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Editorial: New insights into VET

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This issue of the Nordic Journal of Vocational Education and Training is presenting a broad range of research on vocational education and training in a Nordic perspective. Our editorial group is pleased to present six peer-reviewed research articles, two from Norway, one from Finland and three from Sweden. The topics of the articles range from the relevance of the first year of VET, transitions from working in skilled occupations to becoming a vocational teacher, dropout prevention in Finnish VET, relational pedagogy, the meaning of social capital in Swedish VET in a historical perspective, and the craft and vocational knowledge of waiters. The issue also includes two magazine articles and one book review, which are presented later in this editorial.

The first research article concerns the relevance of VET. In Relevant training in the first year of vocational training: Pupils’ experience with vocational training by Åse Nedrebø Bruvik and Grete Haaland they analyse experiences of the first year of initial VET in Norway. Here, the initial VET programmes start with a broad basic year, which is intended to provide a relevant introduction to all vocations that each of the eight programmes prepare for. The findings show that the basic year is experienced as not very relevant for the students, who in most cases already have chosen their future vocation. Furthermore, the students experience limited opportunities to influence neither learning tasks nor educational contents. Thus, the relevance of this part of VET could be questioned.

The second article is also from Norway, but it puts focus on challenges in vocational teacher education. Leaving the tool belt behind:...
Contrasts and metaphors in the transition from vocational work to vocational teacher education) is a study by Nora Kolkin Sarastuen. She explores the transitions from occupational work to teacher education from the perspective of vocational teachers-to-be. The findings show how the vocational teacher students use metaphors and contrasts that are connecting to their experiences from occupational work to describe and give meaning to the new experiences in teacher education, such as ‘leaving the tool belt behind’.

The third article is from Finland. This study is about dropout from vocational education, and particularly analyses a large-scale programme for dropout prevention. Ville Vehkasalo’s article Dropout prevention in vocational education: Evidence from Finnish register data suggests that the programme in question was not effective when it came to increasing study completion or reducing dropouts – even if the completion rates actually were improved. However, the higher level of completion of vocational education could rather be explained by macroeconomic fluctuations and changes in legislation for unemployment benefits.

The next two articles are from Sweden. The fourth article: Relational pedagogy in a vocational programme in upper secondary school: A way to make more students graduate is written by Ulrika Gidlund. The article focuses on reasons for students dropping out of vocational upper secondary school in Sweden. The article aims to understand teachers’ and students’ experiences and perceptions of relational pedagogy and shows that both groups find that the relational pedagogical approach provides a safe and secure learning atmosphere, and that it promotes students’ participation, engagement and motivation in school. The study provides knowledge on how relational pedagogy can work as a retention tool, but also points to the need to find out more about how teachers’ relational competence is acquired.

The second article from Sweden, Constructing vocational education capital: An analysis of symbolic values in the Swedish VET system of 1918, is written by Åsa Broberg. The topic of this article is the creation of educational capital in a historical perspective from the institutionalisation of vocational education in Sweden in the early 20th century. The theoretical and analytical perspective is a Bourdieusian framework using the cultural capital theory. The data consist of historical documents from archives, journals and school memorial books. The findings show that the creation of vocational cultural capital is done through borrowing, crossover and reinventions of cultural capital from two different learning traditions: Apprenticeships in guilds, and higher education in academia, which were materialised in titles, artefacts and rituals.

The sixth and last research article in this issue is a study of the work as a waiter. In Waiters’ craft-related actions studied from the perspective of time-geography, Lars Eriksson, Inger M. Jonsson and Åsa Öström analyse the vocational knowledge of a waiter, including work tasks such as to perform table-setting and serving. The time-geographical perspective and research tools make it possible to
visualise and develop a deeper understanding of the waiter’s actions and underlying knowledge, for example in a serving procedure.

This issue of NJVET also features one book review of *Youth on the move: Tendencies and tensions in youth policies and practices* edited by Kristiina Brunila and Lisbeth Lundahl. The book is reviewed by Arnt Louw. The book consists of an introduction, two main parts and an epilog. The two main parts are: Part 1 – *Young people’s trajectories and identities*, which consists of chapters 1–5 and addresses young people’s own perspectives, and Part 2 – *Young people’s transitions: Policies and new forms of governing*, which consists of chapters 6–8 and addresses policies and official practices. The book addresses one of the most urgent social problems of today, namely young adults’ extended and uncertain transitions from school to work and higher education, and how these transitions shape the interests of young adults, including those outside work and education. The book contributes with a variety of solid and critical examinations of how policies to combat youth unemployment and poverty (‘the transition machinery’) play out in mainly the Nordic welfare countries but also in Iceland and the UK. A central argument in the book is that when young adults’ unemployment and poverty are treated as individual deficiencies on the part of the young adult, measures also become individualistic and place responsibility and agency on the young adult rather than on social and formal structures and conditions for young adults’ lives and transitions.

There are also two magazine articles in this issue. The first magazine article is written by Maarten Matheus van Houten, from Scotland and The Netherlands, who uses the education system of the latter country as an example of more general trends in vocational education. The article *Individual development in a neoliberal context: Climbing to a ‘glass ceiling’? A plea for liberal pedagogy in upper secondary vocational education* discusses consequences of a focus on for example employability and marketable skills in vocational education. Such a focus might result in limited space for the development of critical thinking and analytical skills, which in turn causes problems when it comes to admittance to and success in higher education. Thus, van Houten argues that a liberal pedagogy is necessary in upper secondary VET to avoid limiting future opportunities for VET students beyond their present vocational focus.

The second magazine article, *Svensk yrkeslärarutbildning efter reformen 2011: Lärarstudenters uppfattningar om antagning, VFU och läraranställning* (Swedish vocational teacher education after the reform 2011: Teacher students’ perceptions of admission, practicum internship and teacher appointment) is written by Hamid Asghari and Ingrid Berglund. Based on a survey distributed to former vocational teacher students at two universities in Sweden, they discuss the admission process, how students did their practicum period, their perception of the supervising they received during the period, and their employment as well. The study points out that there are differences between programmes relating to
supervision during the practicum period and that the possibilities of competence development vary.

Thus, this issue presents a broad range of research, and gives us new insights into vocational education and training. The third and last issue of our tenth volume will be a special issue with a number of interesting contributions on assessment in Nordic VET.

Unfortunately, this anniversary year has not become what we expected. Due to the pandemic situation, the Nordyrk conference in Copenhagen 2020 was cancelled. But looking forward, we now know that there will be a Nordyrk conference in 2021. If possible, we will meet in June at Linköping University in Sweden to discuss current VET studies and issues. Alternatively, if this is not possible, the conference will go online and provide an opportunity to meet at a distance.

We also have good news concerning our journal. We are happy to announce that NJVET has received recurring financial support from The Swedish Research Council. Therefore, we now have external funding for three more years, which provides good conditions for further development of this journal.
Individual development in a neoliberal context: Climbing to a ‘glass ceiling’? A plea for liberal pedagogy in upper secondary vocational education

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Abstract

This essay addresses the issue that a neoliberal focus might have an adverse effect on a secondary vocational education student’s personal development and opportunities in higher education. Originating from neoliberal conditions, in upper secondary vocational education there is a strong focus on marketable skills with limited space for acquiring critical thinking and analytical skills, resulting in impediments concerning admittance to higher education as well as low success rates of those admitted. Also, talent development and differentiation are contested under these neoliberal conditions. It is argued that liberal pedagogy is necessary as a means to scaffold especially critical thinking skills and to foster talent development in upper secondary vocational education to cope with this issue and to create more equal opportunities for vocational students from various levels. In the concluding thoughts those involved are encouraged to reconsider preparation for post-secondary education related to admittance and study success.

Keywords: higher education, vocational education and training, pedagogy, globalisation and internationalisation, neoliberalism
Introduction

In vocational education in general, and certainly in upper secondary vocational education, there is a strong focus on marketable skills. Also, from the international perspective, programmes that are developed together with the market and pre-set curricula are common practice.

However, this neoliberal focus might have an adverse effect on a student’s personal development and opportunities in post-secondary education. In this paper I argue that liberal pedagogy is beneficial if not necessary in upper secondary vocational education to cope with this issue. As an example, I will draw on the education system of The Netherlands, as over the past two decades this system has been increasingly formed by both traditional and neoliberal influences. This approach requires a critical stance towards the educational sectors involved, aimed at reconsideration of curricula and collaborative learning-teaching trajectories, but does not mean that, given the globalisation and tendencies in play, neoliberal influences and markets demand should be ignored.

Classical liberal theory emphasizes the importance of education for the construction of the self. Wringe (1997, p. 115) holds that individuals should not ‘use their life to serve the goals, interests and aspirations of another, unless they so choose.’ The capacity to critically question and analyse conditions and concepts present in our lives, as well as acquiring knowledge through enquiry, are essential within this type of pedagogy that aims at self-actualisation and free, autonomous individuals. In this paper, I adopt a ‘contemporary’ interpretation of liberal education, in which education is not primarily for the upper-class white male as was historically the case, but offers ownership of thought and speech for each individual irrespective of class, gender or ethnicity (see Nussbaum, 1997).

Contrasting this liberal view, neoliberals argue that education is about investing in the future of the market through the individual. Giroux (2002) states that under neoliberal conditions, the individual is defined through market-driven notions, in which competition and consumption are important drivers. Neoliberal education produces self-interested, entrepreneurial graduates through standardised, fixed curricula, making them globally competitive and prepared for the market. The Dutch government, for example, describes the neoliberal condition rather explicitly stating it is the government’s responsibility to equip the education sector in such a way that students are able to develop and flourish in the European knowledge society and that institutions are able to acquire a firm position within the international education market (Ministerie van Onderwijs, Cultuur & Wetenschap [OCW], 2000, p. 2). This statement reflects the neoliberal governmental rationality and what Fougner (2006) would call governance aimed at actively establishing certain legal and institutional conditions.

Neoliberal conditions in education do not necessarily preclude autonomous selves or opportunities for personal development and critical thinking. But there
are significant differences between neoliberal and liberal education concerning the position of the individual and even more the outcomes and purposes of learning. Interestingly, liberal pedagogy builds on critical thinking and analysis, and according to Sneyers and De Witte (2016), in neoliberal higher education too, essential to learning and success is a student’s intellectual capacity, that is, the capacity to process information, to think, analyse and judge – skills that require reasoning and enquiry. It is exactly on this point that the neoliberal condition is worrying. Focussing heavily on vocational skills and fixed requirements within upper secondary vocational education may not only curb personal development, but, due to a lack of analytical skills and reasoning capability, also makes it arduous to continue to post-secondary education, that is, higher education (hereafter also: HE). Additionally, the Dutch government aims to generate differentiation and talent development within the HE sector in order to create a more diverse national alumni corps (OCW, 2015). The central issue of this article addresses the issue that liberal pedagogy, being concerned with certain skills, has an important role to play in this context of the education system.

This paper adopts a futures studies approach and proceeds in three sections. In the first section, I will provide a description of the area of concern, elaborating on the problem just introduced concisely. In the second and third sections, analyses of a probable future and respectively preferable future will be put forward. Regarding the exemplary Dutch education system, the timeframe concerned is a middle range future (as indicated by Earl Joseph), until approximately 2025. This is because the qualifications in upper secondary education have been revised in 2016 and these examination criteria will be used for approximately eight years. Another reason stems from the Dutch government’s higher education agenda and the upper secondary vocational education council’s agenda, both running from 2015 to 2025.

Context and issues
This section provides the context of the issue raised in the introduction. At the core of this is the argument that students wanting to proceed from upper secondary vocational education to HE seem to fall short when it concerns skills like critical thinking and conducting an analysis based on rational thinking (see Lowe & Cook, 2003; Van Asselt, 2014). This often leads to either no admittance to HE or exiting HE early, with the possible drawback of not living up fully to one’s potential. In the following paragraphs, contextualising the issue, I will first sketch the situation in Dutch education to provide a base for examples, after which I will argue what the issues are about, exploring the problem more specifically.

The Dutch education system is based on the 1968 ‘Mammoth Law’. It is a binary system distinguishing vocational and academic education (see Van Houten, 2018), consisting of compulsory primary education and secondary education
with national examination, is aimed at attaining a certain level of knowledge and skills. After initial secondary school, students proceed to job-preparatory or academic education. There is upper secondary vocational education called Middelbaar BeroepsOnderwijs (‘intermediate vocational education’, also abbreviated as MBO henceforth) offering education up to EQF level four, and there are two kinds of higher education. The first type of HE is tertiary vocational education called Hoger BeroepsOnderwijs (‘higher vocational education’, also HBO henceforth) offering programmes on EQF levels five to seven, and the other type of HE is academic education (EQF levels six to eight). Here, I focus on upper secondary education and tertiary (or higher) vocational education. One reason for this is the fact that institutions offering these types of education explicitly deliver vocational graduates, allowing for neoliberal drivers to explicitly exhibit themselves in the education offered. Recognizing the prevalence of neoliberalism within vocational education, I find this situation worrying if this puts pressure on liberal pedagogy skills and values or on students’ opportunities. Another reason for this focus derives from the possibilities the Dutch education system offers by law, but which in reality result in impediments.

Within MBO, about half a million students study vocational programmes for specific occupations (MBO-Raad, 2019). Examination criteria and learning outcomes are identical and diplomas are valid due to nationally recognised examination, although courses within programmes may differ between institutions. Because this type of education targets the production of skilled employees, programmes deal with vocational skills and content related to the occupational context. When analysis or reflection is required, often models or prescribed models (like SWOT analysis) are used, allowing little space for original, critical consideration. The vocational emphasis is also expressed in the overall architecture of curricula: courses and internships alternate during the week. The considerable amount of time dedicated to practice influences the time available for teaching. In my view, this results in an even greater emphasis on practice-related theory and knowledge, at the expense of developing thinking or (meta)cognitive capacities. After completing upper secondary education, MBO students are entitled to admittance to tertiary vocational education, with only few exceptions because of severe discrepancies between programmes. A nurse, for example, cannot be admitted to a bachelor’s programme in accounting. Based on research and on the content of programmes and qualifications, the Minister of Education, Culture and Science (Bussemaker, 2013) selected seven such combinations for which admittance was precluded, making up for approximately 5% of all continuing students. However, HBO institutions are cautious when it comes to admitting upper secondary education graduates. Over the previous years, admittance to numerus fixus programmes increasingly is based on decentralized selection, that is, based on previous education results and motivation with the expectation that this would increase study success in HE (Inspectie van het Onderwijs, 2015). This
might oppose the aim of keeping HE programmes open for admittance to a broad population. The existence of multiple routes and options to HE as provided by law leads to a trilemma: HBO institutions strive to higher study success rates, accessibility and high standards all at once (Sociaal en Cultureel Planbureau, 2004).

I would like to reconsider now why there is a precarious situation. From a liberal perspective, I would argue that the focus on content knowledge and vocational skills occupies student’s development so that critical thinking and non-market-oriented personal development become subordinated within curricula. But even if liberal education would have to surrender to neoliberal conditions with a strong focus on vocational, marketable skills, would there be any complications at all if we do not bother with liberal pedagogy and the teaching of rational thinking or reflective and analytical skills? My answer would still be yes, based on a threefold argument.

First, studying in HE requires cognitive skills such as rational thinking, applying logics, and the capacity to scrutinise and analyse. Cognitive skills are foundational skills related to the learning process in HE, with research showing that cognitive skills contribute to achievement within HE (Naglieri, 2005; Naglieri & Das, 2005). Sneyers and De Witte (2016) indicate that intellectual capacities, not content knowledge or experience, might very well be the most important determinant of success in HE. This also relates to the occupations for which students are trained. HE graduates are likely to have more responsibilities in their jobs and to have to deal with more problems than lower skilled employees. Problem solving requires, among other skills, questioning one’s own reasoning, that is, it requires critical thinking and reflection (Billing, 2007). It seems that cognitive skills and critical thinking are required for success in HE, but at the same time, students proceeding from secondary education to HE (tertiary education) are often insufficiently prepared (Lowe & Cook, 2003; Van Asselt, 2014). Van Asselt (2014) states that one reason for this is the difference between mostly inductive education in secondary education and mostly deductive reasoning in HE. Using the Dutch example, this appears to be supported by the statistics. Approximately 40% of the MBO graduates continues in HBO (Van Weert et al., 2017), but just under 60% of these actually graduate (Onderwijsincijfers, n.d.a.), with one out of five students leaving in the first year (OCW, 2015). Additionally, in previous years, higher education institutions (also HEIs hereafter) have been sharpening entry requirements and over the past 10 years, as well the percentage of MBO graduates continuing in HBO has been declining (Herweijer & Turkenburg, 2016; Onderwijsincijfers, n.d.b.). Herweijer and Turkenburg (2016) also show that HEIs struggle with entry requirements and selection procedures and the arithmetic and language entry levels of MBO graduates, for example in the field of teacher education. Although there might not be a causal relationship between these
developments, at least they suggest a discrepancy between acquired levels before HE and entry expectations or requirements for HE.

The differences between secondary education and HE bring me to my second argument. Acknowledging the neoliberal condition in the education sector in general, admitting upper secondary education graduates to HE may be like a poor investment. Bringing back to memory the principle of producing globally competitive labourers, I assume ‘competitive’ also portends ‘highly educated’. HEIs, aware of the risks given the graduation statistics of former upper secondary education students, are hesitant to admit these students, considering the investment involved in terms of money and staff. Using intake procedures including interviews, or complimentary tests in the application procedure, for instance, they may discourage or prohibit future students from applying to their institution. Also, if admitted, exams and teaching can be constructed in such way that some former upper secondary students are simply underprepared or unable to succeed. If the education system fails to create accomplishable opportunities to proceed and succeed on the educational ladder, graduates might be less competitive, and efforts might be in vain.

Thirdly, doing better and being competitive means being different when needed (Magretta, 2002). Related to the issue of competitiveness is the changing labour market. Monotonous work and stability are losing value, whereas flexibility, knowledge and creativity gain importance in the work sphere, with the number of routinely jobs decreasing (CEDEFOP, 2011; Goos et al., 2010; see also Livingstone & Guile, 2012). Employees need so-called 21st century skills such as critical thinking, creativity, collaborative skills and the ability to be innovative (e.g. Griffin & Care, 2015), and several influential Dutch advisory committees emphasize the need for talent development and management, innovation and differentiation in education (e.g. Commissie Toekomstbestendig Hoger Onderwijs Stelsel, 2010; Wetenschappelijke Raad voor het Regeringsbeleid, 2014). So, under neoliberal conditions too, I plead for liberal pedagogy. On the one hand, liberal pedagogy scaffolds 21st century skills such as critical thinking about ideas, structures, and modes of being, meanwhile fostering creativity (Clegg, 2008). On the other hand, liberal pedagogy creates the opportunity for personal influence, talent development and individual flourishing.

To summarise, it appears clear there is an issue which expresses itself in the field of secondary education. Students within upper secondary education are constrained by a curriculum heavily focused on vocational skills and internships with little space for liberal, critical thinking and teaching, which is demonstrated by limited access to, and study success in, HE. They seem insufficiently prepared for HE and the changing labour market, of which the latter asks for graduates with skills more often taught in HE than in (upper) secondary education. The crux form cognitive critical and analytical capacities that are needed in both HE and within ‘modern’ jobs, capacities that are useful for neoliberal purposes but
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commonly *fostered and promoted* in liberal education. Not only does this complicate educational careers and opportunities, it also adds to inequality in social terms, access to and participation in HE, and employability. Although examples are based on The Netherlands, the issues and concerns are widespread\(^1\). Similar to The Netherlands (e.g. Van Houten, 2018) debates exist in, for instance, Denmark (e.g. Jørgensen, 2017), Canada (e.g. Wheelahan, 2015), the UK (e.g. Hodgson & Spours, 2017; Thompson, 2009), and Sweden (e.g. Köpsén, 2019), calling for a reconsideration, to which this paper provides input.

A probable future

In sections two and three, I aim at what Peters (2003) considers to be foresight planning, namely adding to the discussion to encourage reaching a ‘desirable future’ among the educational sector groups involved. In this section, I will analyse a probable future, considering three issues. First, autonomy in education is considered. Then the effect of globalisation on the curricula and autonomy is discussed, after which I deal with my concerns regarding the gap between upper secondary education and tertiary (vocational) education.

Autonomy is central to liberal education and has long been an aim of education (Hedge & Mackenzie, 2016). Adopting White’s (2003, p. 147) definition of an autonomous individual being someone ‘who determines how he or she should live according to their own, unpressured, picture of a worthwhile life,’ I agree with Hedge and MacKenzie (2016) that school education should enable one to become such a person. One of the features of this autonomous life, Hedge and MacKenzie (2016) hold, is that it is largely self-regulated or self-governed, and Dearden (1972) believes that this means that at least important areas of life are determined by oneself. Nussbaum (1997) emphasizes the need for ownership of thought and speech. Hence, for autonomy, choice and freedom of acting are essential.

Following Dearden (1972), there are two kinds of autonomy features that can be distinguished: qualities of the person, such as self-knowledge and morality, and qualities of the mind, such as critical thinking and making assessments. The skills needed in HE as set out earlier, such as critical thinking, can be considered qualities of the mind, and in Dearden’s view would be part of autonomy. Bridges (1997), reviewing the body of literature in philosophy in education, questions whether all ingredients said to be part of autonomy should be taught in school, or that they may not necessarily belong to education. However, as Sneyers and De Witte (2016) indicate that particularly intellectual skills, above knowledge, are important for success in HE, it seems fair to expect that at least those ingredients required for HE are in some form taught in preceding education. Therefore, within the context of the problem discussed in this paper, qualities of the mind might be especially necessary to develop in secondary education as they support
both autonomy and valued skills. This does not mean I adopt the view that autonomy merely consists of thinking, understanding and the mind. But considering it is these capacities that hinder upper secondary students the most to continue flourishing and developing after graduating in MBO or succeed in HE, they apparently are of significance in HE.

Although freedom of speech and thought should be a common good in western education, the actual teaching of communication skills and rational thinking as a means to scaffold the capability to use the freedom available is important to support autonomous individuals. Upper secondary education programmes focus, within a taut timeframe, heavily on vocational content and core subjects like arithmetic or mathematics, and language. It is exactly this curriculum, with little choice, that prepares students for 21st century vocation, but also, by extension, for HE. Therefore, it is desirable to spend time on qualities of the mind and develop reasoning, analytical and decision-making skills. In this context, Hedge and MacKenzie (2016, p. 11) maintain that students ‘would benefit from an educational environment in which debate, discussion, dissent, speculation, doubt and questioning, about anything and everything, are permitted and encouraged.’

Given the current neoliberal focus and curricula, I doubt whether there is sufficient space and time to create the environment Hedge and MacKenzie plead for, yet underline the possible benefits of such an environment.

The focus on core subjects and vocational content knowledge in upper secondary education has undoubtedly been influenced by globalisation. According to Enslin (1999), in education, globalisation has fostered an increasingly common curriculum across countries with an international emphasis on competencies and outcomes. Some of such curricula are based on the concept of competence-based learning and teaching. Significant elements for the development and nature of competence-based learning (as indicated by Tuxworth, 1989) are a demand for greater accountability in education and for increased emphasis on the economical dimension of education, both fitting the neoliberal developments. Meanwhile the EU, in its Lisbon agenda, aims at the EU becoming ‘the most competitive and dynamic knowledge-based economy in the world’ (European Council, 2000, para. 6) and this also influences countries’ education (policy). The Dutch government for instance, acknowledging global connectedness and the importance of knowledge economies, sees it as its responsibility to enable students to flourish in the European knowledge society (OCW, 2000) and in 2015 presented its strategic agenda for higher education until 2025 (OCW, 2015). In the introduction, OCW (2015) mentions globalisation several times as a major driver of educational change and adaptation of education to the international (labour) market. Although this agenda concerns HE, the ministry governs both HBO and MBO and a significant difference in vision for the two sectors is unexpected. I would like to point out that ‘flourishing’ in this context relates to being employable or marketable, as opposed to ‘liberally flourishing’ for a student’s own well-being. Neoliberal
curriculum design prioritizes the market and the whole, picturing the individual within this framework, whereas Enslin (1999) states that in liberalism the individual is prior to society. This development seems to contrast autonomy in terms of freedom to influence one’s own curriculum. HEIs are expected to operate neoliberal, being more actively involved in the education of employees and the unemployed in cooperation with trade and industry parties (Sociaal Economische Raad, 1999) – a way of governing common in HEIs over the past two or three decades (e.g. Giroux, 2015; Morrissey, 2015). Globalisation in this sense seems what Heywood (2003) calls ‘neoliberal globalism’, which according to Mitrovic (2005) relates to further global expansion of economic market-oriented structures, values and concepts.

I expect the middle range future to continue to present a neoliberal educational landscape because of the continuing neoliberal condition within education and global development of the education sector in general. Especially in HE, competitiveness and comparability led to the ‘common’ curriculum Enslin (1999) mentions. In recent years, upper secondary education followed this discourse in order to compete with other institutions and deliver competitive graduates that will still be valuable and might be able to proceed to HE. The autonomy of the student, and particularly the possibility to influence a curriculum and one’s own learning trajectory, will remain limited for some years to come due to the fixedness of the qualification criteria, the obligatory hours for coursework and internships, and the increasing emphasis on arithmetic, languages and competitive market-oriented skills.

The probable future could also bring some liberal features in education. Remarkably, the Dutch strategic agenda for HE until 2025 (OCW, 2015) proposes some interesting goals on liberalisation. However, change often does not happen overnight, and moreover, these proposals and aims concern HE. Another concern arises here. The (proposed) measures and changes for higher education seem to allow for liberal influences, but secondary education appears to adapt slower, at the risk of widening the gap between secondary and tertiary education. With this agenda, the Dutch government aims at ‘world-class education’ and fulfilling its ambition to offer higher education that enables students to get the most out of themselves, for which it is necessary to pay attention to both qualifications as well as socialisation and development of the self. Liberal ‘flourishing’ is reflected in such an aim, although the cause still is neoliberal: the ministry (OCW, 2015) writes there are many sufficiently qualified people, but it is just a matter of getting the right person in the right place. The right person and place do not primarily refer to the match between place and personality or self, but to vacancies and labourers. At the same page, the ministry mentions that within branches where shortages exist or might rise, they work towards solutions, implying that students are being prepared for, or shaped to fit, certain positions within the labour market. This strategy resembles individuals as described by Fougner (2006, p.
as entities ‘constituted and acted upon as flexible and manipulable subjects’ and indeed, as mentioned earlier, defines the individual through market-driven notions the way Giroux (2002) predicts. Nevertheless, this agenda opens up opportunities for choice, for individuals to adapt the course of their education and curriculum and to develop talents and personality. Proper education, OCW (2015) believes, is embedded in groups in which critical discussion and reflection are foundational. One of the spearheads concerns talent development, another diversity. Flexible routes to and through (higher) education should be made possible. After all, the ministry expresses that higher education should offer opportunities to everyone to flourish, develop talents and reach the highest personal level possible. The newest answer to the neoliberal competition, it seems, is diversity and flexibility through liberal-like education by providing choice, critical thinking and self-development, adding personal elements to already well-established programmes and curricula under neoliberal conditions.

This may seem like acceptable for a future, were it not for some concerns that take me back to this paper’s central issue of proceeding on the educational ladder. First, the very focus of the agenda, reflected in the subtitle: Strategic Agenda Higher Education and Research 2015-2025. The agenda is focussed on HE and strategic by its very nature, and does not include much about education prior to HE. Yet, it is not just the Dutch government that seems to increasingly attach value to HE. Governments and HEIs themselves have been involved in the marketisation of higher education, which is a growing worldwide trend with market steering replacing or supplementing government steering (Brown & Carasso, 2013). Partially, this is to widen participation, partially, it is a direct consequence of neoliberal influences (see Molesworth et al., 2010). Recalling Wringe’s (1997) liberal view mentioned in the introduction, I question whether the curricular choices offered are to serve one’s own aims, or rather are meant to serve the goals, interests and aspirations of others, such as governments or companies.

Fact is that HE students are presented with a broad range of choices. As far as The Netherlands are concerned, this is particularly worrying to me, because the Dutch upper secondary education sector’s agenda, called The MBO in 2025 (MBO-Raad, 2015) has a different focus. Cornerstones of that agenda are connection of programmes to the labour market and employment perspectives, the teaching of general skills and courses such as arithmetic and languages, opportunities for lifelong learning, and the construction of examination terms and curricula in cooperation with employers. These values and the upper secondary education skills and curricula explicitly reflect neoliberal education even stronger than those for HE discussed above. The strong neoliberal focus on employers, the market and vocational training in upper secondary education seem to result in a neoliberal focus under neoliberal conditions, contrasting the HE sector becoming increasingly flexible and incorporating liberal elements, even though the conditions remain neoliberal. At the same time, it decreases the space for liberal
pedagogy skills and alignment with HE using, for instance, continuing learning trajectories. If agendas and standpoints in play differ in focus and content, they might very well emphasize the gap between students and their skills and capacities in secondary and tertiary education, making for a probable but less preferable future.

A preferable future

The discrepancy between secondary and tertiary vocational education in terms of necessary skills and liberal education elements on the one hand, and the curricula and vocation-related focus on the other, could reinforce the gap between the two levels of education, having an effect on the continuation of MBO graduates to HE, on their equality matters. In a preferable future, gaps between secondary education and HE would be minimized, and influences of liberal pedagogy in upper secondary education would foster individual development and enable students to develop those capacities needed to actually continue their educational and developmental journey. Apart from the importance of rational and critical thinking skills in HE for practical, vocational purposes, the need for a more liberal approach in upper secondary education also arises from the increased prominence of values, ethics and ideologies in vocational education in general. More than ever before this is a central issue because today’s education prepares tomorrow’s leaders, leaders that will need values and are capable of critically analysing and debating ethical and content-related matters (OCW, 2015). In the following, I will suggest desirable elements for an educational future that adequately prepares and supports secondary education learners, and argue how this future could contribute to (more equal) opportunities and increased liberal outcomes for students in vocational education.

A more liberal approach in upper secondary education would at least provide students with greater levels of autonomy. This autonomy could present itself in two ways. First, it would offer curricular opportunities operationalised as an undesignated space in the curriculum on the one hand, and courses or activities to be chosen by the student on the other. In HE, institutions already offer minors – a package of coherent courses within a certain theme or discipline – allowing for a personal influence on one’s curriculum. Minors and cooperation or exchange of students between upper secondary vocational education institutions would increase the range of choice and possibilities for creating one’s own curriculum and personal profile. However, the room for self-regulation does not have to be narrowed down to the mere curriculum. The second representation of autonomy would relate to critical thinking, discussion and debate, and ownership of thought and speech as advocated by amongst others Nussbaum (1997) and Hedge and MacKenzie (2016). If ownership of the learning process is considered important, students should also be able to influence everyday teaching and
learning in order to govern their individual process. Problem Based Learning (PBL) for example, making use of situations encountered at work or privately, increases a student’s impact on the learning process in general (Duncan & Al-Nakeeb, 2006) and creates ownership (Cockrell et al., 2000). Duncan and Al-Nakeeb (2006) and Duncan et al. (2007) show advantages when making use of such learning strategies: students perceive to improve critical thinking skills and autonomy. This suggests that more autonomy in education not only means creating opportunities to choose programmes or courses, but also offering opportunities to self-direct learning in order to scaffold the learning of critical thinking within these programmes and courses. It seems Dearden’s (1972) qualities of the mind would receive greater attention with more autonomous students providing input to their learning process. PBL or other types of non-traditional learning that allow for students to create their learning environment relate to both choice and the possibility to use one’s life to serve one’s own goals, as liberal education prescribes. Moreover, it recognizes the importance of acquiring knowledge through enquiry, fostering analysis. Furthermore, individual influence and freedom of speech might create a context in which personalities and diversity become visible, that way contributing to a joint level playing field for secondary and tertiary vocational education graduates.

Secondary education, as foundational education, is supposed to create opportunities to proceed to and succeed in HE. To a certain extent, legally these chances to continue on a higher education level depend on the level of the diploma obtained. An assumption behind this is that once an individual has obtained a diploma at a certain level, they are prepared for the next step. The discussion in section one calls the validity of this assumption into question. Partially, these chances to succeed also bank on the actual capacities and skills of students. The statistics and arguments suggest a discrepancy between the chances and actual continuation to HE. These findings provide grounds to argue for a future that deals with the discrepancy, or gap, between attained skills and necessary skills and to smoothen the transfer from secondary education to HE, preferably by balancing examination requirements in secondary education with entry requirements and expectations in HE.

In order to increase the level of critical thinking, rational and analytical skills, these skills should be taught previous to HE. In pursuance of this, the actual teaching and scaffolding of skills that are valued in HE should be incorporated in the curricula and/or in the teaching methods of programmes that grand access to HE. Terenzini et al. (1995) indicate that the more time students have to study, the more gains in critical thinking may be expected. This emphasizes the importance of starting early and providing time to grow. Building on a greater critical thinking capacity, continuing secondary education graduates would also benefit later on in their careers as well – according to Donald (1985) this critical thinking capacity is needed for other skills such as disciplined inquiry and
analysis. Liberal influences in (upper) secondary education therefore should not be limited to allowing greater autonomy, but also by reserving a part of the actual educating for liberal pedagogical aims of education, in particular critical thinking and reasoning.

The discrepancy mentioned earlier suggests a lack of coordination concerning continuity and the learning process of ‘liberal skills’. Absence of continuing learning-teaching trajectories and the struggle HEIs’ teachers experience with ‘transferred’ or continuing students, Herweijer and Turkenburg (2016) point out, implicate a lack of coordination and cooperation. To encourage reaching a consensus concerning a ‘desirable future’ among different education sectors, some kind of cooperation between them is desirable, if not necessary. The Dutch MBO sector’s council for instance pleads for continuing learning trajectories (Berkhout, 2019), and the Dutch Ministry and some HBO institutions such as the Hogeschool van Amsterdam (Amsterdam University of Applied Sciences) express the ambition for the sector to actively create collaborative relationships with upper secondary education (Hogeschool van Amsterdam, 2015; OCW, 2015). The purpose of this collaboration, however, should not only be to familiarize upper secondary education students with the lay of the higher education land, but also to actually scaffold and teach skills that would benefit these students anyhow. It may be the case that preparing students for HE primarily is a task for upper secondary education institutions, but alignment and cooperation can smoothen the execution of this task. Minors-like programmes in upper secondary education, as mentioned earlier, could serve as a vehicle for bridging trajectories between upper secondary curricula and the first year in HE. Herweijer and Turkenburg (2016) indicate that in The Netherlands, the HE sector expects that the recently introduced minors in MBO will indeed act as transition vehicles. To make this happen, such minors’ content should not only cover cognitive requirements but also other (study) skills. In order to be pragmatic, communication and collaboration between the sectors and institutions is essential. If the HE sector expects better prepared students, and upper secondary schools are expected to deliver these, those educators designing and teaching the minors have to maintain collaborative relationships with both upper secondary and HE vocational representatives.

Concluding thoughts

The neoliberal, global context seems to have contributed to pragmatic, hands on curricula in upper secondary education with little space for personality and criticism. Giroux (2002) concisely sketches this context when writing that if society is defined through the culture and values of neoliberalism, critical education as condition for creating thoughtful and engaged citizens is sacrificed to the interest of financial capital and the logic of profit-making. Taking the Dutch context as example, the preparatory education, legal routes to HE, and the EQF level 6 HBO
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Bachelor’s degree curricula cause a delicate situation for upper secondary education students. Preferably, liberal pedagogy and 21st century skills are fostered in upper secondary education, but teaching marketable skills overshadows liberal pedagogy. Although in The Netherlands minors have been introduced in upper secondary education, it is not entirely clear which deficiencies are targeted, and judging by the content of the minors developed so far, it seems to me the focus lies on content and practical skills, not so much (yet) on cognitive, analytical capacities. This signals the need to carefully (re)consider the content of curricula and bridging programmes. Furthermore, apart from their preparedness, the success rate of upper secondary education graduates in HE also derives from a students’ choice of HE programme. Being provided with information about study options and learning about one’s interests and talents within curricula prior to HE contributes to making a better, more adequate choice, although there is no guarantee the right choice will be made (Warps, 2013). If the aim is, to use Giroux’s words, to educate ‘thoughtful and engaged citizens’ (2002, p. 427) that are able to be responsible and critical employees, with attention for talent and differentiation as governments propose, then liberal pedagogy should be embedded in education from an earlier age and at least in programmes preparing for HE. In the longer term, liberal pedagogy and critical thinking could very well scaffold the development of both talented and creative personalities (Clegg, 2008) as well as a competitive, critical, analytical workforce. After all, neoliberalism primarily is a tendency and condition, leaving room for a pedagogy supporting individual and societal development.

