PRIMA EDUCATIONE 2024

JOSEFIN WINTHER

Rudolf Steiner University College, Oslo ORCID: https://orcid.org/0009-0005-3480-671X josefin.winther@steinerhoyskolen.no

The Beautiful Risk of Education Is at Risk. Pedagogy as the Art of Providing Constructive Adversity

Piękne ryzyko edukacji jest zagrożone. Pedagogika jako sztuka dostarczania konstruktywnych przeciwności

Abstract: What is at stake when risk is eradicated from education? Education is a key arena for the development and growth of children and young people. Despite extensive knowledge about how a sound development and growth can take place, there are considerable developments in society that diminishes elements of risk in education. This article explores what is at stake when elements of risks are removed from education. In light of pedagogical and psychological theories, it demonstrates how different kinds of risks are essential for growth at different stages of development. The article aims to show the value of risk in education by highlighting just how intrinsic this element is to all aspects of growth and development.

Keywords: risk; growth; health; education; pedagogy

Abstrakt: Co jest stawką, gdy ryzyko jest eliminowane z edukacji? Edukacja jest kluczową areną rozwoju i wzrostu dzieci i młodzieży. Pomimo rozległej wiedzy na temat tego, jak może przebiegać prawidłowy rozwój i wzrost, w społeczeństwie zachodzą znaczące zmiany, które zmniejszają elementy ryzyka w edukacji. Niniejszy artykuł bada, co jest stawką, gdy elementy ryzyka są usuwane z edukacji. W świetle teorii pedagogicznych i psychologicznych pokazuje, w jaki sposób różne rodzaje ryzyka są niezbędne do wzrostu na różnych etapach rozwoju. Artykuł ma na celu pokazanie wartości ryzyka w edukacji, podkreślając, jak nieodłączny jest ten element dla wszystkich aspektów wzrostu i rozwoju.

Słowa kluczowe: ryzyko; wzrost; zdrowie; edukacja; pedagogika

INTRODUCTION

Risk is always present when something new is emerging. A movement or change from *one state to another*, implies an inherent uncertainty, because the very nature of the movement or change presupposes the freedom of the subject. Imagine a person standing on one side of an abyss (for a child, this can be on a rock in a stream) wanting to move to the other side. This requires the person to take a leap. It is never completely certain that the leap is successful and with a safe landing. This is the element of risk. The fact that something is not certain creates the opportunity for something fundamentally new to occur. Arendt describes *natality* – the birth of human beings – as "the essence of education" (Arendt, 1954, p. 2).

In current educational praxis and theory, much emphasis has been put on transformational dimensions of education (Biesta, 2015; Freire, 2018; Rancière, 1991; Mezirow, 1991). Transformative education underlines the importance of emancipation from predefined and potentially suppressing structures to achieve a true liberation of the individual. More recently, the overarching aim has been conceptualized as *human flourishing* (Schinkel et al., 2023). Accordingly, "if children are to lead a flourishing life, what they do at school should not merely prepare them for it: it should *embody* it" (White, 2011, p. 49).

Biesta highlights the importance of risk in educational contexts. Building on Caputo's description of "the beautiful risk of creation", Biesta conceptualizes the importance of risk in education framing it as the *Beautiful Risk of Education* (2015). He demonstrates a concept of education, where predetermined conceptions of results must be discarded. Education, according to Biesta, is inevitably conditioned by uncertainty, trust and absence of control (2015). In other words, education is a hazardous event that must be recognized by its process, not by outcomes.

Elements of risk on all areas of everyday lives is marginalized, and in many ways risk is systematically countered. This is also the case in education, leading to an impoverishment of teaching and the rich potential of growth. When risks are viewed as something that "needs to be overcome, a problem that needs to be »solved«, we actually eradicate education itself" (Biesta, 2020, p. 103). This paper aims to further explore the nature of risk and demonstrate concrete examples of how it is related to education and vital in a healthy human development.

