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Powerful knowledge, school subjects and the curriculum: an international and comparative perspective

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ABSTRACT

This introductory essay presents a special issue that foregrounds school subjects as purpose-built educational enterprises and reconsiders the role of powerful knowledge in national curricula. Framed against the marginalization of knowledge in both global policy reforms and contemporary curriculum theory, it argues for renewed attention to the educational purpose, content, and construction of school subjects by engaging with questions such as: What are the purposes of school subjects? How should powerful knowledge be conceived in the curriculum? How are school subjects conceptualized and constructed? The issue includes four articles examining the purposes and content of school subjects—geography, history, religious education, and biology—in national curricula across Sweden, Finland, and England. It also features two articles exploring changes in business and management education in Poland and the 'life and death' of Liberal Studies as a school subject in Hong Kong. This special issue advances two key propositions: first, that school subjects are structured to fulfil multiple academic, civic, social, and personal aims; and second, that powerful knowledge should be understood not only in terms of its epistemic structure but also in relation to the intellectual and ethical capabilities it enables.

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> What then, do we mean by a study in the curriculum? What does it stand for? What fixes the place which it occupies in the school work? What furnishes it its end? What gives it its limitations? By what standard do we measure its value? The ordinary school-teacher is not, of course, called upon to raise such questions. He has certain subjects given to him. The curriculum is, as we say, laid out, and the individual teacher has to do the best he can with the studies as he find them. But those who are concerned theoretically with the nature of education, or those who have to do practically with the organization of the course of study —those who 'lay out' the course—cannot afford to ignore these questions (Dewey, 1897/1972, p. 167).

This excerpt is taken from Dewey's (1897/1972) essay 'The psychological aspect of the school curriculum' which, together with his seminal texts *The school and society* and *The child and the curriculum* (Dewey, 1902/1990), laid out the theoretical basis for the curriculum of the Laboratory School in Chicago. It emphasizes the connection between

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education, society, and students at the turn of the twentieth century, advocating for a curriculum that responds to societal needs, promotes democratic values, and progressively guides students towards mastery of knowledge—approximating that held in the mind of a mature, developed adult. At the heart of this curriculum is the formation of a school subject as a distinct form of experience for learners, directed towards educational purpose.

Inspired and informed by John Dewey, Deng has elsewhere argued that school subjects are 'uniquely purpose-built educational enterprises, designed with and through an educational imagination toward educative ends' (Deng & Luke, 2008, p. 83). The formation of school subjects requires addressing an array of fundamental curriculum questions, among which are the purpose question (e.g. what is education for?), the knowledge question (e.g. what knowledge should be taught?), and the content question (e.g. what constitutes the content of a school curriculum? How is knowledge selected and organized into the content of a school subject?). These questions are fundamental for policy makers and curriculum specialists—those concerned with developing a curriculum for an education system—as well as for curriculum theorists who are committed to constructing curriculum theory and models that matter in practice and in the world of schooling towards the advancement of education (Deng, 2018). After all, school subjects are organizational units of an institutional curriculum, providing a structured, consistent, and equitable framework for teaching and learning, ensuring that students acquire the knowledge and skills needed for various educational purposes.

However, the school subject as a distinctive educational construction—along with questions concerning its purpose, knowledge, and content—has largely disappeared from current global competency and outcomes movements. Across the globe there has been a movement towards defining the central purpose of education in terms of twenty-first-century competencies—a body of generic skills that students need to live and function in the world—promoted by powerful international organizations such as the EU, the OECD, and UNESCO (Anderson-Levitt & Gardinier, 2021; Hopmann, 2008; Karseth & Sivesind, 2010; Tahirsylaj & Sundberg, 2025). Coupled with this is a move to establish learning outcomes that allow the assessment and measurement of students' mastery of twenty-first-century competencies and that steer the curriculum and classroom practice towards the teaching of competencies (Mølstad & Karseth, 2016; Tahirsylaj & Sundberg, 2025; Nordin & Sundberg, 2021). Accompanying these shifts is a move to replace knowledge-based curriculum making—centred on the selection and organization of knowledge for teaching and learning in schools—with outcomes-based curriculum making—which focuses on the development of competency standards and frameworks (Tahirsylaj & Sundberg, 2025; Hopmann, 2008; Karseth & Sivesind, 2010). Over the last two decades, there has been a repeated proclamation of the importance of twenty-first-century competencies as 'the changing demands of an increasingly interconnected world threaten to render traditional curriculum subjects redundant', replacing them with areas or modules of learning that dissolve the school subjects as we know them (Grey & Morris, 2024, p. 158). Recently, as evident in the *Learning Compass 2030*, the Organisation for Economic Co-operation and Development (OECD, 2019) has moved away from an exclusive concern with skills and competencies in favour of the teaching of disciplinary knowledge. However, this new policy framework involves 'co-opting' disciplinary knowledge for the 'knowledge economy project' by embracing 'an instrumentalist view of disciplinary

knowledge as something with utility' (Hughson & Wood, 2022, p. 649)—rather than as something that can contribute to broad educational purposes.