Endnote

Acknowledgements
I am grateful to Björn Eussen, Christina Burke and Jan Simon Brouwer for providing me with critical feedback on this paper’s drafts, and to Nicki Hedge and Penny Enslin, for scaffolding my understanding and writing.

Disclosure statement
This is to acknowledge that no financial interest or benefit that has arisen from the direct applications of my research.
Individual development in a neoliberal context: Climbing to a ‘glass ceiling’?

Note on contributor

Maarten van Houten is affiliated with the University of Glasgow, where he is a doctoral candidate focussing on knowledge sharing between teachers in vocational education and learning organisations. He has taught within secondary education, has worked as both a teacher and a (programme and curriculum) coordinator within upper secondary vocational education in Amsterdam, and has experience as a lecturer and teacher trainer at the Amsterdam University of Applied Sciences.
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Individual development in a neoliberal context: Climbing to a ‘glass ceiling’?


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Svensk yrkeslärarutbildning efter reformen 2011: Lärarstudenters uppfattningar om antagning, VFU och läraranställning

(Swedish vocational teacher education after the reform 2011: Teacher students’ perceptions of admission, practicum internship and teacher appointment)

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Abstract

Through a survey to former vocational teacher students at two universities in Sweden, we explore their perceptions of admission, practicum internship during vocational teacher education, and employment as a vocational teacher after education, since teacher education reform in 2011.

The questionnaire used in the survey was answered by 140 former teacher students and the result contributes with knowledge about which vocational subjects were applied for, and which subjects the students later were admitted to, how long the former students’ professional experience was when they applied for the education. The result shows that measures should be taken to support the application process. The study also illustrates how students perceive their practicum at schools and to what extent they were taught in their vocational subjects, and how they value the supervision during the practicum at schools. Here, we can draw conclusions from the questionnaire about differences between different vocational programmes regarding the supervision. Finally, we examined what happened after the vocational teacher education and we see that a large majority of former students have employment as vocational teachers, but that the possibilities of competence development and the broadening of the competencies for more vocational subjects vary.

Keywords: vocational teacher education, vocational teacher students, application for vocational teacher education, practicum internships, supervisor at work placements at schools
Inledning


Antagningen sker utifrån särskilda behörighetskrav på kvalificerade och relevanta yrkeskunskaper (UHR, 2017) som kan grundas i såväl arbetslivserfarenheter som gymnasieskolans kurser och eftergymnasial utbildning exempelvis yrkeshögskola eller specialiserade kurser som privata utbildningsanordnare tillhandahåller. De särskilda behörighetskraven definieras genom kvalificerade och relevanta yrkeskunskaper och kan revideras och aktualiseras över tid (UHRFS 2013:4; UHRFS 2017:3; UHRFS 2018:3).

Inför antagningen till yrkeslärarutbildningen valideras de sökandes kvalificerade och relevanta yrkeskunskaper för yrkesämnen som den sökande avser att få behörighet att undervisa i (UHRS 2013:4). Ett system för validering av yrkeskunskaper infördes parallellt med reformen 2011. För att bedömningarna av de sökandes yrkeskunskaper i ett yrkesämne ska bli likvärdiga uttrycks dessa krav i form av kunskapskriterier. För närvarande kan studenter antas till 211 yrkesämnen i 20 gymnasiala yrkesprogram, inom ungdomsgymnasiet, gymnasiesärskolan och vuxenutbildningen.

Hela yrkeslärarutbildningen bygger efter reformen på den så kallade utbildningsvetenskapliga kärnan (UVK) som motsvarar 60 högskolepoäng (hp) av fastställda kurser gällande centrala och generella kunskaper för alla lärarutbildningar, och ytterligare 30 hp som VFU som genomförs på skolor med gymnasial yrkesutbildning. Både UVK och VFU bör enligt regeringens proposition ”vara nära knuten till det aktuella yrkesämnet” (Regeringens proposition, 2010, s. 30).
Svensk yrkeslärarutbildning efter reformen 2011

Som universitetslärare i yrkeslärarutbildningen har vi egna erfarenheter av reformen och vid flera tillfällen har vi hört spekulationer om vad reformeringen av yrkeslärarutbildningen har inneburit för studenterna gällande såväl antagningen som genomförandet av utbildningen, där VFU och handledningen i yrkesämnen framstått som särskilt kritiska områden. Exempelvis handlar det om att de studenter som genomför sin lärarutbildning i egen tjänst riskerar att inte få kvalificerad yrkesämnesdidaktisk handledning. Vidare har vi hört att examinerade studenter får tjänster utifrån program, snarare än utifrån specifika yrkesämnen, då skolorna inte kan erbjuda heltidstjänster inom de specifika yrkesämnen som läraren har fått behörighet för. Denna typ av hörsmånga har varit en drivkraft för vårt intresse av att undersöka yrkeslärarstudenters uppfattningar om antagningen till yrkeslärarutbildningen, VFU under utbildningen samt anställning som yrkeslärare efter utbildningen. Föreliggande studie är begränsad till två lärosäten där vi själva verkar: Karlstads universitet och Göteborgs universitet.

Den svenska yrkeslärarutbildningens förändring över tid

Lärarutbildningsreformen 2011 och dess konsekvenser för yrkeslärarutbildningen kan sättas i ett historiskt perspektiv av den svenska yrkeslärarutbildningens förändring över tid.


Stort behov av yrkeslärare
I Sverige är det sedan lång tid en stor brist på utbildade yrkeslärare inom flertalet yrkesprogram (Högskoleverket, 2009; Skolverket, 2018). Arbetslösheten bland behöriga yrkeslärare har länge varit låg och den svenska arbetsmarknaden förutsägs vara god för yrkeslärare (Saco, 2019). Bristen på yrkeslärare var också som framgått ett tungt vägande argument för reformeringen och förkortningen av utbildningen för yrkeslärare i reformen 2011 (SOU 2008:12). Andelen yrkes-lärare med pedagogisk högskoleexamen varierar dock starkt mellan yrkesprogrammen. Enligt statistik från Skolverket för läsåret 2017/18 hade Barn-och fritidsprogrammet den högsta andelen lärare med pedagogisk högskoleexamen (86,1 %), därefter kommer följande yrkesprogram: Restaurang och livsmedel (73,3 %), Vård och omsorg (69,2 %), Handel och administration (67,5 %), Hotell och turism (63,4 %), Hantverk (62,9 %), El och energi (51,7 %), Bygg och anläggning (50,4 %), Industriteknik (48,5 %), Naturbruk (47,7 %), Fordon och transport (47 %) samt VVS och fastighet (38,7 %) (Skolverket, 2018).

Yrkeslärarutbildningen efter reformen 2011

Yrkeslärarutbildningen i Sverige består som framgått av 90 hp, varav 60 hp ligger inom den utbildningsvetenskapliga kärnan (UVK) och 30 hp utgörs av VFU (se t.ex. All, Pettersson & Teräs, 2018). Yrkeslärarutbildningen genomförs på varierande sätt vid olika lärosäten; både som heltidsstudier och deltidsstudier, som distansutbildning med campusförlagda delar och vanligtvis som en kombination av dessa delar. Arbetssätten varieras med föreläsningar, individuellt arbete, redovisningar, gruppdiskussioner och examinerande seminarier (se t.ex. Andersén, Asghari & Petersson, 2018; Annerberg & Fändrik, 2019). VFU genomförs i skolor med gymnasial yrkesutbildning, vilket förekommer i såväl ungdomsgymnasiets som vuxenutbildning och särskola. VFU examineras av lärosätenas personal i förhållande till ett innehåll som är styrt av lärandemål i kursplaner. Det behövs därför ett samband mellan VFU-aktiviteter och campusförlagda aktiviteter i yrkeslärarutbildningarna för att studenterna ska utveckla relevanta yrkesämnesdidaktiska kunskaper (Annerberg & Fändrik, 2019).

Ansökan och antagning
I samband med antagningen till yrkeslärarutbildning sker som framgått en validering av sökandens yrkeskunskaper i relation till specificerade yrkesämnen. Johansson (2019) problematiserar möjligheter att bedöma yrkeskunnande i termen


Många sökande till yrkeslärarutbildningen arbetar redan som obehöriga yrkeslärare innan de ansöker om utbildningen (Isacsson m.fl., 2018) och kan ha gedigna erfarenheter av yrkesundervisning. Det som de saknar är då själva dokumentationen över didaktiska kunskaper och kompetens (All m.fl., 2018; Andersén m.fl., 2018).

**Verksamhetsförlagd utbildning (VFU)**


Studenternas utveckling av sina undervisningskunskaper kan exempelvis ske genom att de systematiskt reflekterar över sina erfarenheter under VFU i en så kallad självvärdering (jfr ”own self-feedback” i Hattie & Timperley, 2007, s. 86). VFU medverkar också till att yrkeslärarstudenter får erfarenheter av vad det innebär att vara lärare som i sin tur bidrar till att forma en ny yrkesidentitet som lärare (Hultman, Wedin & Schoultz, 2012). Genom VFU kan studenters profession utvecklas, som exempelvis självständighet, social kompetens och förståelse av varierande förutsättningar i undervisningssituationer (se t.ex. Hultman m.fl., 2012).

Kompetensutveckling efter yrkeslärarexamen för breddning av yrkesämnesbehörighet


Syfte och frågeställningar

Studien syftar till att utforska hur tidigare yrkeslärarstudenter uppfattar sin yrkeslärarutbildning gällande antagningen, VFU samt sin anställning som yrkeslärare i yrkesämnen efter utbildningen. Utifrån syftet organiserades studiens frågeställningar i tre temata som också blev utgångspunkt för enkätundersökningen.

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Ansökan och antagning till yrkeslärarutbildningen
Vilka tidigare yrkeserfarenheter hade de tidigare studenterna inom de ämnen de sökte och antogs till?

Verksamhetsförlagd utbildning (VFU)
Hur genomfördes handledningen inom VFU i relation till studenternas yrkesämnen?

Efter avslutad yrkeslärarutbildning
Vad hände efter lärarutbildningen gällande anställning och möjlighet till kompetensutveckling?

Metod och genomförande
Vi valde att genomföra en webbaserad enkätstudie via Karlstads universitets webbaserade enkätverktyg. Enkäten pågick mellan 8 februari och 30 september 2018.

Enkätens frågor formulerades utifrån den kunskap vi skaffade oss om antagningen av yrkeslärarstudenter samt yrkeslärarutbildningens form och innehåll. Vi fick även konstruktiva synpunkter på enkätfrågorna från kolleger vid våra respektive lärosäten.

I de enkätfrågor där respondenterna skulle ange val av något eller några yrkesämnen har vi använt oss av Universitets- och högskolerådets (UHR) lista över kvalificerade och relevanta yrkeskunskaper för de 211 yrkesämnen som fanns när enkäten genomfördes (UHR, 2017). Dessa ämnen organiseras i sin tur efter de gymnasiala yrkesprogrammens yrkesämnen för att få en bättre överskådlighet.

Enkäten distribuerades via ett informationsbrev till alla tidigare yrkeslärarstudenter som påbörjade utbildningen efter lärarutbildningsreformen 2011 vid våra respektive lärosäten, Karlstads universitet och Göteborgs universitet.

Möjligheten att nå så många av dessa studenter som möjligt försvårades av att lärosätena varken hade aktuella e-postadresser eller uppdaterade hemadresser till studenter som lämnat utbildningen för mer än ett år sedan. Till dessa tidigare studenter använde vi postala utskick, med ett informationsbrev som innehöll en länk till enkäten, till de adresser som lärosätena hade tillgängliga. Det medförde med stor sannolikhet att svarsfrekvensen blev låg, särskilt bland de studenter som gick sin yrkeslärarutbildning närmast efter reformens genomförande. Vid Karlstads universitet skickades sammanlagt 394 enkäter till tidigare studenter hemadresser och e-postadresser och vid Göteborgs universitet skickades 244 enkäter till tidigare yrkeslärarstudenters hemadresser och e-postadresser som fanns tillgängliga. Totalt skickades således 638 informationsbrev till tidigare lärarstudenter vid de båda lärosätena. Postadresserna kan ha varit inaktuella och
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Resultat

140 tidigare yrkeslärarstudenter har deltagit i enkäten, men antalet svar på enskilda frågor varierar mellan 125 och 140. Åldersmässigt var gruppen 50–55 år störst (30 %), och 48 % var män, 49 % kvinnor och 3 % ville inte definiera sitt kön.

Utifrån det stora antalet yrkesämnen i förhållande till antalet respondenter kan vi inte få detaljerad kunskap om varje yrkesämne. Därför har vi valt att beskriva resultatet utifrån de gymnasiala yrkesprogrammen som är totalt 20. Eftersom inga respondenter hade ansökt till yrkesämnen inom Sjöfartsutbildningen, Tågteknikutbildningen, Yrkesdansarutbildningen, Marinteknikutbildningen eller Utbildningen för samiska näringer så har dessa yrkesprogram tagits bort i resultatpresentationen. Även resultat med låg svarsfrekvens har tagits bort. Exempelvis när det gäller frågan om kombinationen av läkartjänst och annan tjänst har vi inte tagit med Teknikprogrammet – fjärde året i vår beräkning, eftersom det enbart var en respondent som svarade på frågan. Resultatet presenterats utifrån de tre temata och studiens frågeställningar.

Ansökan och antagning till yrkesläurarutbildningen

125 tidigare studenter svarade på frågan om hur de fick information inför sin ansökan till yrkesläurarutbildningen. 110 respondenter (88 %) svarade att de sökte information inför sin ansökan till yrkesläurarutbildningen på egen hand medan endast 15 respondenter (12 %) angav att de fick informationen genom vägledare.

140 respondenter hade ansökt för sammanlagt 168 yrkesämnen inom 15 yrkesprogram. 28 av dem (20 %) ansökte om behörighet för yrkesämnen inom mer än ett program. Den högsta andelen studenter som blev antagna fanns för yrkesämnen inom Fordons- och transportprogrammet, Hantverksprogrammet, Bygg- och anläggningsprogrammet, Barn- och fritidsprogrammet, Vård- och omsorgsprogrammet och Handels- och administrationsprogrammet. Lägst antal studenter

VFU (Verksamhetsförlagd utbildning)

På frågan om de tidigare studenterna under sin VFU enbart undervisade i de yrkesämnen de blev antagna till svarade 125 respondenter. Av de 125 respondenter svarade 94 (75 %) att de enbart undervisade i de yrkesämnen de hade blivit antagna till. 31 respondenter (25 %) svarade att de även undervisade i andra yrkesämnen som de inte hade blivit antagna till. Det framkommer att studenter undervisade i sammanlagt 83 yrkesämnen som inte hade blivit antagna i.

På frågan om de tidigare studenterna under sin VFU hade haft en handledare med yrkesämnets kunskaper i de specifika yrkesämnen som de själva var antagna till, svarade 126 respondenter. 99 av dem (79 %) uppgav att de hade haft en VFU-handledare med specifika yrkesämnets kunskaper i de yrkesämnen som de var antagna till. Av de 27 respondenten (21 %) som hade angett att de inte hade en VFU-handledare med specifika yrkesämnets kunskaper i de yrkesämnen som de själva var antagna till, har 18 respondenter angett att de hade VFU i egen tjänst och inte hade några kollegor med behörigheter för de yrkesämnen.

Brister på VFU-handledare med rätt yrkesämnets kunskaper fanns inom sammanlagt 78 yrkesämnen.

Frågan om VFU-handledarens betydelse för studenters nuvarande skicklighet som yrkeslärare besvarades av 123 respondenter, och det finns totalt 142 svar på frågan. Skillnaden beror på att studenterna som har varit antagna till flera yrkesämnen inom ett eller flera program har kunnat ge flera svar och ange att deras VFU-handledare ha haft mer betydelse för dem i ett yrkesämne inom ett program, och mindre betydelse i ett annat yrkesämne inom ett annat program. Av de 142 svaren anger 67 (47 %) att VFU-handledare hade mycket stor eller ganska stor betydelse för studenternas nuvarande skicklighet som yrkeslärare i ämnet. 75 svar (53 %) visar att VFU-handledare hade liten eller ingen betydelse alls för studenternas nuvarande skicklighet som yrkeslärare. Majoriteten av de studenter som svarade att deras VFU-handledare hade mycket stor eller ganska stor betydelse för deras nuvarande skicklighet som yrkeslärare finns i fallande ordning på:

- Barn- och fritidsprogrammet.
- Vård- och omsorgsprogrammet.
- Restaurang- och livsmedelsprogrammet.

Av de studenter som svarade att deras VFU-handledare hade liten betydelse eller ingen betydelse alls finns majoriteten i fallande ordning inom:
• Industritekniska programmet.
• VVS- och fastighetsprogrammet.
• Bygg- och anläggningsprogrammet.
• El- och energiprogrammet.
• Hotell- och turismprogrammet.
• Fordons- och transportprogrammet.

Frågan om studenterna fick den handledning de behövde under sin VFU besvarades av 126 respondenter, som sammanlagt har gett 145 svar. Studenter som har varit antagna till flera yrkesämnen inom ett eller flera program, har svarat att de har fått den handledning de behövde i vissa yrkesämnen, men inte nöjaktig handledning i andra yrkesämnen. 89 av de 145 svaren (61 %) visar att respondenterna ansåg att de fått den handledning de behövde under sin VFU, medan 56 svar (39 %) visar att studenterna inte fick den handledning de behövde.

De studenter som angav att de fick tillräcklig handledning under sin VFU fanns i fallande ordning inom:
• Hotell- och turismprogrammet.
• Restaurang- och livsmedelsprogrammet.
• Naturbruksprogrammet.
• Barn- och fritidsprogrammet.
• Vård- och omsorgsprogrammet.
• El- och energiprogrammet.
• Handels- och administrationsprogrammet.

Studenter på Hotell- och turismprogrammet samt studenter på El- och energiprogrammet hade tidigare svarat att deras VFU-handledare hade liten betydelse eller ingen betydelse alls för dem under deras VFU. Därför framstår svaret att de fick tillräcklig handledning under sin VFU som paradoxalt. Det är svårt att förklara denna paradoxalitet utifrån enkätundersöknngen.

De studenter som angav att de inte fick den handledning de behövde under sin VFU fanns i fallande ordning inom:
• VVS och fastighetsprogrammet.
• Hantverksprogrammet.
• Fordons- och transportprogrammet.
• Bygg- och anläggningsprogrammet.
Efter avslutad yrkeslärarutbildning
Av de 139 respondenter som svarar på frågan om de har en tjänst som yrkeslärare anger 113 att de har en lärartjänst, det vill säga att 81 % av de tidigare lärarstundenterna arbetar som yrkeslärare efter utbildningen. Av de 26 respondent (19 %) som inte har en lärartjänst finns en betydande andel inom Hantverksprogrammet och Hotell- och turismprogrammet. 18 respondenter anger att de har annan anställning, 6 respondenter har inte sökt någon lärartjänst och 2 respondent har sökt lärartjänst, men inte fått någon.

Högst andel yrkeslärare som svarar att de arbetar som yrkeslärare efter yrkeslärarutbildningen finns inom Restaurang- och livsmedelsprogrammet samt VVS- och fastighetsprogrammet. Lägst andel finns inom Hantverksprogrammet samt Hotell- och turismprogrammet.

98 av de 113 respondenter som har en lärartjänst (87 %) svarar att de arbetar 76–100 % som yrkeslärare och bland dem är Fordon- och transportprogrammet, El- och energiprogrammet, Bygg- och anläggningsprogrammet, Industri- och tekniska program samt Vård- och omsorgsprogrammet främst representerade.

Frågan ställdes till de 113 respondenter som har en lärartjänst, om de undervisar enbart i de yrkesämnen som de har fått behörigheter för. Här finns 126 svar och skillnaden beror på att studenterna som har varit antagna till flera yrkesämnen inom ett eller flera program kan ange att de har undervisat enbart i yrkesämnen som de har fått behörighet för i ett program, men också undervisat i yrkesämnen de inte fått behörighet för inom andra program. Av dessa 126 svar visar 75 svar (60 %) att respondenterna undervisade i de yrkesämnen i programmen som de hade fått behörigheter i som yrkeslärare, där i fallande ordning yrkesämnen inom nedanstående program är dominerande:

- Restaurang- och livsmedelsprogrammet.
- Hantverksprogrammet.
- Naturbruksprogrammet.

51 av de 126 svaren (40 %) visar att respondenterna undervisade i ämnen i ett program som de inte har behörighet i. Yrkesämnen inom nedanstående program anges i fallande ordning efter flest yrkeslärare som undervisar i ämnen de inte har behörighet i:

- El- och energiprogrammet
- Industri- och tekniska programmet.
- Hotell- och turismprogrammet.

Som framgått visade 51 svar (40 %) att respondenterna undervisade i ämnen som de inte hade behörighet i. En följdfråga till de svaren var: *Vilka är skälen till att du undervisar inom andra yrkesämnensområden än de du har din behörighet i?* Fem skäl
kunde anges, en respondent kunde ange flera skäl och totalt fanns 72 skäl an-
givna i de 51 svaren. Det absolut viktigaste skälet (60 svar av 72) var att de be-
dömde att de hade tillräcklig yrkesämneskunskap för flera ämnen än deras be-
hörigheter.

På frågan om de kombinerar lärartjänsten med annan tjänst eller eget företag,
har 125 respondenter svarat och 94 av dem (75 %) svarar nej på frågan. Yrkesäm-
nen inom Naturbruksprogrammet, VVS- och fastighetsprogrammet, El- och
energiprogrammet, Restaurang- och livsmålsprogrammet samt Hantverks-
programmet har flest lärare som kombinerar lärartjänsten med annan tjänst eller
eget företag.

Av de 113 respondenter som angett att de arbetar som yrkeslärare, svarar 99
av dem (88 %) på frågan om deras möjligheter till kompetensutveckling de har
fått för att kunna undervisa inom yrkesämnen de inte hade lärarbehörighet i.
Svaren visar att 70 av de 99 respondenterna (71 %) inte har fått möjlighet till så-
dan kompetensutveckling. 29 av 99 respondenter (29 %) svarar således att de har
fått möjlighet till kompetensutveckling för att kunna undervisa inom yrkesäm-
nen de inte hade lärarbehörighet i. De yrkeslärare som inte har fått en sådan kom-
petensutvecklingsmöjlighet finns i fallande ordning inom:

- VVS- och fastighetsprogrammet.
- Industritekniska programmet.
- Hantverksprogrammet.
- Bygg- och anläggningsprogrammet.
- Handels- och administrationsprogrammet.
- Fordons- och transportprogrammet.

De yrkeslärare som har fått möjlighet till kompetensutveckling för att kunna un-
dervisa inom yrkesämnen de inte hade lärarbehörighet i finns i fallande ordning
inom:

- El- och energiprogrammet.
- Barn- och fritidsprogrammet.
- Restaurang- och livsmålsprogrammet.

Även inom dessa program är det dock endast hälften eller färre än hälften av
lärarna som haft möjlighet till sådan kompetensutveckling.
Diskussion och slutsatser

Genom en enkätstudie riktad till tidigare yrkeslärarstudenter har vi undersökt deras upplevelse av yrkeslärarutbildningen gällande antagning, VFU i utbildningen samt läraranställning och möjligheter till kompetensutveckling som yrkeslärare. Under studiens gång har vi presenterat tentativa resultat av studien vid ett par tillfällen och tagit emot synpunkter och erfarenheter från åhörare som i viss utsträckning utgör referenser inom de aktuella temata vi har haft för avsikt att undersöka.

Antagning till yrkeslärarutbildningen

Kravet på kvalificerade och relevanta yrkeskunskaper utifrån arbetslivserfarenheter utgör grund för antagningen (UHR, 2017) och enkätstudien visar att de sökande till yrkeslärarutbildningen hade lång yrkeserfarenhet, hela 80 % hade mer än 8 års yrkeserfarenhet när de sökte utbildningen och cirka 60 % hade mer än 16 års yrkeserfarenhet. Det innebär att yrkeslärarstudenter har en hög genomsnittsålder. Nästan alla av våra respondenter (över 90 %) har blivit antagna i samtliga sökta yrkesämnen, men det framkommer också att studenter upptäcker att de inte har sökt till yrkesämnen som de faktiskt skulle ha kunnat söka till utifrån sina arbetslivserfarenheter. 83 % av respondenterna i enkätten menar att de har tillräcklig yrkesämneskunskap för flera ämnen än vad deras behörighet täcker, men en breddning av behörighet till fler yrkesämnen kan sökas först efter genomförd yrkeslärarutbildning (Skolverket, 2019).

Att söka till yrkeslärarutbildningen framstår utifrån våra respondenter som en individuell process då cirka 80 % av dem anger att de sökte utbildningen på egen hand. Här har vi mött erfarna studievägledare som ifrågasätter att siffran stämmer och menar att de i hög utsträckning ger de sökande stöd i ansökningsprocessen. Det kan bero på hur vi ställt frågan i enkätten, där vi frågar om information inför ansökan och inte om stöd under själva ansökningsprocessen. Svaren indikerar dock att något mer behöver göras angående stöd i ansökningsprocessen.

VFU i utbildningen

Ett resultat som vi menar är viktigt att lyfta fram är att drygt hälften av studenterna angav att deras VFU-handledare hade en liten eller ingen betydelse alls för deras nuvarande skicklighet som yrkeslärare. Det innebär att även studenter som hade VFU-handledare inom sina yrkesämnen menade att de inte fick behövligt stöd från handledaren för att utveckla yrkesämnesdidaktisk kompetens.

Utifrån Skolverkets statistik för läsåret 2017/18 hade Hotell och turism 63,4 %, El och energi 51,7 %, Bygg och anläggning 50,4 %, Industri- och transport 47 %, och VVS och fastighet 38,7 % lärare med pedagogisk högskoleexamen (Skolverket, 2018). De respondenter (75 av 142 svar, eller 53 %) som angav att deras VFU-handledare hade liten eller ingen betydelse, är flest bland Industriteknik, VVS och fastighet, Bygg och anläggning, El och energi, Hotell och turism samt Fordon och transport. Med utgångspunkt i Skolverket (2018) menar vi att en lägre andel av de verksamma lärarna inom flertalet av dessa program har en pedagogisk högskoleexamen, och frånvaro av pedagogisk utbildning kan tänkas påverka yrkeslärares kompetens som VFU-handledare.

De respondenter (67 av 142 svar, eller 47 %) som angav att deras handledare hade haft mycket stor eller ganska stor betydelse för deras nuvarande skicklighet som yrkeslärare fanns främst bland de som hade sin VFU inom yrkesämnen på Barn och fritid, Restaurang och livsmedel och Vård och omsorg. Dessa yrkesprogram har med utgångspunkt i Skolverket (2018) också en betydligt högre andel lärare med pedagogisk högskoleexamen (mellan 69 och 86 %) än flertalet av de program där handledaren angavs ha liten betydelse. Vi menar alltså att det kan finnas en relation mellan studenternas värdering av handledningen under VFU och i vilken utsträckning lärare på programmen har lärarbehörighet (pedagogisk högskolekompetens).

Efter avslutad yrkesläurarutbildning

Arbetslösheten bland behöriga yrkeslärare är låg (Högskoleverket, 2009) och vår enkätundersökning visar också 113 av 139 tidigare lärarstudenter (81 %) arbetar som yrkeslärare efter utbildningen. Av de 26 respondenterna (19 %) som anger att de inte arbetar som yrkeslärare är 18 verksamma i andra yrken och endast 2 respondenten anger att de sökt en lärartjänst, men inte fått någon. Enkätundersökningen visar också att det finns en särskilt stor brist på yrkeslärare inom vissa program, exempelvis El- och energiprogrammet och Industri- och transportprogrammet. På grund av yrkeslärarbristen kan skolorna se en potential i att kunna använda lärare utöver deras yrkesämneskunskaper i undervisningen. I enkätstudien undersöktes vi också i vilken grad yrkesläranorna kombinerade en lärartjänst med annan tjänst eller eget företag och fann att det var vanligast inom Hantverksprogrammet och Naturbruksprogrammet och ovanligast inom Vård- och omsorgsprogrammet. Det kan finnas ett samband till de olika yrkesbranscherna och möjligheter att kombinera lärartjänster med annan verksamhet. En annan förklaring kan vara att yrkesläran som endast har fått behörighet i att undervisa i ett
eller ett fåtal ämnen kan ha svårare att få en heltidstjänst, och kanske är i behov av att kombinera yrkesläartjänsten med annat arbete.


Vår studie visar att det behövs stöd i ansökningsprocessen. Det finns en risk att potentiella yrkesläarstudenter inte orkar ta tag i ansökningsprocessen. Vi menar att resultatet av vår enkät indikerar att information om möjligheter att söka till yrkesläarutbildning inte når ut till potentiella sökanden och att stödet i ansökningsprocessen bör förbättras.

Slutsatser
Vi vill framhålla att vi utifrån vår studie kan dra slutsatsen att vi behöver veta mer om konsekvenserna för yrkesläare och yrkesläarutbildningen av lärarut-
bildningsreformen 2011. Resultatet från vår enkätstudie kan endast ge indikationer som i sin tur kan ge stöd både för en breddning och för en fördjupning i kommande studier.

Aktuell statistik visar att bristen på yrkeslärare med lärarexamen är fortsatt hög trots reformens intentioner att minska andelen obehöriga yrkeslärare. Genom förkortningen av yrkeslärarutbildningen försvåras yrkeslärares möjligheter till fortsatta akademiska studier efter yrkeslärarutbildningen, som nu framstår som en återvändsgränd i det akademiska utbildningssystemet. Det berättigar frågan om vilka som kommer att bli framtida forskare inom det yrkesdidaktiska området? Vilka vägar skapas vid lärosätena för att ge vägar framåt i utbildningssystemet för yrkesläarna, med det stora behov som finns av mer kunskap inom området?

Slutnoter
1 De andra tre examina är förskollärarexamen, grundlärarexamen och ämneslärarexamen (Regeringens proposition, 2010).

Om författarna


Referenser


Hamid Asghari & Ingrid Berglund

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Relevant opplæring i yrkesopplæringens første år: Elevers erfaringer med yrkesrelevant opplæring

(Relevant training in the first year of vocational training: Pupils’ experience with vocational training)

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Abstract

During the last years, vocational education in Norway has been organised through eight different educational programmes. Each programme makes the basic year for many different professions, students may be heading for. The national regulations for Norwegian vocational education and training describe a clear intention of professional relevance for each student and competence development through democratic participation. The aim of this research was to investigate how the basic year in vocational programmes works, related to these intentions from a student perspective. This study provides both qualitative and quantitative results.

Despite the fact that most of the students, before or during the first year, have decided on their future profession, the survey shows that the basic year in Norwegian vocational education is not, or only partially relevant to their vocational plans. The students find that their possibilities to influence in deciding their learning tasks and the educational content is minimal. Interpretation and understanding of curriculum, learning assignments and educational content are decided by the teachers or others, not the students.

Keywords: vocational relevance, vocational interests, vocational plans, student influence, student participation
Innledning


Yrkesopplæringen i Norge er organisert i åtte utdanningsprogrammer. Hovedmodellen er to år i skole og to års læretid i bedrift. De empiriske eksempene i artikkelen er fra første året i skole (Vg1), og er begrenset til å omfatte utdanningsprogrammene Elektro (EL), Bygg- og anleggsteknikk (BA), Teknikk og industriell produksjon (TIP), Design og håndverk (DH) og Helse- og oppvekstfag (HO). Det er mange og til dels svært ulike yrker i ett og samme utdanningsprogram. Vg1 kan være første del av opplæringen for inntil cirka 70 yrker som fører fram til fag- eller svennebrev (Hansen & Haaland, 2015). Dette kan skape utfordringer for Vg1-lærere. De skal, i tråd med læreplanverket, legge til rette for og lede en tilpasset og yrkesrelevant opplæring for elever i samme klasse med ulike utdannings- og yrkesplaner.

Både norsk og internasjonal forskning viser at yrkesrettet, elevmedvirkning og relevans har stor betydning for elevenes motivasjon første året (Vg1). Dette er felles for mange yrker (Bødtker-Lund, Hansen, Haaland & Vagle, 2017; Dahlback et al., 2011; Dahlback, 2019; Jørgensen et al., 2018; Kember et al., 2008).

Læreres bruk av handlingsrommet i læreplanen gir, ved siden av elevenes erfaringer og læringsbehov, grunnlag for å drøfte hvordan kvaliteten i framtidens yrkesopplæring kan endres og videreutvikles. Funnene kan være et nyttig innspill i den pågående endringsprosessen som ny reform i Norsk yrkesopplæring, som iverksettes høsten 2020 (Kunnskapsdepartementet [KD] 2018). Hensikten med denne undersøkelsen er ikke å gjennomføre en læreplananalyse i utdanningsprogrammene. Målet er å synliggjøre hvordan handlingsrommet i planene brukes for å gi en yrkesrelevant opplæring i Vg1 – sett fra et elevperspektiv. Artikkelens problemstilling blir ut fra dette: Hvordan brukes handlingsrommet i
læreplanene som grunnlag for en yrkesrelevant opplæring for elever med ulike yrkesinteresser?

Vi har valgt å ta utgangspunkt i to ulike perspektiver fra Goodlad’s læreplan-teori. Intensjonene for yrkesrelevant opplæring beskrives i NOU-er og Stortingsmeldinger, og gir et bilde av den intendinge læreplanen og et utenfraperspektiv. Studien av elevenes erfarte yrkesrelevans gjennom en spørreundersøkelse gir oss et innenfraperspektiv og innsikt i hvordan handlingsrommet i læreplanene faktisk brukes (Goodlad, 1979).

Sentrale føringer i norsk yrkesopplæring


Sentral forskning

I en internasjonal studie ble studenter fra ni ulike fagområder på tre forskjellige universiteter i Hong Kong intervjuet for å karakterisere hva som påvirket undervisning og læringsmiljøer. Studien, som er utført på et høyere nivå innen utdanning, er interessant. Den har, slik vi ser det, overføringsverdi til videregående opplæring. Studien hevder at de viktigste virkemidlene for å motivere elevene til å lære er å etablere relevans. Etablering av relevans var den mest fremtredende og oftest siterte studentresponsen. Det ble hevdet at dersom læringen skulle gi

En australsk studie understreker viktigheten av at lærerne holder seg oppdatert i eget yrke for å kunne undervise i hele yrkets bredd. Studien viser til behovet for bredd i eget fag, og er derfor interessant i denne sammenheng, hvor bredd mange omhandler yrkene i ett og samme utdanningsprogram. Dette innebærer forventninger til at lærer tilrettelegger for en relevant undervisning til et bredt spekter av yrker i utdanningsprogrammet. Studien peker på et behov for delt ansvar, og et tett samarbeid mellom skole og bedrift i utviklingen av en helhetlig og aktuell yrkesopplæring (Wheelahan & Moodie, 2010, s. 16).

Yrkesrelevant opplæring – fra intensjon til realitet

involveres med innflytelse på valg av eget læringsarbeid (Ryan & Deci, 2000, s. 54).


Metode og analyse

For å få innsikt i hvordan handlingsrommet i læreplanene brukes med det målet å gjøre opplæringen yrkesrelevant for den enkelte elev, gjennomførte vi en spørreundersøkelse blant 203 elever. Målet var å få innsikt i elevenes erfaringer med hvordan innholdet i Vg1 ble tilpasset deres yrkesplan eller yrkesinteresser.