THE EPHEMERAL CHARACTER OF RISK

The infinite unpredictability that teaching entails – including existential dimensions – requires trust without any reassurances of the outcome. The playful attitude required by this complexity, is captured in Manen's book title *Knowing What to Do When You Don't Know What to Do* (2016). Pedagogy is by nature something like an *escapade*:

adventurous and escaping confinements and restraints (Merriam-Webster, n.d.). As teachers must act in the immediacy of the moment (Manen, 2016), the intrinsic role of risk is self-evident. The nature of pedagogy consists of a string of innumerous moments where the teacher must act on the spot (Manen, 2016). This character of teaching can be described as *Kairos moments*, which is described as "a transformative moment of chance depending on our ability and willingness to seize the opportunity that is offered within it" (Manen, 2016, Kairos Time: The Perfect Moment: The NOW section). The harsh nature of a Kairic moment is that if you hesitate, the moment has passed, leaving the teacher with nothing but regret (Manen, 2016).

PHYSICAL DEVELOPMENT, DISCOMFORT AND ACCIDENTS

The healthy development of the human body in the early years of life is the basis for the development of all other aspects of functioning (Perry & Szalavitz, 2010). The continuous discoveries made of how a sound development of the stress-response system is in fact depended on enough stress, confirms the importance of childcare and schools that provide these opportunities. Research here differentiates between positive and tolerable stress on the one hand, and toxic stress on the other, where the latter is the kind that should be avoided (Shonkoff, 2012). Bodily development requires movement, sensory stimulus and a balance between sufficient challenge and sufficient support.

Yet educational and social settings that presuppose physical strain have gradually been devalued and reduced. Gill states that "over the past 30 years, activities that previous generations of children have enjoyed without a second thought have been relabeled as troubling or dangerous, and the adults who permit them branded as irresponsible" (Gill, 2007, p. 10). Gill argues that the growing anxieties about risks in childhood lead to the shrinking horizons of childhood (Gill, 2007).

The positive outcomes of risky play have gained increasing interest in research. Risky play can, among other things, lead to increased physical activity, higher ability to assess and handle risky situations and positive physical and psychological outcomes (Sandseter et al., 2020; Brussoni et al., 2015; Boyesen, 1997; Lavrysen et al., 2015). Contrastingly, the amount of sedentary, passive time spent in front of digital screens has increased by vast amounts in the recent years, and the amount of playing has decreased significantly (Clements, 2004). British children spend only 30 minutes outside daily. Time spent playing, especially outdoors, and even more so in nature, has diminished radically in the last decades. This has colossal consequences for physical and mental health. The correlation between the decline in play and increase in psychopathology has been pointed out (Gray, 2011). Being outside involves many risks, such as being too cold or too warm, getting sweaty from physical activity, getting dirty, eating something poisonous, falling from heights, stumbling, having accidents and physical injuries. These risks are all part of

children's free play. Play is proven to be the fundamental catalyst in child development both cognitively, physically, and socially (Ginsburg, 2007; Anderson-McNamee, 2010), but there is no such thing as risk-free play. In other words, a risk-free childhood is an unhealthy childhood. When children play there are numerous benefits for children and parents. But the "time for free play has been markedly reduced for some children" (Ginsburg, 2007, p. 183), which has affected kindergartens and schools, reducing free play to "make room for more academics" (Ginsburg, 2007, p. 183).

There are several reasons to the reduction in playing and physical activities (Ginsburg, 2007), one of them, being the increased focus on safety. The term "compensation culture" refers to what was originally known as an American phenomenon but has expanded across the Western hemisphere. The term refers to a "where there's blame there is a claim" culture (Lord Dyson, 2013), defined as "the idea that for every accident someone is at fault. For every injury, someone to blame. And, perhaps most damaging, for every accident, there is someone to pay" (Falconer in Lord Dyson, 2013, p. 3). This development has made its way into all public services, including schools, increasing focus on formal structures that limit liability. The fear of being held accountable assumably leads to the reduction of risk in everyday school life. This can be observed in several aspects, for example, the physical shaping of the environment. Louv has called this development "the criminalisation of natural play" (Louv, 2005, p. 27).