The notion of the school subject as an educational enterprise has also been repudiated within much contemporary curriculum theory which—unlike traditional curriculum theory—is no longer concerned with curriculum development but with 'curriculum understanding' (Pinar, 2004; Pinar et al., 1995). The field, particularly in North America, has been fundamentally shaped by a range of critical perspectives, including neo-Marxism, postmodernism, poststructuralism, deconstruction, postcolonialism, feminism, critical race theory, and other critical social theories (Deng, 2018). From neo-Marxist and post-structural perspectives, school subjects are viewed as social and political constructions: the selection and organization of knowledge within these subjects are inextricably linked to issues of social class, race, gender, power, and politics (Apple, 2004; Bernstein, 1971; Giroux, 1981; Popkewitz, 2000). School subjects, after all, emerge from power and interest struggles between those within various academic disciplines and those outside the university. Thus, their development reflects the dynamics and conflicts within and between different communities and social groups (Goodson, 1985; Goodson, Anstead, & Mangan, 1998). In this light, school subjects are regarded not as neutral educational constructs but as social and political 'texts' that demand interrogation from critical, sociological, and historical perspectives.

Similarly, from postmodern, feminist, post-structural, postcolonial, and post-humanist viewpoints, school subjects are not neutral; they are shaped by power, history, ideology, language, culture, and identity. Through the selection and organization of knowledge, school subjects contribute to the legitimation and perpetuation of racism, sexism, classism, and genderism (Hall, 1997; Malewski, 2010; Pinar, 2004). Therefore, the task of curriculum and educational theorists is to critically examine race, class, gender, sexuality, and their intersectionality; decentre dominant Western narratives; include marginalized voices; question human exceptionalism; and foster reflective, inclusive, and justice-oriented understandings of knowledge and identity (Brantlinger & Danforth, 2006; Kincheloe, 2008; Ladson-Billings, 1995). Like scholars in the neo-Marxist and critical traditions, theorists from these perspectives argue that knowledge is socially constructed, relativistic, and shaped by those in power to serve their interests, reinforcing inequalities related to race, gender, and class. School subjects, along with the Western culture and traditions in which they are formed, are reduced to mere embodiments of power, prejudice, domination, and control.

Due to the repudiation of school subjects as purposeful educational enterprises, along with the rejection of curriculum making concerned with their formation, contemporary curriculum theory has entered a state of severe crisis, rendering it irrelevant to practice and incapable of contributing to the advancement of education in today's context (see Deng, 2018; Schwab, 2013; Westbury, 2007). In particular, it is ill-equipped to address the disappearance of questions concerning the purpose, knowledge, and content of school subjects—a consequence of the global competency and accountability movements mentioned earlier. Yet, tackling such questions is vital to curriculum theory and research if we are committed to the development and improvement of education. This is especially crucial in the current post-truth era where knowledge and truth are eroding, and knowledge itself is becoming highly politicized—particularly as school subjects like geography, history, and biology are

increasingly contested and marginalized. We are facing an epistemic crisis that threatens the very foundation of liberal democracy (Béneker et al., 2024; Lambert, 2017; Parker, 2025).

Powerful knowledge, school subjects and the curriculum

It is in this context that the concept of powerful knowledge notably coined by Michael Young and Johan Muller, together with social realism which underpins it, becomes extremely timely and relevant. As an emerging field of scholarship within the sociology of education, social realism asserts that knowledge—while socially constructed—is objective and real (Wheelahan, 2023). Based on the seminal works of Émile Durkheim and Basil Bernstein, social realism establishes a theory of powerful knowledge that differentiates specialized, disciplinary knowledge from common-sense knowledge and everyday experience.