Undersøkelsen viser innledningsvis hvor mange elever som har bestemt seg for hvilket yrke de ønsker å utdanne seg til, og om yrkesvalget ble tatt før eller i løpet av Vg1. Spørreundersøkelsen inneholdt spørsmål med svaralternativer etterfulgt av et åpent kommentarfelt for utdyping med egne ord, noe som gir en kombinasjon av kvantitative og kvalitative data. Videre viser studien elevenes innflytelse på innhold og arbeidsmåter i lys av egne yrkesplaner/interesser. Den viser også hvor lang tid den enkelte elev har arbeidet med oppgaver innen sitt yrke/sin interesse i de felles programfagene (FP) og i faget Yrkesfaglig fordypning (YFF). Det viser også om de har arbeidet med ett eller flere yrker i YFF. I siste delen viser undersøkelsen hvilke produkter og arbeidsoppgaver elevene har jobbet med. Disse blir sett i lys av den enkeltes utdannings- og yrkesplan, og hvilke forventninger elevene hadde til Vg1. Funnene knyttes til om elevene kom inn på sitt førstevalg, og om de hadde bestemt seg for hva de ønsker å utdanne seg til da de begynte i Vg1. Den samlede empirien belyser elevenes ulike erfaringer av samme virkelighet, og bidrar til et nyansert og mangfoldig perspektiv på hvordan læreplanenes handlingsrom brukes i opplæringen.

Valget av informanter er begrunnet i at de var elever ved skoler som representerte de utvalgte utdanningsprogrammene. Elevene var fordelt på fem yrkesfaglige utdanningsprogram. 33 elever var fra BA, 42 elever fra EL, 48 elever fra TIP, 42 elever fra DH og 38 elever fra HO. Bakgrunnen for valg av utdannings-
program var at de innholdsmessig er ulike, men like på den måten at alle er utgangspunktet for mange yrker. En pilotstudie ble gjennomført i forkant av spørreundersøkelsen for å sikre at spørsmålene var formulert på en slik måte at informantene forstod betydningen av dem. I analysedelen jobbet vi to forskere sammen for å sikre perspektivering og kvalitetssikring av analysen. Populasjonen begrenser seg til fire skoler fordelt på to fylker. Det betyr at resultatet ikke nødvendigvis ville blitt det samme i andre deler av landet.

Analysemodellen som ble brukt i bearbeiding av empirien fra undersøkelsen er basert på Malteruds (2017) modell for systematiske tekstkodensering. Modellen er en pragmatisk metode for analyse av kvalitative data. Analysen er egnet for utvikling av beskrivelser og delvis for begrepsavklaring, og består av fire trinn. Elevenes kvalitative beskrivelser gir grunnlag for å tolke deres subjektive perspektiver og erfaringer for hvordan handlingsrommet brukes. For å holde fokus på problemstillingen var spørsmålene i spørreundersøkelsen utgangspunkt for den første kategoriseringen, utformet i forkant av gjennomføringen. Underveis i analysearbeidet, basert på elevenes svar, ble analysekategoriene videreutviklet.

Allerede i første trinn av analysen, som omhandlet behandling av rådata, startet kodingen (Malterud, 2017). På spørsmål om hvilke produkter og arbeidsoppgaver eleven hadde arbeidet med, ble svar som ”det vi fikk beskjed om fra lærer”, eller hvor elevene ramset opp navn på mange ulike oppgaver, verktøy og materialer plasert i kodene: ”ulike oppgaver”, ”verktøy og materialer”, ”litt om alt” og ”lærerstyrt”. Svar som ”det som var relevant for oppgaven” eller ”det jeg hadde lyst til”, ble lagt inn i koden: ”i henhold til yrkesplan eller interesser”.

Trinn to omhandlet en systematisk gjennomgang av resultatet fra trinn en. I denne delen av analysen ble for eksempel beskrivelser av verktøy- og materialbruk sett i sammenheng med elevenes yrkesplaner eller -interesser. Elevenes beskrivelser ble her bearbeidet og kodet i flere omganger før de ble lagt inn under kategorier i analysens tredje trinn. Her blir analysen oppsummert i en oversikt som viser hvordan arbeidsoppgaver og bruk av verktøy og materialer i Vg1 samsvarer med reelle arbeidsoppgaver, verktøy og materialer i yrkene elevene hadde bestemt seg for å utdanne seg til, eller var interessert i. Videre ble dataene i fjerde trinn abstrahert, identifisert, kodet og kondensert inn i overordnede kategorier som representerer mangfoldet i elevenes beskrivelser. For å belyse i hvilken grad elevene opplever at handlingsrommet blir brukt for å tilrettelegge for en yrkesrelevant opplæring, var noen av hovedspørsmålene utformet med tilleggsspørsmål. Disse konkretiserer elevenes svar slik at de kunne analyseres og tolkes i forhold til hverandre.
Resultater og diskusjon

Resultater av analysen presenteres tilknyttet spørsmålene i undersøkelsen i form av beskrivende og forklarende tekst, samt to tabeller. Til slutt diskuterer vi hvordan handlingsrommet i læreplanene brukes for å sikre en yrkesrelevant opplæring for elever i Vg1 med ulike yrkesinteresser.


Resultatene viser at på EL er alle elevene kommet inn på sitt førstevalg, mens på DH, som hadde størst andel av andre-/tredjevalgs-elever, var 36 av 42 elevene (86%) kommet inn på sitt førstevalg. En av årsakene til at EL har 100% førstevalgelever kan være at utdanningsprogrammet har flere søkere enn plasser. Dette er interessant når resultatene viser at EL er det utdanningsprogrammet hvor færrest elevene hadde bestemt seg (før, eller i løpet av Vg1) for hvilket yrke de ville utdanne seg til (71%). På DH, som hadde høyest antall andre- og tredjevalgs-elever, viser resultatene at 74% av elevene hadde bestemte seg før eller i løpet av Vg1. Dette kan muligens ses i sammenheng med at elevener som har hatt DH som førstevalg ikke har hatt en klar yrkesplan eller yrkesinteresse innenfor yrkene i utdanningsprogrammet, noe kommentarer kan tyde på. For eksempel: “Jeg søkte DH fordi jeg er lei skole og liker kunst og håndverk og siden jeg ikke hadde klart tre år med bare skole så vil jeg gå på noe som interesserer meg.” Kommentaren kan forstås som at eleven ikke har bestemt seg for et yrke innen DH, men ønsker en utdanning der det er muligheter for å arbeide praktisk. Når en ser på utdanningsprogrammene i undersøkelsen samlet sett, viser den at 85 av 203 elevene hadde bestemt seg for yrke i løpet av Vg1, mens 99 elevener hadde bestemt seg før Vg1. Den høye andelen av elevene som har bestemt seg for yrke før Vg1 kan indikere at mange elevene har en forventning om og behov for yrkesrelevant opplæring. Den store andelen av elevener som hadde bestemt seg før et yrke før Vg1, kan også indikere at elevener i ungdomsskolen har behov for å bli kjent med yrkene i utdanningsprogrammene på et tidlig tidspunkt for å sikre at utdanningsvalget er i samsvar med deres forventninger av oppgaver i det spesifikk yrket.

Hensikten med spørsmålet om forventninger til Vg1 var å legge grunnlag for å tolke elevenes erfaringer med innhold og arbeidsmåter i Vg1. Manglende samsvar mellom forventninger og innhold kan ha betydning for motivasjonen, behovet for og opplevelsen av relevans i opplæringen. Dersom elevene ikke har forventninger til opplæringen, har de kanskje heller ikke behov for at opplæringen skal være relevant for et spesielt yrke i motsetning til om de har store
forventninger og et klart yrkesmål. Her viser dataene at elevene i alle utdanningsprogrammene har størst forventninger til det faglige innholdet. Funn som skiller seg ut her er forventninger om å jobbe praktisk. På DH og HO er det bare cirka 3% som har forventninger om å arbeide praktisk, mens det på BA, som hadde høyest forventninger, var kun 15% som hadde forventninger om praktisk jobbing. Det er interessant at faglige forventninger skiller seg ut med høyest andel, mens forventningene til praksis er forholdsvis lave. Dette kan ha ulike årsaker. Det kan tenkes at faglige forventninger knyttes opp mot behovet for en yrkesrelevant opplæring, mens praktisk jobbing muligens oppleves som en naturlig del av yrkesopplæringen. Elever som hadde bestemt seg for et bestemt yrke- de ønsket å utdanne seg til hadde høyest forventninger til det faglige innholdet. De uttrykte behov for at handlingsrommet i læreplanene ble brukt slik at deres læarringsarbeid kunne relateres til deres yrkesvalg i større grad enn hos de som ikke hadde bestemt seg for et spesifikk yrke.

Undersøkelsen viser at bare 16% av elevene hadde størst forventninger til sosiale forhold. Her var det lite variasjon mellom utdanningsprogrammene. At det er så få elever som har sosiale forventninger, kan indikere at de faglige forventningene på Vg1 er viktige for elever som kommer rett fra ungdomsskolen og er opptatt av forandring, fremtidig yrke og arbeidsliv. Beskrivende svar som ”mer ansvar og lære om ting jeg får bruk for i jobb” kan indikere elevers forventninger om å medvirke til en yrkesrelevant opplæring på Vg1. 16% sier at de har ingen forventninger til opplæringen, noe som kan ha sammenheng med at de har kommet inn på sitt andre- eller tredjevalg, og dermed ikke regner med å få lære noe de er interessert i eller får bruk for i et fremtidig yrke. Hensikten med spørsmålene Synes du at du hadde nok innflytelse/medvirkning på hva du skulle gjøre? og Hva skulle du eventuelt ønske å ha mer innflytelse på? var å finne ut hvilke behov elevene hadde for innflytelse på eget læarringsarbeid. Behovet for innflytelse ble sett i sammenheng med vår tolkning av deres reelle innflytelse, gjennom deres beskrivelse av hva de hadde gjort av læarringsarbeid, hvilke materialer, verktøy og produkter de hadde brukt, og hvilke yrker de eventuelt var interessert i eller hadde bestemt seg for å utdanne seg til.

Her viser resultatene at DH er det utdanningsprogrammet hvor færrest elevener opplever å ha nok innflytelse/medvirkning på eget læarringsarbeid (33%), mens EL og TIP har størst andel av elevene som mener de har nok innflytelse på eget læerdingsarbeid (70%). Spørsmålet var utformet med tre alternative svar som: Ja, Nei, Vet ikke, og et åpent svaralternativ som gav muligheten for utdyping om hva eleven skulle ønske å ha mer innflytelse på. En elev sier for eksempel at ”leksene er så unødøvende at jeg blir umotivert av de”, mens en annen sier at han ønsker ”mer frihet og ikke bare høre på noen som snakker, jeg ønsker å jobbe med stoffet slik at jeg lærer det på min måte”. Dette kan være en konsekvens av at eleven opplever undervisningen som lite relevant og nyttig for egne yrkesplaner, eller at han mener lekser er unødøvende, og dermed demotiverende.
På spørsmålet om hvilke yrker elevene har fått erfaring med i YFF var hensikten å få et innblikk i om elevene kan fordype seg i selvvalgt yrke, og hvordan de som var usikre på sitt yrkesvalg fikk kjennskap til yrkene i utdanningsprogrammet. På bakgrunn av disse svarene utkristalliserte det seg noen kvalitative kategorier. Dersom eleven for eksempel oppgav navn på mange yrker og/eller skrev mange som svar, ble disse svarene lagt i kategorien mange ulike yrker. Hvis eleven svarte for eksempel "måtte styrke karakteren i fellesfag og har derfor jobba med det", "eg har gjort det eg fikk beskjed om" eller "det læreren bestemte", ble svaret plassert under kategorien lærerstyrt. Kolonnen lærerstyrt og kolonnen med mange ulike yrker kan også ses i sammenheng. Når elever må innom mange ulike yrker, kan det også oppleves som lærerstyrt. I kategorien egen yrkesplan/interesse ble svar som for eksempel "eg jobba med det yrket eg var interessert i, hadde lyst til, det eg syns er kjekt" og lignende plassert.

Svarene ble sett i forhold til hvilke yrker elevene eventuelt hadde bestemt seg for å utdanne seg til. Målet var å finne ut om det var deres valg som lå til grunn for denne yrkeserfaringen eller ikke. På TIP og EL har henholdsvis 8% og 6% fått velge bedrifter eller yrkesoppgaver knyttet til hvilket yrke de ønsker erfaring med. Kolonnen med mange ulike yrker er den som skiller seg ut med størst variasjon mellom utdanningsprogrammene. Utdanningsprogrammene som skiller seg ut her er DH og HO. Resultatene viser at elever ved DH og HO har jobbet med oppgaver som er relatert til flere ulike yrker, uavhengig av om elevene hadde spesifikke yrkesinteresser/yrkesplaner eller ikke. Kommentarer som "det var et roteringssystem som var bestemt på forhånd og me hadde ingen innflytelse på YFF" underbygger elevenes manglende mulighet til medvirkning i eget læringarbeid. Kommentarer som "skulle ønske jeg hadde hatt større innflytelse på undervisningen slik at jeg fikk fordype meg i det jeg har lyst å utdanne meg til" indikerer at elevenes muligheter til å velge yrke i faget YFF kan være begrenset, og at handlingsrommet i forskrift for Yrkesfaglig fordypning ikke utnyttes for å sikre at elevenes læringsbehov kan ivaretas. Vi spurte elevene om hvilke produkter/arbeidsoppgaver de har arbeidet med gjennom skoleåret for å finne ut om arbeidsoppgavene var relevant sett opp mot elevenes yrkesvalg/yrkesinteresser. Resultatene blir her presentert i tabellform, omgjort i prosent av hensyn til lesevennligheten.

Tabell 1. Elevenes produkter/arbeidsoppgaver i Vg1.

<table>
<thead>
<tr>
<th>Hvilke produkter/arbeidsoppgaver har du gjort dette skoleåret?</th>
<th>UTDANNINGSPROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oppgaver/produsker i tråd med elevenes yrkesplan</td>
<td>EL</td>
</tr>
<tr>
<td></td>
<td>42%</td>
</tr>
<tr>
<td>Oppgaver/produsker som ikke kan knyttes direkte til elevenes yrkesplan</td>
<td>58%</td>
</tr>
</tbody>
</table>
Tabell 1 viser hvor mange av elevene som gjennom skoleåret hadde arbeide med produkter/arbeidsoppgaver som kunne relateres til elevenes yrkesvalg. Dette spørsmålet er kun besvart av de elevene som hadde bestemt seg for yrke før eller i løpet av Vg1. Tallene er basert på vår analyse av sammenhengen mellom elevenes beskrivelser av arbeidsoppgaver og produkter de utførte i Vg1, og reelle yrkesoppgaver i det spesifikke yrket de har oppgitt som utdanningsmål. Her skiller DH seg ut ved at hele 94% av elevene beskriver arbeidsoppgaver som ikke kan relateres direkte til elevenes yrkesvalg. I tillegg til spørsmålet i Tabell 1 svarte elevene på følgende åpne spørsmål som grunnlag for vår analyse og vurdering av elevarbeidens yrkesrelevans:

- **Hvilke materialer/utstyr/verktøy etc. har du jobbet med hittil i dette skoleåret?** Svarene ble oppsummert og tolket i forhold til elevenes eventuelle yrkesplan eller yrkesinteresse. Resultatet viste at mange elever jobbet med mye forskjellig, som ikke hadde sammenheng med det yrket de hadde planlagt å utdanne seg til. Et eksempel er at kommende frisører jobbet med leire, tekstiler og papir, og svarene viser at alle elevene i samme klasse jobbet med samme materialer på samme tidspunkt, uavhengig av deres individuelle interesser og yrkesplaner.

- Som grunnlag for vurdering av elevenes muligheter for medvirkning og innflytelse i opplæringen svarte de i tillegg på følgende spørsmål:
  - **Hvorfor har du laget disse produktene/gjort disse arbeidsoppgavene?**
  - **Hvorfor valgte du disse materialene/dette utstyret/verktøyet?**

Analyse av svarene kan tyde på at mange elever ikke hadde innflytelse på eget lærlingsarbeid, og at oppgavene var bestemt på forhånd av lærerne. Dette underbygges av elevens kommentarer hvor elever fra DH som hadde bestemt seg for å bli frisør, sier at de har arbeidet med strikking, sying, maling og gipsarbeid. Andre elever på DH sier de har arbeidet med å lage fuglekasse, trekniv og stol. På BA og TIP er kommentarer som "vi har laget vedkurv og jobbet med grill, hammer, smihammer og meisel". Det kommer tydelig fram at verken materialene eller arbeidsoppgavene er tilpasset ulike yrkesplaner. Elevenes beskrivelser viser at de stort sett har arbeidet med samme oppgaver, materialer og verktøy uavhengig av hvilket yrke de ville utdanne seg til. For elever som har bestemt seg eller er interessert i yrkene som de nevnte oppgavene, materialene og verktøyene passer til, er det sannsynlig av lærlingsarbeidet oppleves som yrkesrelevant. For elever hvor oppgavene, materialene og verktøyene ikke samvaser med yrkesplaner eller interesser, vil lærlingsarbeidet sannsynligvis oppleves som verken relevant eller interessant. Totalt på alle utdanningsprogrammene viser resultatene at 29% av elevene opplever arbeidsoppgavene som relevante, mens 71% hevder at arbeidsoppgavene og materialbruk var bestemt på forhånd, og ikke hadde sammenheng med deres yrkesplan eller yrkesinteresse.

**Spørsmålet** Hvor stor del av tiden i programfagene og yrkesfaglig fordypning arbeider du direkte med oppgaver innen din yrkesinteresse? ble besvart av de elevene som hadde bestemt seg for yrke på det tidspunktet undersøkelsen ble gjennomført.

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Hensikten med spørsmålet var å få innblikk i hvor mye tid eleven erfarte at de fikk bruke på å lære yrket de hadde valgt, og å finne ut hvilke oppgaver de opplevde som nyttige og aktuelle for å lære yrket. Hensikten var også finne ut om det var forskjell på hvordan de erfarte nytteverdien av opplæringen i FP og i faget YFF.

Tabell 2. Tid brukt direkte på egen yrkesplan i de yrkesrettede felles programfagene (FP) og i faget Yrkesfaglig fordypning (YFF).

<table>
<thead>
<tr>
<th>UTDANNINGS-PROGRAM</th>
<th>EL</th>
<th>BA</th>
<th>TP</th>
<th>DH</th>
<th>HO</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>0-25% av tiden</td>
<td>18%</td>
<td>62%</td>
<td>38%</td>
<td>21%</td>
</tr>
<tr>
<td>YFF</td>
<td>50% av tiden</td>
<td>31%</td>
<td>14%</td>
<td>31%</td>
<td>12%</td>
</tr>
<tr>
<td>FP</td>
<td>75-100% av tiden</td>
<td>51%</td>
<td>24%</td>
<td>31%</td>
<td>67%</td>
</tr>
<tr>
<td>YFF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Svarene i denne tabellen er basert på valg av svaralternativer som forteller hvor stor andel av tiden, i de yrkesrettede fagene gjennom YFF og de FP, elevene erfarte å jobbe med oppgaver som var knyttet til deres yrkesplan eller yrkesinteresser. Spørsmålet hadde fem svaralternativer: under 25%, 25%, 50%, 75%, over 75%. I tabellen er de to første og de to siste svaralternativene slått sammen til henholdsvis 0–25% og 75–100% av hensyn til lesevennlighet. På bakgrunn av svarene i tabell 1 og innledende spørsmål fikk vi en indikasjon på forholdet mellom elevens erfaring av undervisningen og dens yrkesrelavan i forhold til egen yrkesinteresse i YFF og FP. Resultatene viser at elevene på EL erfarer at de får arbeide mer med oppgaver som passer til deres yrkesplaner i felles programfag enn hva de gjør i Yrkesfaglig fordypning. På DH og HO arbeider elevene lite i henhold til interesser og egen yrkesplan både i felles programfag og i Yrkesfaglig fordypning. Resultatene viser samtidig at elevene i disse utdanningsprogrammene erfarer å arbeide mer i henhold til egne interesser og yrkesplaner i YFF enn i FP. Resultatene her er sammenfallene med forrige spørsmål som omhandlet hvilke arbeidsoppgaver og materialer elevene arbeidet med. Det går her fram at mange elever opplever at oppgavene, materialene og verktøyene ikke samsvarer med yrket de har valgt eller er interessert i. På DH sier for eksempel 31 av 42 elever (75%) at de i FP arbeider mellom 0–25% direkte med oppgaver innen deres
interessefelt, kun 6 elever sier de har fått arbeidet mellom 75–100% av tiden med egne interessefelt. Disse elevene hadde bestemt seg for å utdanne seg til frisører, som er det største lærefaget i utdanningsprogrammet.

Bruken av handlingsrommet for en yrkesrelevant opplæring

Når det gjelder problemstillingen om i hvilken grad handlingsrommet i læreplanene blir brukt for å sikre en yrkesrelevant opplæring for elever med ulike yrkesinteresser, viser resultatene at innflytelse på eget læringsarbeid er sentralt. Dette er i tråd med Ryan og Deci’s (2017, s. 10) tanker om selvbemømmelse i utviklingen av motivasjon for læring. Utsagn som ”skulde gjerne vært med på å velge oppgaver litt selv fra egen interesse, men det meste er bestemt allerede og vi får sjelden være med å bestemme hvordan vi vil jobbe eller hvilke metoder som passer oss best” kan tyde på at graden av medvirkning og innflytelse på eget læringsarbeid oppleves som liten for elevene. Kember hevder at dersom læring skal oppleves relevant og gi mening, må det skapes en læringskontekst som preges av demokratisk diskusjon og koherens mellom undervisning og den reelle verden, som her betyr elevens livsverden (Kember et al., 2008). Ser vi på Ryan og Deci’s (2017, s. 239) selvbemømmelseteori, som hevder at grunnleggende behov som tilhørighet, kompetanse og autonomi er sentralt for at eleven skal oppleve indre motivasjon, er kommunikasjon i et demokratisk og autonomt utdanningsmiljø avgjørende. Sett i forhold til utsagnet over kan det forstås som at eleven ikke blir tatt med i diskusjon omkring innhold i opplæringen. Dette er interessant i forhold til internasjonale studier som peker på lærerens uavhengighet i forhold til arbeidslivets behov for kompetanse (Andersson, 2019; Robson, Bailey & Larkin, 2004).

For å få et innblikk i hvor mye eleven arbeider med oppgaver som samsvarer med egen yrkesplan eller yrkesinteresser, har vi undersøkt hvor mye tid eleven har hatt til disposisjon for egne valg av læringsoppgaver tilknyttet egne yrkesinteresser i FP og YFF. Dataene viser at en svært høy andel av elevene i lange perioder ikke får arbeide etter egen yrkesplan og egne interesser. Dette indikerer at handlingsrommet i læreplanene i liten grad blir benyttet for å tilrettelegge for en yrkesrelevant opplæring. Produktene og oppgavene elevene arbeider med viser at elevene i samme klasse i all hovedsak arbeider med det samme til samme tid og at arbeidsoppgaver, materialer og utstyr er forutbestemt og lærerstyrt, uavhengig av elevenes utdanningsplaner. Dette samsvarer med tidligere forskning, som viser hvilken effekt slik opplæring har for engasjement og utvikling av lærerlyst (Bødker-Lund et al., 2017; Dahlback et al., 2011, 2018, 2019; Hansen & Haaland, 2015; Hiim, 2013). Kvaliteten på skoleverkstedene spiller også en viktig rolle for om praksisen skal oppleves verdifull, og at elevene synes det er spesielt givende å arbeide med autentiske arbeidsoppgaver (Olsen, Reegård, Seland & Skålholdt, 2015). Samme studie viser at bedriftene spiller en viktig rolle for at opplæringen skal oppleves relevant, under forutsetning av at elevene får arbeide med et yrke de er interessert i. Dette støttes av internasjonal forskning, som
påpeker viktigheten av et tett samarbeid mellom skole og bedrift i utviklingen av en helhetlig og aktuell yrkesopplæring (Wheelahan & Moodie, 2010, s. 22).

Det ligger i styringsdokumentene ingen begrensninger når det gjelder bruk av handlingsrommet, så lenge kompetansemålene er ramme for opplæringen. Dette tilsier at på skoler hvor utstyr og/eller verksted kan være begrensende, er det fullt mulig å involvere bedriftene eller andre relevante aktører i opplæringen. Gjeldende læreplanverk gir rom for store lokale tilpasning, noe som innebærer frihet, tillit og ansvar i større grad enn tidligere for både lærere og elever. Dette skal utfordre til kreativitet både metodisk og i tilpasning av innholdet i opplæringen (Utdannings- og forskningsdepartementet, 2004).

Resultatene fra denne undersøkelsen tyder på at elevene blir pålagt å jobbe med mange ulike yrker som utdanningsprogrammet rekrutterer til. Spørsmålet er om slike breddekkunskaper resulterer i relevant fagkompetanse og gode fagfolk som bransjen har bruk for, eller om det bidrar til demotivasjon og i verste fall frafall i Vg1 (Dahlback et al., 2011; Hansen & Haaland, 2015; Sund, 2005). I perspektiv av Ryan og Deci (2017), hvor selvbestemmelse og autonomi er en nøkkelfaktor for drivkraft og motivasjon, bidrar sannsynligvis ikke en slik bredde- undervisning, hvor elevene må lære litt om mange yrker, til å utvikle verken autonomi eller motivasjon for elever som har klare yrkesplaner. Disse elevene har behov for å få arbeide med sitt yrkesvalg og fordype seg i det. Muligens kan læring av breddekkunnskap passe for elever som er usikre på yrkesvalget, og som ønsker å prøve ut ulike yrker gjennom Vg1. I denne undersøkelsen hadde over halvparten av elevene en klar yrkesplan.

Opplæringen som legger opp til at elevene skal bli litt kjent med mange yrker er ikke i tråd med de nasjonale føringene som Goodlad (1979) beskriver som den intenderte læreplanen. Her pekes det på at yrkesrelevans, tilpasset opplæring, medvirkning, demokrati og dybdelærerin er viktige elementer i utviklingen av kompetente fagfolk (KD, 2016). Noen elever er kanskje mindre bevisste på nytteverdien av opplæringen, og har behov for å gjøre oppgaver knyttet til ulike yrker for å opprettholde motivasjonen for å finne ut hva de kan tenke seg som fremtidig yrke. Denne typen opplæring ivaretar kanskje disse elevenes interesser. Likevel er spørsmålet hvordan overføringsverdi og læring gjennom læringsoppgaver knyttet til andre yrker kan sikres i forhold til det spesifikke yrket eleven etterhvert velger å utdanne seg til.

På EL og BA var det en stor andel som mente de hadde nok innflytelse og medvirkning på innholdet i opplæringen. Ifølge dataene var innholdet i undervisningen hovedsaklig rettet mot tømring i BA og mot elektrikeroppgaver i EL, som da synes å ivaretaka de største lærefagene i utdanningsprogrammene. Det kan bety at selv om oppføringen er lærerstyrt, vil framtidige tømrere og elektrikere oppleve undervisningen som yrkesrelevant, fordi de erfarer det som nyttig for sine interesser og utdanningsplaner. Undersøkelser gjort av Aarkrog og Bang (2013) viser til at eleven må ha innflytelse på eget læringsarbeid for å sikre
opplevelse av mening og relevans, noe som kan ses i sammenheng med at elever på EL og BA ser på tømring og elektrikeroppgaver som en del av sin fremtidige kompetanse, til tross for at de skal utdanne seg til andre yrker innen disse utdanningsprogrammene. Det motsatte synes å være tilfelle for de mindre yrkesfagene, som for eksempel murerfaget i BA og Elektroreparatør i EL. At elever som vil utdanne seg til de små yrkene ikke er så fornøydte, får lite utslag i undersøkelsen, fordi antall elever med slike yrker som utdanningsmål er få i forhold til antallet som vil bli tømrere og elektrikere.

Resultatene fra denne studien tyder på at elevene på DH og HO ikke opplever breddebasert undervisning som interessant, relevant eller nyttig. I disse utdanningsprogrammene indikerer undersøkelsen at elevene opplever begrensede muligheter for elevmedvirkning og innflytelse på eget lærlingsarbeid. I Yrkesfagslig fordypning viser dataene at valgene er mer løererstyrte og breddebaserte enn i felles programfag. Dette er interessant når hensikten med yrkesfagslig fordypning er at elevene skal få fordype seg i det yrket eller deler av det yrket elevene har interesse for eller ønsker å utdanne seg til (KD, 2013).


Resultatene er i tråd med Ryan og Deci’s teori (2017, s. 247) omkring menneskelig behov for autonomi og selvbestemmelse i egne liv som grunnlag for tilfredshet. Resultatene i undersøkelsen indikerer at den intenderte læreplanen, som her representerer de nasjonale føringene, ikke samsvarer med den erfarte læreplanen (Goodlad, 1979), som presenteres gjennom elevenes erfaringer for hvordan handlingsrommet i læreplanene blir brukt i en yrkesrelevant opplæring. Med tanke på skolens mandat, som i følge Isaksen (2015) er å utdanne gode fagarbeidere for fremtiden, viser funnene at det kan være behov for å endre dagens praksis for å sikre at også det første året blir en viktig del av fagopplæringen i alle yrkene som rekrutterer fra det samme Vg1.

Med tanke på skolens mandat, som i følge Isaksen (2015) er å utdanne gode fagarbeidere for fremtiden, viser funnene at det kan være behov for å endre dagens praksis for å sikre at også det første året blir en viktig del av fagopplæringen i alle yrkene som rekrutterer fra det samme Vg1.
Oppsummering og veien videre

At utdanningen ikke er yrkesrelevant kan resultere i at det utdannes fagfolk som ikke har den kompetansen bransjen og samfunnet har behov for. Dette kan føre til at kvaliteten på yrkesutøvelsen svekkes (Bødtker-Lund et al., 2017, s. 7). De nasjonale føringerne legger til rette for medinnflytelse og yrkesrelevant opplæring for elever med ulike utdanningsmål. Dette er ifølge aktuell læringsteori svært viktige elementer i opplæringssammenheng (Dewey, 1966; Ryan & Deci, 2017). Elevene uttrykker betydningen av yrkesrelevans, og at opplæringen må ha en klar sammenheng med egne yrkesplaner eller yrkesinteresser, selv om yrkesplaner eller yrkesinteresser kan endre seg på et senere tidspunkt. Ifølge resultatene i denne artikkelen kan det se ut som begrensningene ligger i at lærerne ikke bruker læreplanenes handlingsrom i tilstrekkelig grad. Dette kan ha sammenheng med skolene og/eller skoleeiernes rammer og betingelser, noe som ikke kommer fram i denne undersøkelsen.

Til tross for at de fleste elevene før, eller i løpet av Vg1 har bestemt seg for sine fremtidige yrker, viser undersøkelsen at mange opplever første året som ikke, eller bare delvis yrkesrelevant for veien videre. Dette støttes også av tidligere forskning på feltet (Dahlback et al., 2011, 2018; Hiim, 2013). Studien viser til et behov for en systematisk, bred og kvalitativ evaluering av muligheter og begrensninger i håndteringsrommet i læreplanene som grunnlag for å konkretisere endringsbehovene i nye læreplaner som er under utvikling, og som blir gjeldende fra 2020 (KD, 2017a).

Denne studien viser at det fremdeles er mange ubesvarte spørsmål som bør følges opp i videre studier, for eksempel skolene og skoleeiernes betydning i tilrettelegging for en yrkesrelevant opplæring, og hvilke muligheter og begrensninger lærerne har for å utnytte håndteringsrommet i læreplanene. Undersøkelsen er en kartlegging av elevenes erfaringer med en yrkesrelevant opplæring, men den belyser ikke muligheter den enkelte lærer har i en slik tilrettelegging. Å utnytte håndteringsrommet i læreplanene krever ofte utradisjonelle undervisningsmåter og et samarbeid med andre aktører på eller utenfor skolen. For eksempel kan man tveleve delvirkerde i tvers av FP og FF, med bedrifter og med ledelsen på skolen. Disse ressursene kan påvirke yrkesrelevante opplevelser, og er interessant for videre undersøkelser. Medvirkning og innflytelse påvirker læringsarbeidet og elevenes utvikling av danning, evne til kritisk tenkning og deltagelse i demokratiske fellesskaper. Dette kan også være grunnlag for videre studier, og er spesielt viktig i implementeringen av ny reform, Fagfornyingen, fra høsten 2020, hvor utvikling av slik kompetanse skal styrkes. I likhet med dagens reform vil også Fagfornyingen ha et bredt spekter av ulike yrker i ett og samme utdanningsprogram. Selv om vi ikke kan generalisere resultatene fra denne studien, vil de kunne overføres til andre utdanningsprogrammer på Vg1.
Sett i et internasjonalt perspektiv finner vi likhetstrekk med den norske modellen, hvor opplæringen fordeles mellom skole og bedrift (Andersson, 2019, s. 30–37). Også andre land har satt søkelyset på lærernes breddekunnskaper i gjenomføringen av en aktuell og helhetlig yrkesutdanning (Wheelahan & Moodie, 2010). Dette kan være interessant for videre undersøkelser i utviklingen av en yrkesrelevant opplæring.

Sluttnote

1 Åse Nedrebø Bruvik, OsloMet – Storbyuniversitetet, er hovedforfatter på artikkelen.

Om forfatterne


Referanser


Malterud, K. (2017). *Kvalitative forskningsmetoder for medisin og helsefag: En innfø-


arbeid, gjennom medvirkning, demokratiske prosesser og interessediffereresiering (Doktortradsavhandling). Roskilde: Roskilde Universitetssenter.


Som å ta av seg verktøybel tet:
Kontraster og metaforer i overgangen fra fagarbeid til yrkesfaglærerutdanning

(Leaving the tool belt behind: Contrasts and metaphors in the transition from vocational work to vocational teacher education)

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Abstract
This article explores the transition from work to higher education and how vocational teacher students talk about the transition from occupational work to vocational teacher education. Previous research has identified students’ experiences of coherence in higher education as a challenge, and in this article the aspect of coherence that explores the contrasts and conflicts between vocational teacher students’ past experiences as occupational workers and experiences in vocational teacher education (biographic coherence) is explored. It is a qualitative study with participant observations and focus group interviews with Norwegian vocational teacher students at their second year of a bachelor’s degree programme to become vocational teachers. The analysis shows that students use metaphors and contrasts when they talk about the transition from occupational work to higher education. The metaphors and contrasts elicit an emotional aspect of the transition from work to education, and how students use their previous experiences from occupational work to give meaning to experiences in education.

Keywords: vocational teacher education, higher education, transitions, coherence, contrasts
Innledning


For å heve kompetansen blant yrkesfaglærere i Norge, samt møte kravene fra Reform 94 i videregående opplæring, ble utdanning av yrkesfaglærere etablert

Historisk sett er høyere utdanning en relativt ny mekanisme i overgang fra et yrke til et annet generelt og i kvalifiseringen til yrkesfaglærer spesielt. YFL utgjør således en sjæregen arena som tilfører andre og nye prosesser i en slik overgang enn for eksempel allmennlærerutdanningen. Målet med studien er økt forståelse for prosessene og utfordringer som seiersva av lærerutdanning som overgang fra yrke til arbeid i fag- og yrkesopplæring, med særlig fokus på motsetninger og kontraster. Studien bidrar til å eksponere motsetninger slik de kommer til syne i utdanningen slik at de kan bli vurdert og forstått. Forskningsspørsmålene er som følger:

- Hva kjennetegner yrkesfaglærerstudenters opplevelse av YFL som overgang fra fagarbeideryrket til yrkesfaglærerutdanning?
- På hvilke måter beskriver studentene kontrastene mellom utdanningen og deres tidligere erfaringer som fagarbeidere?

Videre i artikelen presenteres tidligere forskning etterfulgt av en gjennomgang av teoretiske perspektiv, deretter redegjøres det for artikkelen metodiske tilnærming, før presentasjonen av funnene. Artikkelen avsluttes med en diskusjon og konkluderer med mulige implikasjoner for yrkesfaglærerutdanningen.
YFL som kvalifiseringsarena

Som kvalifiseringsarena skal yrkesfaglærerutdanningen være rotfestet i både håndverkstradisjonen og utdanningstradisjonen og således utdanne yrkesfaglærere som blir kompetent i, og har god kjennskap til, begge disse arenaene (Brandt & Hatlevik, 2003; Fejes & Köpsén, 2014). Å skape helhet og sammenheng mellom profesjonsfag, yrkesfag og praksis (i skole) pekes på som utfordrende i yrkesfaglærerutdanningen, så vel som i andre profesjonsutdanninger (Heggen & Raen, 2014; Rokkones, Landro & Utvær, 2018). Duch og Andreasen (2017) har undersøkt hvordan yrkesfaglærerstudenter forholder seg til spørsmål om koherens, kontraster og likheter i utdanningsløpet. De viser blant annet til en mangel på opplevelse av sammenheng, men at denne ble skapt i studiet gjennom eksempler oppgaver i vitenskapsteori. Erfaringer i utdanningen kan altså bidra til å skape opplevelsens av sammenheng. Samtidig var forskjeller og konflikter mellom kontekstene også en drivkraft for læring (Duch & Andreasen, 2017).


