Foreword

Crossing over Subject Boundaries towards New Horizons: Recent Trends in Research on Crosscurricular Teaching from the Nofa 9 Conference (2024)

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Introduction

The Nofa 9 conference was held in May 2023 at Åbo Akademi University in Vaasa, Finland. The conference's main theme was education, knowledge and *Bildung* in a global world, and participants were invited to discuss the theme from the viewpoints of different school subjects. One viewpoint was crosscurricular teaching, which paved the way for this conference publication. Crosscurricular teaching (CCT henceforth) refers to teaching approaches across and beyond individual school subjects that promote students' overall development and learning. CCT continues to be in high demand due to societal challenges, such as information overload, threats against democracy and climate change. To meet the challenges and prepare students for life in increasingly diverse societies, they need to acquire knowledge and competences not sufficiently supported by the standard curriculum. Instead, this calls for collaboration between different school subjects and rethinking teaching and learning contexts (cf. Mård & Klausen, 2023).

CCT is not a static concept; it can be realised in several ways by different levels of subject integration. Thus, it offers practitioners opportunities to include subject didactics and general approaches according to what is relevant in any teaching situation. In this conference publication, we invited authors to explo-

re crosscurricular topics from various perspectives. Supportive questions were: How do knowledge and generic competencies relate to school subjects? What knowledge and skills will the students need for future challenges in a global world? In what ways can schools and classrooms be(come) sites for the processes of *Bildung*? How can such processes be realised by combining different school subjects, and how can teachers and students work with topics related to an open and undefined future?

The conference publication includes five articles on different topics. We will here discuss the contributions of the articles with the help of a didactic model for crosscurricular teaching we developed in earlier works (Mård & Hilli, 2020; 2023; see Figure 1). It is based on general didactics and provides a *Bildung*-oriented approach to crosscurricular teaching. It includes teaching-

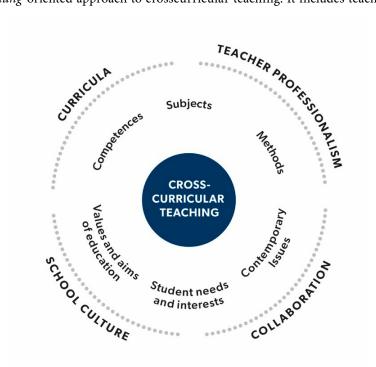


Figure 1. A didactic model for crosscurricular teaching (Mård & Hilli, 2023).

related factors such as educational values and aims, student needs and interests, contemporary issues, methods, subjects, and competences. On a school level, the model includes organisational factors that directly influence teaching, such as the curriculum, school culture, teacher professionalism, and different forms of collaboration.

Since the model is hermeneutic, the two levels (teaching and organisation) and the many dimensions affect each other. This becomes obvious as we discuss the articles' different takes on subjects and crosscurricular teaching. However, the model is extensive, and it is impossible (perhaps even unnecessary) to cover all factors when considering CCT in specific contexts. In this editorial, we focus on methods and collaboration related to other dimensions, such as curricula and students' values and interests.

Wolfgang Klafki's (2001) ideas of *Bildung* are implicit in the model (Mård & Hilli, 2020), indicating that education aims for students to become independent and critical thinkers but also empowered to identify and address societal issues. This means that students need to understand the cultural and political contexts they are part of and be able to critique and change them. Otherwise, education merely becomes a reproduction of past values or systems rather than an open invitation to transform society. In short, *Bildung* can be understood as a movement between a person's past experiences and culture(s) while understanding new perspectives, metaphorically speaking, by widening their horizons.

For Klafki (2001), key problems (e.g., global hunger, war) are important in teaching because they move from individual to social and global aspects. This is easily related to crosscurricular teaching, where joint themes or problems can be the focus for subject integration. We have added another layer to Klafki's ideas of *Bildung* by studying the professionality of teachers' crosscurricular collaboration (Mård & Hilli, 2023). To us, profound teacher collaboration ideally leads to collective processes of *Bildung* because teachers move from past experiences and attitudes to CCT towards joint visions, engagement, and new teaching practices. This may support meaningful student learning, collaborative school cultures, and professional development among faculty members who can negotiate the curriculum through different subjects, methods, and

aims. With this in mind, we will now discuss the five articles through teaching (methods, students) and organisational (collaboration) factors of the model.

Teaching factors

Crosscurricular teaching methods for involving and engaging students and teachers

Language-sensitive teaching is a crosscurricular *method*, aiming to support students' literacy competences across subjects. In their study, Vuola and Nousiainen (2024) show how learning to use the language of subjects intertwines with the central goals in subject education, in this case, science education. Teachers' language awareness and skills are important to develop during teacher education, to prepare them to act as language teachers of their subjects. Through analyses of pre-service physics teachers' written reports, the authors suggest that they have implicit knowledge of the language of science, but explicit teacher training is needed to help them develop their language skills and prepare for language-sensitive teaching.