Developed by 'communities of enquirers' (Young & Muller, 2010, p. 14), disciplinary knowledge is powerful because it is 'specialised', 'context-independent', and 'systematically principled' (Young & Muller, 2013). It achieves objectivity through the use of various methodologies for generating and validating knowledge claims, employing concepts that 'are systematically related to each other in groups' (Young, 2014, p. 75). Furthermore, disciplinary knowledge is powerful because of the capabilities it grants to those who possess it. This knowledge provides us with 'more reliable explanations and new ways of thinking about the world' and 'a language for engaging in political, moral, and other kinds of debates' (Young, 2008, p. 14). The acquisition of this knowledge allows us to move beyond our specific experience and to 'envisage alternative and new possibilities' (Young & Muller, 2018, p. 245). It also empowers individuals to critically question both the knowledge itself and the authority upon which it is based, fostering a sense of freedom and excitement (Young, 2014).

With the concept of powerful knowledge and social realism, Young (2013) has boldly claimed to overcome the crisis in contemporary curriculum theory (noted above) by confronting the loss of the 'primary object', i.e. the neglect of knowledge taught and learned in school. Contemporary curriculum theory, he observes, has been built upon 'over-simplistic' social constructivism that reduces knowledge to interest, ideology, or standpoint and entails a fallacy of equating school academic knowledge with 'knowledge of the powerful', losing sight of the educational value and significance of 'powerful knowledge' (Young, 2007, 2008). He argues that curriculum scholars must employ as the essential point of departure the question, 'what do students have an entitlement to learn?', for constructing curriculum principles that 'maximize the chances that all pupils will have … access to the best knowledge' (Young, 2013, p. 115).

This vision of curriculum is encapsulated by what is called the 'Future 3' educational scenario, which focuses on providing all students with access to powerful disciplinary knowledge. It stands in sharp contrast to the 'Future 2' scenario, which is centrally concerned with the development of generic skills or competencies through constructivist teaching and learning, and to 'Future 1', which treats knowledge as given, absolute, and unchanging. It has been argued that this Future 3 curriculum carries immense educational potential and can enable us to confront the epistemic challenges of the post-truth age (Lambert et al., 2023; Parker, 2025).

Future 3 encapsulates how Young has engaged with questions concerning school subjects as educational enterprises—a radical turn away from school subjects as socio-political constructions he held in the 1970s.[1] The central purpose of a school subject, according to Young, is to provide students with access to powerful knowledge and take students 'beyond their experience in the most reliable ways we have' (Young, 2016, p. 189). Access to powerful knowledge is an 'entitlement' for all students, regardless of their socioeconomic status, race, and gender (Young, 2013). School subjects constitute the 'best way' for organizing the curriculum, each resulting from 'recontextualising' its parent academic discipline—that is, through selecting, sequencing, and pacing academic knowledge in view of the 'coherence' of the discipline and the constraints created by the developmental stages of students (Young, 2013, 2016).

It is important to note that although initially developed within the sociology of education, the concept of powerful knowledge resonates significantly among practitioners and researchers in subject education, notably in history and geography education. These practitioners and researchers have drawn on this concept and related ideas, such as Futures 1, 2, and 3, in their investigations into curriculum, teaching and learning in these subjects (e.g. Chapman, 2021; Counsell et al., 2016; Lambert, 2017). As revealed, this concept, alongside the three Futures, provides a foil for advocating a knowledge-rich (subject) curriculum—particularly in response to the global competency and outcomes movements—and for revitalizing subject-based teacher preparation and professional development, especially when compared to current generic models (e.g. Burn, 2021; Lambert, 2017; Lambert et al., 2023).

On the other hand, Young (2021) observed that for many years the concept of powerful knowledge has already been developed in the history education research community, in particular, in the work of Lee and Counsell, although the term itself is not used. The question of knowledge is treated not as an abstract theoretical matter, but as a practical challenge that teachers encounter daily in their professional lives. As he came to realize:

> . . . teachers needed to understand what acquiring subject knowledge meant as a pedagogic and professional issue as well as a theoretical issue if their students were to become what he referred to as 'historically literate' (Lee, 2011). It was 'becoming literate' in the broadest sense that history education researchers such as Counsell, building on the earlier work of Lee and his colleagues, demonstrated was a possibility for *all* students. This was what David Lambert and I were trying to express by the idea of 'powerful knowledge for all'. (p. 239)

For Young, the key takeaway from the example of history is that advancing the sociology of the curriculum relies just as much on subject-specific research into individual disciplines as it does on broader sociological theories of subject knowledge as 'powerful'.