Lærerutdanning er sentral for utviklingen av kompetansen til å binde sammen fagarbeiderkunnskaper- og ferdigheter med praksisen som lærer (Fejes & Köpsén, 2014). I YFL møter studentene en diskurs som stiller opp et annet “objekt” enn studentene har forholdt seg til som fagarbeidere blant annet gjennom at resultatet eller målet og aktørene differerer. Gjennom YFL kan altså studentene bevege seg inn i lærerprofesjonsdiskursen. Studentene må blant annet reflektere over hvordan teoretisk kunnskap understøtter fagarbeidet, og hvordan praktiske og kontekstuelle elementer av arbeidslivkunnskap rammes inn i en undervisning-læring-situasjon (Alvunger & Johansson, 2018). Utvikling av teoretiske kunnskaper, samt pedagogisk forståelse, er avgjørende for å utdanne kompetente lærere; ”and not merely trainers who have a repertoire of procedures that they apply in different circumstances” (Wheelahan, 2015, s. 753).


Teoretiske perspektiv


Tidligere erfaringer som fagarbeidere og møtet med utdanningen – og de opplevelser som oppstår i dette møtet – forstås her som et møte mellom to tolkningsverdener (eller figured worlds). Tolkningsverdener bygger på menneskets evne til å forme og bli formet i kollektivt oppfattede ”hva hvis” verdener. For eksempel, hva om det fantes en verden kalt akademia der bøker er så viktig at mennesker sitter time etter time, borte fra venner og familie, for å lese og skrive dem? (Holland, Lachicotte, Skinner & Cain, 1998). Disse forenkledes ”hva hvis” verdenene defineres av Holland et al. (1998, s. 53) som ”socially and culturally constructed realm of interpretation in which particular characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others”. Fagarbeid som tolkningsverden kan for eksempel bestå av håndverkere (aktører) som ser verdien av – og derfor handler ut fra – at et produkt skal være ferdig til en gitt tid. Som kontrast, utdanningen som tolkningsverden der elevernes læring gjennom å arbeide med et produkt er viktigere enn selve produktet og eventuelt om det er helt ferdig på tid. En tolkningsverden er altså et sett med sosialt og kulturelt konstruerte forestillinger og antakelser som aktørene forholder seg til som om de var virkelige. I denne artikkelen åpner tolkningsverden som perspektiv opp for å utforske yrkesfaglærerstudenters opplevelse av utdanning som overgang fra fagarbeid.

Vår selvforståelse kan bli formet og endret gjennom deltakelse i tolkningsverdener (Holland et al., 1998; Urrieta, 2007) og som tolkningsverden kan utdanningen danne rammen for, og være en igangsetter av, studentenes endringsprosesser og muligheter til å forestille seg selv, eller ”figure out”, hvem de vil være som yrkesfaglærere. Endringsprosesser som deltakelse i tolkningsverdener kan igangsette forstås gjennom Deweys (2004) erfaringsbegrep. Dewey (2004, s. 113) hevded at erfaringer gjør noe med oss – vi opplever noe som vi handler på, vi gjør noe med det vi opplever, og så gjør dette noe med oss i retur, ”When we experience something we act upon it, we do something with it; then we suffer or undergo the consequences”. Fordi erfaringer gjør noe med oss kan bearbeiding av erfaringer i utdanningen være slitomme prosesser som griper inn i tidligere erfaringer – forstått som fagarbeiderens tolkningsverden.

Metodisk tilnærmning

Datamaterialet for artikkelen bygger på deltagende observasjon og seks fokusgruppeintervju med yrkesfaglærerstudente i 2015 og 2016 ved en yrkesfaglærerutdanning i Norge. Dette er en avgrenset, kvalitativ studie som har undersøkt studenter på andre året av bachelorprogrammet. Studien peker på faktorer av betydning, men gir ikke oversikt over feltet.

Utvalget bestod av bachelorstudenter ved Restaurant- og Matfag, Kunst- og Håndverksfag, samt Teknologiske fag. De spesifikke programmene ble valgt for
Som å ta av seg verktyebeltet

å tilstrebe et utvalg med kjønsbalanse, uten hensikt å sammenlikne på tvers av program eller kjønn.

De deltagende observasjonene fulgte studentenes undervisning som var organisert som samlingsbasert; Restaurant- og Matfag og Design- og Håndverksfag hadde ukesamlinger (4–5 etterfølgende dager) etterfulgt av en periode på noen uker med selvstudium eller praksis i skole eller bedrift, og studentene på Teknologiske fag møttes på fredager fordelt utover semesteret. De deltagende observasjonen fulgte i all hovedsak profesjonsfaget. De samme studentene ble fulgt over et år, 120 timer totalt. Det var mellom 23 og 28 studenter i hver av programmene.

Den primære hensikten med deltagende observasjon var å bli kjent med feltet (Hatch, 2002), og samme observasjonstilnærming ble anvendt for alle program. Observasjonene åpnet opp for å danne et bilde av undervisningen og studentene i undervisningen. Temaet ”overgangen fra fagarbeider til yrkesfaglærer” guidet fokuset for observasjonene sammen med åpne spørsmål som, ”Hva skjer her?”; ”Hvilke temaer – utfordringer og problemer – sirkulerer i klasseromsdiskusjonen?”; ”Hva gjør yrkesfaglærerstudenter og faglærere i klasserommet?”. Dette åpnet opp for å utforske hvordan undervisningen møter fagarbeidere i overgangen til læreryrket. Observasjonsdataene inkluderer også uformelle feltsamta ler med yrkesfaglærerstudenter og faglærere. De deltagende observasjonene og feltsamta lerne tilførte innsikt i et komplekst felt og en viktig kontekstforståelse som også bidro til å sette studentenes beskrivelser (fra fokusgruppeintervjuene) inn i en større forståelsesramme. Observasjonsdataene tok form som detaljerte, håndskrevne feltnotater som beskrev diskusjoner i klasserommet, handlinger og kontekst. De transkriberte notatene utgjorde 105 sider totalt.


Første steg av analysen var en tematisk analyse av observasjonene og intervensjene for å identifisere utsagn om opplevelser av utdanning som overgang fra fagarbeideryrket, såkalt biografisk koherens (Smeby & Heggen, 2014). Disse utsagnene bar preg av metaforer og kontraster, som hovedsakelig kom til uttrykk i
intervjuene. Dermed ble primært data fra fokusgruppeintervjuene anvendt i de videre stegene av analysen.


I tredje stege ble biografisk koherens brukt til å utforske studentenes bruk av kontraster mellom tidligere erfaringer og erfaringer i utdanningen. Studentene kommer inn i utdanning med tidligere erfaringer fra å være fagarbeidere og biografisk koherens åpnet opp for å forstå hvordan studentene bruker tidligere erfaringer til å gi mening til det opplever i utdanningen. Analysen fortsatte inn i arbeidet med presentasjonen av funnene.

Funn

Analysen gir et innblikk i hva som kjennetegner studentenes opplevelse av utdanningen som overgang. Utdanningen kan utforskes som en overgang til lære-ryrket, men det er samtidig en overgang fra fagarbeideryrket og analysen har lagt vekt på studentenes erfaringer fra å være fagarbeidere og hvordan de som fagarbeidere opplever overgangen til høyere utdanning og erfaringer fra å være student og lære. Et av kjennetegnene ved studentenes beskrivelser er bruk av metaforer. Metaforene synliggjør et emosjonelt aspekt ved overgangen; fagarbeidere温柔med erfaringer i utdanningen kan forstås som noe strevsopt og emosjonelt utfordrende. Et annet kjennetegn er bruk av kontraster. Studentene gir mening til det de opplever i utdanningen gjennom å kontrastere det til deres tidligere erfaringer som fagarbeidere.

I overgangen fra fagarbeider til yrkesslaglærer blir utdanningen et mellomstadium som skal ta studentene fra den ene posisjonen i samfunnet til den andre. Utdanningen utgjør dermed rammen for selve overgangen, en ramme hvor overgangsprosesser oppstår og blir igangsatt. Overgangen (i utdanningen) er en "verden" i seg selv som krever noe særegent av studentene. Et av studentene beskriver møtet med utdanningen som "å legge fra seg" det han kan:
Som å ta av seg verktøybellet

Dagfinn: … men det er jo omtrent bare å ta av deg verktøybellet og så bytte det ut med en PC og en kulepenn og så ja, det er det du legger fra deg, det er det du kan …

Følelsen av å legge fra seg det en kan gir assosiasjoner til å gå inn i noe ukjent uten å ta med seg trygheten som verktøybelten, som er kjent, kan gi. Et "verktøybelte" og en "kulepenn" kan også forstås som kontraster som bringer med seg forskjellige måter å håndtere en arbeidsoppgave på – et verktøybelte kan associeres med praktiske ferdigheter og kunnskaper og kulepennen med noe mer teoretisk. Verktøybelten kan også symbolisere studentenes erfaringer fra å være fagarbeidere og slik sett vil utdanningen representere et brudd med tidligere erfaringer – de legger vekk erfaringene sine som fagarbeidere og bytter det ut med en motsetning, nemlig kulepennen. At utdanningen kan skape en opplevelse av et brudd med tidligere erfaringer kan også føre med seg utfordrende følelser. Per forklarer for eksempel opplevelsen av å stå i utdanningen som et "tåkehelvete":

Per: … jeg angret veldig det første semesteret for det var et tåkehelvete uten like for min del, men så etter semesteret har gått da så begynner jeg å skjønne hvor de [faglærerne] ville første semesteret nå, men akkurat når vi begynte så syns jeg at det var helt vanvidd, men de har jo lagt en tanke bak dette her.

"Tåkehelvete" er en relativt sterk metafor som gir assosiasjoner til noe ubehagelig. Assosiasjonen til "tåke" henleder mot en opplevelse av å ikke "se klart" og kan indikere en følelse av manglende oversikt. At han i tillegg kjente på følelser som anger understreker opplevelsen av noe ubehagelig; noe en vil vekk fra. Brunken av "vanvidd" henleder mot noe som er uforståelig eller ubegripelig og som det er vanskelig å knytte mening til. Per forklarer at utover i semestrerne i utdanningen begynte han å forstå mer av de prosessene han selv var en del av og dermed også at det lå en mening (en tanke) bak opplegget i utdanningen.

Noe av det Per trekker frem som særlig forvirrende i møtet med utdanningen er at, "det var ikke noe fasit, alt er riktig, men det var ikke riktig likevel, for det var en fasit". Dette gir assosiasjoner til noe forvirrende, noe som er vanskelig å gripe og en opplevelse av motsigelser. Dette kan forklare følelsen av å stå i et "tåkehelvete" – en fasit kan forstås som et holdepunkt, noe en med sikkerhet vet vil være riktig, et fravær av en slik fasit henleder mot følelser som usikkerhet og det å stå i noe ustabil og uforståelig. Dette kan også forstås som en kontrast til fagarbeid:

Helene: helt annen tankegang […] asså den akademiske tenkninga, du har ikke noen konkrete svar, du har ikke to streker under svaret i forhold til at skal du sette opp et hus […] så er det noe konkret du skal gjøre …

Nina: og så er det litt overgang i forhold til vi som håndverkere vi jobber med noe konkret, men her så svever alt oppi, og så skal du bare ta litt der og der.

Studentene forklarer at som fagarbeidere forholder de seg til noe konkret, mens det de forholder seg til i utdanningen kan forstås som en motsetning; noe som
svever og som ikke har noe konkret svar. Det å løse en arbeidsoppgave som stu-
dent – hvor det ikke er noe konkret svar, ei heller to streker under svaret og de
skal forholde seg til noe svevende – krever noe annet av dem enn å for eksempel
sette opp et hus. Dette kan også forstås som en kontrast mellom det konkrete og
det abstrakte – hvor det konkrete, som det å sette opp et hus, kanskje har klare
rammer for hva som er opplagt feil og opplagt riktig for at huset faktisk skal stå
oppreist. Å håndtere noe abstrakt krever en annen måte å forholde seg til arbeids-
oppgaver på.

I tillegg til følelsen av et brudd med tidligere erfaringer samt å skulle håndtere
og forholde seg til arbeidsoppgaver på andre måter tar utdanningen studentene
også inn en annen måte å tenke rundt fagarbeid:

Per: det var det å begynne å tenke rett og slett, før så bare gjorde du en ting: ferdig.
Nå er det liksom, eller da ble det, "ja, du har gjort en ting, men hvorfor gjorde du
det?", og begynne å tenke på den måten …

Hensikten med arbeidsoppgavene er med andre ord ikke lengre (kun) å gjøre den
ferdig, det er ikke "godt nok" å fullføre den. Det kreves noe mer, noe utover å
gjøre den ferdig. I utdanningen blir studentene bedt om å sette det de har gjort
inn i en større forståelsesramme og "hvorfor" peker således bakover mot studenten
nes fagarbeiderkunnskap. Per forklarer at noe av overgangen for ham var å be-
gynne "å tenke" sett i forhold til før, hvor han "bare gjorde". Det er tenkning
involvert i handlingene til en fagarbeider og dermed kan en stille spørsmålstegn
ved hva Per mener med opplevelsen av å "begynne å tenke". En grunn kan være
at tenkemåter oppleves for Per som en integrert del av det han gjør som fagarbei
der og derfor tenker han ikke over at han tenker. Nina og Siw diskuterer noe av
det samme. De snakker om erfaringer fra lærerpraksisen og peker på at en av
forskjellene mellom den og fagarbeid er nettopp å skulle forklarer hvorfor, "at
du hele tiden skal begrunne ting eller kunne forklare alle mulig typer løsninger"
(Nina). Da jeg spør hvorfor dette er en forskjell til fagarbeid svarer Siw at som
fagarbeider, "kan du gå på instinkt". Studentene utfordres altså til å sette fagarbeid
inn i en teoretisk forståelsesramme og bli kjent med de antakelsene som ligger
til grunn for fagarbeidet.

I alle fokusgruppeintervjuene diskuterer studentene hvilken betydning og
verdi de opplever at utdanningen har for dem og noen syns det er vanskelig å
forstå meningen. Dette gjelder særlig de studentene som har jobbet som lærere i
noen år forut for utdanningen. For eksempel tillegger Wilhelm verdien han som
lærer har for sine elever til fagarbeiderkunnskapene og det at han, "er en arbeidskar
du, er ikke en lærer". Noe av verdien han tilskriver det å være en arbeidskar er at,
"du har ikke lest deg til det; du har prøvd det" (Wilhelm). Dermed kan det
stilles spørsmål rundt hvilken verdi han tillegger lærerkompetansen; å tillegge
lærerkompetansen liten verdi kan kanskje være med på å skape en barriere for
utviklingen av hybrididentiteten som yrkesfaglærer. Noen av studentene beskriver også det å stå i utdanningen som noe påtvunget. Sitatene under er hentet fra to forskjellige fokusgruppeintervju:

Ingvild: jeg føler gjennom studiet blir det skapt en overgang, ellers så hadde det vært ganske så naturlig, men nå er det litt forvirrende, det blir liksom holdt mellom de to tingene akkurat nå [...] jeg har foretalt [meg] at jeg kunne bare gå fra det ene til det andre, men plutselig "nei du må være her nå, det er den overgangsfasen", det blir påtvunget.

Kristian: jeg tenker det at når en er ferdig om tre år og ser tilbake så tenker en at "det var kanskje verdt det", når en er ferdig med ting så er det kanskje lettere å se at det var verdt det – det er det samme som å ha vært hos tannlegen; det er et helvete når det står på, men etterpå så er det jo egentlig verdt det, hvis du har tannverk ...


Flere av studentene beskriver sitt møte med utdanningen som forvirrende. Noe av det som skaper en forvirring er de ulike rollene studentene sjonglerer mellom i utdanningen. Sitatene under er hentet fra en sekvens i et av fokusgruppeintervjuene:

Elisabeth: det som [...] forvirrer meg [...] er det å være det personen som er mellom to stoler, for [...] i den utdannelsen her så [...] vet [jeg] liksom ikke hvem hatt jeg skal ha noen ganger, for jeg har studentrollen og [...] så lærerollen litt, for det at vi skal tenke som en lærer og så skal vi opptre som en student og så er vi håndverkere, så det blir [...] vanskkelig å vite helt hvordan man skal forholde seg.

Stine: ja, det samme føler egentlig jeg, men jeg har ikke klart å komme frem til det, men det som du sier nå er ja, ja, det er det, det er litt sånn hyster som skal på og av.

Ingvild: ja, det er litt som [navn på lærer] sier sånn hattegreie, og "ta på dere hatten".

Elisabeth: ja, men [...] hvilke forventinger har de til hvilken hatt vi har på? Fordi at de forventer at vi skal tenke og opptre og handle som lærere, men de...

Ingvild og Elisabeth: ... behandler oss som studenter.

 [...]
Nora Kolkin Sarastuen

Ingvild: føler tryggest som håndverker…
Stine: ja, det er der en har trygheten sin.

Uttrykket ”mellom to stoler” beskriver hvordan det oppleves å være yrkesfaglærerstudent. Det viser også tilbake til den mellomposisjonen som Ingvild beskriver at hun blir holdt fast i. Den metaforiske bruken av ”stoler” peker mot de to posisjonene, fagarbeider og lærer, som studentene opplever å stå mellom. Denne mellomposisjonen er forvirrende å være i, og er kanskje karakteristisk for det å være i overgang. Metaforen ”hattene” tar oss videre inn i hvordan de opplever vekslingen mellom de ulike rollene i utdanningen; student, lærer og håndverker/fagarbeider. Studentene gir inntrykk av at metaforen ”hattene” er noe de har plukket opp i utdanningen. Ingvild refererer for eksempel til at faglærer bruker denne metaforen; studentene skal ”ta på hatten”. Dette kan være et uttrykk for hvordan utdanningen forsøker å skape et bevisst skille mellom de ulike posisjonene for studentene.

Naturlig nok representerer de tre posisjonene ulike tenke- og handlemåter, og Elisabeth uttrykker en usikkerhet rundt det å ikke vite hvilken av ”hattene” utdanningen forventer at hun skal ha ”på”. Hvilke forventninger knyttes til lærenes måte å tenke på? Etter mange år som fagarbeidere er det nærliggende å tenke seg at forventingene knyttet til ”å tenke som fagarbeider” er innarbeidet, men i takt med overgangen til en ny posisjon introduseres andre forventninger og tidligere tenke- og handlemåter (tidligere erfaringer) blir utfordret.

Siw opplever at i utdanningen må hun evne å ”fange 20 ballonger”. Hun kontrasterer dette til arbeidet som fagarbeider; her jobbet hun som oftest ferdig et produkt før hun begynte på neste. Dermed hadde hun gjerne en eller kanskje to arbeidsoppgaver gående samtidig. P å høyskolen, derimot, følte hun ”at det liksom var 20 ballonger da, som jeg skulle prøve å fange alle, ikke sant, men at jeg i virkeligheten egentlig kan håndtere en eller to ting ganske bra” (Siw). En kan se for seg hva slags følelse det å skulle fange 20 balloner kan gi; en krevende, nesten umulig og håpløs oppgave. Sammenliknet med fagarbeid møter hun altså på forventninger om å håndtere og forholde seg til mange (sevende) ting på en gang. En viktig oppgave blir å lære seg å håndtere stresset og ”det å kjenne på det stresset og på en måte innfinne seg i at”:

Siw: du må faktisk vente […] det er ikke vits i å sitte å stresse nå, men du må på en måte bare roe deg ned og så kommer den ballonen og fester seg om et halt år […]. altså sykt lang tid da.

Stress er (ofte) noe ubehagelig, noe som skaper et ubehag i kroppen. Dette ubehaget beskriver Siw at hun må kjenne på og stå i og samtidig forstå at det ikke hjelper henne å strekke fordi det som skaper stresset – å vente på at en ballong skal feste seg – vil skje en gang i fremtiden, men det er det sykt lang tid til. At noe ”fester seg” kan henlede mot at en oppgave er fulfført – noe som er forstått og mestret.
Diskusjon

I denne artikkelen undersøkes det hva som kjennetegner (a) yrkesfaglærerstudenters opplevelse av YFL som overgang fra fagarbeideryrket, og (b) på hvilke måter studentene beskriver kontrastene mellom utdanningen og deres tidligere erfaringer som fagarbeidere. Studentenes bruk av metaforer og kontraster synliggjør et emosjonelt aspekt ved overgangen og at studentene gir mening til erfaringer i utdanningen gjennom å kontrastere det til deres tidligere erfaringer. Metaforer gir assosiasjoner, men er ikke tydelige beskrivelser av et fenomen, metaforbruken kan derfor indikere at studentene på andre året av bachelorprogrammet har en omtrentlig forståelse av overgangen de selv er en del av. Utdanning kan forstås som en utviklingsmekanisme – en arena der endringsprosesser blir igangsatt. Erfaringer i utdanningen tar studentene inn i følelser som ubehag, strev og håploshet. Under diskuteres det emosjonelle aspektet ved overgang samt hvordan studentene gir mening til erfaringer i utdanningen i lys av deres tidligere erfaringer som fagarbeidere.

Utdanningen plasserer yrkesfaglærerstudentene i spenningsfeltet mellom to forskjellige tenke- og handlemåter og skal utdanne dem til å håndtere motsetningene. Studentene beskriver en opplevelse av å bli holdt mellom to ”verdener” og at dette er noe påtvunget og konstruert. Dette kan gi en opplevelse av å ikke ha kontroll – det er noen andre (her: utdanningen) som styrer utviklingen. Samtidig kan det å ”holde” studentene i en slik mellomposisjon være et viktig poeng i overgangen – å stå mellom noe kan sette studentene i stand til å se bakover mot fagarbeid og fremover mot lærerarbeid og slik sett gi perspektiv til å sammenlikne tidligere erfaringer med nye. Likevel kan følelsen av å bli ”holdt” gi en opplevelse av å stå fast i en tilstand av spenning og konflikt. En kan tenke seg at tannverk og tåkehelvete er noe en vil komme seg ut av. Samtidig skal yrkesfaglærere utdannes til å nettopp stå i spenningsfeltet mellom fagarbeid og lærerarbeid og gjennom utdanningen utvikle kompetanse til å blant annet knytte sammen to motsetningsfylte arenaer (Fejes & Köpsén, 2014; Tapini & Salonen, 2019). Fordi YFL er rotfestet i både håndverks- og utdanningstradisjonen står utdanningen i en særegen posisjon til å eksponere motsetningene mellom de to ”verdenene” slik at de kan bli håndtert.

Studentene setter ord på hvordan de opplever utdanning som overgang ved hjelp av metaforer som for eksempel ”tåkehelvete”, ”vanvidd”, ”tannverk” og ”holdt i en mellomposisjon”. Dette synliggjør et emosjonelt aspekt ved utdanning som overgang og gir assosiasjoner til noe strevsomt, følelsesmessig utfordrende og ubehagelig – som om det er en slags kamp de må holde ut. Metaforene gir også et innblikk i hvordan det oppleves å være en sårbar aktør. Duch` (2016) studie viser at studentene brukte ”krise” for å forklare hvordan de opplevde endringer i utdanningen. ”Krise” kan forstås som en unntakstilstand hvor grunnleggende element i ens livsverden blir rokket ved. Følelser – som ubehag, strev og

En tydeliggjøring av kontrastene kan være et av premissene for å skape koblinger mellom to motsetningsfylte arenaer. Studentene gir mening til erfaringer i utdanningen ved å kontrastere dem med tidligere erfaringer – å skulle ”tenke akademisk” forstå for eksempel gjennom å kontrastere det til å sette opp et hus; å sette opp et hus har to streker under svaret, det er noe konkret som har en fasit, i utdanningen derimot møter de noe som svever, noe som ikke er helt mulig å gripe og som oppleves som selvmotsigende. Og videre er hensikten med arbeidsoppgaven fullført når huset står, i utdanningen er ikke dette (lengre) nok; de må vite hvorfor huset er satt opp på denne bestemte måten. Dette kan oppleves som et brudd med tidligere tenkemåter som kanskje var mer preget av å arbeide instinktivt. Samtidig peker ”hvorfor” mot evnen til å reflektere over hvordan teoretisk kunnskap understøtter fagarbeid og gir således studentene tilgang til spesialkunnskapen som ligger til grunn for praksis (Alvunger & Johansson, 2018; Wheelehan, 2015). ”Hvorfor” blir dermed en videreutvikling av fagarbeiderkunnskapen og kan være med på å skape sammenheng mellom innholdet i utdanningen og studentenes tidligere erfaringer. Dette blir kanskje tydeligere for studentene utover i utdanningsløpet, samtidig kan de ha behov for hjelp til å sette det inn i en slik forståelsesramme slik at de ser verdien av å videreutvikle fagarbeiderkompetansen.

Konklusjon
I denne artikkelen ble kjennetegn ved yrkesfaglærestudenters opplevelse av YFL som overgang fra fagarbeideryrket og kontrastene mellom utdanningen og deres tidligere erfaringer som fagarbeidere utforsket. Studentene kommer inn i utdanning med tidligere erfaringer fra å være fagarbeidere og analysen viser at studentene bruker metaforer og kontraster for å gi mening til noen av sine opplevelser av utdanning som overgang.
Som å ta av seg verktøybelret

Metaforene synliggjør et emosjonelt aspekt ved utdanning som overgang som studentene må håndtere. Bearbeiding nye erfaringer kan være slitsomme prosesser. Å løfte frem for å håndtere slike følelser i utdanningen kan ruste studentene til å stå i spenningsfeltet mellom fagarbeid/ arbeidsliv og skole/ utdanning som yrkesfaglærere.

Utdanningen står i en særegen posisjon til å hjelpe studentene med å håndtere motsetningene mellom arbeidsliv og utdanning. Kontraster er heller ikke nødvendigvis begrensende, forskjeller kan være en viktig drivkraft for læring (Duch & Andreasen, 2017). Tidligere studier viser at studentene tillegger sine erfaringer og kunnskaper som fagarbeidere stor verdi (Sarastuen, 2019; Nylund & Gudmundson, 2017). Å oppleve at det de går inn i, altså utdanningen, er en kontrast til et yrkesliv og fagarbeid de tillegger stor verdi, kan samtidig skape utfordrende følelser. Likeledes som kontraster og motsetninger kan være en drivkraft for læring kan de derfor også skape barrierer. Å synliggjøre og utforske opplevde kontraster og motsetninger kan således være viktig slik at de ikke blir til et hinder for videreutviklingen av fagarbeiderkompetansen og utviklingen av lærerkompetansen.

Om forfatteren

Nora Kolkin Sarastuen har en master i pedagogikk og tar doktorgrad i profesjonstudier ved OsloMet – Storbyuniversitetet, Senter for profesjonstudier. Dette er tredje artikkel i doktorgradsprosjektet med tittelen “Hva kjennetegner overgangen fra å være en fagarbeider til å bli en yrkesfaglærer? Utdanning som endringsarena og overgang fra et yrke til et annet”.
Referenser


Farnsworth, V. & Higham, J. (2012). Teachers who teach their practice: The modulation of hybridised professional teacher identities in work-related


Dropout prevention in vocational education: Evidence from Finnish register data

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Abstract
A large-scale dropout prevention programme was implemented in Finnish vocational education in 2011–2014. We used detailed register data to evaluate the programme’s effects and to circumvent the attrition bias of pretest-posttest surveys. Our data included approximately 24,000 randomly sampled students, both from the participating schools and the non-participating schools, before and after the programme. We estimated the effect of the programme on study completion and dropping out using pooled cross sections and difference-in-differences regression methods. Both study measures have improved during the last decade, but our results suggest that the programme was not effective in increasing study completion or in reducing the number of dropouts. The likely causes for the improved levels of vocational degree completion include recent macroeconomic fluctuations and legislative changes in teenagers’ eligibility for unemployment benefits.

Keywords: vocational schools, study completion, programme evaluation, register data, econometric methods
Introduction

The socioeconomic effects of dropping out from secondary education have long been assumed to be negative, leading to unemployment, low income, poor health, and even social exclusion. However, concrete causal evidence has been scarce. A straightforward cross-sectional comparison of economic outcomes among dropouts and among high school graduates is misleading, as dropouts are likely to come from disadvantaged backgrounds. Dropping out is not randomly allocated, and missing data on family background characteristics causes bias in cross-sectional estimates.

In a recent study, Campbell (2015) presented new evidence of dropout effects. Using sibling data to control for unobservable background characteristics, Campbell found out that dropping out of high school has an independent net effect on economic hardship. Campbell used the income-to-poverty ratio, earned income, and employment as independent variables in his sibling fixed-effect models. Results indicate that the observable differences between dropouts and high school graduates are not entirely attributable to background effects, and dropping out does appear to increase socioeconomic disadvantages (Campbell, 2015, p. 116).

Hence, there are grounds for public programmes and interventions that aim to increase the completion of secondary education. As if in anticipation of reliable scientific proof of dropout effects, numerous such measures have indeed been undertaken during the last decades, in a variety of countries. Whether these dropout prevention interventions produce desired results is another question where we are lacking an unambiguous answer, also due to missing data problems.

Recent large-scale reviews by Wilson et al. (2011) and Hahn et al. (2015) sum up our current knowledge of the effectiveness of dropout prevention programmes. The meta-analysis by Wilson et al. (2011) yields a mean odds ratio estimate of 1.72, which is interpreted as an 8 percentage point decrease in the probability of dropping out in the treated student groups (N = 317 programmes). Hahn et al. (2015) provide similar calculations for the studies published after the Wilson et al. review and produce a median difference of 6.5 percentage points in the probability of high school completion in intervention compared with control populations (N = 11 programmes).

Both reviews therefore suggest that dropout prevention programmes clearly have beneficial effects. However, a closer inspection of the reviews raises some doubts. Due to limited or non-existent register-based data, most studies included in the aforementioned reviews have used pretest-posttest survey data. In this popular study design, treated and control students complete a questionnaire before and after the treatment. With a 100% response rate, such a longitudinal design yields high-quality, unbiased data. The drawback is usually that a non-negligible number of students are no longer available for the second wave survey.
The reported average attrition rate in the dropout programmes included in the review by Wilson et al. (2011) was 11%, with a standard deviation of 20%. That is, within two standard deviations around the mean there have been programmes that experienced an attrition rate of 50%. Attrition was not reported in 17% of the studied samples.

If subjects are missing at random, even an attrition rate of 50% does not cause significant bias to results according to a simulation study by Kristman, Manno, and Côté (2004). However, if subjects are missing from the post-test survey in a non-random fashion, attrition rates of 20%–30% cause seriously biased estimates (Kristman et al., 2004, p. 757). As pointed out by the authors, the literature suggests that missing not at random is the most likely mechanism for loss to follow-up because missing subjects tend to have different outcomes from those that remain in the programme (Kristman et al., 2004, p. 752). Depending on the associations between the expected outcome and the treatment, bias can be positive or negative. If we assume that the missing students from follow-up surveys are more likely to drop out than those that remain in the programme, our pretest-posttest estimates of programme effectiveness are biased upwards and vice versa. Therefore, a meta-analysis of those estimates, like Wilson et al. (2011), also produces biased results.

In a related article, Kristman, Manno, and Côté (2005) studied the merits of widely used attrition correction methods, e.g. regression imputation, weighting, and multiple imputation. Using simulation studies, they found out that none of the methods was successful in correcting the biased estimates if the subjects were missing not at random and the attrition rate was higher than 25%.

Attrition problems may be circumvented using register data, as in this study. However, register data is not a magic bullet, either. In our case, we are not able to identify individual students who were in treatment; the Finnish National Board of Education did not collect participation information on the treated students. However, we are able to identify the treated schools and compare the outcomes of students enrolled in those schools with the outcomes of students enrolled in non-treated schools using standard difference-in-differences regression methods.

The aim of this study is firstly to evaluate the effectiveness of the vocational education dropout prevention programme of 2011–2014. Previous research on vocational education dropout and dropout prevention programmes is scarce (Cerda-Navarro, Sureda-Negre & Comas-Forgas, 2017). However, Andersen et al. (2018) studied a case similar to ours using Danish register data, and we compare the respective findings in the concluding Section. Secondly, we aim to compare our results, which are based on register data, with results from pretest-posttest study designs, which have been prevalent in dropout prevention research.

Our results imply that the dropout prevention programme of 2011–2014 failed to increase study completion or decrease dropping out in Finnish vocational education.
education. During the last decade, dropout rates have indeed decreased and study completion has improved, but likely reasons for these changes include macroeconomic fluctuations and new criteria for youth unemployment benefits.

The remainder of the paper is constructed as follows. We first give a brief overview of the Finnish education system, and then outline dropout risk factors and the dropout prevention programme of 2011–2014. We then present our data, methods, and results, followed by a concluding discussion.

Finnish education system

The education system in Finland is similar to those of the other Nordic countries, and the main parts are outlined in Figure 1. There is a mandatory nine-year basic education in comprehensive schools, starting at age 7. After the basic education, over 95% of students apply for secondary education in vocational institutions or in general upper secondary schools. Secondary education has a standard duration of three years, but it is also possible to integrate vocational education with general upper secondary education for a combined degree, which may then take a longer time.

After secondary education, students may apply for tertiary education in universities or start their working careers. Most opt for the latter, although many also continue their studies. According to the latest statistics from the year 2017, in the age group of 30–34-year-olds (N = 352,269), i.e. just above the usual youth age definitions, 16% of population had completed basic education only, 45% had completed vocational qualifications or general upper secondary education, and 39% had completed tertiary education, i.e. a bachelor’s degree or higher (Statistics Finland, 2019).
Dropout prevention

Dropping out of education is not a snap decision. Rather, it is an accumulation of numerous risk factors, the accumulation often starting at an early age. There is extensive theoretical and empirical literature on this disengagement process, and the relevant risk factors are reasonably well understood. For recent risk factor reviews, see Ecker-Lyster and Niileksela (2016), Ripamonti (2018), and Gubbels, van der Put, and Assink (2019).

Dropout risk factors

Broadly speaking, dropout risk factors may be divided into four categories: student-related, family-related, school-related, and school-environment-related. According to the meta-analysis by Gubbels et al. (2019), advanced age, earlier grade retention, low academic achievement, and learning difficulties are significant student-related risk factors for school dropout. The family-related risk factors include low socio-economic status and low parental involvement, while large classes contribute to dropping out as a school-related factor. Gubbels et al. (2019) also found that involvement with deviant peers – which is related to school environment – is a highly significant dropout predictor. Overall, Gubbels et al. (2019) identified 21 separate risk domains, which had a statistically significant association with school dropout.

Dropout prevention measures aim to mitigate the presence of these risk factors. Naturally, several predictors – the family’s socio-economic status, for instance – are fixed and not within the reach of preventive measures. Nevertheless, schools can decrease student/teacher ratios, offer more intensive student counselling, try to improve their education methods, etc. As mentioned in the Introduction, current research consensus is that the effects of these efforts are positive on average.

How well preventive programmes reach their objectives could also depend on the implementation quality and programme fidelity. Wilson et al. (2011) concluded that programmes which had difficulties with programme fidelity tended to yield smaller effects on dropout than programmes which indicated that no implementation problems were present. More recently, Freeman et al. (2015) and Goulet et al. (2018) presented similar findings. These results may have a bearing on our study, as will be explained later.

The dropout prevention programme 2011–2014

To recapitulate, in 2017, one in six 30–34-year-olds had no qualifications or degrees above basic education in Finland. Since over 95% of each population cohort enrolls in secondary education, there are many who drop out. Dropping out has been a major problem particularly in vocational education, where yearly dropout rates have exceeded 10% in some schools. In order to alleviate this problem, the
Government decided in 2010 to implement a large-scale dropout prevention programme in vocational education, and allocated 16 million euros for four-year programme grants. The programme was administered by the Finnish National Board of Education, and it was implemented in 2011–2014.

The participating schools were not randomly selected to the programme. Rather, the schools (or ‘education providers’, to use the exact term) applied for the programme, and the Finnish National Board of Education selected the participating schools based on their grant applications, which had to adhere to the general guidelines of the programme. The actual measures taken were largely decided by the participating schools: some schools aimed to enhance student counselling, while others concentrated on pedagogical improvements. As most large vocational education providers participated in the programme, the share of vocational students enrolled in the treated schools exceeded 80%.