Risk of accidents in childhood have been severely marginalized by a general increase in safety and security concerns (Hofferth, 2010) accompanied by the application of artificial rubber as surfaces, replacing soil, rocks, and other natural elements. Sanderud describes this as an upbringing on dead surfaces and claims that children are robbed of essential sensory and existential experiences when natural elements are removed from their surroundings. Children "create existential meaning of themselves and the environment as they play outdoors" (Sanderud, 2022, p. 71). In addition to the implementation of artificial – or dead – materials, such as rubber and plastic, in the playgrounds, lessening natural living materials, children also spend drastically less time outside. Both participation in outdoor activities and walking to school has declined (Sanderud, 2022; Hofferth, 2010). According to a study by the UK government, 12% of British children had never visited a natural environment in the preceding 12 months (Natural England, 2016).

Increasingly, studies show that children's opportunities to play freely have decreased in the last decades (Little & Eager, 2010; Brussoni et al., 2012). This has changed childhood and the everyday lives of children, which has become subject to more sedentary indoor activities (Sandseter et al., 2020). In legislation it has become common that areas designated for play must be constructed and placed in a way that minimizes the risk of injuries. An example can be found in playground legislation. If the potential falling height exceeds 60 cm, the surface underneath must be covered with shock absorbing material. It also states that the playgrounds should be constructed in a way that do not lead to infections and illness. (Forskrift om sikkerhet ved lekeplassutstyr, 1996, § 11). In an educational context, this general attitude and its juridical implications, makes it very challenging for initiatives such as school trips, excursions, or physically active and stimulating education in general. The disharmony between legislation and general compensation culture in society and the mandate and responsibility schools have in fostering physical and mental health is evident.

DEVELOPING AN EMPATHETIC, HEARTFELT, AND BALANCED EMOTIONAL LIFE

Children spend between a third and half of their time awake in school (Hall & Nielsen, 2020), depending on age. Hence, it is a critical arena for social and emotional development. We balance our actions and thoughts with our emotional sense and insight. Our emotions respond before thinking commences (Mitchell, 2015). The emotional structures of our bodies precede the development of thinking, and these areas of the "nervous system form the unconscious scaffolding for our thoughts and conscious feeling and, therefore, for our actions" (Maté, 2022, chapter 9).

The development of children's social-emotional life is equally important as intellectual and physical dimensions (Bell & Wolfe, 2004), and the three areas are intrinsically connected. The relation between emotions and cognitions must be understood as an "intricately bound developmental process" (Bell & Wolfe, 2004), and culturally felt knowledge is subordinated to the intellect (Maté, 2022). A healthy set of social-emotional skills is the foundation of communication, relations to other, resolving conflicts and coping with challenges. Just like milestones in early childhood, such as sitting up-right, walking, and talking, developing emotional and social skills takes time and practice (Mitchell, 2015). Our emotional states and capabilities are crucial on several levels, and cognitive flexibility and associative learning are both competences that are affect by our emotions. Our emotions have a demonstratable effect in learning situations, where positive emotions cause "greater cognitive flexibility and openness to new information" (LeBlanc & Posner, 2022, p. 3). On the other hand, individuals tend to hold on to inaccurate strategies longer when trying to solve a problem, and their ability to associate between events is weakened by negative emotions (LeBlanc & Posner, 2022). The importance of a robust and empathetic emotional life is evident, but the conditions for the development of such have worsened in recent years.

AN EMOTIONAL CRISIS

In the development of an empathetic, robust, and heartfelt emotional life, we are faced with an apparent paradox. One the one hand, we need risks and the stress they cause to become resilient and integrated human beings. One possible thesis is that we are facing two challenges at the same time, that are also reinforcing each other's negative impact. Individuals might be subject to fewer adequate and proportional emotional strains in their early years, which hinders the development of a resilient and flexible inner life. At the same time, individuals are subject to more intense and disproportionate forms of stress at an early age. This becomes a negative spiral, where individuals become increasingly fragile and exposed to stress, at the same time, as the types of stress they are exposed to are of the unhealthy kind. One could assume that stress caused by external forces not tangible to the child in a given situation will lead to alienation. To exemplify, one could argue that the stress inflicted by capitalistic motives shaping school life and curriculum is impossible for a child to understand and contextualize, and hence it will cause alienation. Utilizing the concepts from Antonovsky's (1979) *sense of coherence*, the stress caused by the risk of falling from the tree is tangible and will therefore be manageable. The lacking sense of coherence in the first example, due to lack of comprehensibility, manageability, and meaningfulness (Antonovsky, 1979) causes a lacking sense of coherence. The question becomes how teachers can navigate in this landscape of stress, and still be capable of providing constructive situations entailing meaningful risks.

