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Life skills for ‘real life’: How critical thinking is contextualised across vocational programmes

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ABSTRACT

Background: This article presents an analysis of how critical thinking is contextualised in everyday teaching in three vocational education and training (VET) programmes: Vehicle and transport, Restaurant and management, and Health and social care.

Purpose: The main question addressed is: What knowledge discourses permeate different VET-contexts, and hence what kinds of opportunities for critical thinking do they offer students?

Method: The qualitative analysis draws on data from a four-year ethnographic project exploring learning processes that can be characterised as civic education in Swedish vocational education. The analysis presented here used data collected during 85 days of observations of teaching in six VET classes, interviews with 81 students and 10 teachers, and collected teaching material. To explore why some contextualisations provided more opportunities and encouragement for critical thinking than others, we applied Bernsteinian concepts of ‘horizontal and vertical knowledge discourses’ and ‘discursive gaps’.

Findings and conclusions: Overall, teaching that was observed focused primarily on ‘doing’. However, in all three programmes, the analysis identified that there were also situations that touched upon critical thinking. Three major themes were identified: critical thinking related to ‘Personal experiences’, ‘The other(s)’ and ‘Wider perspectives’. It appeared that the frequency and nature of such situations varied with the knowledge discourses permeating the programme. Furthermore, we discuss the manifestations of critical thinking in relation to the wider context of what Bernstein refers to as pedagogic rights; individual enhancement, social inclusion and development of the competence and confidence to participate in political processes.

Introduction

In European educational policy, ‘critical thinking’ is one of four ‘civic competence areas’ that educational institutions and programmes should promote (European Commission/EACEA/Eurydice 2017). Although interpreted in multiple and sometimes contradictory ways, critical thinking is commonly described, in line with frameworks of ‘21st century skills’ (e.g. Ananiadou and Claro 2009; Gordon et al. 2009), as an individual analytical and civic
competence that includes, among other components, ‘reasoning and analysis skills’, ‘questioning’, ‘multi-perspectivity’ and ‘understanding the present world’ (European Commission/EACEA/Eurydice 2017, 55). As such, critical thinking represents an empowering and emancipative civic competence that is crucial for active and democratic participation in society. Competence in critical thinking enables the problematisation of current conditions in society, a critical voice in society, and hence participation in discussions in arenas (e.g. political, trade union, and work settings) that set conditions for everyday life. Therefore, it is widely held that critical thinking should not be taught purely as a theoretical topic; rather, it must also be applied: i.e. students need to learn critical thinking by practising it.

This study focuses on the implementation of critical thinking at the classroom level, rather than on theoretical exploration of the concept of critical thinking. We direct our interest towards the implementation of critical thinking in vocational education and training (VET), assuming that teaching of critical thinking is likely to be particularly challenging in education where practical skills traditionally have been the core learning objective (Lindberg 2003). Still, the division between vocational and academic/theoretical study is not, in itself, a straightforward one, and learning ‘the doings’ of a profession also includes the development of reasoning, analysing and questioning skills. Another argument for studying VET contexts in this manner is that research on teaching and learning of civic competences in VET is sparse, and existing studies almost exclusively focus on curriculum level and/or academic/theoretical subjects/classes, rather than on vocational subjects/classes (e.g. Ledman 2015; Nylund 2013). Something important that emerges in previous studies, and which we want to investigate further in vocational subjects/classes, is that what a specific area of teaching content, such as critical thinking, actually ‘becomes’ in classroom practice heavily depends on the knowledge tradition or knowledge discourse that permeates the particular educational context.

Drawing on some selected components in the European commission’s report on citizenship education in Europe (European Commission/EACEA/Eurydice 2017, 55) of how the competence area critical thinking is framed, in this study we consider critical thinking as an ability to reflect, analyse and question, and to see things from different perspectives. As such, it is an important competence for active and democratic participation in society. Critical thinking can help individuals to see and problematise social structures and their own position in these, including questioning social orders and taking action in order to make a change. With this understanding of critical thinking in mind, the aim of the study was to gain knowledge about how critical thinking is contextualised in everyday teaching practices in vocational subjects in vocational education and training (VET). Sweden provides an interesting setting for such an investigation since Sweden and other Nordic countries tend to prioritise development of critical thinking relatively strongly, as part of efforts to prepare students to become active, critical workers and citizens (Fejes, Nylund, and Wallin 2018; Hoskins, Saisana, and Villalba 2015). However, analyses of VET curricula have shown that the attention paid to critical thinking varies substantially among programmes (Arensmeier 2018; Nylund, Rosvall, and Ledman 2017; Ledman, Rosvall, and Nylund 2018). Hence, an important presumption for our study is that specific educational programmes are associated with specific contexts that set the frameworks, opportunities and constraints for the development of students’ critical thinking. We focus on vocational subjects in three VET contexts: The Vehicle and transport, Restaurant and management (hereafter Restaurant) and the Health and social care programmes. The main question addressed is: What
knowledge discourses permeate these VET contexts – and, hence, what kinds of opportunities for critical thinking do they offer the students?