The special issue

Foregrounding school subjects as educational constructions, this special issue seeks to further the conversation on powerful knowledge, school subjects, and the curriculum—initiated by Young and Muller—against the backdrop of the disappearance of knowledge and subject-related questions from the competency and outcome movements, the crisis in contemporary curriculum theory, and the epistemic crisis of the post-truth age. It draws

on perspectives from curriculum theory, didactics, and subject didactics or subject education. Central to this discussion are the following questions:

- What are the key purposes of school subjects beyond the transmission of disciplinary knowledge? What is the role and significance of knowledge?
- How should powerful knowledge be conceived in the curriculum? What constitutes the 'powers' of knowledge?
- How are school subjects conceptualized and constructed? What types of knowledge are included in the curriculum of a school subject?

Previous studies have shown that different school subjects and countries mediate powerful knowledge in different ways (Gericke et al., 2022; Hudson et al., 2023). However, key questions remain: What counts as powerful knowledge in different school subjects, and what kinds of powers do they mediate? This is an empirical issue that Gericke et al. (2018) and Deng (2021) have previously urged curriculum researchers to investigate. Accordingly, the questions posed above, along with other related questions, will be addressed from an international, comparative perspective on school subjects.

The core component of the special issue consists of four articles that examine questions regarding the purposes and content of four school subjects (geography, history, religious education, and biology) in national curricula. These articles are written by colleagues from Sweden, Finland, and England, all of whom are associated with the KOSS (Knowledge and Quality across School Subjects and Teacher Education) network. Led and administered by Karlstad University and funded by the Swedish Research Council, the network brings together three research groups from these countries to explore issues concerning knowledge building, school subjects, and their transformative potential, drawing on concepts such as 'powerful knowledge' and 'epistemic quality'.[2]

The issue also features two articles by colleagues not associated with the KOSS network. One examines curricular issues concerning the subject of business and management education in Poland, using the concept of powerful knowledge and the three future scenarios as an analytical lens. The other investigates the 'life and death' of Liberal Studies as a compulsory school subject in Hong Kong. All six articles rely on document analysis to systematically analyse national curriculum guidelines and related materials, addressing the above and related questions concerning knowledge, the nature and formation of school subjects, and the curriculum.

The six articles

In 'Reflecting on the powers, possibilities and constraints of geography curricula in England, Finland and Sweden', Hammond et al. examine how the geography curricula in the three countries conceptualize geographical knowledge using Lambert et al. (2015) threefold arrangement: deep, descriptive world knowledge; critical conceptual knowledge; and thinking about alternative futures. The analysis reveals that while the first type of knowledge is common across all three curricula, in the English curriculum this knowledge tends to be depicted as 'merely lists of knowledge to be learnt about the world' (p. 14) for transmission. The Finnish and Swedish curricula more explicitly include critical conceptual knowledge which, together with descriptive world knowledge, is seen as

important for the active and responsible citizenship and thinking about alternative futures related to climate change and sustainability. Hammond et al. suggest that the powers of geographical knowledge lie in enabling students to think critically, conceptually, and futuristically about real-world environmental and societal issues.

The second article, 'Complex outcomes of recontextualised history: comparing lower secondary national curricula in Sweden, England and Finland', examines the aims and content of school history in the national curricula of these countries. The theoretical perspectives include Oakeshott's distinction between history as understanding the past and as a tool for broader purposes, Chapman's history-education framework, and Biesta's three domains of educational goals. Khawaja et al. argue that the English curriculum focuses on acquiring knowledge of the past, understanding the discipline, and fostering agency and national identity, with an emphasis on a chronological national narrative. In a similar vein, the Swedish curriculum focuses on understanding the discipline and fostering historical consciousness and identity formation, incorporating both historical and non-historical elements. The Finnish curriculum, however, emphasizes understanding the discipline and developing citizenship and agency, with less focus on detailed historical knowledge and more on procedural knowledge. The authors conclude that these curricula embody different 'powers of knowledge' and suggest that these powers—relating to 'power-to'—manifest in terms of socialization, citizenship development, and agency formation.