The right to avoid emotional and personal intrusions has gained increased focus and legitimacy, parallelly with the increased attention to cultural sensitivity in the public discourse. In an educational context this has led to a strengthened expectations not to be exposed to emotional strains or exposure. The role of parents in this regard has changed significantly in the last decades, where expectations about psychological control, such as overprotection and critical control, has increased. Studies have shown that this causes anxious adjustments in preschoolers (McShane & Hastings, 2009). Legislation reflects the increased expectations to intervention, by the implementation of paragraphs where one individual's experience of having been violated should automatically initiate formal actions taken by the school (The Education Act, § 9A-4). This has led to a juridical struggle for many schools because they are forced to act formally on one pupil's said experience of a given situation. This puts the school at risk of being accused and even prosecuted for not having acted accordingly. In short, if one person experienced something in a certain way; it has per definition happened. This shifts the relational "contract" between the school and the home. The expectation becomes that a child should not be put in a challenging situation or feel emotionally uncomfortable. In this complex landscape, the teacher is trusted with little room to create authentic educational settings, because this requires elements of relational risks, social discomfort, and sometimes also emotional pain.

FREEDOM TO MOVE IN THE INFINITE REALM OF THINKING

During time in school, the ability to think blossoms and becomes a strength of its own in pupils. As the children mature, they increasingly become capable of independent judgment and hence truly self-directed actions are possible. "While childhood is characterized by identification with adults, it is from that point on more urgent to identify with oneself" (Lindholm, 2018, p. 995) In the age of puberty, cognitive processing and intellectual functioning speed up, and abstract thought operations, organization and understanding causality are consolidated (Yurgelun-Todd, 2007). "Experiences and discoveries are now cognitively permeated and worked through" (Zech, 2019), and as pupils approach teenage years, veracity of the world, of fellow beings and of the teacher is now scrutinized and challenged. The core question becomes what is true? (Lindholm, 2018). The ability to grasp and process the truths of this world is no final stage and is something that all humans must strive for throughout their lives. The ability is trained and development in an inner world, which is a world without physical boundaries. The realm of thought is infinite, and *freedom* is the foundation for the activity of thinking. When cultivating thinking, there can be no set rules. A teacher must be able to facilitate the activity, by merely being a guide that points towards potential directions and possibilities. Here, the need for "open-ended questioning and explorations of the big unknown" (Lindholm, 2018, p. 995) is crucial. The thinker, both pupils and teachers, must be trusted with freedom to explore the power of thought, as scientific thinking can only be discovered and conquered, and "intellectual wondering potentially become a matter of existential importance" (Lindholm, 2018, p. 995). No outer authority can define the boundaries of inner life, and this premise is also the foundation of how new ideas come to life. The emancipated thought and "chance to wonder without boundary or fear of reprisal" (Gilbert & Byers, 2017, p. 922) is crucial in providing inspiring education.

THINKING IN POPULARIZED, POLARIZED, SECULARIZED SCIENTISM

Based on this, we can imagine the infinite risks that thinking entails. Physical development can give bruises and emotional development can cause pain. Intellectual development entails the risk of unconventional thoughts, unwarranted conclusions, reflections based on false terms or the creation of ideas that are so far from the mainstream that they seem threatening or difficult to handle. A phenomenological approach will by nature be a risk-driver and a generator for formations of unexpected concepts. The explicit mandate of academia is the search for truth, and this is done by breaking new ground in the realm of thoughts. Thinking also involves another substantial risk, namely the risk of nothing happening, being unproductive and inefficient. The risk of inefficiency in thinking is not only opposed structurally, in how curricula are shaped and concepts about progression in school materialize in standardized tests, demanding concrete outcomes, but is also threatened internally by mental infrastructures, as the concept of growth has become a "mental infrastructure" (Welzer, 2011, p. 10). One can get a sense of an accumulative foundation, where thinking activities must "lead to" something, whereas research has shown that humans are best at problem-solving when the mind is allowed to wander freely. In fact, mind wandering can be "linked to enhanced creativity, particularly for problems that have been previously encountered" (Baird et al., 2012, p. 1117). The quality and importance of a wandering mind is seemingly overlooked in how education is shaped, as science textbooks "tend to convey science as blocks of facts and scientists as unified through a sound understanding of every single topic, with little room for unsolved problems, inconsistencies, and doubts" (Lindholm, 2018, p. 995). Furthermore, conversations in classrooms are often characterized by the same premise, and "the exploration of paradoxes and uncertainties is rarely encouraged" (Lindhom, 2018, p. 995).