Before describing the theoretical framework, methodological aspects and findings of the study, we provide some information about the Swedish context, including the organisation and content of upper-secondary education in Sweden, and how critical thinking is treated in Swedish curricula. We also briefly discuss traditional associations between certain groups of students and vocational programmes, both generally and specifically.

The Swedish VET context

In Sweden, since 2011 there have been three types of upper-secondary school programmes: five introductory programmes,¹ six programmes preparing students for higher education and 12 vocational programmes. In all programmes, citizenship education and efforts to develop critical thinking are included in all subjects, both academic and vocational.² The curricula state that young people should be offered opportunities to acquire knowledge and skills that prepare them for life as active participants in the construction of society and their own lives. ‘Critical thinking’ is first mentioned in the first section, entitled ‘Fundamental values and tasks of the school’, which states that: ‘students should develop their ability to think critically, examine facts and relationships, and appreciate the consequences of different alternatives’ (Swedish National Agency of Education 2011a, 5). Critical thinking is mentioned again in the second section entitled ‘Overall goals and guidelines’, which states that school shall develop the students’ ability to use their knowledge as a tool to ‘reflect over their experiences and their individual ways of learning [and] critically examine and assess statements and relationships’ (Swedish National Agency of Education 2011a, 8).³

Goals that touch upon critical thinking are also formulated in relation to specific programmes, as illustrated by the following examples. In the Health and social care programme, students should ‘develop the ability to critically examine established routines, and be able to propose changes that lead to greater quality in the area’ (Swedish National Agency of Education 2011b, 188). In the Vehicle and transport programme, students should have ‘the opportunity to discuss and reflect on their own learning based on different tasks, and through this develop an understanding of how they practise their profession, and of the profession as a whole’ (Swedish National Agency of Education 2011b, 99). Curricula for the Restaurant programme state that the education ‘should prepare students for further learning in vocational life and develop their ability to see and understand their own role in the business, and to discuss and reflect on their own learning on the basis of different tasks’ (Swedish National Agency of Education 2011b, 165). Furthermore, ‘issues concerning the working environment and work organisation should have a central place in the education in order to prevent occupational injuries and promote good health’ (Swedish National Agency of Education 2011b, 165).⁴

Swedish VET teacher training consists of a 90-credit teacher programme provided by higher education institutions. To attend the programme, the applicant must have substantial professional experience. The programme contains courses that address general educational issues such as epistemology, didactics, ethics and values. It also includes work-place learning. In terms of the students, those recruited for Swedish VET programmes generally have lower socio-economic status and lower previous academic achievements or qualifications than peers recruited for the programmes providing
preparation for higher education (Swedish National Agency of Education 2016; see also Broady and Börjesson 2008; Sandell 2007). However, they are not a homogenous group; statistics and recent studies show that the population of VET students is diverse in terms of achievement and learning ability (Swedish National Agency of Education 2016; see also Eiríksdóttir and Rosvall 2019). Furthermore, as in many other European countries (e.g. Hadjar and Aeschlimann 2015), there are gendered patterns in students’ choices of programmes, including VET programmes. While some programmes traditionally attract both boys and girls, e.g. the Restaurant programme, some VET programmes have traditionally attracted more boys or girls. For example, the Construction and Vehicle and transport programmes are traditionally male-dominated, whereas the Health and social care and Children and leisure programmes are usually female-dominated (Lundahl 2011). Previous studies have also shown that the settings and practices of vocational education programmes traditionally designed for men are generally more workplace-like and less academic (based, for example, in vehicle workshops or construction sites) than equivalents for women, which are generally set in ordinary classrooms with ordinary textbooks (Hjelmér, Lappalainen, and Rosvall 2014).