The treated schools had to provide a final report of the programme activities and outlays, and the Finnish National Board of Education officials audited these final reports. The Finnish National Board of Education also prepared a yearly monitoring report on the programme results. Additionally, an external evaluation report on the programme was published (Ahola, Saikkonen & Valkoja-Lähteenmäki, 2015). The authors of the yearly monitoring reports and the evaluation report mainly used various qualitative methods (surveys, interviews), and statistics compiled by the Finnish National Board of Education, but from the participating schools only. The authors did not collect comparison data from non-treated schools and used only descriptive statistics.

Both the yearly monitoring reports and the external evaluation report claim that the dropout prevention programme had beneficial effects on study completion rates and that dropping out decreased during the programme. However, since no comparison data from non-treated schools was analysed or even presented, there are no reasons to attribute these changes to the dropout programme, as a number of external factors could have produced similar changes.

Data and methods

As we mentioned earlier, most dropout prevention studies have used pretest-posttest survey data. However, in the Nordic Countries, the National Statistics Offices gather high quality register data from various fields, including education. Therefore, we decided to exploit register data in our approach, combined with difference-in-differences regression methods for pooled cross sections.

Data

In our study, we used detailed register data from the student registers of Statistics Finland. First, we compiled a list of schools that participated in the dropout prevention programme. We then requested Statistics Finland to collect two random
samples of students from the first-year vocational student cohorts of 2002, 2007, and 2012, i.e. six random samples in total. Three samples come from the participating schools and three from non-participating schools (control schools). We restricted our sample to upper secondary vocational education carried out in vocational institutions; youth apprenticeship training and adults’ competence-based qualifications were excluded.

The sample size was determined as follows. Since almost 90% of vocational students were studying in the participating schools, and the size of each enrolling cohort was approximately 50,000 students, roughly 5,000 first-year students were studying in the control schools. Therefore, we requested that the sample size of each random sample should be approximately 4,000 students to achieve a total sample size of 24,000 students. The sample sizes that Statistics Finland delivered are tabulated in Table 1.

Table 1. Sample sizes.

<table>
<thead>
<tr>
<th>Year of enrollment</th>
<th>Control school students</th>
<th>Treatment school students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>3,993</td>
<td>3,994</td>
</tr>
<tr>
<td>2007</td>
<td>3,978</td>
<td>3,993</td>
</tr>
<tr>
<td>2012</td>
<td>3,775</td>
<td>3,987</td>
</tr>
</tbody>
</table>

Our data include the following background characteristics of the students:

- age at enrolment year
- gender
- grade point average in basic education certificate
- special needs education status (= 1 if student is entitled to special needs education, 0 otherwise)
- socio-economic status of mother
- socio-economic status of father
- study field.

We had two dependent variables in our study. Both are indicator (dummy) variables:

- whether the student completed his/her studies in three years’ time (= 1 yes, = 0 no)
- whether the student dropped out before the end of third study year (= 1 yes, = 0 no).

The target schedule for study completion in vocational education is three years. Hence, in our data the information on study completion was collected three years after the enrolment year, i.e. from the years 2005, 2010, and 2015 (end of each year). However, some students spend a considerably longer time completing their studies. If a student has not completed his or her studies in three years’ time (i.e. the completion variable above equals zero), but is still enrolled as a full-time student, the dropout variable is valued zero as well. Consequently, our
dependent variables are not perfect complements. That is, it is possible that both are valued zero for some students.

Table 2 presents summary statistics of the background characteristics of both treatment and control school students from the year 2012 student cohort. Note that most students are aged 16 when enrolling to vocational institutions, but in our data there are some new students aged between 20–30 or even older, and the mean age reflects this fact.

In Finnish basic education, the subject grades range from 4 (‘fail’) to 10 (‘excellent’). Among the control school students, the mean GPA was 7.3 in the 2012 cohort, and among the treatment school students, the mean GPA was 7.2. Figure 2 depicts the distribution of grade point averages of the treatment school students.

![Figure 2. Grade point average in basic education certificate, treatment school students, year 2012 cohort (N = 3,621).](image)

Note that data on the grade point averages of several sampled students is missing in Table 2. The reason for this is that the data include only the GPA data supplied by the students’ comprehensive schools. Self-reported grades were excluded as they could be unreliable. Older vocational education applicants have occasionally used self-reported grades in their school applications.
Table 2. Summary statistics, year 2012 student cohort.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control school students</th>
<th>Treatment school students</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>3,775</td>
<td>3,987</td>
</tr>
<tr>
<td>Mean age at enrollment</td>
<td>19.5</td>
<td>18.7</td>
</tr>
<tr>
<td>Gender: male</td>
<td>46.6%</td>
<td>52.3%</td>
</tr>
<tr>
<td>Mean GPA in basic education certificate</td>
<td>7.3</td>
<td>7.2</td>
</tr>
<tr>
<td>Special needs education status</td>
<td>11.7%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Mother’s socioeconomic status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer, other entrepreneur</td>
<td>8.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Senior officials and upper management</td>
<td>8.9%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Lower-level employees with administrative and clerical occupations</td>
<td>39.3%</td>
<td>43.7%</td>
</tr>
<tr>
<td>Manual workers</td>
<td>16.7%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Students</td>
<td>1.9%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Pensioners</td>
<td>7.5%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7.7%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>9.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Father’s socioeconomic status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer, other entrepreneur</td>
<td>16.7%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Senior officials and upper management</td>
<td>8.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Lower-level employees with administrative and clerical occupations</td>
<td>11.1%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Manual workers</td>
<td>30.7%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Students</td>
<td>0.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Pensioners</td>
<td>10.2%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7.5%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>14.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Study field:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts, humanities, education</td>
<td>11.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Business and administration</td>
<td>18.2%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Natural sciences</td>
<td>2.8%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Engineering, manufacturing, construction</td>
<td>23.7%</td>
<td>38.4%</td>
</tr>
<tr>
<td>Agriculture, forestry, fisheries</td>
<td>13.5%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Health and welfare</td>
<td>5.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Services</td>
<td>25.5%</td>
<td>21.0%</td>
</tr>
</tbody>
</table>

From Table 2, we observe that vocational school students usually come from family backgrounds where parents are employed in lower-level clerical or administrative occupations (typically mothers) or as manual workers (typically fathers). When we compare the backgrounds of control school students with those of treatment school students, we find only minor differences. However, the study fields are somewhat different in the two groups. We are able to control for these
observable differences by including Table 2 variables in our regression equations as confounders.

Our baseline regressions include all complete observations from the 2007 and 2012 cohorts. As explained earlier, there was no ‘across the board’ treatment, and the participating schools largely decided themselves what they did with the programme grant. However, the outlays had to adhere to the general programme objectives outlined by the Finnish National Board of Education. As a result, there was considerable variation in the actual treatments.

In order to account for the most obvious differences in the actual treatments, we classified the treated schools into three major categories according to their final programme reports before submitting the list of participating schools to Statistics Finland:

• projects enhancing student counselling (1,122)
• projects aiming at pedagogical improvements (1,142)
• projects improving school infrastructure (89).

Since several schools were involved in multiple (two or more) projects simultaneously, we also created a fourth category:
• multiple projects (1,634).

The number in parenthesis is the number of treatment school students in each category from the year 2012 cohort in our data. Using this information, we may then also study the effects of each treatment category separately.

Econometric model and identification

In our econometric analysis, we use the 2007 student cohort as the ‘before treatment’ sample and the 2012 student cohort as the ‘after treatment’ sample. As explained above, the year 2007 sample also contains information on study completion and dropping out from the year 2010, and the year 2012 sample contains information on study completion and dropping out from the year 2015. The dropout programme was implemented during 2011–2014. In our analysis, we pool the 2007 and 2012 cross sections and use standard difference-in-differences regression for pooled cross sections. Our estimating equation (1) may be written as:

\[ Y = X\beta + \delta_{\text{dropoutprog}} + \delta_{\text{year2012}} + \delta_{\text{dropoutprog}\cdot\text{year2012}} + \varepsilon. \]

The variable \(\text{dropoutprog}\) equals one if the student was enrolled in a participating school, and zero otherwise. Since we have this information from the pre-treatment period (2007) also, \(\text{dropoutprog}\) essentially controls for unobservable systematic differences between students enrolling in treatment schools and control schools. Time-invariant differences may still exist even after controlling for the observable background characteristics, namely the variables denoted \(X\) (age, gender, GPA, etc.). For instance, the participating schools may be located in larger
city areas, which offer plentiful opportunities for truancy compared to quieter rural areas.\textsuperscript{8}

The variable \textit{year2012} equals one if the observation is from the latter (treatment) period and zero otherwise. This year dummy controls for nationwide five-year changes in legislation, economy, employment, social benefits, and so forth, which may also affect study completion and dropping out.

The interaction term \textit{dropoutprog·year2012} measures the effect of the programme. It equals one for those students enrolled in the participating schools during the latter time period (2012), and zero otherwise. Note that since our dependent variables are binary, we are estimating a linear probability model. Therefore, the coefficients measure the percentage point change in the probability of study completion or dropping out.

The key identifying assumption in difference-in-differences regression models is that of parallel trends. That is, \textit{without} the treatment, we should observe no differences in response variable development over time when comparing the treated units to the control units. We may test this assumption by using data from earlier time periods, i.e. before the treatment, and running an identical regression. In this case, we should observe an insignificant coefficient for the interaction term. We test this assumption below. Note, however, that the existence of parallel trends is a necessary rather than a sufficient condition for causal inference. There might be unobserved factors that changed simultaneously with the treatment and caused changes in the outcome variables, although the pre-treatment trends were similar.

Since it was the vocational education providers – not the students – that applied for the dropout prevention programme, this exercise resembles a natural experiment where receiving the treatment is more or less random from the viewpoint of the students. It is unlikely that a student enrolling in 2012 would have applied to vocational institutions solely based on whether the schools participated in the dropout programme or not. More likely determinants for school applications are the available study fields, school locations, and friends’ opinions and choices. As most large education providers participated in the programme, the odds were that the average student enrolled in a participating school.

All student-level data in this study were stored in Statistics Finland’s server and analysed using the Fiona remote access system. The statistics package Stata 15 was used in the estimations.

Results

As a first step in our analysis, we tabulate the outcome variables for each enrolment year and student group. Combining these tabulations yields the following Table 3. The numerical values of the treated (2012) student cohort are in \textit{italics}. By design, our data include random samples of students from the treated and
control schools, both before and after the treatment. Note that the percentages do not add up to 100%. There were some students who failed to graduate in three years but did not drop out, i.e. they were still full-time students.

Table 3. Tabulation of outcome variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control school students</th>
<th>Treatment school students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of enrollment: 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed studies in three years</td>
<td>57.8%</td>
<td>60.6%</td>
</tr>
<tr>
<td>Dropped out</td>
<td>28.0%</td>
<td>27.0%</td>
</tr>
<tr>
<td>N</td>
<td>3,993</td>
<td>3,994</td>
</tr>
<tr>
<td>Year of enrollment: 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed studies in three years</td>
<td>64.5%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Dropped out</td>
<td>21.9%</td>
<td>23.7%</td>
</tr>
<tr>
<td>N</td>
<td>3,978</td>
<td>3,993</td>
</tr>
<tr>
<td>Year of enrollment: 2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed studies in three years</td>
<td>70.9%</td>
<td>67.1%</td>
</tr>
<tr>
<td>Dropped out</td>
<td>16.4%</td>
<td>18.2%</td>
</tr>
<tr>
<td>N</td>
<td>3,775</td>
<td>3,987</td>
</tr>
</tbody>
</table>

Table 3 indicates that over the 10-year period 2002–2012, study completion has increased and dropping out has decreased in vocational education. We observe similar development in both student groups. From the year 2002 cohort, 28% of the control school students dropped out. Ten years later, the dropout rate was 16% – an improvement of 12 percentage points. In the treated schools, the year 2002 cohort had a dropout rate of 27%. A decade later, the dropout rate was 18%.

There could be several reasons for these observations. During the years 2002–2005, when the year 2002 cohort was in vocational education, Finland’s economy and employment were growing rapidly. In these circumstances, there were plenty of alternatives for studying, for instance taking on a full-time job. After the 2008 global financial crisis, Finland’s economy experienced a deep and prolonged recession. Especially youth unemployment soared, which is depicted in Figure 3. The three vertical lines indicate the years (2005, 2010, and 2015) when the students in our samples should have graduated; i.e. three years after enrolling. Additionally, the criteria for youth unemployment benefits were tightened in 2013. Under 18-year-olds without a completed secondary education were no longer eligible for unemployment benefits. In this case, continuing one’s studies despite minor school difficulties could well be worthwhile.
Based on the figures in Table 3, the effect of the dropout prevention programme 2011–2014 is not immediately obvious – in fact, the completion rate increased faster among the control school students than in the treatment schools in the 2007–2012 student cohorts, and the percentage point decrease in dropout rates was equal. However, the simple comparison in Table 3 does not take into account the fact that there were observable differences between the control school students and the treatment school students (Table 2). There might also be unobservable systematic differences across time between the two groups of students, for instance related to school locations.

Baseline results

In Table 4, we report the results from our baseline regressions, which include the total available sample from the 2007 and 2012 student cohorts. For brevity, the coefficients on parents’ socioeconomic status and study field indicators are omitted and are available on request. As explained above, those enrolled in 2007 belong to the ‘before the treatment’ cohort and those enrolled in 2012 belong to the ‘after the treatment’ cohort.
Table 4. The effect of dropout prevention program on the probability of study completion and dropping out in Finnish vocational education, baseline difference-in-differences estimates.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dependent variable: completed studies in three years’ time (0 = no, 1 = yes)</th>
<th>Dependent variable: dropped out before the end of third year (0 = no, 1 = yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at enrollment</td>
<td>-0.006*** (0.001)</td>
<td>0.013*** (0.001)</td>
</tr>
<tr>
<td>Female indicator</td>
<td>-0.057*** (0.009)</td>
<td>0.029*** (0.008)</td>
</tr>
<tr>
<td>GPA in basic education certif.</td>
<td>0.154*** (0.008)</td>
<td>-0.097*** (0.007)</td>
</tr>
<tr>
<td>Special needs student indicator</td>
<td>-0.070*** (0.014)</td>
<td>0.043*** (0.012)</td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>-0.024 (0.019)</td>
<td>0.025 (0.015)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.058*** (0.018)</td>
<td>-0.059*** (0.012)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>-0.011 (0.025)</td>
<td>-0.008 (0.017)</td>
</tr>
<tr>
<td>Mother’s socioeconomic status</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Father’s socioeconomic status</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Study field</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.235*** (0.068)</td>
<td>0.607*** (0.064)</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.087</td>
<td>0.060</td>
</tr>
<tr>
<td>N</td>
<td>14,175</td>
<td>14,175</td>
</tr>
</tbody>
</table>

Notes: School-clustered standard errors in parenthesis. * p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001.

Note that the number of observations is 14,175, which is less than the aggregate N of our pooled samples (3,978 + 3,993 + 3,775 + 3,987 = 15,733). As mentioned earlier, this is due to missing GPA data on some (mostly older) students, who have used self-reported grades in their applications.

The estimates in Table 4 indicate that both study completion and dropping out depend on several observable factors. The student’s advanced age at enrolment has a negative effect on study completion probabilities and a positive effect on dropout probabilities. Female students are more likely to drop out than male students. Special needs students, who may experience various learning difficulties, exhibit a similar pattern. A high grade point average decreases the probability of dropping out. If the GPA increases by one unit (i.e. from 7.0 to 8.0, for instance), the probability of dropping out decreases by 10 percentage points, ceteris paribus. The GPA in basic education certificate is the most significant independent variable in both equations, with t-values exceeding 10. The socioeconomic status of parents and the study field also have an effect on study completion and dropping
out. The lower the socioeconomic status of parents, the higher the probability to drop out.

We find that the observed characteristics mentioned above account for most of the variation between the control and treatment school students. After controlling for observable factors, the treatment school students are not systematically different from the control school students. That is, the dropoutprog indicator is not statistically significant. Note that dropoutprog equals one for the participating schools and zero for the control schools, both before and after the treatment.

The year 2012 indicator is highly significant. This variable controls for various nationwide factors that may affect study completion, such as economic fluctuations, unemployment, and social benefits. We find that the three-year dropout probability decreased by roughly 6 percentage points from the 2007 enrolment year to the 2012 enrolment year.

We measure the effect of the programme with the coefficient on the interaction term dropoutprog·year2012. This term equals one for the treatment school students enrolled in 2012, and zero otherwise. Overall, the results do not seem very encouraging: both coefficients are statistically insignificant, by a large margin. Hence, we find zero programme effects on study completion and dropping out in our baseline regressions.

Alternative specifications
The next three Subsections contain statistical specification and identification tests. For a more general discussion, see the concluding Section.

In order to test the robustness of our baseline results, we experimented with various alternative specifications. In our basic equation, there is a single indicator, dropoutprog, which controls for unobservable differences between the treatment school students (dropoutprog = 1) and the control school students (dropoutprog = 0). As an alternative, we can use school indicators for each school separately. Although the identities of schools are withheld in our sample, the data include encrypted school codes, which allows us to estimate school fixed effects. In this case, it is necessary to omit dropoutprog in order to avoid perfect collinearity. Our difference-in-differences estimates with school fixed effects are presented in Table 5, Panel A.

As mentioned above, most vocational school students were enrolled in treatment schools. Therefore, the probability of being sampled in a 50/50 random sample was somewhat different for the treated students than with the control students. We test whether this could have an effect on our baseline results by using fixed probability weights for both groups in the regression equations. The probability weight for the control school students is 10.5, and the probability weight for the treated students is 1.6. The weights are based on treatment school student enrolment, as reported in the official programme monitoring reports, and
on vocational education statistics. The weighted estimates are reported in Table 5, Panel B.

As a third alternative, we restrict our analysis only to those first-year students who were sixteen years old when enrolling to vocational education. This is by far the largest age cohort in our sample and also the most vulnerable group in many ways. 16-year olds have the least experience in life in general, they may still be in the middle of teenage turmoil, and they are easily led to other pursuits besides studying. Age-restricted estimates are presented in Table 5, Panel C.

Table 5. The effect of dropout prevention program on the probability of study completion and dropping out in Finnish vocational education, alternative specifications, difference-in-differences estimates.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Dependent variable: completed studies in three years’ time (0 = no, 1 = yes)</th>
<th>Dependent variable: dropped out before the end of third year (0 = no, 1 = yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. School fixed effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>(omitted)</td>
<td>(omitted)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.048*</td>
<td>-0.060***</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>-0.005</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Control variables as in Table 4</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>N</td>
<td>14,175</td>
<td>14,175</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.109</td>
<td>0.078</td>
</tr>
<tr>
<td><strong>B. Probability weights</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>-0.021</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.059**</td>
<td>-0.059***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>-0.011</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Control variables as in Table 4</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>N</td>
<td>14,175</td>
<td>14,175</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.083</td>
<td>0.063</td>
</tr>
<tr>
<td><strong>C. Sample restricted to students aged 16</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>-0.028</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.022)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.057*</td>
<td>-0.053***</td>
</tr>
<tr>
<td></td>
<td>(0.026)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>0.015</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Control variables as in Table 4</td>
<td>included, except for age</td>
<td>included, except for age</td>
</tr>
<tr>
<td>N</td>
<td>7,543</td>
<td>7,543</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.099</td>
<td>0.057</td>
</tr>
</tbody>
</table>

Notes: School-clustered standard errors in parenthesis. * p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001.
Regression results in Table 5 align with our baseline estimates, albeit with minor differences in the estimated coefficients. However, the main conclusions remain the same: the programme has had no effects on study completion or dropping out in Finnish vocational education, if we pool the treatment measures and analyse the average effectiveness of the programme.

Effects by treatment category

Next, we further elaborate our programme evaluation and study the programme effects by treatment category. As mentioned above, we classified the treatment measures into three categories, plus one extra category for multiple projects. Results by treatment category are presented in Table 6, Panels A–D. Each sample contains only those treatment school students that were included in a particular treatment category; other treatment school students are omitted. The group of control school students is the same in each regression.

**Table 6. The effect of dropout prevention program on the probability of study completion and dropping out in Finnish vocational education, by treatment category, difference-in-differences estimates.**

<table>
<thead>
<tr>
<th>Treatment category</th>
<th>Dependent variable: completed studies in three years' time (0 = no, 1 = yes)</th>
<th>Dependent variable: dropped out before the end of third year (0 = no, 1 = yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Student counselling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>0.021</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.058**</td>
<td>-0.058***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>-0.075*</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Control variables as in Table 4</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>N</td>
<td>8,857</td>
<td>8,857</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.092</td>
<td>0.059</td>
</tr>
<tr>
<td>B. Pedagogical improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropoutprog indicator</td>
<td>-0.086***</td>
<td>0.076**</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Year2012 indicator</td>
<td>0.058**</td>
<td>-0.060***</td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td>(0.012)</td>
</tr>
<tr>
<td>Dropoutprog*year2012</td>
<td>0.040</td>
<td>-0.054*</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>Control variables as in Table 4</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>N</td>
<td>8,763</td>
<td>8,763</td>
</tr>
<tr>
<td>R-sq.</td>
<td>0.098</td>
<td>0.066</td>
</tr>
</tbody>
</table>
Examining the results in Table 6, we observe that disaggregating the treatment measures and analysing the treatment categories separately unmasks several interesting findings. However, the evidence on the effectiveness of the dropout prevention programme seems to be far from clear-cut. The results suggest that when we analyse the probability of study completion, school infrastructure projects appear to be effective – the coefficient on the interaction term is +0.15, i.e. an increase of 15 percentage points, with a p-value smaller than 0.001. The drawback is that in our sample, only 89 students were enrolled in schools that participated in infrastructure projects. Hence, this positive result hinges on a relatively small number of observations.

On the other hand, when we study the effects on dropout probabilities, treatments aiming to pedagogical improvements seem to fare well. The coefficient on the interaction term is -0.054, and the coefficient is statistically significant at the 5% level. Teaching innovations and improvements therefore seem to have a beneficial effect on dropping out, decreasing the dropout probability by 5.4 percentage points. In addition, the treatment sample in this case is considerably larger (N = 1,142) than in the aforementioned infrastructure projects (N = 89).

However, we obtain contrary evidence when we analyse student counselling treatments (Panel A in Table 6). The results seem to indicate that projects aiming to improve student counselling in fact decreased the probability of study completion by 7.5 percentage points, and the estimate is significant at the 5% level. This result is rather counterintuitive, as we would expect at least a zero effect when doing nothing.
Identification tests
Since we observe beneficial effects among those dropout prevention projects that targeted pedagogical efforts, we should also test whether our identifying assumption of parallel trends holds. This would require that we find no differences in trends before the treatment. As our sample contains data from three student cohorts, 2002, 2007, and 2012, we are able to test the existence of parallel trends by using the 2002 and 2007 cohorts in a pooled difference-in-differences regression identical to equation (1).9 The regression is restricted to those schools that undertook pedagogical improvement projects during the dropout prevention programme.

This identification test yields a coefficient of 0.054 for the interaction term dropoutprog*year2007.10 The p-value, 0.074, is quite close to the conventional risk level of 5%. That is, the treated and control schools already had diverging trends prior to the treatment. It is instructive to graph the time series of the three-year dropout rates in the control schools vis-à-vis those treatment schools aiming at pedagogical improvements. These time series are presented in Figure 4, where the vertical axis measures the share of students who dropped out before the end of the third study year.

![Figure 4](image-url)

**Figure 4.** Three-year dropout rates in the control schools (N = 3,775–3,993) and in the treatment schools (N = 1,105–1,321) in the 2002, 2007, and 2012 first-year student cohorts, treatment: pedagogical improvements, implemented in 2011–2014.

In Figure 4, we find unambiguous evidence of diverging trends before the treatment, i.e. from the year 2002 to the year 2007. In the control schools, the dropout
rate decreased from 0.28 to 0.22 – an improvement of six percentage points. In those vocational schools that were treatment schools in 2011–2014, the dropout rate was approximately constant during 2002–2007. Therefore, we do not have a credible counterfactual for causal inference in our analysis. This would require that the trends were parallel *ex ante*.

We may apply a similar test to those schools that undertook student-counselling projects during the 2011–2014 dropout programme. This had a seemingly peculiar effect on study completion according to the results in Panel A of Table 6. That is, we use the year 2002 and 2007 student cohorts, and test whether the coefficient on the interaction term $dropoutprog*year2007$ is different from zero. If our assumption of parallel trends holds, the coefficient should not diverge from zero. In this case, our interaction coefficient is negative, but statistically insignificant, by a large margin. Hence, we observe parallel trends *ex ante*. Taken at face value, this result implies that the dropout programme caused a decrease in study completion rates in those treated schools that concentrated on student counselling projects.

**Discussion**

We studied the effects of a large-scale dropout prevention programme in Finnish vocational education. Instead of usual pretest-posttest survey data, we utilized highly detailed register data, and standard difference-in-differences estimators. Overall, our results suggest that the dropout prevention programme implemented in 2011–2014 did not succeed in reducing dropping out or increasing completion rates in Finnish vocational education. Our finding is in stark contrast to earlier, positive dropout programme evaluation results reported in the Introduction.

Otherwise our results are well in line with earlier research on school dropouts. We find that the student’s advanced age, poor academic achievement, learning difficulties, and low socioeconomic status of parents are statistically significant dropout risk factors. We also observe that nationwide changes in legislation and youth labour demand have had an effect on school dropout. These factors may broadly be classified as school-environment-related risk factors.

However, our focus is on the dropout prevention programme 2011–2014, and according to our results, the programme failed to reach its objectives. There could be several explanations for this unfortunate outcome. Firstly, the dropout prevention programme in question may have been poorly planned and executed, and therefore produced insignificant results. Secondly, it may also be true that the dropout programme was in fact superbly managed and implemented by the Finnish Board of Education, but our result is just a random statistical coincidence. Thirdly, our disappointing result could be an outcome of using detailed register data, which has zero attrition rate. As mentioned in the Introduction, there have
been dropout prevention programmes where approximately 50% of study subjects were unavailable for the posttest survey. As a result, the evaluation estimates of these programmes may have been seriously biased in favour of producing desirable results.

Which of the aforementioned explanations is true? Answering this question is plain guesswork at this stage. Poor programme implementation and intervention fidelity might be reasons for indiscernible effects in our case. As mentioned earlier, the participating schools were only obliged to follow the general outlines of the programme (‘aiming to increase study completion’), and the implementation details were largely left to the participating schools to decide. As a result, there was considerable variation in the actual treatments. This may not have been the best policy, since finding out ex post what was being implemented is tricky on the basis of haphazard final reports.

We might assume that a random statistical coincidence is unlikely due to our large sample size (over 14,000 in baseline regressions). In any case, our results could be interpreted as a warning sign when pondering the reliability of pretest-posttest study designs, the mainstay in dropout programme research. One could argue that we definitely need more register-based studies on dropout prevention in order to mitigate attrition bias.

Our methodological approach may be compared with a recent study by Andersen et al. (2018), who evaluated a vocational education dropout prevention programme aimed at improving participating schools’ social environment in Denmark. Andersen et al. used cross-sectional register data (N = 10,190) and logistic regression to estimate the effect on school dropout. Adjusting for age, sex, ethnicity, parental income, prior school dropout, and type of basic course, they find that after two years, the dropout rate was 36% in intervention schools and 40% in control schools. The difference of four percentage points was significant at the 5% level. Hence, they find desired effects for the dropout prevention programme.

However, the drawback in the research by Andersen et al. (2018) is that the participating schools were not randomly assigned. Rather, the same four vocational schools that had originally developed the intervention were chosen as intervention schools, while the control schools were chosen by the researchers to match the intervention schools in size, location, and basic courses. Thus, there might be significant self-selection bias in the estimates, since Andersen et al. (2018) are unable to control for unobservable factors due to cross-sectional data. That is, they have no observations from the intervention and control schools prior to the programme.

However, our study is not totally without good news. During our 10-year study period, dropout rates have decreased, and study completion rates have increased in Finnish vocational education – by several percentage points. Probable factors and causes for these beneficial changes include the prolonged economic
recession after the 2008 global financial crisis, and the tightened criteria for youth unemployment benefits, which were implemented in 2013. After the year 2013, teenagers without a secondary education could no longer apply for unemployment benefits. Both occurrences have created economic incentives to stay in vocational education despite minor school difficulties.

Our study also demonstrates the importance of rigorous evaluation practices. In the official evaluation report of the programme (Ahola et al., 2015), only data from intervention schools were analysed. Improvements in study completion rates during the programme were then erroneously attributed to the dropout prevention programme. Since similar development occurred in the non-intervention schools as well, the probable causes were the nationwide economic fluctuations and the legislative changes in unemployment benefits. Counterfactual designs effectively unmask these and other similar confounders.

Our recommendations concern mainly future dropout programme implementation. The participating classes or schools should collect lists of participants, preferably students’ social security numbers. This would enable evaluators to combine participants and detailed register data, avoiding the attrition problem of pretest-posttest designs. The drawback of this study is that we were unable to identify individual students who actually participated in the dropout prevention projects, as this information was not collected by the intervention schools. The implementation of school programmes should be as uniform as possible; in the present case, the schools largely decided themselves what they did with the grant. In retrospect, it may be difficult to decipher what the treatment actually entailed.

Endnotes

1 A simpler design follows the treated group only, but single-group designs were excluded from the Wilson et al. (2011) and Hahn et al. (2015) review studies.
2 For an illustration related to school programmes, see for instance Weisman and Gottfredson (2001).
3 Note that the cutoff point is the end of each calendar year, so that those born in September–December start their school at age 6.
4 The programme’s official name in Finnish was Ammatillisen koulutuksen läpäisyn tehostamisohjelma.
5 The current name of the organisation is the Finnish National Agency for Education.
6 Unfortunately, the Finnish education system is plagued with professional jargon. In this paper, we mainly use the old-fashioned term ‘school’ instead of ‘education provider’ or ‘institution’.
7 For details, see for example Wooldridge (2010), Chapter 6.
8 Note that Statistics Finland withheld the identities of students and schools in our data. Likewise, tabulating the minimum or maximum values of GPAs is not allowed to protect the students’ identities.
The only difference is that the special needs education status dummy is not available for 2002. This has no effect on the results, since the dropout prevention estimate in Table 6, Panel B is nearly identical if special needs education status is omitted from the model. Full results are available on request.

Note on contributor

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References


Relational pedagogy in a vocational programme in upper secondary school: A way to make more students graduate

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Abstract
In Sweden, many students start but do not graduate from upper secondary school despite preventive efforts. The reasons for students dropping out of school have been examined and opposed, but there is still more to be done. The overall aim of this study was to contextualise and understand teachers’ and students’ experiences and perceptions of relational pedagogy in a vocational upper secondary programme in Sweden. The theoretical framework was relational pedagogy to investigate theoretical knowledge of pedagogical relations. The data for this qualitative study was collected through two focus group interviews with 10 teachers and 10 individual student interviews. Directed content analysis was used to analyse the data in order to pay attention to the core concepts of relational pedagogy as a theoretical encoding scheme. The findings show that teachers and students find their working and learning atmosphere much safer and more secure compared to earlier; both groups mentioned relational pedagogy as promoting student participation, engagement, and motivation in school. This study contributes with knowledge of how vocational teachers and students perceive working with relational pedagogy to promote learning and school attendance, but there is still a need to find out more about how teachers’ relational competence is acquired.

Keywords: dropouts, graduation, relational pedagogy, upper secondary school, vocational education
Introduction

Dropping out of upper secondary school is a major problem in the Western world. OECD (2019) claimed that 20–40% of students who enter upper secondary school have not graduated by the age of 25. In Sweden, as in other countries, this may result in low educational levels, unemployment, low income, social problems (Lundahl, Lindblad, Lovén, Mårald & Śvedberg, 2017), criminality, and poor health (Holen, Waaktaar & Sagatun, 2016) for students who do not graduate, and the issue has therefore been taken most seriously.

At the beginning of the 21st century, the level of youth unemployment in Sweden increased compared to other countries. A reform of upper secondary school was introduced in the autumn of 2011. One of the aims of this reform was the following: ‘Everyone should reach the goals. The throughput should be high and students should complete their upper secondary diploma within three years. As few students as possible should drop out of their upper secondary education’ (Skolverket, 2012, p. 12, my translation).

This has not worked out well. In Sweden, almost 97% of students enter upper secondary school, but one out of three students does not graduate. These students either drop out at some time during the 3 years or do not reach the learning requirements for a diploma (OECD, 2019).

In one upper secondary school in Sweden, a project based on relational pedagogy has been in progress for 3 years, with the purpose of creating a vocational programme in which all students complete their education and receive grades from all subjects according to the diploma goals of the programme. The new pedagogical model focuses on the teachers being more educated in relational pedagogy, more social activities outside the classroom, individually adapted education, and more teachers in the classroom at the same time. The project aims to offer vocational education that is available to all, regardless of learning disability or difficulty, in which the students participate in their learning and have possibilities to succeed and become employable. The overall aim of this study was to contextualise and understand teachers’ and students’ experiences and perceptions of relational pedagogy in a vocational upper secondary programme in Sweden to find out how working with relational pedagogy can improve learning and school attendance in vocational education.

Background

This section will begin with a presentation of the context of parts of the Swedish school system, especially upper secondary school and its vocational education. Then, the background and problem with upper secondary school dropouts will
be discussed from a Swedish and Scandinavian perspective. Finally, previous research on relational pedagogy will be presented and related to the theoretical framework of this study.

The context
The background and key concepts behind this study are of great importance for understanding the context in which this study arose. The discussion of related concepts is meant to explain the specific context of vocational upper secondary school in Sweden and the specific phenomena regarding upper secondary school dropout.

Upper secondary school
In Sweden, upper secondary school not only prepares students for higher education but can also prepare them for employment immediately after graduation. It is intended to provide them with a good foundation for active participation in society and personal development.

Upper secondary school in Sweden serves students aged 16–19. It runs for 3 years and is voluntary. There are 18 national programmes to choose from - 12 vocational and six theoretical. There are also five introductory programmes for students who are not yet qualified for a national programme. After 3 years in a vocational programme, the student should be prepared to start working within the trade or profession he or she studied. Students are also taught basic competences to apply to higher education during these 3 years. In 2011, upper secondary schools emphasised that education must provide good specific preparation for higher education studies or for students’ future working life (Skolverket, 2011).

Many dropouts
In upper secondary school, the proportion of youth who have failed some courses and therefore do not graduate or has dropped out is too high. One out of three students do not graduate from upper secondary school, either dropping out during the 3 years or not achieving the learning goals and grades (Skolverket, 2019; Thurfjell, 2017). The percentages are shown in Table 1.

Table 1. Students graduating from upper secondary school 2018.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Graduated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical programmes</td>
<td>75.1%</td>
</tr>
<tr>
<td>Vocational programmes</td>
<td>70.2%</td>
</tr>
<tr>
<td>Introductory programmes</td>
<td>7.6%</td>
</tr>
<tr>
<td>Total</td>
<td>65%</td>
</tr>
</tbody>
</table>
There have been some studies on predictors of student dropout rates. Researchers from Scandinavia have detected that a low grade point average is a strong predictor of dropout in upper secondary school. Grade point average, according to Sæle, Sørlie, Nergård-Nilssen, Ottosen, Bjørnskov Goll and Friborg (2016), related to many factors: cognitive and school-related aspects, such as learning difficulties and behaviour problems, and psychosocial factors such as mental illness, anxiety, and depression. Lundahl et al. (2017) also mentioned that student dropout might depend on students’ lack of motivation related to a complex process resulting from a mixture of individual and contextual factors such as special educational needs (SEN), immigration status, or negative teacher–student relationships (TSRs). Holen et al. (2016) indicated that students with more positive TSRs are less likely to drop out than students with more negative TSRs. Krane, Ness, Holter-Sorensen, Karlsson and Binder (2017) explained that positive TSRs result in students being happier and having more positive attitudes towards school. Students who have dropped out have described negative TRS experiences.

In a Swedish report from a project funded by the European Social Fund (Temagruppen Unga i arbetslivet, 2013), 379 young people (188 girls and 191 boys) between 16 and 29 years old who had dropped out of upper secondary school (both vocational and theoretical programmes) were interviewed about their experiences. They were asked about their reasons for dropping out of school, what could have prevented the dropout, and their vision of a perfect upper secondary school.