THINKING IN SCHOOLS

Steiner states that an active and mobile thinking is of "immense importance in practical life" (Steiner, 1909). This form of activity can be connected to the concept of *wonder*, understood as "mode of consciousness (...) which engages us on *all levels* – emotionally, intellectually, aesthetically, and strongly existentially" (Schinkel, 2017, p. 552). A phenomenologically based education is depended on the cultivation of thinking "which has become possessed of *wonder*" (Steiner, 1911, Lecture II). These perspectives on thinking are characterized by a fundamentally different approach to the relation between the pupil and the world. Wonder has a strong receptive element to it (Schinkel et al., 2023), but not in terms of being receptive to given answers or fact entities. Wonder is characterized by an imagination-stirring, intensification of the present, which is phenomenologically "wholly receptive" (Schinkel et al., 2023, p. 149). This receptive and intensified presence can serve as a foundation to learn a "*reverent devotion to the world of reality* and finally what we called *knowing oneself to be in wisdom-filled harmony with the phenomena of the world*" (Steiner, 1911, Lecture II).

Current education tends towards a form of thinking limited to models, be it scientific models or models as imprints of the current scientistic discourse. In a model-paradigm, the risk is that "mathematical idealisations are considered more real than perceptual lifeworld experience. As a consequence, that which does not conform to such idealisations is discarded as irrelevant from a scientific point of view" (Østergaard et al., 2008, p. 104). This development contrast the recognized as a vital value and component in education to meet future and contemporary societal challenges" (Sanderud, 2022, p. 72).

The scientistic discourse has become standardized to such an extent that we are no longer aware of it. In the context of schools this leads to an "academization", which has also been enforced by legislations increasing emphasis on academic success in schools (Hofferth, 2010). This means that traits of inefficiency or the lack of productivity and measurability, diminishes the status of educational situations that do not produce replicable, measurable learning outcomes. A concrete example is how recess has been marginalized and viewed as "time that would be better spent on academics" (Murray et al., 2013). Despite research underlining the value of free mind activities, such as mind wandering or "free attention" (Citton, 2017, p. 117), the forces pushing for the "learnification" (Biesta, 2006) of education instrumentalization of thinking as activity as such. When pupils are socialized into this discourse, the proximal question becomes "What's in it for me?". Thinking becomes cultivated to an instrument for achievements, or a sense of accomplishment, and subject to capitalization of human activities.

THE BEAUTY AND SIGNIFICANCE OF RISKS

The thesis of this paper is that *the beautiful risk of education is at risk*. Risk and human flourishing are intertwined in profound ways. When risks are removed, so are fundamental opportunities to grow. Risks are a necessity in building a resilient and sound physical health, emotive relations in the inner and outer life of the individual and to develop the ability to think in a wonderous manner in dialogue with the phenomena of the world.

Yet, schools are faced with a substantial societal impact, both from policies, discourses, parents, and media. Parallelly, these factors are present as more or less subconscious drivers of how school life is shaped from within.

Teachers and schools find themselves in an exposed position, pressured from several angles. The children and our future need education that provide them with the opportunity to grow healthy, strong, and free as individuals physically, emotionally, and intellectually. They must also experience the joy and sense of meaning in being an adaptable and good-natured part of a social community. This requires authentic situations where something is at risk. Schools are expected to deal with a comprehensive task of upbringing and education. Simultaneously, concerns, commotion, and criticism occur when innocent accidents happen in the school yard, or a child feels emotionally challenged, combined with expectations of academic results. Schools must be aware of their situation, and not lose sight of what is most important – the child. The most effective way of resisting these risk-reducing tendencies, is to support colleagues in their efforts to create authentic situations. If a teacher must overcome similar suspicion within the group of colleagues when attempting to teach, it will exhaust most people relatively fast. Teachers, say yes to your colleagues' efforts, be of support also when it took unexpected turns and applaud the courage to fail.