**Theoretical framework**

A basic assumption underlying this study is that different educational programmes constitute specific contexts that set the frameworks for the development of students’ critical thinking. Thus, the same general school content can be contextualised in different ways, which influences the knowledge that students encounter in the classroom and the roles they are prepared for as workers and citizens (Apple 2004; Davies 2015; Nylund 2013; Nylund and Rosvall 2016; Shay 2013; Wheelahan 2010). For example, the same school content can either promote or constrain critical thinking, depending on the frequencies and ways that issues that enable and stimulate such thinking are raised and handled. Although the analysis is essentially inductive, it rests on several theoretical concepts to facilitate identification, interpretation and discussion of critical thinking in different contexts. We draw particularly on Bernstein’s (2000) idea of ‘discursive gaps’, and, to scrutinise the kinds of gaps that occur in different contexts, we use the concepts ‘horizontal’ and ‘vertical’ discourse. Following Bernstein, ‘knowledges’ that are relevant in everyday, local contexts and segmentally connected, are regarded as having a horizontal organisation:

[..] in the case of horizontal discourse, its ‘knowledges’, competences and literacies are segmental. They are contextually specific and ‘context dependent’, embedded in on-going practices, usually with strong affective loading, and directed towards specific, immediate goals, highly relevant to the acquirer in the context of his/her life (Bernstein 1999, 161).

Thus, ‘horizontal discourse’ allows an individual to do and reflect on things in specific contexts and to interact with the material world. Because of its close relation to specific contexts, knowledge in horizontal discourses is not easily transferable to other contexts. The kind(s) of critical thinking that can occur in horizontal knowledge discourses is an empirical issue to which we return. However, due to a lack of conceptual or more abstract knowledge in such discourse, the learning is likely to be rather context-bound and, thus, unlikely to be particularly helpful for understanding the present world more broadly.
In contrast, knowledge in ‘vertical discourse’ is less segmental, more abstract, sequenced and conceptual, and based on disciplinary systems of meaning. Thus, it is more general and can be used in other, broader contexts, and can change perceptions of events and processes. Hence, knowledge that is contextualised in a vertical discourse (and contains various elements including abstract and conceptual elements) is not tied to the material and obvious everyday knowledge and practices. Instead, a ‘discursive gap’ appears between the material and immaterial in vertical discourses that enables alternative ways of thinking, thereby providing individuals with the ability to question norms and taken-for-granted states of human affairs, and visualise alternative arrangements (Bernstein 2000). Therefore, a vertical discourse appears more likely to open opportunities for critical thinking in terms of, for example, ‘multi-perspectivity’ and ‘understanding the present world’.

In this way, we find the concepts of ‘discursive gaps’, ‘horizontal discourse’ and ‘vertical discourse’ valuable for scrutinising the contextualisations of teaching contents, and discussing to what extent they open opportunities for critical thinking. However, we assign somewhat less importance to the role of conceptual knowledge in the creation of discursive gaps than Bernstein, at least in our understanding of his writings. In our analysis, we regard a discursive gap as a disconnection that may appear when educational content is perspectivised, i.e. when another perspective is added and shifts it. Such shifts may not necessarily be between context-dependent empirical cases and context-independent conceptual knowledge. Moreover, as our analysis shows, perspectivising educational content can mean quite different things in practice.

We also discuss manifestations of critical thinking in relation to the wider context of crucial civic competences for enacting citizenship; particularly to what Bernstein refers to as ‘pedagogic rights’ (Bernstein 2000, xx). These are the rights: ‘to the means of critical understanding and to new possibilities’, ‘to be included, socially, intellectually, culturally and personally’, and ‘to participate in procedures whereby order is constructed, maintained and changed’ (Bernstein 2000, xx-xxi). For convenience, these rights are, respectively, referred to here as the rights to individual enhancement, social inclusion and political participation. According to Bernstein, these rights operate on different levels, and education should be organised and practised in a manner that provides conditions that foster these rights. Essentially, it is important to ensure that students develop confidence at an individual level, belonging at a group level, and ability to participate in civic discussion and action at a political level, according to a model based on Bernsteinian ideas presented by McLean, Abbas, and Ashwin (2012).

Thus, our analysis is inspired by the ideas of ‘discursive gaps’ and that critical thinking connects to central individual needs and citizenship-related rights, including individual enhancement, social inclusion, and the competence and confidence to participate politically. To explore discursive gaps empirically we use the concepts ‘horizontal discourse’ and ‘vertical discourse’. However, these concepts have not been deductive and definite starting points for our analysis. Rather, our aims have been to explore what critical thinking actually develops in the three focal contexts, and if these concepts can contribute to understandings of why some contextualisations provide more opportunities for critical thinking than others.