For more than half of the interviewed students, bullying was the main reason for dropping out. They criticised the school staff for not acting even though they knew what was going on. The second most common reason was lack of pedagogical support when they did not reach the learning requirements, which led to anxiety, stress, low self-esteem, absenteeism, and finally dropping out. The dropout students also found the school environment too messy, loud, and chaotic and the classes too large. They described the teachers as tired, disrespectful, and not engaged. Some even described them as prejudiced, but others described teachers who cared about them and therefore had great importance in their lives.

Those who had dropped out of school thought it would have been different if they had had teachers who motivated them. They wanted engaged teachers who cared about and believed in them, teachers with reasonable demands who understand that students are unique and learn differently (Temagruppen Unga i arbetslivet, 2013).

To sum up, the predictors for dropping out are slightly different but most students and previous reviews refer to the quality of TSRs. With this in mind, the background and purpose of a project based on relational pedagogy in a vocational programme will be presented.
A teacher team of a vocational programme at an upper secondary school in Sweden had experienced years when a lot of students dropped out or failed in many subjects and therefore did not graduate. In 2014, this teacher team initiated a new pedagogical model. Their aim was to create an educational model based on relational pedagogy to provide adequate conditions for all students, regardless of ability or disability, to fulfil their educational goals.

The purpose of changing the educational model was to give each student an individually adapted pedagogy, more responsibility, and the chance to form better relationships with their teachers, which in turn would lead to the students graduating and being employable (Specialpedagogiska skolmyndigheten, 2015). In the present study, these teachers’ and students’ experiences and perceptions of relational pedagogy in a vocational upper secondary programme in Sweden will be contextualised and examined.

Previous research

This section presents previous research on relational pedagogy and its related methods, approaches, or theoretical starting points to frame the research area.

Relational pedagogy

Good relationships between teachers and students have been an issue in pedagogical research since the beginning of this millennium (Cornelius-White, 2007; Hattie, 2012; Martin & Dowson, 2009; Murray & Pianta, 2007; Nordenbo, Søgaard Larsen, Tiftikçi, Wendt & Østergaard, 2008; Roorda, Koomen, Spilt & Oort, 2011). Because one of the greatest challenges for teachers today is initiating, maintaining, and developing good relationships with their students, which involves a relational perspective on pedagogy, Jensen, Bengaard Skibsted and Vedsgaard Christensen (2015) stated that it is important to note when talking about relational pedagogy that it is not about the teachers’ quality but the quality of teaching. In Krane et al.’s (2017) study, the students found that what and how the teachers taught, as well as their demeanours, influenced them.

Teaching is an interaction between the teacher and the student. Darby (2005) indicated that teachers and students interact, and when doing so, the teacher always influences the students in a specific way, whether the teacher intends to or not. When interacting, the teacher and students reveal something about themselves, whether they intend to or not. A positive relationship with a teacher, according to Ryan and Deci (2000), causes a student to internalise some of the teacher’s values and beliefs, which can be carried over into other school situations. Through good TSRs, students learn how to act and think in certain educational situations, which they then can apply to other more general circumstances.

Previous research has shown that relational pedagogy has some important advantages when it comes to learning. Findings from Cornelius-White’s (2007)
Relational pedagogy in a vocational programme in upper secondary school

meta-analysis prove that positive TSRs lead to positive student outcomes; the opposite is also true. Positive TSRs lead to better teaching, as well as better teaching leads to better student outcomes. In the meta-analysis, Cornelius-White (2007) found that teacher variables such as positive TSRs, empathy, warmth, and encouragement of students’ learning are more effective than other educational innovations. Also, Martin and Dowson (2009) found that positive TSRs improved students’ motivation, engagement, and achievement in school. They detected that relationships are important for students’ engagement and motivation at school. They concluded that high-quality interpersonal TRSs in the students’ lives correlated with students’ motivation, engagement, and achievement. Krane et al. (2017) also found that positive TSRs promote students’ well-being and motivate them to attend school. To learn more about TSRs’ connection to students’ learning achievement, Ljungblad (2019) developed a theoretical perspective on relational teachership based on previous research on didactics and relational pedagogy. To develop a better understanding of TSRs and their importance for students’ achievement, she added the didactic triangle to highlight various aspects of TSRs.

The result of TSRs differs depending on the nature of the student. In Roorda et al.’s (2011) study of the relationship between TSRs and students’ school engagement and achievement, their analysis showed positive connections between good TSRs, engagement, and achievement, as well as negative connections between negative TSRs and negative engagement and achievement. Unexpectedly, and in contrast to previous assumptions, positive TSRs were more important to upper secondary students’ engagement and achievement than to that of younger students. For primary school students, negative TSRs were more strongly related to negative engagement and achievement than for upper secondary students. This study showed that positive TSRs are more important for older students, and negative TSRs are more devastating for younger students when it comes to engagement and achievement. In further analysis, the researchers also found that students with SEN and learning difficulties and other at-risk students were more strongly sensitive to the quality of TSRs than other students (Roorda et al., 2011). This is in line with Murray and Pianta’s (2007) study, in which the researchers also noticed the importance of good TSRs for students’ mental health and social-emotional functioning. Ljungblad (2019) also claimed that it is important to examine how good TSRs can provide better opportunities for at-risk students and students with SEN who are in need of alternative and more effective interventions.

Different studies characterise relational competence slightly differently, or using different subcategories. Jensen et al. (2015) studied TSRs both theoretically and practically. The purpose of their project was to fill in both theoretical and empirical knowledge gaps, to further understand the importance of TSRs, and to map the theoretical landscape more thoroughly. The researchers distinguished
six central sub-elements of the concept of relational competence: context, appreciation, change of perspective, empathy, attention, and presence of mind (Jensen et al., 2015). Comparable to Jensen et al. (2015), Darby (2005) identified in her study six categories within three spheres of relational influence that students perceived through positive TSRs: passion (enthusiasm), comfort (friendly, non-threatening, comfortable environment; being ‘friends’ with the student; sense of humour), and support (‘help’, being attentive to their needs, responsive, and fair and acknowledging all students in an encouraging way).

The age of students is not the only vital factor when it comes to the importance of positive TSRs (Roorda et al., 2011); the type of teacher also matters. Aspelin (2018) suggested that expectations and demands of relational competence differ depending on the type of teacher. When vocational and subject teachers in upper secondary schools are compared, some differences in relational competence become evident. A vocational teacher spends much more time in the classroom with students than a subject teacher does (Köpsén, 2014; Mårtensson, Andersson & Nyström, 2019). Consequently, the relationship between the student and the vocational teacher is more important. Furthermore, Köpsén (2014) explained that a vocational teacher is an expert in the trade the student intends to master and a role model for the professional craftsmanship the student wants to achieve. Previous research claimed that being a role model and a teacher for a specific professional vocation requires a certain amount of striving towards the vocation but also balancing the amount of closeness to and distance from the students (Aultman, Williams-Johnson & Schultz, 2009; Fejes & Köpsén, 2014; Köpsén, 2014; Lippke, 2012; Nylund & Gudmundson, 2017).

When investigating relational pedagogy in Sweden, it is impossible not to refer to Aspelin’s thorough research. Aspelin (2006, 2018) used Scheff’s (1990) social psychological perspective to develop a theory of teachers’ relational competence. According to Scheff’s (1990) theory, the social bond is a central concept. Humans need to build social bonds with other humans, and that is true for teachers and students as well. These social bonds by nature can be built, repaired, threatened, or even cut off (Aspelin, 1996).

The teaching profession, which is closely dependent on relationships, could be viewed (according to Scheff, 1990) as an ongoing process of communication in which the teacher’s communication develops the relationship with the student. Aspelin (2006, 2018) talked about three competences on which relational pedagogy is based. The first, communication competence, deals with what people say to each other (verbal communication) and how they act in relation to each other (nonverbal communication). It is about how well they cognitively understand each other and whether they show each other adequate respect in an emotional aspect. The second, differentiation competence, deals with the degree of closeness and distance in the TSR. The teacher must be aware of the fine boundaries between being too close or too much of a friend and being too distant, too much
Relational pedagogy in a vocational programme in upper secondary school

of a remote instructor. Being too much of either could be devastating to a good TSR. The third and last is the teachers’ socio-emotional competence, which relates to the emotional indicators the teacher has to cope with. Socio-emotional competence refers to a teacher’s ability to deal with and encourage a student to feel pride and prevent him or her from feeling shame. Shame and pride are important feelings in because they impact how a student believes he or she is valued by others (Aspelin, 2006, 2016, 2019; Aspelin & Jonsson, 2019). Relational pedagogy is a theoretical perspective that focuses on teaching as a communicative human interaction and as a relational process (Aspelin, 2018; Ljungblad, 2019).

To sum up, the interactive relation between people has an impact on both the context and the people involved in it. If teachers of vocational programmes create sound relationships with students, this will lead to better learning for the students. Therefore, relational pedagogy as a theoretical framework is used to understand the importance of relationships in vocational education in this article.

Theoretical framework
The present article is a study of vocational teachers’ and students’ experiences and perceptions of working with relational pedagogy. The theoretical framework of this study is based on Aspelin’s definition and research on relational pedagogy, in which it could be studied through three competences: (a) communication, (b) differentiation, and (c) socio-emotional. These three competences must be seen as analytical categories. Aspelin and Jonsson (2019) clarified that one cannot separate one competence from another in real life. Communicative competence, differentiation competence, and socio-emotional competence are only theoretical tools that can help us to identify aspects of teachers’ communication, interactions, and actions to develop theoretical knowledge of pedagogical relations.

Overall aim
In Sweden, the proportion of youth who dropout of upper secondary school or fail some courses and therefore not graduate is too high. It is therefore most important to generate and improve new knowledge of the reasons for, and prevention of school dropout. The overall aim of this study was to contextualise and understand teachers’ and students’ experiences and perceptions of relational pedagogy with regard to learning, and school attendance in a vocational upper secondary programme in Sweden.

Research questions
• How do upper secondary vocational teachers and students describe their experiences of working with relational pedagogy?
What advantages and difficulties do the upper secondary vocational teachers and students articulate regarding working with relational pedagogy to promote learning and school attendance?

Methodology (materials and methods)
A qualitative research design of directed content analysis was used to address the research questions (Hsieh & Shannon, 2005; Krippendorff, 2018).

Methods of data collection
The primary sources of this study were data collected through focus group interviews and individual follow-up interviews with the teachers who had worked with relational pedagogy.

The empirical data on the teachers’ understanding and attitudes were collected through two focus group interviews with four to six teachers of the same teacher team. In one group, all six teachers had been initiators of the project, and in the other group, the four teachers had started working at the school after the project had already started. Focus group interviews with the teachers were used as a method of data collection to let the interviews function as their normal teacher team meetings rather than having them answer questions about their experiences and perceptions. The teachers were divided into two different groups so that the difference in their entrance into the project would not influence their discussions. The 10 interviewed teachers were all the teachers involved in the project at the end of the project. The empirical data also consisted of 10 individual follow-up interviews all conducted in June 2018.

The focus group interviews were based on stimulus texts containing quotations from the application of this project to encourage the interviewees to express their personal values and ideals in relation to specific social and cultural contexts (Törrönen, 2002), in this case, Swedish vocational upper secondary schools. The interviews were recorded with a video camera and a voice recorder to make it easier to keep track of who said what when analysing the material. The total empirical materials consist of about two hours of audio- and videotaped discussion, about one hour per focus group interview, and were transcribed into 19,310 words.

The students who had been working according to relational pedagogy were also interviewed about their perceptions of the project. The data on students’ perceptions were collected through individual interviews based on a semi-structured interview guide. They were transcribed into 23,104 words. All students who had been involved in the project from the first year were asked to take part in the interviews, but for different reasons, only 9 out of 17 attended.
Qualitative content analysis

Qualitative content analysis with a directed approach (Hsieh & Shannon, 2005) was used to analyse the data. Because the data were collected through focus group interviews and individual interviews with a focus on relational pedagogy, it was possible to pay attention to the core concepts of relational pedagogy as a theoretical encoding scheme. Hsieh and Shannon (2005) explained that prior research or theoretical models can be used to identify key concepts or variables as initial coding categories. Elo and Kyngäs (2008) called it deductive content analysis, in which a structured matrix of analysis based on a model can be used. The themes that ran across both the teachers’ and students’ interviews were therefore identified deductively according to the three analytical categories of relational pedagogy.

The analyses began with a construction of a coding scheme based on relational pedagogy and a division of the different interviews. The meaning units were divided into three domains: (a) teachers initiating the project, (b) teachers coming into the project after it had started, and (c) students involved in the project. The analyses of the interviews from the three domains were made separately but with the same coding scheme and performed, as described in Figure 1.

Figure 1. The steps in the analysis, inspired by Rising Holmström, Häggström, and Kristiansen (2015).
First, statements about relational pedagogy were identified through an open reading to obtain an overall impression of the interviews’ content. In the second step, meaning units representing the predetermined themes of the existing theory of relational pedagogy were highlighted. Third, the various meaning units were coded using the predetermined themes. Fourth, the meaning units sorted in the themes were then separated into subcategories depending on their characteristics (see Table 2). The analysis involved a constant moving back and forth throughout the entire data set, the coded extracts of data analysed, and the analysis of the data produced. Data that were not coded were analysed to decide whether they could create a new theme or subtheme and labelled them ‘Other.’ Parts of the analysis process were discussed with experts to ensure the reliability of the themes and subthemes.

Table 2. Example of the analysis process.

<table>
<thead>
<tr>
<th>Meaning unit</th>
<th>Subtheme</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘We call each other colleagues, not teacher and student’</td>
<td>What they say</td>
<td>Communication</td>
</tr>
<tr>
<td>‘We keep the students not too close, and not too distant’</td>
<td>Balance</td>
<td>Differentiation</td>
</tr>
<tr>
<td>‘No one judges you here. You can be yourself!’</td>
<td>Safety</td>
<td>Socio-emotional</td>
</tr>
<tr>
<td>‘No consensus in the teacher team’</td>
<td>Disadvantages</td>
<td>Other</td>
</tr>
</tbody>
</table>

The Swedish Research Council’s rules for good ethical research in the humanities and social sciences were followed in this study regarding individual protection of information, consent, confidentiality, and use (Hermerén, 2011). All teachers participated voluntarily in the study after a written presentation in which they were assured anonymity. Each individual was guaranteed anonymity through encoding. Therefore, no findings are linked to any individual teacher or student.

Results

In the following section, empirical data will be presented and analysed. Because the empirical data derive from three sources, the meaning units of the empirical data were divided into three domains and analysed separately. The domains are as follows:

(a) The understanding of the teachers initiating the project
(b) The understanding of the teachers coming into the project after it started
(c) The understanding of the students involved in the project
The results of the analysis are therefore presented under separate subheadings and analysed according to three themes; then, in the next section, they are discussed together in relation to previous research.

The understanding of the teachers initiating the project

Within this first domain, how the upper secondary vocational teachers initiating the project described their experiences of working with relational pedagogy will be examined.

The teachers mentioned the difference in both what and how they communicated with the students. One advantage they mentioned was that when teachers worked together, the students received various explanations of difficult tasks from several teachers and thus in many different ways. The classroom doors were open, and often two teachers were scheduled in the same class at the same time. This resulted in them helping each other to present explanations to the students. One teacher explained, ‘For the students, if they don’t understand one explanation they go to another [teacher] and get another explanation, and then they understand.’

This strengthened the students as well as the teachers. The teachers improved their communication competence. One teacher said, ‘We try to see every student as an individual and make it understandable and comprehensive for each student. I don’t think we really did that before. We just taught.’

They also described how important the differentiation competence was. They stated how important it is with relationships and being friends but also to be honest with all students that they have to work hard in their studies. One teacher said that not doing that ‘is like deceiving the students, in a way.’ Another teacher stated that when the teacher is too much of a friend, ‘there are no one telling them what consequences their behaviour will lead to.’ They claimed that it is important that teachers require students to keep up with their studies. They also found out during the project that dropping out of the programme did not have to be negative for the student. With better TSRs and effective communication, teachers found it easier to guide the students who were in the wrong vocational programme, such as those who did not desire to become electricians or plumbers, and to help these students get a fresh start in a vocational or theoretical upper secondary school programme of their choice. One teacher explained, ‘If they want to become good craftsmen, which is our goal, they have to jump on the train. If not there will be consequences.’

The teachers also stressed socio-emotional competence and what it brought to the students. They got to know the students better as individuals and as well as students; all students’ learning abilities or disabilities were identified, and teaching was adapted to them. The teachers accordingly knew more about each student’s preferences in the classroom. One teacher explained, ‘It is easier to identify
[the students’ individual needs] and meet them.’ They also found it easier to contact the students for whatever reason. Better relationships led to higher degrees of student responsibility and made it easier for students to contact teachers when they needed to. Another teacher said, ‘It is easier for them to contact us too.’ One more advantage of relational pedagogy the teachers claimed was that it enabled the students to know each other earlier and more deeply, which made a difference in their learning motivation. The first week they only worked on bringing the class together. One teacher said that in the new classes, ‘to work during the first days. To make them feel welcomed, and to get to know each other.’ Another teacher claimed that, for the socio-emotional atmosphere, ‘The camp [during the first week] and the get-to-know exercises are important.’

With positive TSRs, the teachers also believed that the students felt safer, which in turn reduced their chances of becoming at-risk students. They claimed that the more comfortable the students felt at school, the more meaningful they found their studies. One teacher also referred to the parents as being more satisfied, as they would say such things as ‘What has happened with my son or daughter now? She/he has never been like this before. She/he wants to go to school and is successful there, far more than ever before.’ Another teacher explained that he had interviewed the students with the same question for a couple of years and states that, ‘There is a much more positive atmosphere now than before. Something must have happened.’

The aim of the project was to make all students graduate. One teacher stated clearly that the goal was not achieved and would not be. Another one claimed, ‘We haven’t developed enough because of many different reasons, but I think our goal is clearly achievable. We are only in the beginning, but I think we could reach it. I’m totally convinced that we will!’ One of the difficulties mentioned was the lack of consensus within the project’s teacher team. Some teachers just did not want to work with relational pedagogy, which made the rest of the teachers in the teacher team frustrated and frail. When confrontations amongst the teacher team occurred, one teacher described the team as being covered with ‘a negative black blanket.’ The teachers explained their lack of consensus among and problems with recruitment and blamed them on a weak management and headmaster. The teachers felt that the project was successful in many ways but were aware that not everything they had hoped for had become real. Other positive changes occurred instead. One teacher said, ‘It might not have turned out exactly the way we planned, but it has given us so much else.’ The project has also spread, and other teachers at other schools have adopted the model. The same teacher said, ‘We have discovered something that could work here, and there are others that work this way, almost even more than we do.’

In summary, the teachers initiating the project described their experiences with relational pedagogy as positive in terms of the effects it had on their working situation and on the students. Their descriptions were based on the effects of
improved communication and socio-emotional competence. They were also more conscious of the fragility with differentiation. They were, anyhow, aware that the project could have been even more effective with stronger management.

The understanding of the teachers coming into the project after it started

In this domain, the analysis was intended to help to understand how upper secondary vocational teachers coming into the project after it started described their experiences of working with relational pedagogy.

These teachers also highlighted the differences in both what and how they communicated with the students. One of the teachers explained, ‘We call and treat each other as colleagues instead of teacher/student.’ Another one said, ‘Instead of me being a teacher and them being students, we are co-workers who work toward the same goal.’

Improved communication enabled the teachers to interact with the students differently. In teaching situations, they also felt they had improved. One teacher explained, ‘We have learnt how to handle the students and talk to them in a way that they understand.’

The teachers had opportunities to guide and tutor the students according to what the latter wanted for their future. They also helped students to find out what they wanted to do and become. One teacher explained, ‘It is easier to guide them to the right programme now.’ The teachers claimed that students actually had a lot of supervision when it came to their vocational plans.

They also described how important their differentiation competence was. One teacher explained, ‘You balance on a very narrow line. You should not be too close, and not too distant from the students.’ The teachers felt it was important to stress the boundary between being a friendly teacher and being a friend. Another teacher said, ‘You gain more respect by having a good relationship, but there must be some distance so you can set boundaries for things.’ Differentiation competence seems to be the competence these teachers found most difficult to accomplish.

The teachers mentioned socio-emotional competence as the most effective approach, stressing that there is nothing without good relationships. When relationships are solid between students and teachers, all earn and show more respect. Thanks to the relational pedagogy project, the teachers felt they really got to know the students better, which helped them to better know how to make the students understand. The teachers learnt how to best respond to and match the students in their learning and working processes. They also clarified that when the students found school fun, they would always show up, participate, and thus learn. One teacher said, ‘I think like this, I have these students, I want them to feel safe and secure here, I want them to participate and have fun.’ Another teacher explained, ‘Now, school is a place the students want to go to. Everybody socialises with almost everybody.’
Overall, the teachers concluded that although they cannot make all students graduate through relational pedagogy, they can help more reach that point. One teacher speculated, ‘We might not reach the goal of 100% to graduate, but instead of 80%, we might reach 90% or 95%.’ Another one agreed and continued, ‘100% is doubtful. But it is a goal to constantly strive for.’

Although the working and learning atmosphere improved greatly, the teachers still felt difficulty within the teacher team. Similarly, to the teachers who initiated the project, these teachers did not feel that they belonged to a team – they were just individuals working with the same students. These teachers also believed that the project would have been much more effective if management had been more distinct and determined towards the teacher team.

The understanding of the students involved in the project
The analysis of the third domain determined how the upper secondary vocational students involved in this project described their experiences with relational pedagogy.

The students, of course, viewed relational pedagogy a bit differently. They mentioned differences in both what and how the teachers communicated with them and what changes the communication made. One student said, ‘It depends more on how the teachers are as persons than the way they teach. If they are merry and open, it is easier to learn.’ The students also claimed that they received more and quicker help with their assignments, confirming that they received individual help because the teachers all believed in adapted learning. They described their teachers as excellent, driven, and positive; one student said, ‘I haven’t had one single bad teacher, at least as far as I can remember.’

Students also discussed how important differentiation competence was, as they did not want the teachers to be too friendly at the expense of being toolittle teachers. One student explained that teachers must behave as teachers, saying, ‘The teachers must see who is working and who is not and then tell those who aren’t to start working.’ Another one who wanted the teachers to be friendlier said, ‘You can actually talk and work at the same time, and teachers know that.’ Students had different opinions on how close or distant they wanted the teachers to be. They also experienced that, in relation to the project, they were given the responsibility to complete tasks by themselves, which gave them a sense of professional pride.

The students put the strongest focus on socio-emotional competence and what it brought to their studies. They explained that the teachers being good-humoured and open made it easier to learn; when students harmonised with teachers, they also harmonised with the course content and subject, which made them feel that their studies would be interesting throughout the rest of their education.

One advantage described took place at the start of the semester, when all the new students and their new teachers went on a joint overnight excursion with
students from other grades. The students attested that getting to know each other at the beginning was a great start socially that made the rest of the school year a more positive experience. Students confirmed that working with relational pedagogy made it easier for them to relate better to peers and teachers. One student described the atmosphere as follows: ‘Here you can be yourself, take the time you need, and really feel secure.’ Another one said, ‘I got the impression that both teachers and students actually are behaving well here. It makes you feel safe and secure.’ A third said, ‘No one judges you here at school. You can be yourself.’

The students also stated that they felt that education had become more interesting. The change in pedagogical model had led to a change in learning and teaching methods. The students spoke positively about their relationships with their peers, explaining that it was fun to be in school with their friends, which in turn made them work harder. One student said, ‘It has given me very good friends that I will keep for the rest of my life. That is really awesome.’ They described school as always fun to go to because they knew their peers would be there, and because of their presence, school days would be fun.

In summary, the teachers explained that better TSRs enabled them to know the students better, which (a) led to a more respectful atmosphere, (b) made it easier to individualise and adapt teaching to students’ needs, (c) made it easier to guide and tutor the students, (d) promoted higher student responsibility, (e) promoted better student participation and motivation, (f) provided more time to collaborate with colleagues and learn from each other, and (g) strengthened their vocational identities.

The students explained that better TSRs led to (a) more individualisation by adapted learning, (b) finding school more fun and thus working harder, (c) feeling more secure and safe at school, (d) larger interest in the vocation, and (e) higher professional pride. Better relationships amongst students also led to school being perceived as more fun, thereby prompting more participation and feelings of security and safety at school.

In terms of how teachers and students described working with relational pedagogy, all three analytical categories were highlighted, but in different ways. The teachers described their improved communicative competence, in terms of both what they said and how they communicated with the students, as well as their differentiation competence, as something difficult but important to keeping a good balance between closeness to and distance from the students. They spoke mostly about how their augmented socio-emotional competence improved the working and learning atmosphere in various ways. The students described the teachers’ communicative competence as how nice and easy to talk to they were and their differentiation competence as how the teachers balanced friendliness and teaching. The students also described socio-emotional improvement as the most effective competence; they felt safe and secure and that the teachers were doing their job.
The teachers also articulated some difficulties of the project that could be strengthen by working more distinctly with relational pedagogy. The difficulties were (a) balancing the degree of closeness and distance, (b) lack of consensus in the teacher team, (c) weak management, and (d) recruitment problems. Clearer communication and differentiation would strengthen the consensus in the teacher team and the management, respectively, and through better socio-emotional competence, working conditions would improve, enticing more teachers to apply for a job at that school and thus solving the recruitment problems.

Discussion

The overall aim of this study was to contextualise and understand teachers’ and students’ experiences and perceptions of relational pedagogy in a vocational upper secondary programme in Sweden. With inspiration from Aspelin’s theoretical approach to relational pedagogy (e.g., Aspelin, 2006; Aspelin & Jonsson, 2019), the teachers’ focus group discussions and students’ interviews were analysed with a focus on the articulated advantages and difficulties of working with relational pedagogy to promote learning and school attendance.

The teachers focused on the advantages because they noticed higher student participation, motivation, and school attendance, which is in line with Martin and Dowson’s (2009) review. They also claimed that improved TSRs made it easier to guide and tutor the students, which led to the students gaining better insight into the teachers’ values and beliefs in not only school situations, as Ryan and Deci (2000) found, but also workplace ones. The teachers in this study said that working on the project strengthened their vocational identities, and that they could therefore be better role models for the craft that Köpsén (2014) claimed vocational teachers aim for. During the project, the vocational teachers developed a meta-knowledge of their elaborated relational competence and its consequences, which is notable in their discussions. They have become more aware of TSRs’ importance for teaching and for fostering craftsmen.

The teachers and students in this study both emphasised that there must be a balance between how close or distant vocational teachers are to their students. This has been discussed extensively in other studies (Aultman, Williams-Johnson & Schultz, 2009; Fejes & Köpsén, 2014; Köpsén, 2014; Lippke, 2012) and must therefore be viewed as one of the most difficult issues when working with relational pedagogy. Aspelin (2018) stated that being too close or too distant could be devastating to positive TSRs. Vocational teachers spend much more time with the students experiencing this balance, and the consequences of being either too close or too distant are more evident with these teachers than with others. Even though this competence is important for students’ learning and school attendance, it is not clear whether it is a competence a teacher could learn or develop.
This project was implemented in an upper secondary school vocational programme. The teacher team were strengthened by additional teachers, and they had prepared to develop positive TSRs by studying research and practical manuals on relational pedagogy. The teachers’ increased relational competence enabled them to improve the students’ learning and school attendance. This ability is notable in the results of the students’ opinions, which indicate a focus on the advantages of TSRs, and is in line with the results of Roorda et al. (2011), confirming that positive TSRs are very important to upper secondary students’ engagement and achievement. The teachers in this project also mentioned that the programme comprised many students with a variety of special needs. Previous research has proven that positive TSRs are even more effective for the learning and participation of students at risk or with SEN (Murray & Piantas, 2007; Roorda et al., 2011). In another school form or classes without students with SEN, the results might have been different. However, this study does confirm the claims of prior researchers.

Conclusions

The overall conclusion of this study is that the teachers and students of the three domains experienced improvements to their working and learning environments through working with relational pedagogy, but in slightly different ways. The teachers initiating the project wanted a change from what they had experienced earlier, the teachers coming into the project after it had started could not compare it with anything, and the students did not experience the management of the project. However, the results showed that all participants experienced effects of relational pedagogy on the working and learning environments.

The teachers and students both pointed out that their working and learning environment became more satisfying when working with relational pedagogy. Because of their consciousness of socio-emotional competence, the atmosphere improved between teachers and students, students and students, and teachers and teachers (with some exceptions). The consequences of these pedagogical changes affected the entire working and learning situation and promoted the students’ learning and school attendance. The students explained that when going to school was fun, they would go, participate, and learn. When students were on good terms with teachers, they were on good terms with the subjects they were teaching. They also mentioned that better communicative competences provided better opportunities to adapt and individualise their lessons, and that positive TSRs were necessary for effective mentoring and tutoring of students.

Another conclusion is the concern of both teachers and students about the consequences of teachers becoming too close or too distant. The students expressed that an ideal teacher would be friendly and nice, but still an authority. The teach-
ers were aware of this and discussed the difficulties with this balance. The differences in the individual contexts and expectations of individual students demand sensitivity and sure instinct in each individual situation.

Finally, this study concludes on the importance of strong management, especially considering that not all teachers in the teacher team were willing to change their pedagogy. The teachers in this study were disappointed with the management, believing the project would have been even more effective if they had consensus within the teacher team. They accused the management of being too weak and absent to support the project as needed.

The study of TSRs is important for understanding qualitative factors within the classroom. Even though various aspects of TSRs and student learning outcomes have been emphasised in many empirical studies, research reviews, and meta-analyses, according to Jensen et al. (2015), little is known of how teachers’ relational competence is acquired; there are no fixed methods or approaches within relational pedagogy. The field is still too undefined and unexplored, but a theoretical starting point needs to be developed as an area for creating new knowledge (Aspelin, 2018; Aspelin & Persson, 2011). Jensen et al. (2015) supported this concept by confirming that the research field is in its infancy and needs to be further developed to generate more knowledge of TSRs’ importance for students’ knowledge achievement.

This study has though contributed to the research field by presenting how students and teachers perceive various teacher relational competences as improving the students’ learning and school attendance in vocational programmes. To develop and/or generate more knowledge of relational pedagogy this study has focused on upper secondary teachers’ and vocational programme students’ experiences. By focusing on the importance of teachers’ verbal and nonverbal communication, the difficulties and importance of the teacher to balance being too close or too distant from the student, and the importance of students feeling safe and respected at school, the results show the teachers’ and students’ positive perceptions of relational pedagogy in terms of learning and school attendance, as well as the difficulties they find in implementing it.

However, there is still a need for further research, especially because previous research has already claimed that the research field of relational pedagogy needs to be further developed empirically and theoretically (e.g., Aspelin, 2018; Aspelin & Persson, 2011; Jensen et al., 2015). Some potential areas for further research are (a) students’ grades and results with regard to relational pedagogy, (b) the workload for teachers and/or management when working with relational pedagogy, (c) other ages or school forms (preschool to university) to strengthen the meta-analysis of Roorda et al. (2011), and (d) what actual activities, tools, or methods for good TSRs work and when. TSRs are important for students’ outcomes, but even Jensen et al. (2015) claimed that too little is known of how teachers’ relational competence is acquired. From this study, it is obvious that when teachers
improve their communicative, differentiation, and socio-emotional competences, working and learning atmospheres become more positive for all and promote the students’ learning and school attendance.

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Constructing vocational education capital: An analysis of symbolic values in the Swedish VET system of 1918

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Abstract
This article explores ways of creating educational capital in vocational education and training in Sweden during a period in the early 20th century when vocational learning was first institutionalised as education. As such, at the same time it had to create itself and submit to the established educational system. This process is the focus of the article; it is examined by using concepts from Bourdieu’s capital-theory. In this perspective, vocational education and training as an educational form is considered part of the field of education. However, the main focus of the analysis is the newly formed education for vocational learning as a field of vocational education where a particular vocational educational capital was created. The aim is to illuminate ways of creating vocational education capital by borrowings, crossovers and reinventions of values from two traditions of learning and knowledge production: apprenticeship in the guilds and education in academia. The symbols from both crafts and academia were passed on into the early VET system through its institutions and actors. It materialised in titles, artefacts and rituals that are presented in archives, journals and school memorial books.

Keywords: history of vocational education, symbolic capital, educational capital, field of vocational education, sociology of education
Introduction

This article explores a phenomenon appearing in the early 20th century when vocational education in the Nordic countries was organised as an educational form rather than as vocational learning mainly associated with apprenticeship and the logics of working life. It is a process of constructing vocational educational capital as symbolic asset in relation to education as well as to trade and industry. The systems of national vocational education and training (VET) developed differently in terms of juridical, economical, and ideological aspects, and in division of responsibility between government and trade and industry. The contrasts of both differences and similarities contribute to understand the characters of VET systems, but as pointed out in a recent study more can be done to broaden this understanding by investigating previously unexplored relations such as the proximity to compulsory education (Hellstrand, 2020; Michelsen, 2018). This article takes that relation into account and is a historical study of early Swedish VET as a social field where education capital was constructed combining learning traditions and recontextualising values. It also provides examples of this process. The case is 20th century Swedish VET, but the Nordic countries experienced the same development of national vocational as well as general compulsory education during the period (Michelsen, 2018). The creating of a specific vocational education capital, which this article explores, can thus be assumed to have taken place in a similar way in the Nordic countries, but with outcomes specific to each nation depending on its relations to general and academic education.

In 1918 Sweden got its first government-regulated and government-financed vocational education and training (VET) system. At the same time, compulsory education for the majority of young people was reformed and extended to offer two years’ continuation following the five-year compulsory general education, ‘folkskolan’. The curricula of this education were to contain mainly practical subjects and the aim was to prepare for working life or for further education in the newly established vocational education (Lindell, 1992). The combination of five-year compulsory education (age 7–11), two-year practical continuation education (age 12–13), and vocational education (age 14–15/17), formed a working-class educational track within a segmented national education system. Another, academic track, for the upper classes, was through the ‘läroverk’ (age 9–15) that prepared for university education and higher offices. A new institution for education regardless of its content has to conform to the preceding conception and form of organised schooling. Thus, already established educational systems have power over the purpose and aims, organisation and content of new educations. In this case, the ‘läroverk’ with its long historical traditions and the somewhat later ‘folkskola’ were the educational institutions that positioned vocational education (Lindensjö & Lundgren, 2014). In the history of education, in this case the history of Swedish VET, two processes can be identified a process of contemporary
reproduction and, at the same time, a process of historical reproduction. The first process reproduces knowledge and skills considered necessary for production and to live in a society. In themselves this knowledge and these skills have historical genetics. The second process, the historical reproduction of education, reproduces the organisation of knowledge (priorities and aims) and learning (Lindensjö & Lundgren, 2014).

When vocational learning began to form as an education in an educational system from the early 20th century, VET had to manage two important tasks: to constitute itself within a pre-existing system of education and to gain recognition as an educational option with social as well as vocational credibility. Hence, the contemporary reproduction of vocational knowledge and skills with its legacy of crafts became part of the historical reproduction of education in Sweden. Although conditioned by the history of education, conforming vocational learning to vocational education was, and still is, not a predetermined process. The aim of this article is to illuminate ways of creating vocational education capital by borrowings, crossovers and reinventions of values from two traditions of learning and knowledge production: apprenticeship in the guilds and academia.

The time frame of the early Swedish VET system is 1918–1971, but this article centres on the period 1940–1970 as it is possible to identify periods of rise and fall in the VET model emerging from the 1918 reform. The period 1940–1970 can, in this case, be defined as a peak performance for the model in terms of increasing number of students and increased attention in education policy debates. The investigation takes as its point of departure the theoretical construction of VET as a social field; and the research questions guiding the investigation into the construction work of education capital are: 1) What traditions and already existing expressions of symbolic values were available for the construction of a vocational education capital? 2) What kinds of actions can be interpreted as contributing to building up symbolic capital specific to vocational education and training as an educational institution?

Following a presentation of the theoretical considerations and method, the investigation falls into two parts. Part one describes the early Swedish national VET as a social field and its different traditions as a carrier of symbolic values. Part two analyses these values as expressed in symbolic actions and artefacts.

