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Phenomenon-based learning in Finland: a critical overview of its historical and philosophical roots

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ABSTRACT

The idea of phenomenon-based learning (PhBL) was introduced into the Finnish core curriculum for basic education in 2014. The Finnish approach has raised interest in many other countries. In Finland, the idea of PhBL is often linked to the traditions of educational psychology, constructivism, problem-based learning (PBL) and inquiry-based learning (IBL). However, philosophical approaches like phenomenology, existentialism, and the tradition of *Bildung* have also influenced Finnish school development. Drawing on this complexity of philosophical and scholarly developments, we argue that the inherent ideas of PhBL are neither new, nor is it surprising that they have re-appeared as PhBL in the Finnish context. With PhBL's holistic approach, the focus on collaboration and reciprocal responsibility represents a promising practice for education in a world that is facing complex challenges. Still, despite its strong roots in several philosophical traditions, like in many other countries, Finnish educational policy development has been strongly influenced by the growing demands for measurability and accountability and increasingly struggling with atomisation of knowledge and skills. These specific national developments in Finland can raise awareness for similar challenges relevant in other contexts than the Finnish.

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Introduction

In recent discussions, cross-disciplinary educational methods have been seen as an alternative to disciplinary focused education and as especially suitable for meeting the contemporary and future challenges of local, national, and global societies (see Wolff, 2022b). However, the complexity of the world's current challenges cannot be grasped, understood, and solved with solutions from a single epistemological and ontological perspective. The entangled interdependence of contemporary key problems, such as inequality, climate change, pollution, pandemics, insecurity, violence and malnourishment, require awareness of as many insights and approaches as possible. Achieving comprehension and possible solutions requires creativity, which demands 'deep disciplinary knowledge—but at the same time it requires one to think broadly, across disciplines' (Henriksen, 2018, p. 9). The aim of phenomenon-based learning (PhBL) is to provide such an educational approach.

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This article relates to the project SveaSus (*Sustainable World Heritage Learning through a Phenomenon-based Approach*) that has run at the Faculty of Educational Sciences at the University of Helsinki from 2018 to 2023. The project has included a course open for all students at the faculty, and engaged lecturers, researchers, and artists in a close collaboration of both research and development. The learning environment has mainly been the World Heritage site Suomenlinna, which is placed on islands close to Helsinki. Questions of sustainability related to place and time have been topics for learning and educational development. The project has explored phenomenon-based learning through various approaches, such as embodied learning, and art-based and multilingual methods. With sustainability as the focus, phenomenon-based learning as an approach and World Heritage as a learning environment the SveaSus project has been a unique teaching and learning experiment. Both authors have been engaged in this project.

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Cross-disciplinarity and phenomenon-based learning were incorporated into the *Finnish core curriculum for basic educatio*n, which was published in Finnish and Swedish in 2014 and in English in 2016. An important aim of the phenomenon-based learning approach was to relate the learning topics to the students' neighbouring environments and experiences, thus liberating their agency (Tian & Risku, 2019). Internationally, the introduction of phenomenon-based learning into the Finnish curriculum for basic education has been met with wide interest, especially on social media. A common understanding that has spread fast is that Finland has replaced distinct school subjects in favour of an inter- and transdisciplinary teaching and learning approach. However, even if this seems apparent when reading blogs and websites discussing PhBL in Finnish education, it is not the case (see also, Tian & Risku, 2019). The Finnish curriculum is still structured according to traditional school subjects, but it has added and recommended PhBL as one among many approaches intended for realising the overarching aims and values of the curriculum (Finnish National Board of Education, 2016). Nevertheless, the concept is not clearly interpreted, and the Finnish schools and teachers interpret and implement the ideas in several ways (Leppiniemi, 2016).

In this article, our aim is not to provide a validation of what could be a right or wrong way of understanding the PhBL approach, nor to give definite descriptions or instructions on how to work with PhBL. Rather, the article provides a historical and philosophical overview of the roots of the Finnish understanding of education to provide a deeper understanding for the ongoing discussion on how PhBL might be understood and used. A curriculum is the result of a dynamic development, evolved as a combination of various scholarly approaches and educational principles. In Finland, the idea of phenomenon-based learning has been built on constructivism, and more specifically, on problem-based learning (PBL) and inquiry-based learning (IBL) (see Wolff, 2022a). Still, we show that there are also other theoretical foundations to the development of PhBL in Finland. Continental philosophical and educational approaches, such as phenomenology, existentialism, and the tradition of *Bildung* and *Didaktik* have strongly influenced Finnish educational theory and school development.

The term 'phenomenon-based learning' itself is not mentioned at all in the original Finnish language version, and only a few times in the translated versions of the curriculum text. Still, the word 'phenomenon' (in Finnish *ilmiö)* occurs alone or in combination with various other words numerous times (Finnish National Board of Education, 2016; Opetushallitus, 2014; Utbildningsstyrelsen, 2014). The curriculum mentions 'phenomenon-based' in combination with words like 'approach' (ph-b approach) and 'method' (ph-b method), whereas other notions like 'everyday', 'cultural', 'historical', 'chemical', and 'worldview' may determinate the 'phenomena' (Finnish National Board of Education, 2016). However, the word 'phenomena' most often appears vaguely, in combination with verbs such as to 'observe', 'describe', 'understand' or 'explain' phenomena.