In 'Powers of knowledge in secondary religious education curricula of Sweden, England and Finland', Niemelä et al. analyse the kinds of knowledge and abilities that secondary religious education curricula in there three countries aim to develop, using Young and Muller's theory of powerful knowledge as the primary framework. They find that the 'capabilities of ethics, values, and life questions' are prominently featured in both Finland and Sweden, but less so in England. The English curriculum emphasizes critical thinking and knowledge of authoritative groups, particularly from academia. In contrast, the Swedish curriculum highlights the development of intercultural competence and an understanding of societies, focusing on how different religious traditions express beliefs. The Finnish curriculum emphasizes knowledge of authoritative groups (religious communities) and underscores the importance of human rights and personal development. Furthermore, Niemelä et al. show that 'powers of knowledge' in religious education curricula lie in fostering critical thinking, intercultural competence, ethical reflection, and the ability to engage with diverse worldviews and values.

The fourth article, 'A framework for curricular analysis of powerful knowledge: comparing school-biology in England, Finland and Sweden', examines biological knowledge by comparing the biology curricula of the three countries. Using the concept of powerful knowledge as a key point of departure, Gericke et al. propose a framework for curricular analysis, exploring the purposes of school science (academic, civic, and humanistic) and different knowledge types (substantive, disciplinary, and personal/social/cultural practice), as well as the pedagogical and psychological aspects of content selection and organization. The study finds that the English curriculum emphasizes academic goals, focusing on substantive and disciplinary knowledge, with limited attention to real-world applications and pedagogical or psychological factors in content selection. In contrast, the Finnish curriculum seeks to achieve academic, civic, and humanistic goals, encompassing all three knowledge types, with content selection reflecting pedagogical considerations

and sociocultural applications. The Swedish curriculum addresses academic, civic, and some humanistic goals, integrating substantive, disciplinary, and sociocultural knowledge, with content selection supporting the application of knowledge in students' everyday and sociocultural contexts. The article highlights the 'powers' of knowledge in empowering students in practical, societal, and personal ways, reflecting varying educational purposes, and underscores the distinction between the curriculum and didactics traditions. The comparative curricular analysis successfully highlights differences between the biology curricula of the three countries, indicating the general applicability of the proposed framework.

The last two articles, although dealing with issues related to school subjects, are not connected to the KOSS network. In 'From entrepreneurship to business & management education', Brant and Kilar examine the recent shift in Poland's national curriculum from entrepreneurship education to a newly implemented compulsory subject in business and management. Using Young and Muller's concept of powerful knowledge and their *three Futures* framework, the authors assess whether the change constitutes a fundamental curriculum transformation or a more limited reform. They conclude that while the new subject introduces potential for improvement, it does not fundamentally reconfigure how business knowledge is conceptualized or taught. The shift is neither a regression to Future 1—marked by traditional, authoritative transmission of knowledge—nor a full evolution to Future 3, which emphasizes access to deep, disciplinary understanding. Instead, it aspires towards Future 3 but remains grounded in the characteristics of Future 2, with its emphasis on generic competencies and real-world application, lacking a strong epistemic structure.

In their article 'The life and death of Liberal Studies: explaining curriculum change in post-handover Hong Kong', Yan and Morris analyse the trajectory of Liberal Studies as a compulsory interdisciplinary subject in Hong Kong. Utilizing Cuban's framework of curriculum change, they illustrate how the subject emerged as both a product and victim of Hong Kong's evolving political and social landscape post-handover. Introduced in 2009 amidst educational reforms and influenced by global educational paradigms, Liberal Studies aimed to cultivate critical thinking and civic awareness among students. However, its eventual replacement by Citizenship and Social Development in 2021 was framed within a nationalist discourse emphasizing national security and patriotic education. The case of Liberal Studies underscores how school subjects are intricately intertwined with complex local and national politics, reflecting global trends while being shaped by them.

Two distinctive approaches to the formation of the national curriculum

A brief survey of the four articles related to the KOSS network highlights two distinctive ways of formulating the national curriculum. In England, the national curriculum—whether in geography, history, biology, or religious education—is structured primarily to deliver specialized academic knowledge and related skills. The content of each subject is selected from its parent discipline and related sources to serve this purpose, with little or no concern for pedagogical practice in the classroom. In contrast, Finland and Sweden adopt a more integrated approach, where the curriculum is designed not only to transmit academic knowledge but also to foster broader

educational goals such as citizenship development, identity formation, and the development of competencies and values. Accordingly, the content of a school subject is selected not only from academic disciplines but also from other sources, and is organized with these broader purposes in mind, often taking pedagogical concerns into account or supporting certain pedagogical approaches.