Theoretical considerations and method

Bourdieu’s theory of capital aimed to explain social production and reproduction of hierarchical structures in society. Educational systems in particular have been fruitfully investigated using the key concepts of this theory. Interestingly enough, vocational education has not been subject to many such attempts. One explanation may be that VET is rarely considered in its own right but rather as an integrated part of a national education system (Berner, 1989). However, for
the aim of this article it is just as important to acknowledge relational aspects between general, academic education and VET as to separate the two as different historical and cultural traditions of knowledge production and social reproduction. The assumption made is that VET as an institutionalised education is formed by tensions embedded in differences and similarities of traditions and the educational capital; the currency of vocational education in society can be perceived through symbols created in that tension.

The analytical tools used in this investigation are the concepts of social field, symbolic capital and habitus. These concepts are most comprehensible when the empirical material and the concepts are tied to an analysis of the data (Bourdieu, 1995). The Bourdieuan concepts in this investigation operates on two levels for the purpose of a) setting the scene for creating vocational education capital, and b) exploring ways of creating vocational education capital.

The empirical material comprises text and photographs from a journal, school archives and memory books. The relevance of the material pertains to the producers as well as the products. The material is produced by people engaged in VET on different levels and positions. The products, in this case means perceptions of VET and VET values revealing themselves in descriptions and action. The different types of sources will be briefly introduced here and further described in connection to its use in relation to the analysis.

_Tidskrift för praktiska ungdomsskolor_ (TPU) [Journal of Youth Vocational Schools] was a journal published by the organisation Svenska yrkesskoleföreningen (SYF) [Association of Swedish Vocational Schools]. This organisation was formed in response to the 1918 VET reform, and its aim was work for the development of Swedish VET. Articles in the journal provide reports of the inner life of VET though portraits, debates, important issues and statements.

Archive material from two vocational schools in Stockholm provides close encounters with actions and practices such as ceremonies and board decisions that provide information about the perception of VET among those who were closely involved in school activities. Minutes, photos and a school song are included in the archive material. All quotes from the source material are translated from Swedish for this article.

Unlike the journal and the archive material, the memory books are not contemporary (and thus not a producer in the field of VET at the time) but included because of the accounts given by former teachers and students describing symbolic events and giving information on aspects of socialisation through vocational education. The books are also used for its photographic material and the descriptions of events that took place at the time.

Since the material include both historical texts (of different genres) and pictures, the method is a combination of content analysis and visual imagery analysis. Historical document analysis is usually carried out within a hermeneutical, interpretative tradition which imply contextualisation and an abductive process.
Constructing vocational education capital

in the interpretation moving back and forth between the known, the data, the theoretical concepts and the new understanding (Selander & Ödman, 2004). The context in terms of the Swedish VET in the particular time period is well known through previous research. Sorting out the actions and expressions of a historical process is constructing new knowledge, and this is done by content analysis. The content in the articles, minutes and books was categorised as actions and expressions in accordance with the key theoretical concepts: habitus and capitals of different kind (Watt Bolsen, 2007). Visual material is useful to inform historical and sociological research as it ‘depict the physical arrangements […] of bodies within socially constructed spaces’ (Margolis & Fram, 2007, p. 193). This is important for understanding schooling in the Bourdieuan sense as something embodied and expressed through actions (what and how people do and say things) and symbols. In using both texts and images with a hermeneutical approach it is also important to recognise settings of particular actions and expressions. That means for example, to recognise the authority of School Boards or the informality/formality of an interaction between students or students and teachers.

VET as a social field – setting the scene

In short, a social field is a system of relations and positions occupied by people and institutions that battle over something that is common to them. A field appears as a structured room, and the structure is established by a history of old battles and acquired positions. Where there is a social field there is a struggle, but the properties or specifics of the struggle are characterised by the particular field (Bourdieu, 1991, 1995). In the case of Swedish VET, the field created around ‘the good vocational education’ fused together crafts and industry, the parties of the labour market, academics and workers, and I would like to emphasise the roles of the teachers and the students as important groups of interests in the development of early 20th century Swedish VET.

The constitution and development of the 1918 VET system during the early to mid-1900s also provided conditions for a VET field to emerge. Indeed ‘a world of its own’ (Bourdieu & Chartier, 2015, p. 16; Broady, 1998b) as a social field has also been described, the VET system was explicitly narrated as ‘yrkesskolvärlden’ [the world of vocational schools/education] and, equally explicitly, inhabited by ‘yrkesskolfolk’ [vocational school/education people] (Broberg, 2014; TPU 1:1957, p. 12; TPU 2:1956, p. 25). The need for developing skills for trade and industry was paramount both to traditional vocational groups (crafts) finding themselves under new conditions after the free trade laws of the late 19th century had been implemented, and to representatives of the new industrial groups. The struggle in the early vocational education field concerned defining or deciding what to count as the ‘real’, or as it was put in its own time, as ‘the actual vocational education’ (Broberg, 2014). This core education, as we may call it, drew
heavily on the tradition of the guilds and apprenticeship learning and this legacy gave it its most valuable cultural capital. The relationally contesting part related to the upcoming industrial vocations and how to acquire the knowledge and skills required. Strategies of closure and strategies to break closure developed from the two traditions. Attempts were made to bring in new actors, institutions or symbols to enforce different parts of the field. These actions reveal the intertwined process of contemporary and historical reproduction as vocational learning merged into education. At the same time as new VET educational forms such as in-school workshops competed with apprenticeship, new educations for new industrial professions employed the traditional meriting system of the guilds.

The structure of a field is a state-of-strength ratio between the actors and institutions that battle over the distribution and definitions of the symbolic capital specific to the field. Those who monopolise the specific capital in a specific state-of-strength ratio, according to Bourdieu, have a tendency to use it for conservative strategies, but part of the fields dynamic is that the constitution of the field is dependent on groups challenging the orthodoxy in a previous state (Bourdieu, 1991, 2000).

As a field, VET constituted itself around a common interest in the transfer and development of vocational skills and the qualification system to measure them. For a long time, this had been the responsibility of the guilds, and learning through apprenticeship was the only known way of acquiring practical vocational skills. For the constitution of VET as a field, the silence or obviousness of how to acquire vocational skills had to be broken by actors challenging the doxa (the unquestioned truth) of practical learning within the guild tradition. Before the 20th century, the new actors voicing the question of acquiring vocational skills by education were no threat to the traditional truth of how to acquire them. The formation of VET as a field was dependent on the interest in practical learning from industry challenging conceptions, organisation and evaluation of vocational skill transfer or learning. The head of a corporation did not train the worker himself as the master in a craft workshop; he had to rely on others to educate his workers. His interest in this aspect of business made him challenge the traditional opinion or present alternative ideas about practical learning that forced the door to the doxa of vocational skill transfer and development. These new actors often had no experience themselves of the learning acquired to work in their factory. However, they did have experience of other kinds of formal education in the academic tradition. Hence, one contribution to the VET field’s coming into being was the dismantling of the guild system and the growth of industry. This brought together different actors that from different positions combat over the definition of good vocational education and training, how it was organised, measured and symbolised in merits. This struggle became a battle over which vocational education was ‘the real vocational education and training’. The symbols would emphasise what was and what was not to be counted as real vocational education.
and the power to charge the symbols with value picked from two traditional institutions for learning: the guilds and academia.

Vocational skills were the epicentre of the guilds, and how to learn, evaluate and give merit to their participants united them as a field in terms of vocational education, even though the word education was not used at this time and in this context. The hierarchy in play within the guild system transferred into the VET field as a scale of values. There was a difference between master and journeyman and a difference between coopers and goldsmiths. In vocational education, there was a difference between types of education (courses, workshop schools, apprenticeship, etc.), between vocations to be trained in (hairdresser, photographer, electrician, carpenter, etc.) and between schools. Of course, this can be said about academia as well, but when structures of labour altered in the industrial era, the hierarchy of the old guild system was challenged by new occupations rather than by academic educations. New vocations, new techniques, new structures and actors became part of vocational skill production, a production previously maintained by guilds. At the same time education became available as idea and form of skill production through the implementation and expansion of general compulsory education. These developments are important context for VET as an education in the early 20th century.

By the mid-1900s VET produced and reproduced itself as a field in a number of magazines, the most prominent example being the Tidskrift för praktiska ungdomsskolor. Concerns about VET were channelled through other journals as well, such as Industria and later on Yrkesläraren [The Vocational Teacher], for example. VET also managed to constitute national institutions of both a sector and a governmental kind. The previously mentioned Svenska yrkesskolföreningen, Arbetsmarknadens yrkesråd (AY) [Labour Market’s Vocational Council] and Kungliga överstyrelsen för yrkesutbildning (KÖY) [The Royal Board of Vocational Education] were institutions constituted solely for the purpose of developing vocational education. Another actor was Sveriges hantverksorganisation (SHIO) [The Swedish Handicraft Organisation]. The Boards of the various schools were important actors as well. These were independent boards in the municipal organisation, consisting of a majority of persons from trade and industry. People holding positions in the VET field ranged from teachers, and traditional tradesmen or craftsmen, to industrial magnates and students.

In this study, students are regarded as part of the field. It could be argued that for students, their education is only a transitory period, as they are oriented towards other fields. But as this article focuses on practices creating VET educational capital and not the use of it, I conclude that the students were important contributors (direct and indirect) in this creation process (Bourdieu, 1986). It is also possible to include students as producers of capital in line with the argument that consumers (in this case the consumers of VET) contribute to the production of the product that is consumed (in this case the education capital of VET). This
argument taken from *La Distinction* relates to the process of change within a field (Bourdieu, 1986, p. 241). Production is crucial and paradoxical; it both constitutes and transforms the field at the same time, and in that process, all actors in the field are producers.

It is important to note a distinction used in this article when referring to the VET system in Sweden from 1918 to 1971 as a field. I borrow the concept of field to visualise the stage setting for the actions, artefacts and narratives that are the main concern of this investigation: to narrate a process of creating VET educational capital. To investigate the field of VET at this time in history would shift focus to the structures-of-power relation. Although interesting and in need of investigation, this would be too extensive a scope for this article.

**Forms of capitals and habitus**

The operative concepts in this investigation are the symbolic capital and habitus (of different learning traditions) as they are used to create or empower VET educational capital in 20th century Swedish VET as well as to symbolise the created capital. This is done in a dynamic production process of reusing symbolic values from different traditions and fields to create new symbols communicating new values (Bourdieu, 1992, 1995; Ullman, 1997). The concepts unveil narratives, artefacts, ceremonies and actions as contributors to this process.

The definition of *symbolic capital* can also be briefly defined as whatever is recognised as valuable by social groups. Symbolic capital signals other types of capital: education capital (type of education, level, institution of education), social capital (connections, associations, networks, social belonging), and cultural capital (preferences and knowledge of art, music, theatre, literature). Symbolic capital is the things, artefacts, titles, merits and ceremonies through which forms of capital can be visualised. Symbols are charged with a certain value made visible through materialisation or action (Bourdieu, 1995). This is also closely connected to the concept of *habitus*, since habitus describes the embodiment of social and cognitive skills, some of which can be recognised as symbolic capital, like wearing a school uniform, but it also relates to the way an individual or group talks or uses language in a particular way (Bourdieu, 2000). Hence, habitus reveals itself through language, behaviour and ways of thinking and practicing. This, like symbolic capital, is dependent on the social context of a field being understood correctly and being produced and reproduced. Habitus is an incorporated mastering of the practical, which is developed by participating in daily activities within the field. It is the bodily, verbal and cognitive transformation into a member of, for example, a vocational group. Situated learning as an apprentice is often related to the development of habitus and connected to specific vocational groups (Lave & Wenger, 1991), but there are also interesting studies on the way the late 19th and early 20th century male middle class developed a class habitus
through upper secondary elite educations (Florin & Johansson, 1993). When studying Swedish VET in the mid-1900s we find many examples and indications of how the education contributed to a homogenic working-class habitus as well as a vocational-specific habitus.

Recognising values creating vocational education capital

The vocational education institutionalised in the early guilds had strategies, structures, ceremonials and merit systems that formed a field of craftsmanship where it was possible to accumulate cultural and symbolic capital, which was understood and which, to a certain extent, could be interpreted and recognised even outside the field. Bourdieu makes an important distinction between recognising, knowing something by sight, and recognition, as a deeper acknowledgement (Bourdieu, 1995, p. 97; Broady, 1998a). This means that the symbolic capital has at least two interrelated sides: one that makes a statement within the field and one that makes a statement in the surrounding society. One such symbol in the guild tradition was the title master and the message it conveyed to associate workers, society and presumed customers. The vocational teachers in the in-school workshop educations were even referred to as masters and journeymen’s trials were adopted in some trades that lacked a clear heritage from a guild (TPU 1:1945, 7:1962). The master in the early guilds was responsible not only for the reproduction of skills in the trade but also for the socialisation of the apprentice into the vocational ethics and cultural codes. This vocational disciplinarian responsibility also appears in the VET of the 20th century and is portrayed in different narratives, particularly in student memoirs (Larsson, 1991).

A number of articles in the Tidskrift för praktiska ungdomsskolor are biographical material that emphasise hard work, perseverance and physical interaction with material as the conditions for qualitative vocational knowing. A common text genre in the journal was biographical, often narrating how the traditional artisan came into being. One example is the article Minnen från gesäll- och vandringsår [Memories from journeyman and wandering years] (TPU 9:1946) It tells the story of vocational teacher Werner Blom’s many long journeys in Sweden and abroad, training with masters and becoming a skilled shoemaker.

Another narrative has a particular class perspective, the narrative of the diligent worker. The tradition that the narratives connect to – sometimes implicitly, sometimes explicitly – was one emanating from the guilds and their historical social responsibilities, quality standards and position in the local community (Edgren, 1987). By the early 20th century, it had also taken on ideals communicated through social movements among the working class and lower-middle class (Ambjörnsson, 1988, 2011). The grand narrative or figure of thought that it is possible to recognise here is what Weber described as the Protestant ethic (Weber, 1978). The narrative of the diligent worker and the hard way to gain
proficiency in a trade fused into the narrative of the vocational student as being part of a long and specific tradition of a trade and a class. It is important to recognise the diversity of vocations (from goldsmiths to plumbers) and vocational groups (in-school educations, apprenticeship at an industry school or in a small-scale craft business) within VET. The examples below can be seen an effort to both create and symbolise VET educational capital. It may also be interpreted as part of a defining process – or closure – to distinguish a particular ‘us’ from ‘them’. Defining processes are part of the struggle and the moving of positions within the field that structure and define it.

The master in the school workshop was expected to be the embodiment of the work ethic and to exemplify the ways of thinking and practicing that upheld the differences from both the white-collar vocations and the unspecified workers without education or training in that specific craft. This discourse is particularly evident in articles problematising the different norms and standards the students encountered when they were doing their workplace training, as in this example of differing work ethics between school and workplace:

The work ethics of the adults [at the workplace] must in many cases be improved. How can the poor vocational teacher keep the students in the building when the lights are turned off a quarter of an hour earlier? (TPU 4:1967, p. 245 [emphasis in original])

The idea that VET had a responsibility to discipline future workers is its reproduction of schooling as well as in the production of vocational knowing for contemporary needs. Another example is the grounds for employment as a VET teacher. Character was an important qualification. According to documents in school archives ‘zeal’, ‘honourable conduct’, ‘dedicated’, ‘careful’, and the ability to maintain ‘law and order’ were valued assets as vocational teacher (LYS B4:1 Tjänstgöringsbetyg och förordnanden).

The students were socialised into the tradition of a good work ethic. Punctuality, cleanliness and good order were taught and rewarded, and the breaking of norms was punished by the system of diligence money (a form of apprenticeship pay, but for in-school workshop students). As one man recollects, the master could fine a student (take away the diligence money) for leaving a blunt tool unsharpened for the next user or even for breaking wind, as behaviour violating the norm of professional conduct (Larsson, 1991). At the same time, a sign of belonging and of the ability to read or interpret the constitutions of a specific vocation was when the vocational students could enjoy a laugh at the expense of white-collar representatives. The following example is from an article arguing for the importance of VET and the qualitative differences of vocational knowing in different vocational groups working together. A master in a workshop school reported:
Now it is so that a craftsman can see from a blueprint how much practical experience the constructor has. […] The boys know nothing funnier than finding a mistake in the drawings the clients have handed in for manufacture at the school (TPU 3:1945, p. 101)

Humour such as this is a kind of language specific to a group, and as such, the habitus of an individual in the group would be to understand the fun. Habitus generates strategies in the social milieu one encounters. The master’s pride in his students not only emanated from the knowledge they showed but also underlined the community they shared, which became visible in the encounter with another social milieu. It is possible to interpret the laughter at the drawings from the architect’s office as an expression of habitus produced or constructed within the vocational education and training. Underlining this expression is not only the social difference between different educational backgrounds but also, and perhaps most important, the use of knowledge unique to the educational tradition of vocational skills mediated in the VET system of schools.

Another example that reveals the norms that the schooling sought to develop in the vocational student is the struggle for the exclusive right to the name vocational student. There were indignant articles in Tidskrift för praktiska ungdomsskolor about juvenile delinquents in correctional institutions being called vocational education students (TPU 5:1955, 9:1959, 7:1962, 9:1962). The groups of interests in vocational education fought hard to make the Ministry of Social Affairs change the wording in the official language concerning the juvenile delinquents participating in correctional programmes where they trained for work. The vocational students were pictured as embodying the moral virtues of hard work and honesty, the complete opposite of the other group of unfortunate young people in the institutions. Thus, it was the habitus developed or embodied in vocational education that would single out the vocational student, and in this respect, he or she also became a trademark of VET. The charging of the name ‘vocational student’ with moral virtues contributed to the construction of the symbolic capital VET could generate. To say you were a vocational student would carry a positive meaning, not only for the future employer or fellow craftsman but for the surrounding community as well. The educational capital of VET was in this case symbolised by the definition of a VET student and embodied in the students’ habitus which in turn made the individual VET student a symbolic capital for VET. The norms of the context developing the vocational student habitus were illustrated in the lyrics of songs written by students for end-of-semester ceremonies, as when the Vocational Schools of Stockholm celebrated the end of another academic year at Skansen in 1948. The song honoured the students’ knowledge and virtues, vocation by vocation, as in these verses:

When a house is to be built we blast the rock,
Build the walls, do the carpentry and paint the wood.
And with fine interior decoration
Our upholsterers complete the job
In our school years we are short of cash
While our comrades get well paid.
But in life we soon found out
That a real craftsman
Earns more than he who knows nothing.

We have learnt at LYS in these hard years
How to gain some lasting knowledge.
Those who chose an easier way
We shall soon pass by.
They stand still while we move on fast.
[…]

We take great interest in all around us.
We want to learn more about everything.
An open mind and open eyes
For our society is what our LYS gave us.

(LYS Styrelseprotokoll, A1A 1920-196)

It was clearly also a celebration of the school and the education it provided which brought forth these excellent workers.

In 1952, vocational students at an in-school workshop of mechanical education took the initiative to create a school signet ring.

A ring is rarely (if ever) just a ring. A ring is a bodily-worn symbol of something: a marriage, a title, economic wealth, family tradition, education and so on. This is important since it signals some form of social or cultural capital. The interpretation or recognition of its value is made within a social field.

The Board treated the request from the students in a subsequent minute. First it ruled in favour of letting the students make a ring. It also decided that the Board would contribute to the initiative by sending a request to the city council to use the official seal of the community as an engraving on the ring. This was approved, and the Board decided to purchase the necessary machinery to manufacture the ring (FSU, Styrelseprotokoll 20/5 1952 § 68, A4A:1). The students and the representatives of the school and the municipal authorities came together in the idea of a need to embody the knowledge and experience gained from this particular education, and as the official seal signals, from a particular school. The ring was at the same time specific to trade, education and the school. Most likely the narrative to support the symbol was connected to the tradition of guilds, where historically there are examples of master rings (Figure 1). In this example, we know little about what trade the students were in (other than some kind of mechanical vocation), but there is another example of school ring that was created on the initiative of students in industrial vocations. This was an industrial school with a
Constructing vocational education capital

private organiser (one of many educational forms in the 1918 VET system) in the small industrial town of Laxå (Henriksén, 2008). Being a group of interests within the field of VET, this industry is complex. New vocations were created in the industry that could not trace their origin to a craft. The idea of a ring might therefore also have been inspired by the academic tradition, but once again, the students took the initiative and the engraving on the ring in this case clearly symbolised skills associated with workshop vocations as it figured a hammer and a spanner (Figure 2). In both cases, the in-school workshop in Huddinge (municipal organiser) and the industrial school in Laxå (private organiser) students and administration worked together to create VET educational capital by reusing the symbolic value of a master ring, which in turn symbolised a value system of quality vocational knowing. But rings are also used in the academic tradition to symbolise the highest degree of education. The two schools were examples of the new educational forms in vocational learning, for example in-school workshops, organised not by a craftsman in a small business as an apprenticeship. The academic tradition may have been represented by the organisers; in any case, the men on the school boards could easily recognise the symbol of a ring as related to either learning tradition. Thus, these rings were recognisable by both craft and industry, and perhaps even academia. They signalled the importance of VET and the particular schools by drawing on the historical credit of two learning traditions.

Figure 1. A master ring (TPU 2:1947).
Another way of constructing VET educational capital by this optimising use of two-tradition symbols, as in the cases of the rings, was to mark the end-of-semester ceremonials. Stockholm Vocational schools held their ceremonies in the City Hall and in Blå Hallen (The Blue Hall). This is a place with high ceremonial ambience. It is the room where the Nobel Prize ceremony is held. Photos from the archive show men and women in formal dress, white for the women sitting on the right side and black for the men seated on the left side, as they all face the speaker at the rostrum (Figure 3) (LYS F5 Fotografier). The palatial or even church-like architecture of the City Hall underlines the importance of the ceremony taking place there. It is not going too far to compare this ceremony with the Stockholm University conferment of a doctor’s degree.
Figure 1. End of semester ceremonial of Stockholm Vocational schools (probably 1920s). An item in the programme was appointing journeymen. Source: Municipal archives of Stockholm.

It is possible to claim that this ceremony emulates the traits and traditions of academia and claims a comparative acknowledgement of their merits. However, the actual procedure in this setting had its roots in the guild meritng system. Part of the ceremony in the City Hall in the early VET was also the official appointment of new journeymen by giving them their diplomas and medals. The graduations in Blå Hallen were most likely intended to imitate the traditional crafts for the more modern vocations, as well as for female educations, which lacked the traditions of a journeyman’s test and a journeyman’s certificate. A craft education still ranked higher within the field; the ring and award ceremony alluding to the guild tradition would reinforce vocational learning as education as such, not as an education in comparison with an academic education. The ceremony symbolised VET education capital communicating its value, to be recognised both inside and outside the field. Within the field of VET the tradition of craft was a currency that could empower modern vocations and new educational forms. New vocational students in this context were, for example, car mechanics who would have trouble tracing any roots back to a guild, but also female vocations, as women were traditionally not associated with the guilds. New groups within the field of
VET were challenging the doxa of how to develop quality vocational knowing by using the currency once monopolised by the crafts though its historical heritage of the guilds.

The ceremony setting’s double allusion to the history of the guilds and the history of academia signalled a symbolic value equal to the academic tradition, but within the vocational education field. This is a crucial point. Based on the assumption that a field also functions as a market, I argue that the symbolic value established by these types of ceremonies and likewise the ring in Huddinge and in Laxå could be exchanged in the middle of the 20th century because the academic tradition was a completely different field/market with a different currency.

The students passed through the social field of vocational education and training, but it is important not to underestimate their part in formulating and participating in the making of VET educational capital, and their efforts to accumulate VET educational capital. The initiatives of making the rings and the song written for the ceremony at Skansen indicate that they were involved in producing and reproducing the symbolic value of vocational education. The importance of the vocational student as a symbol and the stories that reveal the standards of a qualified worker were not generated by the students but rather lived by them. They experienced masters, penalties and rewards, ceremonies, humour, systems of merits and standards and symbols materialising or institutionalising these truths about vocational education, blue-collar vocations and vocational knowledge.

Concluding discussion

The VET field in early 20th century Sweden, which was built round the question of education for the transfer of skills and the charging of its symbols, was generated in the struggle over what was to be counted as ‘real’ or ‘actual’ vocational education. This was a field created by actors, organisations, associations, school boards and institutions, and by systems of credits and ongoing discussions through papers and conventions. VET in the early Swedish model created educational capital by merging the traditions of the guilds and academia and using their symbols in new ways – but recognisable in the VET field. Findings in the empirical material of rituals and artefacts such as ceremonies in the city hall, school rings and songs are examples of this. This symbolic capital was used to communicate the value of VET in relation to other educations (to attract students) and to the labour market (to build up both industrial and craft employers’ confidence). The lyrics in the song about knowledgeable craftsmanship and the struggle to keep the definition of ‘vocational student’ tide to the discourse of the diligent worker is examples ways to produce symbolic capital in and for VET as an education.
The VET field as structured by the conditions of the educational system of the time (1918–1971) gradually disintegrated in the stepwise integration of the independent school boards into the primary and secondary municipal school organisation (Broberg, 2014). On the national level, the government authority dedicated solely to vocational education closed down and its resources were integrated into the state-regulated national education system. In doing so, the trade and industry that previously had a significant influence though the cooperative organisation AY saw their mandate diminished (Olofsson, 2001, 2005). The fact that the organisation SYF and its journal Tidskrift för praktiska ungdomsskolor (by 1968 it had been renamed Tidskrift för yrkesutbildning) closed down in the aftermath of the 1971 reform also illustrates a transformation of what distinguished the early Swedish VET field. What really rearranged and perhaps weakened the field was the loss of authority over the definition of what ‘real vocational education’ was. The process of historical reproduction of education affected VET by its integration into the ‘gymnasium’, an upper secondary level previously providing academic education only. This merger meant that there were no different forms of vocational education to compare with. VET from 1971 was a two-year, upper secondary, in-school programme and preparatory (no vocational exams like journeymen were issued by this education) regardless of the vocation it was preparing for. One possible conclusion is that this new system affected the possibility to build hierarchies within VET, between vocational education programmes. Thus the struggle to define what real vocational education was disappeared when the upper-secondary education organisation erased the heterogeneity of VET educational forms. This historical development altered the rules of engagement, which affected not only the positions and structures but also the systems of value determining the currency of vocational education capital. In the early model of VET, different vocational education forms competed for the high symbolic assets. In the new field, there were only academic educations to compete with. The symbols charged with value from the guild tradition became, in the new field, a foreign currency with no exchange value. With the field of vocational education disbanded or divided into sub-fields with no clear connections, there were no social fields where the symbols – fused by both the guild and the academic tradition, forming an exclusively ‘VET currency’ – could be interpreted and recognised. During a period of a little more than 50 years, the struggle to define good vocational education and training was developing while new occupations and gender structures were emerging. As a field, the actors and dynamics shifted and altered, the symbols were charged and recharged, and it was perhaps because the currency remained exclusive to the field that VET could to some extent be perceived in its own right.

The symbols from both crafts and academia were passed on through the early VET system through its institutions and actors and the values negotiated within the field. The transfer of a symbol, a title such as journeyman or master from
historical times to a modern practice, does not mean that it is given the same content. It is rather a ‘passing on of an earlier scale of value and status of the title’, and herein lies both continuity and change (Ullman, 1997, p. 22). Today the title of master or journeyman is not associated with vocational education at the upper secondary level. It does not symbolise the same skills as in the guilds or the early 20th century Swedish VET, but it is empowered by the historical scale of value. That means it continues to be a valuable symbolic capital, but not of education gained from the national vocational education system. The passing on of this particular scale of values through titles, narratives, rituals and artefacts is now, with very few exceptions, administered by educational organisers outside the state-funded national education system. The early social field of VET consolidated vocational education capital through tensions between traditions and the legacy of different scales of values. These tensions were lost in the process of turning vocational education into upper secondary, school-based education regulated in the same way as academic education. What this loss of tension means for Swedish vocational education and training in terms of accumulating educational and symbolic capital and gaining recognition as valuable education capital remains to be investigated and discussed. As suggested in the introduction the process of creating vocational education capital can be identified in the development of VET in all Nordic countries but the conditions are different depending on the field. The possibilities to uphold, transform and manage values turned into capital are closely related to the esteem of VET. The esteem of VET today is recognised in research to be a shared problem although different in character (Larsen & Persson Thunqvist, 2018). The Nordic countries have developed differently in terms of regulating the relations between education and stakeholders (Michelsen & Stenström, 2018). This also means differences in structures of VET as a field and the process of constructing VET capital. A way of understanding this particular challenge is perhaps to understand the rules of engagement for VET as a social field and its historical development.

Endnotes

1 For statistical data on the number of students involved in VET, see Statistiska centralbyrån (1984). The period is also characterised by its many governmental inquiries involving VET or focusing on VET especially. See, for example, the public reports, SOU 1954:11 and SOU 1966:3.

2 Research using this theoretical approach to understanding VET is usually related to learning and vocational skills, for example in Colley et al. (2003) or in Rehn and Eliasson (2015). The Bourdieuan concepts used to investigate VET models are less common; however, the thesis of Nylund (2013) should be mentioned as well as the article by Nylund (2012).
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Source material (Unpublished)

Archive

**Huddinge kommunarkiv** [Municipal archive of Huddinge]

**Stockholms stadsarkiv** [City archive of Stockholm]
LYS B4: 1 Tjänstgöringsbetyg och förordnanden [CV records and appointments].
LYS F5 Fotografier [Photographs].

Source material (Published)

Articles in *Tidsskrift för praktiska ungdomsskolor* (TPU) [Journal of Youth Vocational Schools]

Minnen från gesäll- och vandringsår [Memories from apprentice and wandering years] 9:1946.
Yrkesskoleelever på vansinnesfärd [Vocational school students on a mad journey] 5:1955.
Hel avslutningsklass klarade gesällprov [ Entire class qualified in journeyman’s test] 7:1962.
Memory books


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Waiters´ craft-related actions studied from the perspective of time-geography

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Abstract
The aim of this paper is to visualize, communicate and understand the vocational knowledge of a waiter’s craft, including how to perform table-setting and serving. The underlying theoretical perspectives are Culinary Arts and Meal Science, Craft Science, and Time-Geography. Basic time-geographical concepts used in the study are project, log, notation and constraint. The empirical data consist of two postulated serving methods wherein different procedures are identified. The data are based on the first author’s vocational experience and are described by logs of procedures. Questions in the logs concerning capacity, coupling, or authority constraints indicate limits to what is possible. Additionally, one of the serving methods is shown by a notation, displaying the waiter’s and the guests’ actions in relation to the procedures. The notation, complemented with a drawing of the room, provides knowledge about when, where, and for how long a serving procedure lasts. Through the use of time-geographical tools, the waiter’s craft procedures can be described and interpreted. Thus, it became possible to visualize, communicate, and acquire a deeper understanding of how the waiter in her vocational craft predicts and masters how time and materiality together with spatiality affect a meal event.

Keywords: time-geography, vocational knowledge, waiter, restaurant craft, table-setting, serving
Waiters’ craft-related actions studied from the perspective of time-geography

Introduction

In the field of craft, attention is often directed to the result and assessments are made of the finished product or service. A craftsperson’s vocational role often involves many different assessments being made during the performance of a craft procedure. The assessments are often implicit knowledge and are undertaken silently. In a vocational internship, it is less important to be able to give explanations of what the assessments are; it is more important that they are the right ones for the craft procedure (Almevik, 2011). However, in order to create the conditions for knowledge transfer in vocational education and training, it is necessary to achieve a profound depth and to change the focus from performing to examining how to perform (Sjömar, 2017). In this article, the aim is to increase the current understanding of the waiter’s vocational knowledge by using time-geographical approaches and methods.

In general, perceptions of a waiter’s work and skill vary. In some contexts, serving and table-setting are considered to be a simple type of work with a few requisites. Work as a waiter is often the first job of young people, who can begin the role as novices since education is rarely in demand (Statens offentliga utredningar [SOU], 2017). In other contexts, however, table-setting and serving are considered to be stature-enhancing and prestigious forms of work. For example, the daily press in Sweden reports on the professional table-setting at the Nobel Prize dinner. The textual descriptions, which are often illustrated by accompanying pictures, reflect how the serving procedures are implemented. With the Nobel Prize dinner as an example, the practical performance of the waiter’s procedures for table-setting and serving requires knowledge of which utensils will be presented, where on the table they will be placed, and when the serving will be done. Serving also requires activities that occur in short sequences, often with minimum time and full attention necessarily directed to guests. All these are activities with specific time-space requirements. A skilled and experienced waiter repeats serving activities several times until they become routines, stays one-step ahead, and has the ability to predict the next event. Once such actions become routines, even a skilled waiter will have difficulty in communicating a thorough description of what occurs in a serving situation. Almevik (2014) points out the importance, for dissemination of knowledge, of linking theory and practice together rather than separating them. One way to go about this, means Almevik (2017), is for crafts-persons to learn both to document and communicate their own knowledge.

The philosopher Polanyi (1958) wrote that when an action is not reflected upon, and when its performance is not assessed, we lose the description of how that craft is executed. Polanyi states that when attention is not paid to the individual parts of a procedure, it becomes impossible to identify them. On the other hand, Ingold (2013) believes that it is the gravest of errors to regard such know-
how as a subconscious act, or as something that practitioners can do without thinking, since the work involves the most intense concentration.

The time-geographical approach provides conceptual tools which are useful for investigating processes of the physical connection between material in space over time. Ellegård (2019) underlines that time-geography helps in the analysing of how different needs are satisfied differently depending on where, when, and by whom the activities are performed. Hägerstrand (1970) believes that time and space are inseparable, and that time is necessary to enable people and things to be brought together. This way of reasoning can be transferred to different restaurant crafts, where a variety of meal situations are dependent on their specific location in space and time. In the same way, Gustafsson (2004) suggests that no meal is carried out without the presence of different eating situations, places and rooms for dining in.

Craft knowing

A common way to describe craftsmanship involves mystifying the craft knowledge by saying that it is present ‘in the body’ (Sjömar, 2011). Craftsmanship is often linked to physical labor and to the fact that knowledge rests ‘in the hands’ or ‘sits in the spine’ (Almevik, 2011; Sjömar, 2011). A craft performance could be described as a procedure that involves a series of difficult decisions made (Tempte, 1982) and their risk taking is central to the performance (Pye, 1968). Schön (1983) states that practical knowledge is both problem solving and assessments of the results. In the same way, Molander (1996) suggests that discernment and attention are adjacent. Pye (1968) distinguishes craftsmanship through the concept of ‘workmanship of risk’ as being characterised by unprecedented work, in which the quality of a piece of work can be risked, while ‘workmanship of certainty’ is performed on a secure basis with a predetermined result. Attention could be seen as a key concept in practical knowledge development. A skilled practitioner is attentive to her actions and possesses an overview of the situation (Molander, 1996). We mean to say that, in line with Sjömar (2017), craft science research is both theoretical and practical; theoretical in the sense that the purpose is to gain explanations and understanding of craft procedures, and practical because the investigative methodology is included to perform the procedures.

Restaurant craft

Restaurant craft is seldom discussed and analysed through materiality. Gustafsson (2004) explains that although the dining room is important for the guest experience, even the table-setting may qualify as ‘a small room’ in itself. Bitner (1992) uses the term ‘service-scape’ for the built environment, referring to the environment where the customers interact. The creative part of the meal experience
Waiters’ craft-related actions studied from the perspective of time-geography

will occur on the laid-out table (Gustafsson, 2004). Walter (2011) uses the concept of ‘experience room’ and points out in her thesis that customers and employees are part of the physical environment. The craft that is performed by the waiter has to do with the waiter’s ability to read the guests’ expectations and needs throughout the meal (Gustafsson, 2004; Gustafsson, Öström, Johansson & Mossberg, 2006). A server should have knowledge about the eating situation and should try to satisfy the guests’ needs in the best possible way (Gustafsson, 2004; Gustafsson et al., 2006).

An invented craft procedure is often carried out by an expert with ease and in a flow. Serving food is no exception. A serving procedure will often follow the same method every day. However, the logic of how such a flow continues can be difficult for an outsider to understand without any knowledge of serving. An expert knows how to do the work. Dreyfus and Dreyfus (1988) point out that an expert uses his/her entire knowledge, including both explicit and implicit knowledge. At any rate, it is not certain that an expert who can manage a meal situation involving hundreds of people will be able to convey her knowledge. Lauvås, Handal and Nilsson (2015) propose the use of the phrase ‘insight into knowledge’, which refers to knowledge that we are so close to that we are hardly aware that we have it.