In this article we first present a short historical overview of how to understand the notion of phenomenon, and we provide a sketch of how today's diverse academic disciplines and school subjects have evolved. From a phenomenon perspective, the division of academic subjects and disciplines can be understood as human attempts at meaning making and understanding the world. In turn, this gives rise to reflections on how teaching and learning could be understood and undertaken and the need for both the disciplinary and cross-disciplinary ordering of knowledge. We continue by showing that educational thinking in Finland has been influenced by both the classical German theories of *Bildung* and *Didaktik* and by insights from educational psychology. We finally argue that there is an ambivalence in today's educational policy discourses. On one hand, the urgent need for holistic approaches to teaching, learning, and understanding is widely stressed. On the other hand, we argue with many others that this ambition is contradicted at a policy level. Caused by the growing demands for measurability and accountability, education is increasingly struggling with the atomisation of knowledge and skills. Drawing on this complexity of philosophical, societal, scientific, and economic developments, we do not argue that PhBL is a stand-alone option, but it provides several attributes that are worth striving for to meet the challenges of the contemporary world.

What is a phenomenon?

In the 20th century, phenomenology was the dominating tradition in continental European philosophy. Edmund Husserl is seen as the initiator of phenomenology although his influence is also apparent in several fields other than philosophy, such as linguistics, sociology, and cognitive psychology (Beyer, 2022).

To understand the roots of the word phenomenon, one must search for the initial meaning of the concept as interpreted in phenomenology. Based on Kant, Husserl (2001, p. 168) stresses that meaning is inspired by intuitions, but since intuitions are not enough, 'we must go back to "the things themselves"'. However, Husserl did not think there was anything like a 'pure' or neutral and value-free object or thing (Husserl, 2001; Overgaard, 2004).

Husserl has inspired other central continental philosophers in the philosophical tradition of phenomenology, including Heidegger, Sartre and Merleau-Ponty (see Smith 2013; Østergaard et al., 2008). During the 19th century, Husserl suggested considering the living subject as the core of ontological and epistemological endeavours. In contrast to the immense development of empiric and positivistic approaches to science, even to the then so-called moral science (Mill, 1843/1978), Husserl considered the experiencing subject as 'being in the world', and a part of a 'lifeworld' that is their everyday context (see Overgaard, 2004). Based on this idea, humans easily and naïvely accept the world as they know it as the only one (see Seamon, 2020), and in accordance with 'reality' and 'true knowledge'. But, according to Husserl, knowledge cannot be understood as being independent of human consciousness (Willis, 2001). Instead, all knowing is basically subjective since the subjects are those who are engaged, entangled in the meaning they see, and in the knowledge that is derived from the meaning they experience.

A central aim in Husserl's phenomenology was to investigate the *intentionality* of consciousness, which means that perception, thinking, and judging is always about or of something. However, human consciousness is not objective, but rather humans 'are conscious of something ideal whose nature is quite unlike the psychical process of knowing' (Zahavi, 2017, p. 99.)

> Although it [phenomenology] is a transcendental philosophy that suspends the affirmation of the natural attitude in order to understand them, it is also a philosophy for which the world is always 'already there' prior to reflection – like an inalienable presence – and whose entire effort is to rediscover this naïve contact with the world in order to finally raise it to a philosophical status.
>
> (Merleau-Ponty, 2012, p. 7)

For our current purpose, the philosophy of Merleau-Ponty (2012) is especially interesting. He developed phenomenological lines of thought in which he placed bodily experiences and doings before knowing (Merleau-Ponty, 2012). Merleau-Ponty was critical of Cartesian dualism and the belief that it is possible to overcome corporal consciousness. On the contrary, he believed that humans are essentially embodied and social. They are always already decentralised, and their consciousness is inseparably linked with their bodies as well as with each other before they come to know themselves (see also Brinkmann, 2020; Welsh, 2013).

In phenomenology, the concept of intersubjectivity is fundamental, since it is essentially embedded in the lifeworld (Overgaard, 2004). Husserl and Heidegger already described the intersubjective experience as essential when humans constitute themselves as objectively existing subjects, in their relations to other experiencing subjects, and to the objective world of place and time that Husserl called the *spatio-temporal* world (Meyer, 2021; Summa, 2014). This implies further that in phenomenology, education is regarded as an existential meaning making project, a dialogue with the world that never ends (Biesta, 2020). A phenomenological approach to learning sees learning as something embodied, emotional, and experimental, and not as something quantified or itemized (Küpers, 2012). Thus, the learning process is a dynamic process that is simultaneously cognitive, sensual, responsive, individual, and collective. It strives towards transformation at both individual and social levels. It triggers the learners to become ethically conscious and rethink their earlier assumptions about themselves, each other, and the world in which they live.