These differences in the formation of the national curriculum between England, on the one hand, and Finland and Sweden, on the other, reflect the distinct traditions of the English curriculum and Nordic didactics. The curriculum tradition—in which Herbert Spencer's 1860 question 'What knowledge is of most worth?' is still regarded as seminal—is largely driven by present question of 'what should they [students] know?' and prioritizes the transmission of academic knowledge to the younger generation (Hamilton, 1999, p. 136). It separates curriculum content from pedagogy. In this tradition how to develop a national curriculum in response to social and cultural needs or problems has not been a primary preoccupation for curriculum theorists given the relative short history of the national curriculum in England (Moon, 2004; Reid, 1997). In contrast, didactics in Nordic countries is centrally concerned with—and animated by—the future-oriented question of 'what should they [students] become?' (Hamilton, 1999, p. 136). Accordingly, the aims of the curriculum are not only to transmit knowledge but also to foster personal formation, citizenship development, social development, and other educational goals, with content selected for these purposes and in support of teaching and learning in the classroom. Within the Nordic didactic tradition, which has a much longer history of a national curriculum, the development of a national curriculum in the form of curriculum guidelines and syllabuses is an essential topic which has long been investigated and theorized by didactics and curriculum scholars (Gundem, 2000; Hamilton, 1999).

We shall now return to address the key questions of this special issues introduced above. Based on the six articles, three claims can be made regarding school subjects, powerful knowledge, and curriculum.

School subjects as 'uniquely purpose-built educational enterprises'

Taken together, the set of articles reaffirms the proposition that school subjects are 'uniquely purpose-built educational enterprises' (Deng & Luke, 2008) as stated at the outset. They are designed to fulfil multiple goals—academic, social, economic, and personal. School subjects are expected not only to impart academic knowledge but also to foster students' critical thinking, ethical reasoning, and civic responsibility. In addition, they aim to promote personal development and prepare students to become informed, responsible individuals. These diverse purposes of school subjects highlight a broader and more significant role than simply transmitting specialized, disciplinary knowledge as emphasized by Young and Muller. They also attest to what John Meyer refers to as shared 'consensual assumptions' about the vital role of schooling as a public institution—as a vehicle for the intergenerational transmission of culture, human development, social progress, and the promotion of equality (Meyer, 1992). However, as seen in this special issue, these goals can carry different focus or weight across school subjects and countries, reflecting the varying traditions of curriculum and didactics (Gericke et al., this issue; Khawaja et al., this issue; Niemelä et al., this issue).

These various goals determine that school subjects can consist of various kinds of knowledge: factual or substantive knowledge (essential facts and information fundamental to understanding a subject), disciplinary knowledge (the specialized concepts, principles, and methods unique to a specific academic discipline that shape its framework and inquiry), practical knowledge (which enables the application of knowledge to daily life and socio-cultural contexts), and metacognitive knowledge (which enables students to reflect on and regulate their learning processes, enhancing their capacity to adapt and apply knowledge across contexts (Khawaja et al., this issue; Niemelä et al., this issue; Gericke et al., this issue; Brant & Kilar, this issue). Through curriculum making, these types of knowledges are selected and organized to achieve various educational goals and support teaching and learning in the classroom (Deng, 2009). To cite Deng and Luke (2008) fully, school subjects 'are uniquely purpose-built educational enterprises, designed with and through an educational imagination toward educative ends' (p. 83).

To reaffirm the idea of school subjects as 'uniquely purpose-built educational enterprises' is to challenge contemporary curriculum theory and discourse which construe school subjects as nothing more than socio-political constructions as noted earlier. What postmodern and post-structural curriculum theorists fail to acknowledge are the educational goals or functions (academic, social, civic, personal) that school subjects serve within the curriculum. It also counters the global competency and outcome movements which, by replacing the curriculum task of content selection and organization with the development of competency and outcomes frameworks, render school subjects redundant and undermine the role of knowledge, as indicated above. As the four KOSS related articles testify, school subjects remain the primary coordinating categories within the national curriculum across England, Sweden, and Finland. A school subject cannot be reduced to a list of competency outcomes; it constitutes 'a course of study' – 'a trajectory for our students to set out upon' – which is directed towards broad educational goals (Biesta, 2022, p. 156). The formation of a school subject must address what these goals are, what constitutes the content, and how content is selected and organized into a school subject—questions that form the core issue of subject didactics research and inquiry (Deng, 2024). What the global competency and outcome movements fail to recognize is the importance of these broad educational purposes and the central role of disciplinary knowledge in achieving them, including the development of 21st-century capabilities, through the creative and purposeful construction of school subjects, as will be elaborated below.