**Methodology**

The analysis draws on data from an ethnographic project about civic education in Swedish vocational education, focusing on the Vehicle and transport, Restaurant, and Health and
social care programmes (for previous publications based on the project, see Nylund, Rosvall, and Ledman 2017; Ledman, Rosvall, and Nylund 2018; Rosvall et al. 2018). The set of programmes included in the project was intended to capture the diversity of VET programmes, in terms, among other things, of the following variables: vocational sectors, students’ gender ratio, and proportion of students from immigrant backgrounds.5

Data collection
For the analysis presented here, we used data collected during the first year of the project. The data included 85 field days of classroom observations in six Swedish VET classes (two Vehicle and transport classes, two Restaurant classes and two Health and social care classes) in year one of the students’ upper-secondary education (student age range 15–16 years old), interviews with 81 students and 10 teachers, and various teaching materials. The six classes were situated in five schools, i.e. all classes we observed except two were in different schools. All four researchers participated in data collection, carrying out ethnographic fieldwork in one or two classes each. We did observations for full or half schooldays, taking field-notes during the classes. All interviews were conducted in school during schooltime and audio recorded. Teachers were interviewed individually, and students in pairs/small groups of three/individually, depending on what they preferred.

Ethical considerations
During the planning, setting up and implementation of the study, we carefully followed the guidelines of the Swedish Research Council (2019). The participants were informed about the study verbally by researchers in person and given extensive written information, and then given time to consider whether they would accept/decline participation. The information focused on the scope of the study and methods, including details about the length of the study, how extensive the observations would be and the kind of interviews we planned to carry out. They were also informed about that they were free to withdraw at any time during the study, and that their participation would be confidential. After oral approval by individual participants, the study was conducted according to the agreed methods. Personal information and results related to individual participants were kept confidential within the research group during the whole research process. All names stated in the results section (personal names and the names of the schools, cities, etc.) are pseudonyms.

Data analysis
All four researchers participated in analysing the data, in a process similar to what Gordon et al. (2006) describe as ‘collective ethnography’. We held meetings for the purpose of discussing, coding, grouping and thematising our data in light of the focal issues. Working in a critical ethnographic tradition, the analysis started out inductively (cf. Charmaz 2014; Walford 2008), by identifying teaching situations in the printed field-notes where some kind of critical thinking seemed to be present, and by identifying parts of transcribed interviews in which students and teachers reflected on teaching. These pieces of field-notes/transcripts were coded, grouped in clusters and then merged in themes which pulled together separate but similar pieces of data. After this initial
analysis, we scrutinised the thematised data using a framework based on the theoretical concepts. Finally, we considered similarities and differences between the programmes and discussed the findings in relation to Bernstein’s (2000, xx) pedagogical rights. When writing up findings and completing this article, selected quotations from the data were translated from Swedish to English by the research team.

Findings

Overall, the organisation of VET education and both the localities and uses of school localities were similar across the five schools. Teaching of the vocational subjects was often concentrated on particular weekdays and conducted both in ordinary classrooms and spaces designed for teaching these practices. Examples of such subjects include Medicine and Health and social care in the Health and social care programme, Vehicle technology and The vehicle and transport industry in the Vehicle and transport programme, and Catering and industry knowledge and Service and reception in the Restaurant programme. Usually, the teachers taught each class individually, but in each school, we also observed examples of co-teaching. Thus, although there were some school- and teacher-related differences between classes of the same programme, in terms of the critical thinking and citizenship aspects of interest here, the similarities between schools were much stronger than the differences. Therefore, we focus primarily on general patterns observed when reporting and discussing the findings.

It was evident that teaching we observed in VET-subjects focussed on the knowledge that is required in order to perform common tasks in a workplace, including the practical skills needed to perform them. The practising of carrying out tasks took place in workplace-like environments in school such as kitchens, bakeries, machine halls and rooms for practising healthcare. For example, the students in the Vehicle and transport programme were taught and trained in skills such as: how to take an engine apart, how to change tyres, fuel pumps and oil, and how to check and fix a vehicle’s electrical system. In the Restaurant programme, students learnt how to understand recipes, and how to cook, bake and serve. In the Health and social care programme the students learnt things like how to feed and shower care-recipients, and how to check the heart rates and blood pressure of care-recipients. These activities seldom included elements that required any kind of critical thinking. However, in all three programmes, there were also aspects within the everyday teaching that touched upon critical thinking, in the sense that the students were encouraged to reflect on the teaching topic and think about it from different perspectives. Analysis of these teaching situations resulted in the identification of three major themes: (1) critical thinking related to personal experiences, (2) critical thinking related to others and (3) critical thinking related to wider perspectives. These themes are presented and discussed in detail in the sections below. Where relevant, anonymised and translated quotations from the data are used to illuminate points.

