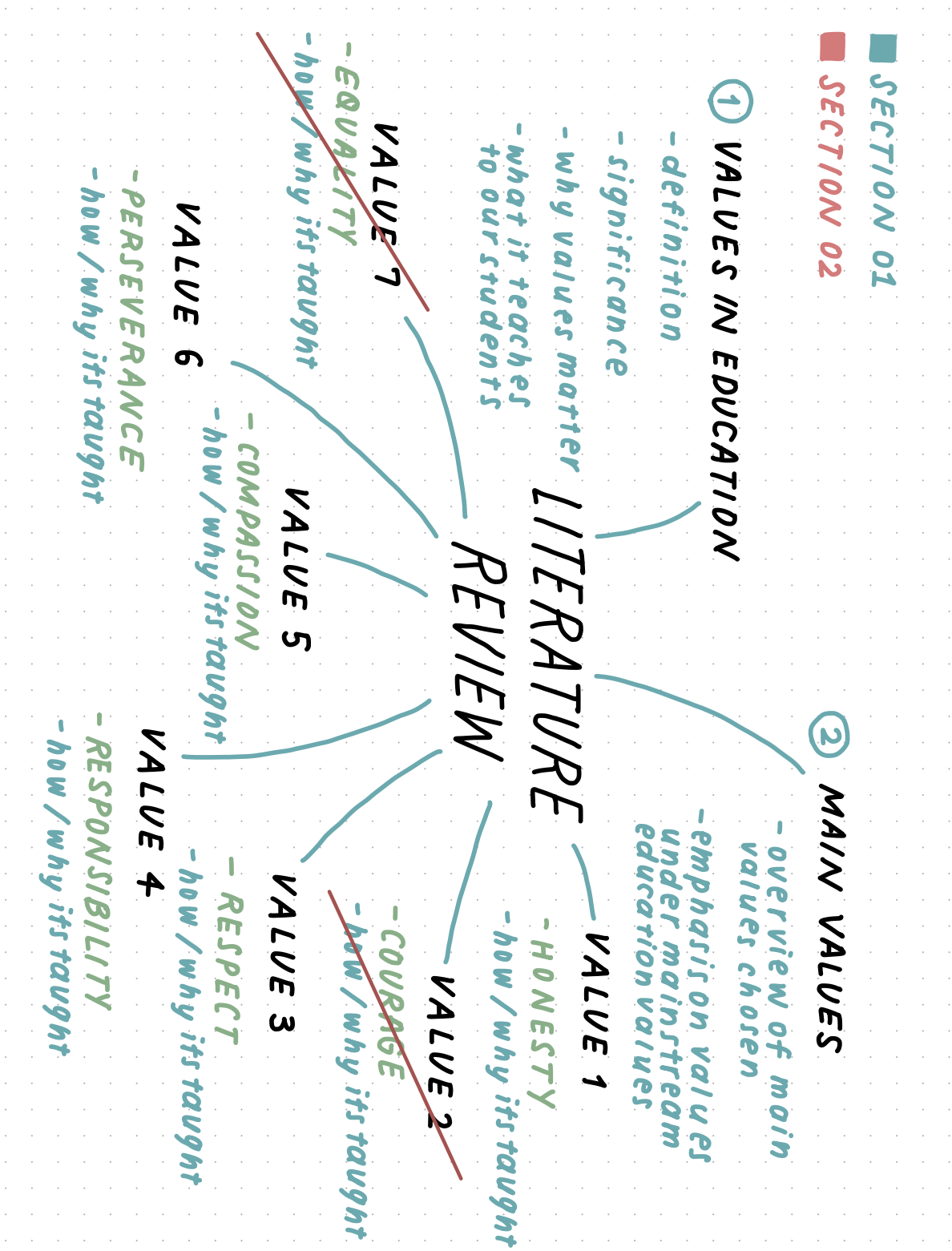
| ***Literature*** | ***Values and Values-based education (VBE)*** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *VBE Define* | *Honesty* | *Respect* | *Courage* | *Compassion* | *Responsibility* | *Tolerance* | *Perseverance* | *Equality* | *Justice* | *Teamwork* |
| (Korch, 2008) | ✓✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| (Kisrchenbaum. 1995) | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| (Larkins, 1997) | | ✓ | | | | | | ✓ | | | |
| (Huitt, 1997) | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | |
| (Eskew, 2004) | ✓ | | | | ✓ | | | | | | |
| (Gökçe, 2021) | ✓✓✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ |
| (Thornberg & Oguz, 2013) | ✓✓✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| (Solomons & Fataar, 2011) | ✓ | | | | | | | | | | |
| (Feather, 1995) | ✓ | | | | | | | | | | |
| (Cam, 2014) | | ✓ | | | | | | | | | ✓ |
| (Althof & Berkowitz, 2006) | | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | ✓ |
| (Mergler & Spooner-Lane, 2012) | ✓ | | ✓ | | | ✓ | | ✓ | | | ✓ |
| (Talivaldis Ozolins, 2010) | | | ✓ | | | | | | | | |
| (Johansson et al., 2016) | ✓ | | ✓ | | | | | | | | |
| (Winton, 2008) | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | |
| (Kenan, 2009) | ✓✓ | | | | | | | | | | |
| (Romanowski, 2003) | | ✓ | ✓ | | | | | | | ✓ | |
| (Thornberg & Oguz, 2016) | ✓✓✓ | ✓ | | ✓ | | | | | | ✓ | |
| (Biesta, 2010) | ✓✓ | | | | | | | | | | |
| (Brady, 2011) | | ✓ | | | ✓ | | ✓ | | | | |
| (Mergler et al., 2016) | | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | |
| (Pfeil et al., 2017) | ✓ | | ✓ | | | ✓ | | ✓ | | | ✓ |
| **Total Value Type Frequency** | | **11** | **13** | 6 | **8** | **8** | 6 | **7** | 4 | 5 | 5 |