The 'powers' of powerful knowledge

A distinctive feature of powerful knowledge is reiterated across the five articles (Hammond et al., this issue; Brant & Kilar, this issue; Niemelä et al., this issue; Khawaja et al., this issue; Gericke et al., this issue). Powerful knowledge refers to specialized knowledge developed by expert communities within a specific discipline or field and validated through rigorous, systematic methodologies. It is context-independent and transcends everyday experience, enabling individuals to critically engage with complex issues and to challenge both the knowledge itself and the authority behind it.

These five articles, in varying ways, further elaborate another feature of powerful knowledge—pertaining to the powers or 'power to' of knowledge—an important

characteristic that has not received sufficient attention in the literature. As highlighted in these articles, the acquisition of powerful knowledge enables students to develop the ability to act, think critically, and engage meaningfully with the world. Whether in geography, religious education, history or business education, this knowledge equips students with the intellectual tools to challenge existing ideas, propose alternatives, and engage in societal, political, and ethical discussions, thereby empowering them to shape the world around them. In other words, school subjects, derived from or informed by academic disciplines, can contribute to the development of a set of powers as identified by Maude (2017) based on Young and Muller's theory of powerful knowledge—in terms of being able to:

- discover new ways of thinking
- better explain and understand the natural and social worlds
- think about alternative futures and what they could do to influence them
- have some power over their own knowledge
- be able to engage in current debates of significance, and
- go beyond the limits of their personal experience. (p. 30)

Calling attention to these two vital features of powerful knowledge—what makes knowledge powerful and the powers this knowledge gives to those who possess it—challenges the relativistic, exclusively political stance towards knowledge endorsed in contemporary curriculum theory. As noted earlier, this field has been fundamentally shaped by intellectual traditions such as neo-Marxism, postmodernism, poststructuralism, posthumanism, and other related perspectives. Knowledge is not 'arbitrarily' constructed and cannot be reduced solely to the standpoint or experience of its producers. Although socially constructed, knowledge is objective and real because its development is grounded in the real world, employing distinctive 'codes' and 'practices' in the creation and rigorous verification of knowledge within highly specialized research communities (Young, 2008; Young & Muller, 2013). Importantly, these codes and practices are also visible in school subjects that relate to their parent disciplines (Gericke et al., 2018), although the transformation of a discipline into a school subject also incorporates elements that differ from those in the original discipline (Hudson et al., 2023). Furthermore, the powers of specialized, disciplinary knowledge cannot be reduced to mere 'tyrannical' powers—that is, to 'power-over' (Muller, 2023), or powers to dominate, control, and suppress subordinate, disadvantaged, and minority groups—as conceived and exclusively emphasized by neo-Marxist, postmodern, and post-structural theorists, or viewed solely in terms of 'knowledge of the powerful'.

It is both crucial and timely to highlight the educational and transformative powers that disciplinary knowledge possesses in education and curriculum. As Lambert et al. (2023) observed, 'powerful knowledge is … wrapped up in the potential of specialized disciplinary knowledge to enable students (in Bernstein's memorable phrase) "[…] to think the unthinkable and the not yet thought"' (p. 157). To grasp this concept is to appreciate the 'profundity' of school subjects that are based on or informed by academic disciplines in educational contexts. After all, school subjects are embodiments of human wisdom, ways of thinking, and ways of interacting with the world (Dewey, 1902/1990). They hold immense potential for cultivating capabilities such as communication, critical

thinking, creativity, problem-solving, learning to learn, and intercultural competence. To actualize this potential, a school subject must be constructed in a way that maximizes the contribution of disciplinary knowledge to the development of these capabilities and supports curriculum making in classrooms, thereby unlocking and realizing the potential of knowledge (for further elaboration, see Deng, 2022)—a point to which we will return below.

Powerful knowledge, school subjects and the post-truth age

To argue for the crucial role of disciplinary knowledge in school subjects within the curriculum is to confront the epistemic crisis of the post-truth age—a societal condition in which objective facts, particularly specialized and scientific knowledge, are increasingly distrusted and highly politicized, as noted earlier. In this light, what has been called 'radical uncertainty' (Emmot, 2022)—including calls to decolonize knowledge and the emergence of post-truth populist politics—further intensifies this crisis. In this context, 'knowledge and truth are a matter of individual perspectives "on" the world, with no outside arbiter' (McIntyre, 2018, p. 10; also Lewandowsky et al., 2017). The rise of misinformation and the deliberate manipulation of facts in public discourse further exacerbate this crisis, undermining trust in institutions that once upheld objective knowledge.