Critical thinking related to personal experiences

In all three programmes, the students were asked to reflect on teaching content based on their personal experiences. Often, when lecturing, the teacher asked the students about their previous knowledge of the subject, including their personal experiences of it. For
example, in one of the Restaurant classes, the teacher was explaining about the nutritional content of dairy products and introducing the terms ‘separation’, ‘homogenisation’ and ‘pasteurisation’. At this time, the teacher asked the students about their own personal knowledge of milk that has not been homogenised and if they had experiences of seeing or tasting such milk. A student responded: ‘The fat flows up to the surface’ and continued talking about the smell of the milk and what ‘the yellowish fat looks like’, thus presenting a description based on personal experience. The students also took the initiative sometimes to reflect on teaching content based on their own experiences, with the teachers’ encouragement. For example, during a lecture about a crash security system in a Vehicle class, students offered descriptions of their own experiences of traffic accidents or accidents they had heard about, which they wanted to share.

Furthermore, students were encouraged to reflect on their own work efforts during lessons. They were asked to think about what they could do better, for example, and about their learning processes more broadly. In addition, in one Vehicle and transport class, self-reflection was systematically fostered by requiring the students to document their daily school work in a logbook, or ‘report’, as they called it:

Teacher: Have you written your report? […] writes on the board: ‘writing report’]. Make sure to be detailed when reporting. I don’t want you to write ‘I’ve screwed something up’, I want to know the details, what did you screw up? What theoretical part did you work with?

Student: What did I do on Monday?

Teacher: Who are you going to ask that of? Me?

Student: Myself. We worked in the book, section 21. I finished that part. Then we started on the second section. It was about wheels and tyres. I worked with [name].

Teacher: And the week before you worked with? […] You should write down what you have worked with in the machine hall, and what you have worked on in the book. (Observation, Vehicle and transport class)

While the encouragement of individual reflection on the teaching content and self-reflection was commonly observed in the teaching practices, there were fewer attempts to stimulate collective reflecting. However, some collective reflections were observed across all three programmes. For example, during one lesson in the Vehicle and transport programme, the head teacher reminded the students about the upcoming individual development dialogues that were to be held with all students. This stimulated discussion, indicating the sense that the students felt a need to discuss not only their individual experiences and performance but also to discuss, collectively, problems they felt they had experienced in some lessons.

In general, our analysis of the data suggested that when the students were asked to reflect on teaching content in relation to personal experiences, an ‘individual experience’ component was brought into the teaching content, adding another perspective to it. This contributed to another point of view, thereby opening a discursive gap and providing a potential space for critical thinking, according to our theoretical framework. However, the added perspective was a purely personal or private extension of the predominantly horizontal discourse pervading the teaching context. The teaching topics (e.g. dairy production) were largely linked to a specific context, often an envisioned professional vocational context.
(e.g. a dairy) or the students’ everyday civic life (e.g. driving vehicles) – and, hence, were strongly context-dependent. Thus, in a predominantly horizontal knowledge discourse, the students were urged to self-reflect and reflect on teaching content from a perspective of personal experience, so there was limited movement between contexts. The reflection had a weak connection to the ‘pedagogic rights’ described by Bernstein (2000). Teaching offered the students opportunities to reflect on the content based on personal experiences, and multiple opportunities for self-reflection, but its potential for enhancement and empowerment was not utilised. The practices we observed were self-actualising and self-reflecting, offering little opportunity to develop critical thinking at individual enhancement, social inclusion or political participation levels. Power relations, or further issues concerning social order and how to think about society more generally, were not touched upon.

**Critical thinking related to others**

Another common form of reflection was based on the perspective of ‘the other(s)’. In the Health and social care programme, where this was most common, the ‘others’ were almost exclusively notional care recipients (i.e. constructed or ‘dummy’ care recipients that had been created for the purpose of teaching and learning). The teachers repeatedly emphasised the importance of reflecting on care situations from the perspective of the care recipients. The excerpt below is from the initial minutes of a lesson in a school room furnished as a hospital ward with manikins lying in the beds. The teacher started the lesson by asking the students what they did during the last lesson:

Teacher: What did we do yesterday?

Student: Personal care.

Teacher: Yes. To help someone with personal care, and help someone dress and look good. And do you remember the difficult but important word we talked about?

Student: Intrega … Intregi … I don’t remember.

Teacher: Integrity.

Then the teacher starts talking about how important it is to protect the care recipient’s integrity, for example the importance of not exposing naked body parts to other people in the room when helping care recipients with dressing or washing.