To acknowledge intersubjectivity in education is to encourage not only individual reflection, but also joint reflections in the form of joint planning, creation, discussions, practice, and problem solving. Focusing on the intersubjective nature of teaching and learning, also acknowledges the role of emotions in learning situations, including elements like trust, recognition, and respect, as well as doubt, confusion, and relational anxiety (Murphy & Brown, 2012).

The rise of subjects

As pointed out above, the starting point in PhBL is usually a phenomenon, something tangible or intangible. Since a phenomenon can be studied from many angles, PhBL opposes strict and one-sided

subject-based educational approaches. Instead, the emphasis lies on an approach to teaching and learning that is as broad as possible without losing the subject's own depth (Wolff, 2022a). Therefore, PhBL could be called an interdisciplinary approach to learning (see Rauste-von Wright et al., 2003). In educational policy discussions, interdisciplinary teaching is a surprisingly controversial issue. Surprisingly, because, as we will describe, the emergence of what today is easily taken for granted as school subjects mirroring academic disciplines could be described as a phenomenon-based development of knowledge. The more humankind has acquired knowledge about the world, the more this knowledge has become comprehensively structured in diverse disciplines. Simultaneously, this way of structuring knowledge has become more and more important as institutional and administrative distinctions that for centuries have shaped the organisational framework of how humans have passed on and used knowledge (Stichweh, 2001). This is also the way knowledge usually is organized in schools today.

While the first written evidence on a natural philosophy from Egypt and Mesopotamia does not distinguish natural philosophy from religion and magic (Grant, 2007), the birth of the Western history of knowledge is often associated with the ancient Greeks. Endeavours of systematically searching for knowledge for its own sake, and not only for practical usage, were called philosophy. By the fourth century there was a philosophical concern about the unity and disunity of science (Lennox, 2001). Based on the early Greek natural philosophy, Aristotle developed the first systematic order of knowledge. Firstly, he divided knowledge into two categories, one human and one divine (Wians, 2008). This first division was a way of positioning humans in the cosmos. Secondly, Aristotle distinguished human knowledge between theoretical (scientific knowledge, *episteme*), practical (wisdom, *phronesis*), and productive science (skills and crafts, *techné*). The theoretical sciences investigated the natural entirety in branches such as mathematics, physics, but also in biology, botany, and astronomy. These sciences were understood as investigations at a conceptual level rather than as empirical research. Among other things, this involved analysing causal explanation or the attempt to prove a final cause of all motion ('the unmoved mover' or 'prime mover'). The practical sciences examined human action and conduct not only at individual and societal levels, but also at ethical and political levels, while the productive sciences focused on the production of artefacts and arts, such as agriculture, medicine, shipbuilding, music, theatre, dance, and rhetoric.

The first distinctions of knowledge categories are interesting for today's PhBL discussions about overcoming strict subject boundaries, since the boundaries that are meant to be overcome are based on the differences between discernible phenomena. Starting with the experience of being in the world, human knowledge developed through discerning characteristics that were experienced as meaningful. Some aspects of the lifeworld were considered as conceptual questions (e.g. what is movement, what is existence), while others were recognised as questions concerning the shared life with other human beings (e.g. how to live ethically and politically together) and yet others were questions for further practical purposes (e.g. how to build a bridge or water supply).

The seven liberal arts, *trivium* and *quadrivium,* that structured mediaeval universities can be understood in a similar way. These arts describe seven phenomena that were seen as central both for systematically observing the world and for reaching true knowledge. The *trivium* covers communication and language in a broad sense and consists of general grammar, formal logic, and rhetoric, while the *quadrivium* addresses the study of number in time and space through arithmetic, geometry, music, and astronomy.

This overview of the history of ideas shows how the way in which humans have structured (i.e. ordered, organised) knowledge in subjects has started from discerning various phenomena in the world. Viewing something as belonging to one phenomenon always also implies assumptions about other related but distinct phenomena (e.g. distinction between living beings and non-living material, or distinctions of change induced by natural laws, by social-political power or by ethical considerations). With these developments in mind, PhBL is nothing new, and the aim of PhBL is not to blur the distinctions between different subjects. Rather, when students are asked to investigate how to understand complex phenomena, they are invited to follow the long trace of human curiosity. As Foucault (1985) shows at the beginning of the book *The order of things,* the existence of a long tradition is not equivalent to consensus. Rather, various cultures and lines of thought have divided phenomena completely differently. In a similar sense, students should be encouraged to unite and divide the phenomena they study both in

accordance with the school subject's own tradition and internal logic and with respect to the students' own questions concerning contemporary key challenges in society.

How to teach complexity in both depth and breadth?