The concept of powerful knowledge, along with the social realism that underpins it, reaffirms the continued relevance of a curriculum grounded in specialized, developed fields of knowledge—school subjects. As German educational theorist Ewald Terhart (2023) observed:

> In the eyes of many observers, he [Michael Young] became a fervent defender of the legitimate and liberating, even emancipatory, claim and potential of the content and subject matter prescribed by curricula and taught at schools, the 'things' of and at school (Young, 2008). He states that best knowledge, that 'powerful knowledge', is important and [sic] liberating for all. Students have the right to be confronted with the genuine claim of these 'things'; precisely and only through this does liberating education unfold itself, and in so doing, may develop the students' capacities. (p. 132)

More specifically, school subjects grounded in powerful knowledge provide 'firm foundations for young people to move on in their life beyond school' (Yates, 2022, p. 60). They offer students reliable frameworks for understanding complex issues, in contrast to the emotional appeals and misinformation that often dominate public discourse. By emphasizing subjects rooted in expert knowledge—whether in biology, history, or geography—schools equip students with the tools to critically assess information, challenge misleading narratives, and engage thoughtfully in societal debates, as highlighted by the articles in this special issue.

Furthermore, by renewing the focus on specialized, disciplinary knowledge, school subjects introduce students to the unique ways of thinking, reasoning, and inquiring that are specific to each discipline—whether historical interpretation, scientific inquiry, or geographical analysis—thereby fostering disciplinary habits of mind. Such capabilities are essential not only for academic success but also for thoughtful and responsible participation in democratic and knowledge-based

societies, as suggested by Hammond et al. (this issue), Brant & Kilar (this issue), Khawaja et al. (this issue), and Gericke et al. (this issue). These school subjects provide students with opportunities 'to think about how we know what we claim to know' (Lambert, 2025) and help them 'become more intellectually prepared to grasp the epochal questions that we all face' (Lambert et al., 2024). Initiation into school subjects based on disciplinary knowledge, Pring (1999) argues, 'gives a certain political independence, the power to resist the persuasions and propaganda of those with political power' (p. 74). More research is needed in this area to explore how disciplinary knowledge in school subjects equips students for intellectual autonomy and the capacity to engage thoughtfully and critically in democratic processes.

So much for the educational significance and potential of school subjects within the curriculum informed by the concept of powerful knowledge. We must not forget that school subjects are 'the most quintessential of social and political constructions' (Goodson & Marsh, 1996, p. 1), and therefore, school subjects must always be understood in relation to the larger social, political, and ideological context in which they are developed and evolve. In this regard, the piece by Yin and Morris (this issue) is particularly useful as it illustrates the 'life and death' of a school subject (Liberal Studies)—a construction intrinsically intertwined with local and national politics and power struggles. Likewise, Hammond et al. (this issue) remind us that 'education is always political, and the construction and representation of geography as a school subject is complex and debated' (p. 2). The understanding of school subjects thus cannot be divorced from the broader social, political, and cultural contexts that influence their development and that provide them with form and meaning (Apple, 2004; Goodson & Marsh, 1996). While acknowledging these social and political issues, in this special issue we foreground school subjects as purposeful educational constructions because this notion calls for fundamental curriculum questions—such as 'What is education for?', 'What knowledge should be taught?', and 'How is knowledge selected and organised into the content of a school subject?'—questions that tend to be overlooked but are at the heart of curriculum theory and practice directed towards educational advancement.

Notes

1. This conception of school subjects was associated with the new sociology of education (NSOE) which Young and his colleagues helped to establish, as signified by the landmark work *Knowledge and control*. It is posited that school subjects are socio-political constructions inextricably intertwined with the needs, interests, and ideologies of those who hold power: 'how a society selects, classifies, distributes, transmits, and evaluates the educational knowledge it considers to be public reflects both the distribution of power and the principles of social Control' (Bernstein, 1971; also, p. 85; Young, 1971).
2. See more details at the Karlstad University website: https://www.kau.se/en/rose/external-relations/knowledge-and-quality-across-school-subjects-and- teacher-education-koss.

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