REFERENCES

- Act Relating to Primary and Secondary Education and Training (the Education Act). Ministry of Education and Research. https://lovdata.no/dokument/NLE/lov/1998-07-17-61/KAPIT-TEL_10#KAPITTEL_10
- Anderson-McNamee, J.K. (2010). The importance of play in early childhood development. *Family and Human Development*. Montana State University.
- Antonovsky, A. (1979). Health, Stress and Coping. Jossey-Bass.
- Arendt, H. (1954). Between Past and Future. The Viking Press.
- Baird, B., Smallwood, J., Mrazek, M., Kam, J.W.Y., Franklin, M.S., & Schooler, J.W. (2012). Inspired by distraction: Mind wandering facilitates creative incubation. *Psychological Science*, 23, 1117.
- Bell, M.A., & Wolfe, C.D. (2004). Emotion and cognition: An intricately bound developmental process. *Child Development*, 75(2), 366–370.
- Biesta, G. (2006). Beyond Learning: Democratic Education for a Human Future. Routledge.
- Biesta, G. (2015). Beautiful Risk of Education. 1st ed. Taylor and Francis.
- Biesta, G. (2020). Risking ourselves in education: Qualification, socialization, and subjectification revisited. *Educational Theory*, *70*(1), 89–104.
- Boyesen, M. (1997). *Den truende tryggheten*. Doctoral Thesis. The Norwegian University of Science and Technology Norway, Trondheim.
- Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E., ... Bienenstock, A. (2015). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, *12*(6), 6423–6454.
- Brussoni, M., Olsen, L.L., Pike, I., & Sleet, D.A. (2012). Risky play and children's safety: Balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, 9(9), 3134–3148.
- Citton, Y. (2017). The Ecology of Attention. John Wiley & Sons.
- Clements, R. (2004). an Investigation of the Status of Outdoor Play. *Contemporary Issues in Early Childhood*, 5(1).
- Forskrift om sikkerhet ved lekeplassutstyr. (1996). (FOR-2014-09-12-1171) Lovdata. https://lovdata.no/dokument/SF/forskrift/1996-07-19-703
- Freire, P. (2018). Pedagogy of the Oppressed: 50th Anniversary Edition. Bloomsbury Academic.
- Gilbert, A., & Byers, C.C. (2017). Wonder as a tool to engage preservice elementary teachers in science learning and teaching. *Science Education*. https://doi.org/10.1002/sce.21300.
- Gill, T. (2007). No Fear: Growing Up in a Risk Averse Society. Calouste Gulbenkian Foundation.
- Ginsburg, K.R., & Committee on Communications, Committee on Psychosocial Aspects of Child and Family Health. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182–191.
- Gray, P. (2011). The decline of play and the rise of psychopathology in children and adolescents. *American Journal of Play*, 3(4).
- Hall, H., & Nielsen, E. (2020). *How do children spend their time? Time use and skill development in the PSID: FEDS Notes.* Washington Board of Governors of the Federal Reserve System.
- Hofferth, S.L. (2009). Changes in American children's time 1997 to 2003. *Electronic International Journal of Time Use Research*, 6(1), 26–47. https://doi.org/10.1007/s11191-018-0015-7
- Lavrysen, A., Bertrands, E., Leyssen, L., Smets, L., Vanderspikken, A., & De Graef, P. (2015). Risky-play at school. Facilitating risk perception and competence in young children. *Eu*-

ropean Early Childhood Education Research Journal, 1, 11. https://doi.org/10.1080/135029 3X.2015.1102412