**Appendix B**

Alternative education and Forest School research matrix

| Literature | Alternative Education (AE) and Forest Schools (FS) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | *AE History* | *AE Values* | *FS History* | *FS Values* | *Compassion* | *Honesty* | *Perseverance* | *Respect* | *Responsibility* |
| (Dabaja, 2021) | | | ✓✓✓ | ✓✓ | | | | | |
| (Friedman et al., 2022) | | | ✓ | ✓✓ | | | | | |
| (Plows et al., 2016) | | | ✓ | | | | | | |
| (Nazir & Pedretti, 2015) | | | ✓ | | | | | | |
| (Harris, 2021) | | | ✓✓✓ | ✓ | | | | | |
| (Kumm et al., 2020) | ✓✓✓ | ✓ | | | | | | | |
| (Button & Wilde, 2019) | ✓✓ | | | | | | | | |
| (Elliot, 2015) | | | ✓✓ | | | | | | |
| (O'Brien, 2009) | | | ✓✓✓ | ✓ | | | | | |
| (Waite & Goodenough, 2018) | | | ✓ | ✓✓✓ | | | | | |
| (Maillet, 2017) | | ✓✓ | | | | | | | |
| (Kemp, 2020) | | | | ✓ | | | | | |
| (Cerino, 2021) | ✓ | ✓ | ✓✓✓ | ✓✓✓ | | | | | |
| (Harper, 2017) | | | | ✓ | | | ✓✓ | | |
| (Garden & Downes, 2021) | | | ✓✓ | ✓✓ | | | | | |
| (Geiger & Keller, 2018) | | | | | ✓✓ | | | | |
| (Lumber et al., 2017) | | | | ✓✓ | ✓✓✓ | | | | |
| (Abdul Wahab et al., 2020) | | | ✓ | | | ✓✓ | | | |
| (MacEachren, 2018) | ✓ | | ✓✓✓ | ✓✓ | | ✓✓✓ | | ✓✓ | |
| (Gere et al., 2012) | | | | ✓ | | | ✓✓ | | ✓ |
| (Harper & Obee, 2021) | | | | ✓✓ | | | ✓✓✓ | | ✓✓ |
| (Seidman, 2022) | | | | | | | | ✓✓ | |
| (Veselinovska et al., 2010) | | | | ✓ | | | | ✓✓✓ | ✓✓ |

**Appendix C**
Literature review mind map (section 01)



**Appendix D**
Literature review mind map (section 02)