The more knowledge there is about something, the more it is necessary to distinguish between two possible and important attitudes about teaching and learning. Throughout the history of education and schooling a distinction has been made between '*disciplina*' and '*doctrina*', to structure knowledge for educational purposes (Stichweh. 2001, p. 13727f). The term '*disciplina*' is 'focused on methods inculcating knowledge' (Stichweh 2001, p. 13728). The variation 'discipline' has additional meaning as 'admonition, correction, and even punishment for mistakes', and emerged in mediaeval times. When there has been a difference in meaning between '*disciplina*' and '*doctrina*', '*doctrina*' is used to denote the possibility and need to further develop knowledge. According to Stichweh's overview on the etymological development of the words, the term '*discipline*' is still 'a place where one deposits knowledge after having detected or discovered it, but it is not a dynamic system for the production of knowledge' (Stichweh 2001, p. 13728).

With increasing amounts of knowledge, scholars have been challenged to store knowledge by educating students into given disciplines and traditions on the one hand and the need to constantly renew knowledge on the other. Development of insight through research is closely linked to the educational questions about which bodies of knowledge are worth passing on to the next generation and about how one should teach and learn these bodies of knowledge, both regarding the concepts of disciplina and doctrina. The theory and philosophy of critical realism calls for carefulness in attempts to divide bodies of knowledge into separate parts. Rather, critical realism stresses that the theoretical knowledge in every scientific and school subject should be understood as the ontological depth of a subject with its own inner logical structure (Wheelahan, 2010). While it seems to be a desirable outcome in many contemporary discussions about competency-based curriculum to splinter long-evolved bodies of knowledge into smaller pieces of knowledge, Wheelahan argues that the inner theoretical structure of subjects with their own educative value are at risk of getting lost in teaching and learning (Wheelahan et al., 2022; Rosenblad et al., 2022).

The question that derives from these reflections is how scientific subjects (and thereby school subjects) can be renewed both with respect to their own inner logical structure and development and in relation to an always changing world and open future.

This question points to the core of the *Bildung* tradition that has had a strong influence on Finnish education.

The tradition of *Bildung* and *Didaktik* in Finland — an answer to key questions and an uncertain future

Like other national curricula, the Finnish curricula are a conglomeration of many aspirations and visions of what is important when preparing the new generation for the future. The theoretical and philosophical foundations of the Finnish curricula are a mixture of a) German *Bildung* theories, b) psychological constructivism, and c) the recent skill/competence discourses (Wolff, 2022a; Zilliacus & Wolff, 2021). In the following we will give an overview of these theoretical influences and reflect on their partly quite contrasting historical, economic, and political interests.

A central antecedent in the Finnish education system can be traced back to the notion of *Bildung*, and its crucial role in establishing a modern, secular, and democratic society. Although closely linked to German cultural development throughout the Enlightenment and Modernity, the notion of *Bildung* expresses an existential question that has been discussed throughout Western civilisation and philosophy. The twofold question is: What does it mean to be a human being and how does anybody become human? In the Western history of ideas, reflections on the meaning of spiritual cultivation and refining the soul can be traced back to the ancient Greeks and Hellenistic philosophy (Schwenk, 1996). The usage of the word *Bildung* itself is based on Christian theology and its educational concept of *Imago Dei*, literally meaning God's image. In this tradition, human beings are created in the image of God and are constantly facing the task of fulfilling this 'likeness'. Of importance for today's educational discussion is that

this view is not teleological; although the seed of being sacred is planted in human beings at birth, it is not determined how it will develop. *Bildung*, thus, expresses an ongoing and ambivalent movement. To become human, one is constantly asked to strive for something that one cannot picture or plan in advance (Horlacher, 2016; Schaffar & Uljens, 2015).

Since the reformation, the academic and intellectual evolvement in Finland has been closely linked to German philosophical developments. (For an overview, see Manninen et al., 2021; Uljens, 2002b). The ideas of German idealism and romanticism were introduced to Finland in the late 18th century (at that time, Finland was still a part of Sweden and later a Russian grand duchy). The philosophy of Fichte, Schelling, Herder and Hegel made a deep impact on academic and intellectual development in Finland, and this philosophy was taught and developed by Johan Jakob Tengström and Johan Wilhelm Snellman (Uljens, 2002b). Like many young scholars at that time, Snellman had adopted Hegelianism from Tengström, who was the only professor of philosophy in Finland at the beginning of the 19th century (Manninen et al., 2021). In accordance with the Enlightenment optimist view, there was a belief, or hope, in the constant improvement and progress of humankind through education, (scientific) knowledge and insight. The progress, teleological in nature, was to occur as a stepwise change from one generation to the next. Consequently, the modern concepts of *Bildung* and education may be seen as theoretical constructs dealing with the individual's development but with an *intergenerational* perspective. This process had a direction, but as the concept of *Bildung* expresses, its ends were open in a radical sense. Since the Enlightenment, the central question in philosophical theories of education that are linked to this tradition has been how to pass the culture over to a younger generation without reducing educational activity to pure reproductive socialisation into cultural practices and norms. This question mirrors the distinction between '*disciplina*' and '*doctrina*'. Further questions arise: How to prepare the next generation for a future that, by definition, cannot be known? And: How to support the individual's development to become an independent and autonomous but continuously growing and developing member of an ever-changing culture (Schaffar & Uljens, 2015)?