- LeBlanc, V.R., & Posner, G.D. (2022). Emotions in simulation-based education: Friends or foes of learning?. *Advances in Simulation*, 7(3). https://doi.org/10.1186/s41077-021-00198-6
- Lindholm, M. (2018). Promoting curiosity? Science & Education, 27, 987-1002
- Little, H., & Eager, D. (2010). Risk, challenge and safety: Implications for play quality and playground design. *European Early Childhood Education Research Journal*, 18(4), 497–513. https:// doi.org/10.1080/1350293X.2010.525949
- Lord Dyson. (2013). *Compensation Culture: Fact or Fantasy?* https://www.judiciary.uk/wp-content/uploads/JCO/Documents/Speeches/mr-speech-compensation-culture.pdf
- Louv, R. (2005). Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder. Atlantic Books.
- Manen, M. van. (2016). Pedagogical Tact. 1st ed. Taylor and Francis.
- Maté, G. (2022). *The Myth of Normal: Trauma, Illness, and Healing in a Toxic Culture.* Ebury Publishing.
- McShane, K.E., & Hastings, P.D. (2009). The new friends vignettes: Measuring parental psychological control that confers risk for anxious adjustment in preschoolers. *International Journal ofBehavioral Development*, 33(6), 481–495.
- Merriam-Webster. (n.d.). Escapade. In *Merriam-Webster.com dictionary*. https://www.merriam-webster.com/dictionary/escapade
- Mezirow, J. (1991). Transformative Dimensions of Adult Learning. Jossey-Bass.
- Mitchell, D.S. (2015). Social-Emotional Education and Waldorf Education. *The Online Waldorf Library*, 14(2).
- Murray, R., Ramstetter, C., Devore, C., Allison, M., Ancona, R., Barnett, S., Gunther, R., Welch Holmes, B., Lamont, J., Minier, M., Okamoto, J., Wheeler, L., & Young, T. (2013). The crucial role of recess in school. *Pediatrics*, 131(1) 183–188. https://doi.org/10.1542/peds.2012-2993
- Natural England. (2016). *Monitor of engagement with the natural environment: A pilot to develop an indicator of visits to the natural environment by children*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/498944/mene-childrens-report-years-1-2.pdf
- Oleksiyenko, A.V., & Jackson, L. (2021). Freedom of speech, freedom to teach, freedom to learn: The crisis of higher education in the post-truth era. *Educational Philosophy and Theory*, 53(11), 1057–1062. https://doi.org/10.1080/00131857.2020.1773800
- Østergaard, E., Hugo, A., & Dahlin, B. (2008). Doing phenomenology in science education: A research review. *Studies in Science Education*, 44(2), 93–121.
- Perry, B., & Szalavitz, M. (2010). Born for Love. HarperCollins.
- Rancière, J. (1991). *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation*. Stanford University Press.
- Sanderud, J.R. (2022). *Playing, Sensing, And Meaning. An ethnographic study of children's self-governed play in a Norwegian nature kindergarten.* PhD. Western Norway University of Applied Sciences.
- Sandseter, E.B.H., Kleppe, R., & Sando, O.J. (2020). The prevalence of risky play in young children's indoor and outdoor free play. *Early Childhood Education Journal*, 49, 303–312. https:// doi.org/10.1007/s10643-020-01074-0
- Schinkel, A. (2017). The educational importance of deep wonder. *Journal of Philosophy of Education*, 51(2), 538–553.

Schinkel, A., Wolbert, L., Pedersen J.B.W., & de Ruyter, D.J. (2023). Human Flourishing, Wonder, and Education. *Studies in Philosophy and Education*, 42, 143–162

Selye, H. (1984). The Stress of Life. McGraw-Hill Education.

Shonkoff, J.P., Garner, A.S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, & Section on Developmental and Behavioral Pediatrics. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232–e246. https://doi.org/10.1542/peds.2011-2663

Steiner, R. (1909). Practical Training in Thought. GA 108.

Steiner, R. (1911). The World of the Senses and the World of the Spirit. GA 134.

- Welzer, H. (2011). *Mental Infrastructures: How Growth Entered the World and Our Souls*. Heinrich Böll Stiftung.
- White, J. (2011). *Exploring Well-Being in Schools: A Guide to Making Children's Lives More Fulfilling*. Routledge.

Yurgelun-Todd D. (2007). Emotional and cognitive changes during adolescence. Current Opinion in Neurobiology, 17(2), 251–257. https://doi.org/10.1016/j.conb.2007.03.009

Zech, M. (2019). "Seven-year periods" as heuristic tools – or: why Waldorf education works. *Waldorf Resources*.