The idea of language-sensitive teaching was similarly a purpose of the cross-curricular project reported by Juganson et al. (2024), relating to the theme of democracy as an overarching value of education. In the project, students' writing of essays was supported by providing them with different writing strategies and awareness of their use of language. The authors argue that writing is an effective tool for students to acquire content knowledge of the subjects at hand. However, as Vuola and Nousiainen (2024) emphasize, this presupposes teachers who are aware of the importance of teaching that supports the development of language and literacy alongside content knowledge and subject-specific skills. Forsman et al. (2023) define this as recognizing language as a means of learning.

In their narrative study, Törnegren and Deldén (2024) introduce the idea of meaning-making stories as a crosscurricular method with potential to include students' lifeworld-experiences in the classroom. Using social studies teaching as a platform for study, the narrative approach opens student experiences and interests that connect to new methods (role-playing, drama); for example,

when teaching about hunters and gatherers, the students were asked to spend time in the forest and hunt themselves. In the analysis, this became one way to bridge the student's lived experiences of hunting and their relationship to nature. However, the authors highlight the importance of teachers challenging students' preconceived notions to support critical thinking and reflective capabilities. They suggest that narrative awareness of both teachers and students can enhance increased connectivity between teachers' and students' stories in the classroom, making teaching more relevant and meaningful in considering students' needs and interests.

Organisational factors

Crosscurricular collaboration between subjects and different stakeholders

Collaboration between subjects can become intersections of new approaches that take on contemporary issues like sustainability and foster climate change literacy, as Sjöström et al. (2024) point out in their comparative discussion of how seven school subjects can be understood with the help of Klafki's material and formal *Bildung*. Drawing on the different subjects' epistemic particularities, they can support educating new generations about climate change. Rather than seeing subject-didactic issues with cross-curricular teaching, the authors welcome knowledge contributions (e.g., different literacies) from the seven subjects included by focusing on where they intersect in the curriculum and what the subjects can specifically contribute.

Collaboration between subject teachers can create meaningful learning opportunities and promote students' attitudes towards different school subjects, as Juganson et al. (2024) argue for in their study. The authors examined students' attitudes towards religion when integrated with geography in the crosscurricular project on democracy and included language development teaching. The results indicate that crosscurricular teaching positively affected students' democracy skills, understanding of countries, cultures and religions, and writing skills. Accordingly, the authors discern an increased interest in religion, compared to previous experiences of teaching the subjects separately. As becomes evident in both studies on subject and subject teacher collaboration (Juganson et al., 2024; Sjöström et al., 2024), a prerequisite for collaboration is curriculum

knowledge (see Niemelä & Tirri, 2018), meaning that teachers need insights into the curricular content and methods of other subjects, to identify connections and intersections for crosscurricular coordination.

Collaboration between the school and other stakeholders can become meaning-ful as Kairavuori and Niinistö (2024) explore in their study where the Finnish art museum Ateneum has, together with teachers and researchers, developed a digital program for schools. The distances in Finland make it almost impossible for all pupils to visit Helsinki, where Ateneum is located. The project My Museum invites pupils to learn about and create art by offering guided tours and workshops during digital visits. The project becomes a meaningful collaboration between the curriculum and an outside stakeholder because pupils meet art experts while creating art in the classroom with their teachers. Depending on how they approach the digital material and workshops, other subjects would likely adapt to the museum's materials differently. Similarly, Törnegren and Deldén (2024) show how collaboration with external experts and authentic environments are important crosscurricular aspects to support meaningful and holistic learning.

Conclusions

The five articles of the conference publication exemplify various ways of working within one subject or integrating several subjects while at the same time highlighting methods or ideas applicable in crosscurricular teaching environments. This accentuates the relationship between disciplinary knowledge and the aim of education to foster independent and critical thinking (cf. Klafki, 2001). As Schaffar and Wolff (2024) point out, CCT enables sound factual knowledge from diverse subjects while concurrently enabling approaches open to students critically reviewing and questioning current knowledge, and collaboratively searching for knowledge with peers, teachers, and external stakeholders. Similarly, Klausen and Mård (2023) emphasize the mutual relation of subject-specific activities and CCT. Since *Bildung* requires immersion and appropriation, concentrating on fostering specific skills and acquiring specialized knowledge can be necessary. However, this should always be done with an implicit concern for students' overall development.

The articles suggest that crosscurricular teaching and subject collaborations can offer teachers and students new and meaningful ways to work with the curriculum. Since there are many ways to conceptualize CCT, it can mean confusing and frustrating processes unless there is time for negotiating joint visions and structures (cf. Mård & Hilli, 2023). Still, it can allow students, teachers, and other stakeholders to collaborate on meaningful and contemporary topics. We consider these collective *Bildung* processes where teachers gain new perspectives in negotiations and discussions. They are challenged to consider new ways of learning and teaching when meeting different subjects, experts, and methods while they widen their horizons together.

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