The concept of *Bildung* ties individual and societal political change tightly together. In Finland, the idea of *Bildung* was mainly introduced by Johan Wilhelm Snellman with writings about academic freedom and various reflections on the ethical and spiritual self-cultivation of the human being (Uljens, 2002b). Since individuals in a modern, secular, and plural world are equipped with modern freedom (of religion, vocation, speech, etc.), the forms of life of the present society can no longer be seen to contain the keys for the future. Still, the way these ideals have been realised throughout (German and Finnish) educational history has been harshly criticised. Ideals of *Bildung* have been used differently in Germany and Finland to establish elitist class structures in society and to strengthen nationalism (Masschelein & Ricken, 2003).

Other educational movements, such as reform pedagogy in the early 20th century, have been established as counter-movements to the *Bildung*-elitist developments. While these aspects of the *Bildung*-tradition have undoubtedly been problematic, they are misuses of the original ideas. Klafki explains that the classic theories of *Bildung* had a radical socio-political character at their time and were explicitly developed to revolutionise the society towards more justice, freedom, and responsibility between the people (Klafki, 1999). The central task for a modern society in earlier centuries as well as today has been well captured in Schleiermacher's insight that human beings (as individuals and as members of communities) must learn to live in accordance with the question, and not the answer, of what could be considered a good and valuable life (Schaffar & Uljens, 2015). Here, the individual process of maturing, or becoming a human being, is linked to the question of how a just society can be established. Since then, the question of the good life has been a guiding principle of open democratic, liberal societies and the subject of ongoing consideration on how to develop educational institutions and methods that help people to both become part of that society and at the same time be able to fundamentally question and change it.

Wolfgang Klafki (1997) has famously developed these thoughts even in the parallel discussions about *Didaktik,* i.e. about the theory of teaching. Along with the insight of *Bildung* he argues that policy makers and teachers never know what bodies of knowledge, cognitions and attitudes future students will need. He points towards the risk that education could become nothing more than a narrow simplification of scientific knowledge. To prevent that he suggests so called 'epochal key problems' to be the

guiding questions for curriculum planning. These epochal key-questions should address major global issues, which relate to urgent problems of today, such as the environmental crisis, social inequity, and war. These questions demand an understanding of both subject-based depth and the capacity of working and learning interdisciplinary with various elements from different bodies of knowledge. We argue in another article for a similar guiding principle for education today when striving for sustainable societies (Schaffar, 2021b).

In these historical developments around the notion of *Bildung* and *Didaktik*, there can be found several elements that have enabled PhBL to be introduced in the Finnish curriculum as a method for interdisciplinary teaching to provide the next generation with the knowledge and abilities that are needed to face a complex and uncertain future. Still, as we will point out in the next section, the process to introduce PhBL in the Finnish curriculum is often only linked to discussions inspired by educational psychology.

Understanding the learning subject—traditions of educational psychology in Finland

Since the end of the 16th century and beginning of the 17th century, education, philosophy, and psychology were not strictly divided in different academic discourses and disciplines in the Western history of ideas. Johann Friedrich Herbart, one of the more influential philosophers of education at that time, described ethics and psychology as essential in educational questions (Kivelä & Siljander, 2013). In Finland, education was established as an academic subject at the University of Helsinki in 1852, and preceded psychology by more than 80 years as an independent discipline (Kansanen 1990; Kivelä & Siljander, 2013). Therefore, until psychology became a subject of its own in Finland, educational research included questions which today belong to psychology. Like the Continental development of thought, the academic and intellectual development in Finland during that time shifted focus from mainly the philosophical inspiration of idealism towards the new upcoming psychological science during the late decades of the 19th century (Manninen et al., 2021). Psychology, still considered to be part of philosophy, offered promising new ways of thinking at a time when philosophy was criticised as only being able to give speculative answers. Instead, the upcoming experimental psychology raised some counternarrative inspired by materialism and promises of gaining scientific answers based on empirically collected knowledge. In Finland, it was mainly Georg Hjalmar Neiglick, Edvard Westermarck and later Rolf Lagerborg who developed the anti-metaphysical, anti-clerical and often more Cosmopolitan lines of thought of the 1880s, turning away from the preceding exclusively German influence to French and British influences (Manninen et al., 2021).

The ideas of Herbart helped to establish the psychological view of education in Finland and stayed vital until the end of the 1910s. Herbart's ideas were especially introduced by Michael Soininen (Kivelä & Siljander, 2013; Uljens, 2002a) and Albert Lilius, who developed empirical educational research based on psychology (Uljens, 2002a). Other German educational developments were also influential, since by tradition, Finnish students studied in Germany and other Central European countries (Kansanen, 1990). Ernst Meumann's experimental educational laboratory in Hamburg was a role model for Finnish educational research in the first decades of the 20th century (Kivelä & Siljander, 2013). Even if a new wave of interest in the Continental philosophy tradition occurred after the Second World War (Kivelä & Siljander, 2013), the interest in psychology did not disappear. Psychological thinking was now influenced by American behaviourist theory that came to dominate the landscape in less than 20 years in the middle of the 20th century. Nevertheless, a new theoretical turn towards constructivism occurred, which was strongly influenced by psychology. Instead of focusing on how to influence and change the students externally, the focus was now on the students' self-regulation and the cognitive processes through which the students actively organise their environment (Kivelä & Siljander, 2013). This new shift led to a decrease in the interest in theoretical philosophical educational perspectives, which is why Finland has been little influenced by critical pedagogy and the Frankfurt School philosophers, compared with Germany, Denmark, and Norway (Kansanen, 1990).