(Observation, Health and social care class)

After the introduction, the teacher instructed them as to how to wash a care-recipient in bed. Then, the students started to practice this, working in pairs with a manikin, which was sitting up in bed. During the washing procedure, the students laughed a lot. The teacher told them to be serious by inviting them to think about the other person: ‘Would you behave like this if there was a real care recipient in the bed?’ The Health and social care teachers explicitly stated that they encouraged the students to ‘step out of themselves’ and their own life world, and try to understand the care recipient’s situation and lifeworld. In fact, the teachers in one of the classes had developed a method for developing this skill, called writing ‘life stories’. According to the teachers, creating life stories helped to train the students to take the perspective of care recipients, and
consequently, help them to respond to and provide recipients with the best possible care. The students practised writing life stories in school. As part of their learning, they were also asked to create a life story for one of the care recipients that they had met during their practice period, and use it to construct instructions to provide the best possible care for the person, accounting for individual needs and personal circumstances. Making up life stories was therefore used as a method for practising and developing reflexivity, in order to help students to provide appropriate and adequate care for recipients. It is worth noting that in the life story activity, the students had met the care recipients in real life, whereas often the practising itself was, out of necessity, based on an abstract care recipient. Through practising reflexivity in the form of taking the perspective of care recipients in this manner, the students were expected to learn to be responsive and adapt to individual care recipients’ needs.

The focus on ‘the other(s)’, as outlined here, was mediated via a ‘we’ discourse. For example, when the teachers talked about the routines and practices at workplaces, they usually used the term ‘we’, in which they included themselves (as former nurses, chefs, etc.) and the students (as future nurses, chefs, etc.). In the Health and social care context, we recorded statements such as: ‘This [empathy] is extremely important for us healthcare workers’. The ‘we’ notion was also reflected in teaching methods, as much of teaching was carried out through group or pair work, e.g. role play. In Health and social care lessons, the students practised feeding, changing nappies, and lifting care recipients by playing roles in pairs, with one acting as a caregiver and another as a care recipient. In the Restaurant programme, when working in the kitchen, the students worked almost exclusively in groups. For example, during one observed lesson, the students made sausages, and on several occasions offered advice to classmates who were having difficulties. They also divided the work between themselves in a time-efficient and fair manner. For example, while one student retrieved tools, the other started preparing a machine, and at the end of the lesson when the kitchen had to be cleaned, they said things like: ‘If you clean up here, I’ll clean up over there.’

The teachers used group and pair work to enable the students to practice collaboration, and thus help prepare them for working life. They emphasised the importance of listening to their classmates and future colleagues, to understand their points of view and the importance of working together. The students also saw the benefits of group and pair work, particularly those who had collaborated with a real work team and a supervisor during a workplace practice period. Ability to collaborate was seen as a crucial skill for working in any workplace. This was observed by one of the Health and social care students when she referred to working in the sector: ‘It’s a matter of working together; everyone needs to listen to each other’s ideas.’

In general, these were situations when the viewpoint of another person or group of people was added to a teaching content in a specific knowledge discursive setting. This addition of new angles opened space for critical thinking in the classroom, as it transferred the knowledge to another context and made the students active participants in knowledge production. However, as noted in the previous section, the observed contextualisation occurred in courses and lessons dominated by, generally, horizontal knowledge discourses. Moreover, a specific point of view was generally highlighted: i.e. that of the recipient of the service to be provided (the customer or care recipient). In that sense, its potential for developing crucial analytical skills, for questioning norms and
‘understanding the present world’ (for example) was underutilised. However, as the contextualising occurred via a ‘we’ discourse (the teachers discursively included the students when referring collectively to health-care workers) and ‘we’ practice (group and pair work), it had connections to what Bernstein refers to as the right of belonging in groups, and hence developing crucial skills for a sense of social inclusion.

**Critical thinking related to wider perspectives**

In the third form of reflection, there were discussions on issues related to social and environmental issues: for example, power, gender, class, economics, politics and public health. These kinds of discussions with ‘wider perspectives’ occurred mainly in the Health and social care programme, but on some occasions also in the Vehicle and Restaurant programmes. Particular courses or topics in the programmes seemed to stimulate such discussions. Examples included: the Health, Pedagogy and Ethics and human living conditions courses in the Health and social care programme; parts of the Conditions and work areas in the Vehicle and transport industry course that addressed environmental issues in the Vehicle and transport programme; and, also, topics such as food, nutrition and hygiene in the Restaurant programme.

An example of critical thinking related to wider perspectives occurred in the Health pedagogy course, when the students worked on the topic of infectious diseases, including symptoms, how infectious diseases spread, and possible ways of preventing the spread. When the students reported their assignments orally to the class, the teacher asked questions and made comments that initiated discussion and debate in the classroom. In the following discussions, the teacher repeatedly emphasised that she considered the spread of the diseases as a social and global problem and something that humans have exacerbated by our lifestyles. She argued, for example, that there is a need for a critical approach to food and nutrition, not only from an individual health perspective but also from global, economic and environmental perspectives. The Health and social care teachers considered it important for the students to discuss, problematise and reflect on the teaching content. As one of the teachers said in an interview, ‘We want them to think for themselves’. They emphasised that discussions and individual reflections were means by which to inspire further thought about what is written in textbooks. One way of initiating discussions with wider perspectives and encouraging the students to participate actively in them was to ask ‘why-questions’. For example, when engaging the students to take part in the discussion about the causes and spread of infectious diseases, she repeatedly asked why-questions:

Teacher: Some infectious diseases arise and are spread only in some countries in the world. How come? Why do you think that is?