The development of explicitly phenomenon-based learning started at the end of the 1990s. At that point, educational research in Finland was mainly inspired by Anglo-Saxon and psychological approaches to education that focused on applied questions and research-based teacher education (Kansanen, 1990; Uljens, 2002b). In the 1990s, Maijaliisa Rauste-von Wright was responsible for educational psychology in

teacher education at the University of Helsinki and developed phenomenon-based learning in that context (Rauste-von Wright, 2001). She based it on a theoretical background developed by John Dewey and George Herbert Mead and combined their philosophies into a pragmatic constructivism (Rauste-von Wright et al., 2003), in which she wanted to see a shift from a curriculum-based teaching to *learning* that emerged from the students' own worldviews (Rauste-von Wright, 2001). According to her, learning is always 'a context-based and situated interaction process'. She called her phenomenon-based approach 'a self-correcting model of curriculum', in which she wished to 'bridge the traditional gap between theory and practice' (Rauste-von Wright, 2001, p. 25).

Rauste-von Wright's PhBL had a deep impact at the University of Helsinki which has a strong influence on curriculum development in Finland. With some of her colleagues, she included ideas from inquiry-based learning (IBL) (see e.g. Caliskan, 2012) in the PhBL approach (Lonka, 2018). Both inquiry-based learning (IBL) and problem-based learning (PBL) are based on constructivism, understood in a broad sense as both ontology and epistemology. The key idea of constructivism is that humans understand, construct meaning and learn through reflection on their earlier experiences in relation to new understanding (Göğüş, 2012). In these lines of thought the traces back to Dewey emphasise the students as actively reflecting and constructing knowledge when confronted by new experiences. Rauste-von Wright combined these insights additionally with natural and social environments as joint parts of human interaction, and the mind and body, in the footsteps of Mead (Lonka, 2018).

Recent international influences on Finnish curriculum development

The final steps for incorporating PhBL into the curriculum in Finland were taken alongside and influenced by the educational policy discussion that characterised the decades around the end of the last millennium (2000). It is important to mention these latest developments because they break with central principles that had guided Finland's educational policy until then. Like Sweden, Norway, Denmark and Iceland, Finland is one of the Nordic countries. The so called 'Nordic model' started to develop in the 1920s. Although it has had a slightly different development and partly different manifestations in the Nordic countries, there are similarities in all Nordic countries. The political and economic structure is following principles of democracy, solidarity, and equality. Similar social reforms were taken in the Nordic countries leading to a high level of welfare and societal harmonisation due to shared systems for healthcare, salary-development, pensions, unemployment, basic education for everybody and support for higher education (Kettunen, 2001; Uljens et al., 2016; Hakala & Kujala 2021).

Still, since the late 1990s, educational theory, practice, research, and policy attracted more and more attention in the increasingly globalised social and economic discourses. Internationally acting institutions from the global North (the World bank, UNESCO, the OECD, the EU) increasingly gained influence on national educational policy development (Steiner-Khamsi, 2019; Wahlström, 2016). Apart from the EU, Western institutions do not work via direct political discussion that in democratic structures lead to public opinion and decisions by political legitimised bodies. Rather, the OECD, the World Bank and UNESCO are engaged in so called soft governance (Steiner-Khamsi, 2019; Wahlström, 2016). These influences break with basic principles that were prominent in the Nordic welfare-states and this governance has been documented, analysed, and criticised widely (Foran, 2020; Gorur, 2016; Lindblad et al., 2018; Mertanen et al., 2021; Rizvi, 2022; Steiner-Khamsi, 2019).

The international influence on the development of the national curriculum is as strong in Finland as in any other Western or Western-oriented country.

> In the 1990s, when Finland suffered a deep economic recession due to the fall of the Soviet Union, policy discourses envisioned Finland as an 'information society' (…) Thus, Finland eagerly followed the OECD policy rhetoric to meet the challenges that the changing labour market posed.
>
> (Säntti et al 2021, p. 5; or see, Rinne, 2008)

At the turn of the millennium, Finland was taken by surprise and became the chart-topper in OECD and World Economic Forum reports and thus became an educational model for other countries. 'This has certainly had an effect on how educational policy initiatives are framed in Finland' (Säntti et al., 2021, p. 5). Therefore, when changes to the Finnish educational systems are suggested, the status of its education

as an international model cannot be neglected. Thus, the rhetoric tends to highlight the ambition to 'stay on top', to warn of the danger of 'being left behind' by 'competitors' and the urge to make 'the best even better' (cf. Saari & Säntti 2018; Säntti et al. 2021).

According to Niemelä (2019), the implementation of PhBL in the Finnish curricula should be understood as situated in these discourses about improving the Finnish 'top model' and to adjust it even more to match international expectations. The initial implementation of PhBL into the curriculum can be read in an OECD political context (Halinen & Jääskeläinen, 2015; Niemelä, 2019) as it responds directly to the OECD request for 21st century skills and transversal knowledge (Lonka, 2018) and is in line with EU educational and economic politics (Halinen & Jääskeläinen, 2015; Wolff, 2022a).

Still, there are reasons for being more critical of these influences of globally acting institutions on the national curriculum in general and more specifically for the understanding and further development of PhBL. In the following section, we refer to three critical points.

Holistic understanding against trends of economic motivation for atomisation of skills

1. In general, every educational system reflects certain political and social values. Nevertheless, the problems arising from the increased influence of globally acting economic institutions are manifold. When the role of education is regarded as a means for specific interests in society—political, economic, or social—education becomes instrumentalised and obliged to justify itself by its expected outcome (see Vlieghe & Zamojski, 2020). Public and academic debates are even inclined to give education the role of salvation, in that education is supposed to lead society in the desired direction (Peim, 2022) and/or when education promises economic growth, democracy or sustainability.

During the last three or four decades, societal and educational policy development has been clearly influenced by economic interests. In the summary of their anthology on the commodification, marketisation and business involvement in education policy, Parreira do Amaral and Thompson write:

> Recent years saw the burgeoning of activities for which the term Global Education Industry (GEI) has been coined. Increasingly, (…) economic rationales and logics pervade educational thinking and practice; Business strategies and modes of operation progressively penetrate the education sector with the active involvement of business actors and stakeholders.
>
> (Parreira do Amaral & Thompson, 2019, p. 273)

The problem is that the logic of the market differs fundamentally from democratically oriented forms of educational practice. It has a one-sided focus on striving for private and national economic growth and value, a focus that differs from striving for education for humanity, as has been prominent in the classic theories of *Bildung* (Schaffar, 2021a). It also differs from educational aims that point towards sustainability (in a broad sense) that would be needed in today's global crises (Schaffar, 2022). Regarding PhBL, this one-sidedness leads to a constriction of learning and teaching about certain phenomena as they are already constrained by the overall perspective of education and knowledge on economic growth, applicability, and usefulness.

In contrast, phenomenology aims at understanding the world from many angles (including political, religious, and economic views), due to the insight that non-identical individuals experience the meaningfulness of their lifeworld variously. An interest-bounded educational approach contradicts that basic phenomenological insight, since phenomenology aims at viewing the world from various angles in a historical light, and as something that is steadily changing (Merleau-Ponty, 2012). We will deepen this criticism in the next two points.

2. PhBL has been introduced to increase students' transversal competencies to meet the complex and yet unknown problems of an uncertain future (Lonka 2018; Niemelä 2019; Rauste-von Wright, 2003). According to the critique against the globalised assessment industry, an outcomes-based and assessment-driven education is heading in precisely the opposite direction. Standardised learning outcomes and accountability requests provide a strict frame to which students, teachers, educational institutions, and policy developments are required to adapt (*disciplina*). Accordingly, students and teachers are not asked to inquire, critique, and evolve knowledge about what is necessary for their own and their communities' futures (*doctrina*). When steadily faced with numbers and rankings, educators are forced to

focus on measurements that instrumentalise human beings to such an extent that they even undermine their own humanity (Roberts, 2020). 'Children become metrics and government data' (Foran 2020, p. 46; see also, Gorur, 2016), and their own lifeworlds and their own experiences of and reflections on phenomena loose meaning.

This results in at least two severe problems. First, while *Bildung*, phenomenology and existentialism underline that the future's openness should be understood as both an invitation and a request to choose between various opportunities to act, the global focus on pre-given, assessable learning outcomes forces students, teachers, and institutions into a deterministic and authoritarian worldview (Mertanen et al., 2021).

Second, while PhBL builds on the insight of learning as a shared and community-based activity, the increased focus on standardisation and assessment of learning outcomes leads to the opposite. Those who do not have the stated or desired 'right kind of competence' can easily be blamed for lacking education. Educational systems are at risk of accepting dropouts at every level of society (Mertanen et al., 2021). Instead of learning with and from each other to develop a shared responsibility for each other's and the communities' future (like the Nordic welfare model aimed at), the recent global developments in educational policy are increasing the sense of being in constant competition with each other and in an isolated fight for survival.

3. The logic of economic processes that has been prominent in Finland during the last few decades forces a different internal logic on educational practice than could be seen in the diverse educational traditions in Finland. Economic thinking sees and treats education like any other production process. 'Since only measurable, assessable units, processes and outcomes, are tradable, it is only those parts of the educational discussion that are seen as relevant in a dominant capitalist view of education' (Schaffar, 2021a, p. 62). In this logical frame, knowledge risks to be understood as itemised or atomised, that is, as essentially being small pieces of facts that can be assessed, compared, and put together like a puzzle, according to any desired individual purpose and interest (Rosenblad et al 2022).