One student says that there is often poor hygiene in the countries where the diseases are spread, and the teacher asks the students why, why do they have poor hygiene? Why do they have poorer hygiene than we do in Sweden?

(Observation, Health and social care class)

In this exchange, the teacher introduced a wider perspective into teaching about diseases by linking the emergence and rapid spread of some diseases with economic
inequality, poverty and poor hygiene in some parts of the world. As the discussion continued, she also raised culturally and educationally related issues, addressing them as global social problems. Furthermore, in teaching within this course, the students were addressed as agents. For example, when teaching about aid organisations’ work to fight the spread of infectious diseases, the students were asked to reflect on how they, as individuals, could make a difference: ‘What can you do to change this situation? And can you do something to make others change?’ The teacher also touched upon what it means to be a nurse or nursing assistant working in areas heavily exposed to infectious diseases and mentioned the need for trained staff.

We also recorded this kind of discussion in the other two programmes, albeit less often. For example, during a lesson about sustainable energy in the Vehicle and transport programme, the teacher started by addressing some news that had made international headlines: ‘This weekend there was so much smog in Oslo that they had to ban a type of car, do you know which type?’ During the following lecture, the teacher argued that the environment is the most important social and political issue of all, and that the students, when they become professionals, will need to take environmental issues seriously. The teacher mixed everyday knowledge with conceptual knowledge based on notions such as accumulation, retardation, circuitry and combining fact-based questions with more value-loaded and personal questions. This teacher also frequently asked why-questions, which stimulated the students to participate in the discussion rather than only ‘answering questions’. Furthermore, by addressing the students as future professionals, the teacher positioned the students as important actors: ‘These are questions you must address in your profession’. Contextualisation of the teaching content in wider perspectives was also observed a couple of times in the Restaurant programme. However, in one of the Restaurant classes, there were students who believed that it was impossible to discuss wider issues in the classroom. For example, in an interview, one student explained that they felt that ‘there are unwritten rules, you do not discuss politics, economics, religion, salaries and stuff. The closest we have come to such discussions is when the teacher asks, “How does this affect other countries?” It is kind of as far as we get when it comes to that.’

Overall, the analysis of this theme suggested that, in some situations, the teaching content was linked to major social and political issues, but there were great variations between subjects and programmes. When it occurred, the teaching content was allowed to move beyond the everyday knowledge context, to wider and more general contexts, such as global warming, power relations, and labour market forces. This contextual movement – between material, obvious everyday knowledge and empirical cases, to more abstract and general knowledge – opened space for critical thinking with relevance for participation in civic discussion. These discussions had some of the key characteristics of a vertical knowledge discourse, including consideration of abstract phenomena and relations, often with grounding in at least a few concepts of a non-everyday character.

Discussion

The analysis demonstrates three manifestations of what can be broadly described as forms of ‘critical thinking’: reflection based on personal experiences, the perspective of ‘the other(s)’, and wider perspectives. We understand these variations as associated with what we have described, in previous sections as specific knowledge-based discourses
dominating the programmes. As shown there, we witnessed both highly context-dependent horizontal discourses and vertical discourses, which influenced and constrained the reflection and exploration of other perspectives fostered in the vocational programmes’ settings. When new perspectives were added to teaching content, they were usually extensions of the overall (generally horizontal) discourse permeating the programme. Thus, the added perspectives did not substantially change the present perspective. Students were asked to engage in self-reflections and/or encouraged to reflect on the teaching object based on already acquired everyday knowledge. Thus, the exploration of other perspectives occurred via a horizontal logic, and movements between different contexts were limited, as was the opening of opportunities for discussing social, historical and political issues. Thus, the analysis suggested that discursive gaps that emerged through the exploration of perspectives via horizontal logic provided little assistance for the students to see beyond what they already knew, beyond the ‘empirical’ or ‘how it is’.

In contrast, the somewhat rarer presence of a more vertical discourse provided opportunities for more mobile and trans-discursive reflection. We noted, for example, teachers opening up spaces for vertical discourses by initiating discussions highlighting social, environmental, cultural and economic perspectives. We also recorded cases where teaching objectives (for example, teaching about infectious diseases, described above) covered not only everyday contexts but also more abstract contexts (economics, politics, etc.). The discursive gaps that emerged in such cases helped the students to see beyond ‘how it is’, and encouraged them to problematise, question and think ‘new’ thoughts about already acquired knowledge (see Bernstein 2000). This provided them with opportunities to practice and develop some important skills for participating in civic discussion, including raising critical questions about, for example, power relations and hierarchies. Thus, this teaching appeared to have the potential to provide the students with competences to participate in society’s conversation about itself and social change, thereby generating agency for social and professional mobility (cf. Gamble 2014; Muller 2009; Winch 2014). Hence, discursive gaps were created in different ways in different contexts, which has important consequences for the opportunities and constraints for critical thinking.

When relating the three themes to the wider framework of civic competences and enacting citizenship, it became apparent that the identified forms of reflection had varying strengths of connection to Bernstein’s (2000) pedagogic rights. Individual self-reflection, of the kind assigned to the first theme, had weak links to the pedagogic rights. However, according to our analysis, the reflection assigned to the third theme had stronger links. For example, we observed students exercising pedagogical rights – such as questioning, problematising taken-for-granted ‘truths’ – and participating in discussions that gave them richer perspectives for understanding the world, including themselves. Some manifestations of critical thinking related specifically to one or two of the rights, but in general expressions of individual, group and political/societal level rights were strongly linked and difficult to distinguish. For example, in situations where the students practised and acquired what we recognised as conceptual knowledge to participate in civic discussion, they also developed what can be regarded as an individual enhancement. As we understand and interpret the findings, these pedagogical rights and civic competences build on each other, and all parts must be present to be
empowering and emancipatory, i.e. to foster the acquisition of the skills and confidence to participate in the construction, maintenance and transformation of social order.

We conclude this discussion with comments on the distribution of critical thinking among the programmes. Well aware that this is a small-scale study and that the findings are not necessarily generalisable, we note that the numerous observed examples of various kinds of critical thinking provided an unexpected and encouraging contrast with previous descriptions of vocational education as being strongly focussed on ‘doing’, adaptation and adjustment (Anyon 1980; Apple 2004; Beach 2018). Particularly in the Health and social care classes, the students were sometimes asked to think critically at individual, group and civic discussion levels. They were encouraged to question and debate in the classroom and were approached by teachers as individuals, students and workers with an agency. Thus, the students were provided with individual analytical competences, including civic competence of a more empowering character, similar to the competences to express criticism in society and actively participate in democratic processes (Bernstein 2000).

However, critical thinking with a strong connection to the pedagogic rights described above was less common in the other two programmes, where a horizontal knowledge discourse dominated. Furthermore, in all three programmes, we noted few examples of critical thinking of a strongly empowering and emancipatory character. Teaching we observed rarely raised critical questions about the students’ positions in social hierarchies as students (in school and at work-places during practice periods) or their positions in social hierarchies as future workers and citizens. Hence, little of its potential to promote social and professional mobility was exploited. Given the typically subordinate occupational and social positions that students attending these programmes are socialised into (Nylund 2013), and their predominantly lower socio-economic backgrounds (Broady and Börjesson 2008; Sandell 2007), we suggest that empowering and emancipatory knowledge assumes particular importance. As Bernstein (2000) and other researchers (Grace 2014; Young and Muller 2014; Winch 2014) have pointed out, there is an unequal distribution of knowledge in educational institutions: not all offer young people opportunities to develop qualitative, extensive and empowering civic knowledge. While some young people are socialised into becoming critical analytical empowered citizens, others are socialised into adapting to the social order of labour markets (Bernstein 2000; Bourdieu and Passeron 1970). With this in mind, we argue that it is important for all vocational education, in all subjects, to provide this knowledge; otherwise, there is a risk of some VET education representing what Lappalainen (2014) describes as education that mainly focuses on teaching and learning of labour skills and orders, including the social orders of labour markets. In this scenario, although the students would be taught about ‘labour market citizenship’ and learning how to adapt, they would acquire few empowering and emancipatory general citizenship competences. It is hoped that our research exploring the knowledge discourses permeating vocational contexts, and the kinds of opportunities for critical thinking they offer the students, will provide helpful insights that can inform the further development of vocational programmes.
Notes

1. The introductory programmes are mainly directed toward pupils who are unable to access a national programme due to lack of approved grades in any of the core subjects (SFS 2010: 800).

2. Citizenship education is commonly integrated in all subjects in Europe, but in many European countries, citizenship is taught as a separate subject (European Commission/EACEA/Eurydice 2017).

3. The source document quoted in this section is a version in English.

4. The source document quoted in this section is a version in English.

5. Proportions of girls were 81%, 58% and 14% in the Health and social care, Restaurant, and Vehicle and transport classes, respectively, and proportions of students from immigrant backgrounds were 66%, 7% and 0%, respectively.

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