However, in phenomenology, education becomes an existential human project and involves human meaning making. It is an endless dialogue and commitment (Biesta, 2020) in line with the *Bildung* idea. Küpers (2012) sees the phenomenological approach as a contrast to the recent developments in policy development that focus on controlling learning and knowledge. According to him, learning in line with phenomenology is simultaneously embodied, emotional, cognitive, and responsive in a dynamic process (Küpers, 2012). Therefore, he uses expressions like 'phenomenology of learning', 'phenomenological approach to learning', 'embodied learning', and 'experiential learning' as more or less synonyms.

In accordance with the insights from critical realism, the inner theoretical structure of subject knowledge is important to build a foundation of knowledge and understanding of many phenomena in the world. Still, a one-sided focus on (factual) subject knowledge is not sufficient to handle complicated challenges and key issues like sustainability and to search creatively for innovative solutions. Following Klafki (1997) who calls for an education that promotes critique, argumentation, and empathy, teaching and learning should aim to enable a deeper engagement with knowledge than only acquiring a set of pre-defined, measurable, and manageable items (Schaffar, 2021a). Education should encourage the learners towards critical, self-reflexive inquiry, to be both introduced into the knowledge tradition (*disciplina*) and to be engaged in questioning and changing what should be developed (*doctrina*). We find the roots of these insights in the Finnish educational history of thoughts, both in the tradition of *Bildung* and *Didaktik,* phenomenology, and in many of the insights from educational psychology. Here, the ground for the Nordic welfare state with democracy, equality and solidarity were laid, too. The latest developments on educational policy that come from globalised interests of economic competition between states and individuals stand in contrast to this 'holistic learning experiences' (Thorburn and Stolz, 2022, p. 1). Dealing with broad epochal key issues (Klafki, 1997) like sustainability, democracy and social justice requires cooperation and openness.

PhBL as an educational approach to recent key-challenges in society

Independent of the theoretical background or the political agenda for education, every community is facing complex and urgent challenges with possibly devastating future consequences. The recent developments of globalised educational discourses with standardised and pre-defined learning outcomes are not

adequate for preparing students for the contemporary key challenges. Globally acting institutions from Western nation states are dominating the narratives on what kind of knowledge and competence will be needed in future societies (cf. 21st century skills). The focus on future challenges as essentially economic challenges is destroying locally developed and adjusted knowledge. It narrows the sense of the peculiarities of the local situations and the human imaginary and creativity for just and sustainable solutions.

Finland, on the other hand, has had a long tradition of thought that views education as a practice with an imminent goal, a goal in itself. It is worth being reminded of this history of thought, especially in today's situation of instrumentalization of knowledge and education. Education in this sense is a constant intergenerational dynamic inquiry, a mirror through which communities may reflect on what is meaningful and worth striving for (Schaffar, 2021b; Vlieghe & Zamojski, 2020). On the one hand, the various philosophical roots of Finnish education work as reminders even for other national policy developments that education should be seen as having its own meaning; it is a lived experience and needs to be good in itself (Vlieghe & Zamojski, 2020). The self-reflexive understanding of education prevents education from being a means for external interests. It turns education into an existential practice in which the individual is strongly related to the process of self-transformation and community building (cf. the classic theories of *Bildung*). Existence is seldom ordered, well-structured, comparable, and logical; rather, it is a constant dynamic, a motion that can be chaotic and unpredictable (Roberts, 2020). The future is both uncertain and filled with risks, open for change and possibilities. It is the task of education to enable students to dare to question and to actively change things that need development, and to live with the ambivalence of uncertainties. On the other hand, the Finnish case shows that the latest global policy developments were strong enough to seriously challenge even these long traditions of thought and practices and work counterproductive to many of the outspoken goals for education.

With the different philosophical and scientific traditions in mind, we argue that PhBL offers a didactical 'tool' (in the broad sense) with ample potential. The PhBL approach is neither a salvation approach, nor a quick-fix-method that could be easily adapted. But, as we see it, PhBL can be a way to thoroughly reflect on what the meaning of education might be today.

PhBL enables sound factual knowledge from diverse school subjects (*disciplina*), but at the same time it enables a transdisciplinary learning approach that is open to the students' own curiosity and questions that challenge current knowledge (*doctrina*) and searches for knowledge in various ways and in collaboration with various teachers, partners, and experts. Based on a phenomenological approach, PhBL becomes a way of learning that is situated in the students' realities (lifeworlds), involves embodiment and emotions intertwined with cognitive knowledge. It is a dialogue with the world, reflecting on what the world asks for, what the world has to say, and what the world tries to teach about (Biesta, 2021). In this kind of education, the students need to let the world become the teacher. They need to be willing to put themselves on the periphery for a while and dare to take the risk to be touched by the unknown. Yet, it is not only about opening one's consciousness and perception towards the unknown. It is also about making the familiar unfamiliar through profound reflection on what might be taken for granted. In this sense, PhBL could be seen as a collaborative, embodied ongoing dialogue between the teachers, the students, and the world.

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