One step toward understanding a vocational skill is to identify and describe what is happening in each section of a procedure. Rolf (2017) classifies knowledge development into five steps. From the first step, capacities refer to actions such as taking in oxygen, i.e. breathing, further to abilities, practical skills, know-how, and, to the highest level, professional competence, which refers to professional proficiency and ability to transform knowledge processes and improve rules. Also, Dreyfus and Dreyfus (1988) also describe knowledge development in five steps, where a novice is characterised as one whose perspective is governed by rules and guidelines, further to advanced beginner, competent, skilled, and expert. An expert does not rely on rules and guidelines but regards the situation as a whole and perceives it intuitively. The similarities in the models of Rolf and Dreyfus and Dreyfus are that both present a transition from a position of dependence on others’ assessments to a position of self-control.

From 1960 to 1980, craft-oriented procedures such as carving birds, filleting fish, and flaming desserts disappeared from first-class restaurants and the waiter’s craftsmanship was rationalised and the tasks were reduced to carrying plates (Lundqvist, 2006). This simplification can be seen as a regression to an earlier stage of Rolf’s classification system; the waiters are limited to an ability to transport. However, Billing and Wahlström (2004) state that the craftsmanship of a sommelier nowadays has been further developed. Here, the knowledge required for a sommelier can be seen as an instrument in the battle for a position within the restaurant environment (Jonsson, Nygren & Pipping Ekström, 2006).
One way to systematise the waiter’s work is to make a *mise-en-place*, which means putting together the utensils for an upcoming work moment (Culinary Institute of America [CIA], 2001). A mise-an-place can be seen as a restaurant craft which can be checked against instructions. The concept of mise-an-place can be compared to the concept of ‘knowing that’, which is explained by Ryle (1949), who refers to a knowledge manifested through representations (i.e., the advice the headwaiter and restaurateur Uno Hedman (1999) gives that a plate should be placed two cm from the edge of the table). Education documents for serving and table-setting will give guidance that explains which utensils must be used depending on the menu (CIA, 2001; Hedman, 1999). The concept of ‘knowing how’ (Ryle, 1949), the craft procedures are executed is seldom articulated within the arena of restaurant craftsmanship. Guideline descriptions seldom problematise how utensils, table-settings, and serving procedures affect the result of the waiter’s work and the practical elements of eating. Schön (1983) considers that thinking and practicing are not separated; rather they form a unit: we reflect in the action. Ryle (1949) considers that the reflective practitioner is constantly in a learning situation, and a skilled practitioner is reflective. Later, Molander (1996) discussed the practitioner doing the right thing at the right time. Knowing and action are part of a waiter’s everyday life. The knowledge involved in creating a meal described in the Five Aspects Meal Model (the FAMM-model) involves different parts; the room, the meeting, the products, the atmosphere, and the control system (Gustafsson et al., 2006). These parts form a whole that will hopefully please the guests. However, research has shown that what makes a meal experience a particularly good one is the social interaction between the actors (Walter, 2011). The guests’ experience of a meal will include the restaurant scene, the restaurant atmosphere, and the quality of the staff, etc., all of which will be seen as the most important points (Gustafsson et al., 2006).

In this study, we will investigate how a professional practice of serving can be achieved, understood, and illustrated, through words and pictures, and also how the simple actions of supervision are built around complex systems. We will also point out how craft not only sits in the hands but is also found in reflected craft procedures.

**Aim**

The aim of this article is to visualize, communicate and understand the vocational knowledge of a waiter’s craft, including the actions of table-setting and serving of food, based on concepts and methodology from the time-geographic approach.
Methodology

We define the practical work of table-setting and serving as a craft and use craft science (Sjömar, 2017) as a perspective within the discipline of Culinary Arts and Meal Science (Gustafsson, 2004). ‘The main character of craft science is that it is theoretical, with the aim to reach explanations and understandings, and practical, as it is both to the exploratory methodology and to the research results means to be able to perform the craft procedures and control the processes’ (Sjömar, 2017, p. 101–102). The first author of this article has 30 years of experience as a waiter, a headwaiter, and a designer of meals. The vocational knowledge has consisted of designing and executing meals for the private business sector in Sweden (i.e., SEB, The Nobel Foundation, The Sweden Fashion Council), and for official authorities (i.e. City of Stockholm, Swedish-arranged EU-dinners). Here, this author used his own experience as the empirical data. A person with such long and experienced vocational knowledge could be defined as a reflective practitioner (Schön, 1983), and as an expert (Dreyfus & Dreyfus, 1988). Westerlund (2017), with a background as a gardener, and Wellton (2017), a former chef, demonstrated in their respective theses that their own practical experiences made it possible to interpret their activities and understand the practitioners’ skills and knowledge. Their own experience enabled them to delve deeper into interviews with other professionals. On the other hand, when a researcher had an insider perspective, it was important for the researcher to reflect on the fact that certain questions may never be asked, as the material is too familiar (Alvesson & Sköldberg, 2008; Wellton, 2017; Westerlund, 2017).

Perspective of time-geography

Time-geography offers opportunities to describe and analyse processes in both time and space (Lenntorp, 2011), two dimensions that are basic for all existence, as everything takes time and occupies space (Ellegård, 2019; Hägerstrand, 2009). The meaning of time-geography is ‘to rise up from the flat map with its static patterns and think in terms of a world on the move’ (Hägerstrand, 1982, p. 651). Time-geography has been proven useful for enhancing complex crafts that span over time and space (Hägerstrand, 1982; Jarefjäll, 2016). On an overall level time-geography has been used to investigate crafts that are carried out in various occupations and spaces (Eriksson, Seiler, Jarefjäll & Almevik, 2019). In this study we have placed the waiter’s equipment and his/her craft knowledge under the light of the concepts from time-geography.

Within time-geography a project is defined as a goal-oriented activity (Ellegård, 2019; Hägerstrand, 1982; Åquist, 1992). We define serving guests’ food as a time-geographical project. In this study, the project is performed in two different ways: by plate serving and by silver service. A project will be managed by a diversity of activities, for example table-setting and serving. An activity depends
on its *individuals*. Within time-geography an individual can be a human, a non-human (a thing), or an animal – anything that can be regarded as indivisible at the level of the investigation. In this study, individuals are, for example, a waiter and a utensil. Activities are performed at different *stations*. A station could be a table. Activities and individuals can be noted as trajectories in a *notation*, thereby it is be possible to visualize what activity is performed, when, for how long, and where (Ellegård, 2019). The notation illustrates when procedures occur simultaneously, which means *beside-each-otherness*, and when procedures occur in a timely manner, which means *after-each-otherness*. The concept of *bundle* refers to the grouping of several individuals and describes the staying together of two or more individuals (Ellegård, 2019). In the notation, time is regarded as a continuous dimension and the now is described by a line, the *now-line*, which constantly moves along the time axis, transforming future to past. It can be formulated in the words of Hägerstrand (1982, p. 651): ‘a world on the move.’ The continuous time dimension shall be read, in the notation, from the bottom up (Ellegård, 2019).

Empirical data in time-geography is often based on time-diaries, called *logs*. A log can either be *factual* or *postulated*. A factual log is a result of different requirements, obstacles, and opportunities (Hägerstrand, 1982; Mårtensson, 1979; Åquist, 1992). A postulated log reveals to what *can* be done in a time-space. By using a postulated log, opportunities are opened to analyse the limits of *what* is possible. And in the same way the problems of *interpreting* factual logs are avoided (Hägerstrand 1982; Mårtensson 1979; Åquist, 1992). An analytical concept of time-geography is the focus on *constraints*. The constraints are divided into three groups: *capacity*, *coupling*, and *authority*, which will generate questions about what is or is not possible to manage, in a project (Hägerstrand, 1970). Capacity constraints concern the individual’s opportunities related to her bodily functions and to the resources that are available to her. Coupling constraints arise from requirements for coordination between individual’s, but also between individuals, tools, and material. Authority constraints concern power relations, for example, about control over the room and possibilities for access to different parts of the room (Ellegård, 2019; Åquist, 1982). Time-geography is characterised by physical realism, which means that intentions, feelings, or quality aspects of an activity are not included (Åquist, 1992). This approach is in line with our study, where we consider the work of waiter’s to be dependent on the materiality. We do not intend to study the quality of the procedures.

*The use of the time-geographical concept – project*

The chosen project for this study involved two different ways of serving food: plate serving and silver service. In order to study the project, both the procedures of table-setting and serving have been conducted as experimental data. Based on his long vocational experience as a waiter, the first author thought through
different serving methods and wrote down various possible scenarios. Plate serving refers to a plate with a completed portion of food being transported and served to the guest at the table. Silver service involves condiments being transported to the table in serving bowls for the guests to take from. The main food, placed on a dish, is transported to the table where the waiter offers the dish to the guest, who lifts the main food and places it onto her own plate. Based on the first author’s vocational experience we have defined different dining procedures as such: table-setting; transporting of food; serving of food; and the completion of the serving procedures, (see Table 1). Since the purpose was to test the possibilities of a time-geographical approach as a method, we have chosen to limit the material by omitting the serving of drinks. What was discovered in the study was that the serving of food, without drink, provided a large amount of data which was considered sufficient to test the model’s usefulness.

Table 1. Defined dining procedures.

<table>
<thead>
<tr>
<th>Nr</th>
<th>Procedures</th>
<th>Plate service</th>
<th>Silver service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Table setting</td>
<td>A knife and fork are placed on a table, the cutlery is placed at the place where the guest will sit.</td>
<td>A knife, fork and an empty plate are placed on a table. The cutlery and the plate are placed at the place where the guest will sit.</td>
</tr>
<tr>
<td>2</td>
<td>Transport</td>
<td>The waiter transports one plate with fish, potatoes, and sauce from the kitchen into the dining room and to the table.</td>
<td>The waiter transports the fish dish, the sauce bowl, and the bowl of potatoes from the kitchen by means of a serving station. At the serving station, the serving cutlery is placed onto the dish and into the bowls. The transport continues to the table in the dining room.</td>
</tr>
<tr>
<td>3</td>
<td>Serving</td>
<td>The waiter places the plate of food onto the table in front of the guest.</td>
<td>The waiter places the bowls of potatoes and sauce onto the table on the right side of the guest.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The waiter offers the fish dish on the left side of the guest.</td>
<td>The guest serves herself fish from the dish.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The guest serves herself fish from the dish.</td>
<td>The waiter leaves the guest and the table and transports the empty fish dish to the serving station or to the kitchen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The guest takes the bowl of potatoes and serves herself. She then puts the bowl back onto the table, on her left side.</td>
<td>The guest takes the bowl of potatoes and serves herself. She then puts the bowl back onto the table, on her left side.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The guest takes the sauce bowl and serves herself sauce. She then puts the sauce bowl back on the table, on her left side.</td>
<td>The serving moment is completed when the guest has a plate with fish, potatoes, and sauce on the table in front of her. The empty bowls are picked up by the waiter and transported away from the table.</td>
</tr>
<tr>
<td>4</td>
<td>Completion</td>
<td>The serving moment is completed; the guest now has a plate with food on the table in front of her.</td>
<td>The serving moment is completed when the guest has a plate with fish, potatoes, and sauce on the table in front of her. The empty bowls are picked up by the waiter and transported away from the table.</td>
</tr>
</tbody>
</table>
The use of the time-geographical concept – logs

The collected postulated data, based on the first author’s own experiences, is compiled into two time-diaries, called: log for plate service and log for silver service. Each log has a chronological number and a name, and covers the procedures executed by three guests and one waiter. Descriptions are given both for the actions of the waiter and the guests. Based on the concept of constraints, different questions are listed and answered about any capacity, coupling, or authority constraints that may occur.

The use of the time-geographical concept – notation

Figure 1. One human individual (a waiter) and two non-human individuals (a plate and a table) are included in this example. The waiter goes from the serving station to the kitchen and takes a plate of food (thereby, the waiter and the plate are joined together and form a bundle). The waiter and the plate arrive at the table (which is stationary) and now the three form a bundle (for a very short time). The waiter sets the plate down on the table and leaves. The waiter is now separated from both the table and the plate. A new bundle has emerged between the plate and the table.

A time-geographic notation will give additional information to the log both by visualizing and analysing activities in a project (Ellegård, 2019). The notation is a
description that shows a sequence of activities performed by individuals, including movement activities, in the time-sequence and duration of activities (Ellegård, 2019). In the same way, a notation illustrates where and when someone (a human individual or a non-human individual) is in a defined project. The notation illustrates both beside-each-otherness and after-each-otherness and can be used to investigate how and why individuals, human and no-human, come together and leave each other (Ellegård, 2019) (Figure 1).

In order to understand silver service, which requires more procedures than plate service (see Table 1, row number 3), we have chosen to illustrate information from the log in a notation. Thereby, we will test whether the time-geographical concepts of being stationary, arriving, connecting, and separating can be used to provide explanations for the waiter’s vocational knowledge.

In the end of next section, Results, a notation illustrates which individuals, (i.e., plate, platter, and waiter) are included in each procedure. When the trajectories for individuals, whether human or non-human, are combined in a serving procedure, they form a bundle. The notation visualizes when and where these different bundles occur and disappear. This method makes it possible to illustrate the length of time which different individuals take when participating in a serving procedure. The now-line shows the time at which the serving procedures are in progress.

**Results**

The investigation of the waiter’s vocational knowledge inspired by time-geography results in two logs (one for each way of performing the project) and in one notation, which visualizes a vital part of the project using the silver service procedures. First, we compare the two logs before going deeper into the execution of the vocational knowledge by analysing the notation. Thereby, we bring to the fore the timing, duration, sequence, and specific location of the actions performed by the involved human individuals in the procedures and their use of non-human individuals. The notation also makes clear what is happening simultaneously. In summary, we suggest that the time-geographical concepts make visible the waiter's simultaneous capacity to understand, plan and execute procedures that take place in time and space. We will consider that the understanding of the waiter’s craft procedures compares to Hägerstrand’s (1982, p. 651) phrase ‘a world on the move’ but with a flexible and ongoing table landscape.

**Visualization of table-setting and serving procedures – logs**

When crafting procedures are noted in the log and questions are asked of the material based on the time-geographical concept of constraints, it is possible to point out the waiter’s different types of knowledge which are necessary to carry out a serving procedure. By comparing the two different serving methods – plate
service and silver service – we can make visible how something as seemingly simple as two serving methods means big differences in the knowledge required to carry out the task. These differences appear, for example, where and when so-called critical times occur in the serving order: in this case, the waiter setting the table she needs to choose cutlery which will prevent future coupling constraints between the characteristics of the dish and the shape of the cutlery (Table 2 and Table 3, Procedure 1).

Table 2. Postulated log for plate service.

<table>
<thead>
<tr>
<th>Nr</th>
<th>Procedures</th>
<th>Waiter’s actions</th>
<th>Guests’ actions</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Table setting</td>
<td>The waiter prepares the table surface and sets the knives and forks.</td>
<td>None</td>
<td>What knowledge does the waiter use when preparing and choosing the most suitable: - Table area? - Utensils (i.e., knife and fork)? - Positions on the table for the utensils?</td>
</tr>
<tr>
<td>2</td>
<td>Sitting down</td>
<td>The waiter shows the guests to the table and hands it over to the guests.</td>
<td>The three guests are seated at the table.</td>
<td>Can the table and utensils be interpreted and used by the guests?</td>
</tr>
<tr>
<td>3</td>
<td>Waiting for food</td>
<td>The waiter is in charge of the table and the guests.</td>
<td>The guests have the opportunity to act.</td>
<td>Have the guests gained power over the table area and utensils? How can they affect them? For example, a guest might accidentally knock the cutlery onto the floor.</td>
</tr>
<tr>
<td>4</td>
<td>Plating</td>
<td>None</td>
<td>None</td>
<td>The chef places food on the plates in the kitchen. Which plates does the chef choose? Where and in what way is the food placed on the plates?</td>
</tr>
<tr>
<td>5</td>
<td>Leaving</td>
<td>The waiter walks away from the table and the dining room.</td>
<td>None</td>
<td>What may occur once the waiter has lost the control of the table and the guests? For example, a guest may put her bag or her laptop on the table?</td>
</tr>
<tr>
<td>6</td>
<td>Transport</td>
<td>The waiter picks up the three plates in the kitchen. The food is transported from the kitchen to the dining room and then to the table.</td>
<td>None</td>
<td>Does the waiter have the ability to carry the plates? What are the size and the weight of the plates, and how is the food positioned on the plate? Are the plates too big or too heavy? Is the food positioned in a way that causes risks to arise during the food’s transportation?</td>
</tr>
<tr>
<td>7</td>
<td>Serving</td>
<td>The waiter places one plate on the table in front of every guest.</td>
<td>None</td>
<td>Are the guests ready at the time when the food is served? Is the table surface free of other items, such as bags and laptops? Are all the guests present at the table (e.g., has anyone gone to the toilet)?</td>
</tr>
<tr>
<td>8</td>
<td>Completion</td>
<td>The waiter leaves the table.</td>
<td>The guests start to eat.</td>
<td>Until when does the waiter’s control over the table and guest continue?</td>
</tr>
</tbody>
</table>
Setting a table also involves deciding where to place the knife and fork. If the placement of the cutlery does not match the guests’ expected standards for a table setting (Table 2, Procedure 1), authority constraints occur, which can be seen as an example of the waiter’s craft, which includes understanding the guests’ expectations.

In plate service, the waiter carries out the procedure of setting the table with all of the utensils, but not the plate (Table 2, Procedure 1). The waiter chooses the table and capacity constraints will occur if the table size is not large enough for the plate which will arrive to the table later (Table 2, Procedure 7). The chef might choose three plates that are not too big or too heavy, or that otherwise do not align with the waiter’s plan to transport three plates at once (Table 2, Procedure 6). Though no coupling constraints should occur, it is included within the waiter’s craft to communicate with the chef about the setting as well the transportation of the plates.

In silver service the table is set with all utensils, including the plates (Table 3, Procedure 1). The chef, in the kitchen, is involved in the service when he or she places fish, potatoes, and sauce in platters and bowls (Table 3, Procedure 4). To avoid capacity constraints for the waiter, the chef needs knowledge regarding the size, shape, and weight of the selected platters and bowls, so that they conform to the waiter’s capacity to transport them. The placement of the food on the platter and in bowls can also contribute to coupling constraints should the waiter be unable to physically lift and transport these utensils (Table 3, Procedure 6).

In silver service, the serving procedures begin when the waiter places the bowls of potatoes and sauce onto the table. In order to avoid coupling constraints between the individuals, the bowls must be placed at a distance that allows the guest to reach them (Table 3, Procedure 9). The serving procedures continue when the waiter offers the platter of fish. The guest takes the serving cutlery and moves the fish onto her plate (Table 3, Procedure 10). If the guest takes too much fish, a capacity constraint will occur, since there will not be enough fish for the other guests sitting at the table. Authority constraints are imposed if the guest does not return the serving cutlery to the waiter or if the guest’s actions take too long (Table 3, Procedure 10). To prevent capacity, coupling, or authority constraints from occurring, the guest needs to understand how many potatoes and how much sauce she can take; she also needs to understand how to move the bowls of potatoes and sauce so that the second guest can reach them. Here, it may be a standard or a norm that the guests understand that sharing a meal means to share the served food as well to share the served utensils. During silver service, many different constraints can arise. There are several critical points here, which are dependent on a number of procedures being risky when serving responsibilities are shared between guests.
Table 3. Postulated log for silver service.

<table>
<thead>
<tr>
<th>Nr</th>
<th>Procedures</th>
<th>Waiter’s actions</th>
<th>Guest’s actions</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Table setting</td>
<td>The waiter prepares the table surface and sets the plates, knives, and forks.</td>
<td>None</td>
<td>What knowledge does the waiter use when preparing and choosing the most suitable: - Table area? - Utensils (i.e., plate, knife, and fork)? - Positions on the table for the utensils?</td>
</tr>
<tr>
<td>2</td>
<td>Sitting down</td>
<td>The waiter shows the guests to the table.</td>
<td>The guests are seated at the table.</td>
<td>Can the table and utensils be interpreted and used by the guests?</td>
</tr>
<tr>
<td>3</td>
<td>Waiting for food</td>
<td>The waiter is in charge of the table and guests.</td>
<td>The guests have the opportunity to act.</td>
<td>Have the guests gained power over the table area and utensils? How can they affect the table area? For example, a guest might accidentally knock the cutlery onto the floor.</td>
</tr>
<tr>
<td>4</td>
<td>Plating</td>
<td>None</td>
<td>None</td>
<td>Which platter and bowls are chosen by the chef? How (in what form) is the food placed in the bowls and onto the platter?</td>
</tr>
<tr>
<td>5</td>
<td>Leaving</td>
<td>The waiter walks away from the table.</td>
<td>None</td>
<td>What may occur once the waiter has lost control of the table and the guests? For example, a guest may put her bag or her laptop onto the table.</td>
</tr>
<tr>
<td>6</td>
<td>Transport</td>
<td>The waiter lifts and transports the fish dish and the bowls of potatoes and sauce.</td>
<td>None</td>
<td>Can the waiter carry the platter and the bowls in one instance of transport? What are the size and the weight of the dishes? How is the food positioned on the platter and in the bowls? Do any risks arise during the transport?</td>
</tr>
<tr>
<td>7</td>
<td>Adding serving cutlery</td>
<td>The waiter places a serving spoon and serving fork on the fish dish, a potato spoon in the potato bowl, and a sauce spoon in the sauce bowl.</td>
<td>None</td>
<td>Which serving cutlery does the waiter choose?</td>
</tr>
<tr>
<td>8</td>
<td>Transport</td>
<td>The waiter goes to the first guest.</td>
<td>None</td>
<td>Can the waiter carry one dish and two bowls, with the food and the added serving cutlery, in one instance of transport?</td>
</tr>
<tr>
<td>9</td>
<td>Serving</td>
<td>The waiter puts the bowls of potatoes and sauce onto the table.</td>
<td>None</td>
<td>Does the waiter know where the sauce bowl and the potato bowl should be placed on the table? Is there enough space on the table for the bowls?</td>
</tr>
<tr>
<td>10</td>
<td>Serving</td>
<td>The waiter offers the fish dish to the first guest.</td>
<td>The first guest takes the serving spoon and serving fork and lifts a fish fillet to her own plate.</td>
<td>Can the first guest use the serving cutlery to serve herself the fish? For how long will this guest use the serving cutlery? How much fish will this guest take?</td>
</tr>
<tr>
<td>No.</td>
<td>Activity</td>
<td>Description</td>
<td>Question 1</td>
<td>Question 2</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
<td>-------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>11</td>
<td>Serving</td>
<td>The waiter finishes serving the first guest and moves on to serve the second guest.</td>
<td>None</td>
<td>Can the second guest use the serving cutlery to serve herself the fish? For how long will this guest use the serving cutlery? How much fish will this guest take?</td>
</tr>
<tr>
<td>12</td>
<td>Serving</td>
<td>The first guest takes the potato bowl, moves it near to her plate, takes the serving spoon and places potatoes onto her plate. Next, the guest moves the potato bowl over to the second guest.</td>
<td>The first guest takes the potato bowl, moves it near to her plate, takes the serving spoon and places potatoes onto her plate. Next, the guest moves the potato bowl over to the second guest.</td>
<td>Does the first guest know that she should move the potato bowl closer to her own plate? How many potatoes will this guest take? Does the guest know that she should then move the potato bowl away from her own plate and closer to the second guest?</td>
</tr>
<tr>
<td>13</td>
<td>Serving</td>
<td>The first guest takes the sauce bowl, moves it near to her plate, takes the serving spoon, and places the sauce onto her plate. Next, the guest moves the sauce bowl over to the second guest.</td>
<td>The first guest takes the sauce bowl, moves it near to her plate, takes the serving spoon, and places the sauce onto her plate. Next, the guest moves the sauce bowl over to the second guest.</td>
<td>Does the first guest know that she should move the sauce bowl closer to her own plate? How much sauce will this guest take? Does the guest know that she should then move the sauce bowl away from her own plate and closer to the second guest?</td>
</tr>
<tr>
<td>14</td>
<td>Transport</td>
<td>The waiter leaves the table and goes away with the empty fish dish.</td>
<td>The guests’ self-service of potatoes and sauce continues after the waiter leaves the dining room.</td>
<td>What can happen when the waiter loses control of the table and the guests? What can happen as the guests serve themselves with potatoes and sauce?</td>
</tr>
<tr>
<td>15</td>
<td>Arrival</td>
<td>The waiter returns to the table.</td>
<td>None</td>
<td>Are the guests finished serving themselves potatoes and sauce?</td>
</tr>
<tr>
<td>16</td>
<td>Transport completion</td>
<td>The waiter picks up the bowls and takes them away from the table.</td>
<td>The guests start to eat.</td>
<td>What can happen when the waiter loses the control of the table and the guests?</td>
</tr>
<tr>
<td>17</td>
<td>Completion</td>
<td>The waiter leaves the table.</td>
<td>None</td>
<td>Until when does the waiter’s control over the table and guests continue?</td>
</tr>
</tbody>
</table>

**Visualization of serving in time and space – notation**

To make visible that the craft procedures in silver service are much more complex than in plate service due to the fact that the serving is shared between waiter and guest, as well as between guest and guest, a notation is made (Figure 2). The information from the silver service log which describes in text what happens, when
it happens, for how long it goes on and who participates has been transferred to a notation. This gives the opportunity to replicate sequences of the waiter’s and guests’ complex activities.

The notation thus provides, for example, a visual image that shows that the waiter is able to ensure that material resources are in the right place and at the right time which can be described by the time-geographical concept of side-by-side-ness. The notation also provides the opportunity to visualize how activities occur in time, explained by the time-geographical concept of before-and-after-ness. By noting the time on the y-axis, it becomes possible to illustrate the waiter’s order of different serving procedures; by noting location indications on the x-axis, it is possible to see all the different places that the waiter uses in his work. The notation makes it easy to see the interplay in the time-space between the different kinds of individuals (human individuals and non-human individuals) during the procedures as well as when a procedure is completed. To illustrate the notation in a more communicative way, we have added an illustration at the bottom of the notation.

The notation (Figure 2) indicates that at the 1-minute point, three activity bundles are formed of the various individuals as follows:

- The waiter, the fish dish, the fish spoon and the fish fork form a blue activity bundle;
- The potato bowl and the spoon form a red activity bundle; and
- The sauce bowl and the sauce spoon form a green activity bundle.

At the *time* when the waiter invites guest A to take a portion of fish (at the 1.5-minute point), guest A becomes connected with the waiter’s blue activity bundle. When guest A is ready for this activity, she is separated from the blue activity bundle. Soon after, guest A connects to the red bundle for the purpose of serving herself potatoes and after a while she is separated from this bundle. Thereafter, she is connected and separated to the green bundle to serve herself sauce. This happens at the same *time* as the waiter invites guest B to take fish. The waiter has a physical connection to the blue trajectory during the whole serving procedure. But at the same time the waiter shares the physical responsibility of the fish spoon and fish fork with the guests because the waiter offers the cutlery to them when they have to transfer the fish onto their own plates. This is visible in the blue bundles (Figure 2).
The significance of the waiter’s understanding of the after-each-otherness becomes visible as the notation system shows that procedures must be performed in a certain order. At the same time, following the timeline reveals that some procedures take place in parallel during the serving process; for example, while the waiter invites guest B to serve herself fish, guest A is serving herself sauce. Thus, the waiter’s understanding of after-each-otherness and beside-each-otherness is part of the knowledge that the waiter has when performing a dining situation. Hereby, through the notation, it is possible to visualize and communicate complex serving procedures that occur simultaneously and in a timely manner.
Discussion

The aim of this article is to visualize, communicate, and understand the vocational knowledge of a waiter’s craft, including the actions of table-setting and serving. This study shows that time-geographical key concepts such as time, space, and individuals are transferable to the context of Culinary Arts and Meals Science. The waiter’s work is characterised by different path choices, where the decisions made before each situation are characterised by the relationship between time, space, and its various individuals consisting of people and things. These three aspects affect every table-setting and serving situation, which are performed every day, everywhere. In order to understand the waiter’s vocational knowledge and to be able to convey its content to the situations of teaching and training, but also in the professional world, the craftsmanship needs to be conceptualised. The time-geographical approach with its concepts is one way of approaching knowledge that is sometimes referred to as ‘tacit knowledge’.

In the next section we will discuss the methods and approaches of time-geography and how these have enabled us to get closer to descriptions of the waiter’s vocational craft knowledge.

Discussion of the method

Through the use of the time-geographical methods, we investigate the approach used by Dunin-Woyseth and Nilsson (2017) and Sjömar (2017), wherein the focus of craft knowledge is shifted from a practical production field to an exploratory research field, to answer questions about how a craft procedure is carried out. We believe that this is important to achieve development in our research field.

With support both from the field of crafts (Almevik, 2011; Ehn, 2014) and from the field of time-geography (Ellegård, 2019), we have broken down some serving procedures into smaller parts. The time-geographical perspective makes it possible to pay attention to the many different choices and decisions that the craftsman needs to make in each crafting procedure. This allows us to understand the complexity of dining procedures. We have sorted the data from two well-known serving methods – plate serving and silver service – into time-geographical logs.

In this study, we have not been interested in identifying what is right or wrong in a traditional way of serving. Those answers would be dependent on the dining context (Gustafsson, 2004). Instead we have chosen to remove the experience-based part of the craft, in order to get deeper into an understanding of what the practical benefits of the waiter’s procedures are. We believe that this abstraction makes it possible both to talk about and to teach and train in the profession of the waiter in a more intellectual, and at the same time technical way. This means that in a teaching occasion the practical part of the craft (like the function of moving material) cannot be hidden through the social interaction between waiter and guest, discussed by Walter (2011). In the same way, time-geography has no
primary ambitions to discuss experiences or meaning of projects (Åquist, 1992). By using the concept of constraints, it is possible to visualize underlying aspects of a waiter’s knowing that are necessary to perform a serving procedure. Seeking out, by questions, what could be a constraint allows for determining the factors which enable a project to be successfully carried out. This methodological approach, to ask what is an obstacle, makes it possible to describe possibilities and limits of projects (Hägerstrand, 1970). Searching for constraints in this way provides an opportunity to explain (Åquist, 1992) what seems obvious in a waiter’s craft procedure. The time-geography approach breaks down the data of the time, space, and individuals to a very basic and ordinary level (Hägerstrand, 2009). When we elucidated what the various table-setting and serving procedures are and what actions the waiter performs, we perceive knowledge pertaining to a level that Rolf (2017) defines as abilities on a fundamental level.

The notation with its graphics shows that a crafting process is ongoing in a flow of individuals who move around in time and space (Gustafsson, 2004; Gustafsson et al., 2006; Walter, 2011; Åquist, 1992). Through the notation, together with the illustration of a table with its guests and a waiter in a restaurant room, we show what the waiter has to manage. The notation shows when and where individuals, who are dependent upon one another, must be brought together and separated. Hereby, we make visible one part of the waiter’s knowledge that Lundquist (2006) suggests is to carry out the transportation of utensils from one place to another. In the same way, by the time-geographical concepts and methods, we can visualize and communicate when and where different actors (human and non-human) integrate in a meal experience. From this, it will be possible to communicate when and where, in a meal experience, the social interactions between guests could be possible in the way Walter (2011) suggests. The notation together with the illustration describes and explains how the waiters affect this studied meal situation in aspects of space and time; this can be viewed in contrast to the log, which gives no spatial view. The log is a time-diary that notes the event and time, while the notation illustrates the event and its duration in time, and location in the room wherein the procedure takes place. Through the use of both the log and the notation, this study has demonstrated the ability to visualize, communicate and understand, the waiter’s craft-related actions. The time-geographical method can also feel foreign; for example, when it touches on what is so close to the waiter’s everyday reality, the approach can be perceived as stating the obvious. Hägerstrand (2009) believes, however, that we also need to see the obvious to manage a resource utilisation in a joint existence. One difficulty in this study has been to limit the data, since the view of time-geography means to see the world as a myriad of threads where everything is linked together as in a weave. When everything according to time-geography belongs in huge systems of bonds, it becomes difficult to delineate. This combined with the first author’s own long experience and understanding of the waiter’s profession, which can
also be likened to a weave of experience, has made it difficult to formulate and limit the data. At the same time, we believe that the method can clearly be seen as a bridge between Culinary Arts and Meal Science and Craft Science, thus enabling new approaches to study the waiter’s vocational knowledge.

Discussion of the result

Concepts and methods from time-geography allow researchers to both separate and integrate factors, such as time, space, humans and non-humans (materials things), and to use separation/integration in order to look at them as constraints/facilitators when a project is performed. The flow of events takes place as after-each-otherness and is largely controlled and influenced by the waiter, who has mastered the materiality of the period. As a result, chains of events that affect each other can emerge from the hidden, the often unspoken and the too-often forgiven taken. The notation also makes visible parallel activities, beside-each-otherness, which are simultaneously going on in the time-space. A meal always takes place in some kind of spatiality and requires time to be implemented. Hereby, we will describe how the concept of time is compared to timing, how the concept of space is compared to table/dining room, and how the concept of individual is compared to waiters/guests/utensils.

Time

In time-geography, time is a basic dimension for all existence, and in our analysis, timing is a vital aspect of time. A waiter’s vocational knowledge involves mastering chains of events that occur over a period of time. In the same way, the waiter needs to have an understanding that table-setting and serving need to be performed in a certain time frame. This part of the waiter’s knowledge is usually taken for granted. Traditional knowledge transfer from master to apprentice means that instructions are given that serving should be done in the right time and in the right order (Wellton, 2017). The notation (Figure 2) highlights the often unspoken professional practice. Through the notation it is possible to demonstrate at what time, in which before-and-afterness (Ellegård, 2019; Hägerstrand, 2009) the waiter needs to make a decision (Gustafsson, 2004; Gustafsson et al., 2006).

Room

In this study, the time-geographical concept space equated is the room. In Culinary Arts and Meal Science the FAMM model is a central framework and the room is one part (Gustafsson et al., 2006). In discussions about the room in perspective of FAMM as well as the room as concepts of ‘service-scape’ and ‘experience room’ (Bitner, 1992; Walter, 2011) the importance of the room and the table-setting for a guest experience (Gustafsson, 2004), are common. Difficulties arise when room for ongoing procedures are to be explained. Hägerstrand suggests
that we need to see the space, or room, in terms of ‘a world on the move’ (1982, p. 651). Similarly, in this article, we try to examine the restaurant’s room based on the idea of a changing space – that is, a room which is influenced by its individuals. Models that can describe a changing space are one step towards making visible the waiter’s vocational knowledge. Models that capture flows with events can complement knowledge as ‘knowing that’ (Ryle, 1949). ‘Knowing that’ points out, for example, where utensils must be placed on the table surface or where the table should be placed in the room (Hedman, 1999). However, ‘knowing how’ means to understand how materials that are moved in the room, both by guests and by staff, affect the waiter’s craft procedures. The time-geographic approach makes it possible both to visualize and communicate this flow of material movements, which are a large part of the waiter’s vocational knowledge. The dining room is not a stationary room but a room that is constantly changing.

**Individuals**

Through the time-geographic notation it is possible to discern which individuals are onsite within a given craft procedure. We demonstrate that a skilled waiter needs to possess knowledge about which serving procedures are onsite and which individuals are dependent upon or independent from one another in a serving procedure. To make the notation at more synoptic level, we created an illustration in the lower part of the notation. It illustrates the different individuals of the notation as well as the stations at which they are located at the beginning of the serving. The illustration makes it easier to visualize how the trajectories of the individuals (i.e., people and materials) are moving between different stations in the time-space.

**Craft**

How rooms are affected by presence of different individuals (human and non-human) is something which is rarely emphasised in educational materials. The same can be said for how rooms are affected by the time at which an individual (human and non-human) arrives at or leaves the room. This is usually something that ‘just happens’ through the crafting procedures. With the support of the time-geography, it is possible to shed light on how the time, the room, and the individuals are linked together by different serving procedures. When a map, or a notation, shows the geographical location of places, the content of the waiter’s vocational knowledge can be described. The definition of the waiter’s level of craftsmanship becomes apparent when she makes decisions that alter the table-setting and the serving craft procedures. This definition of craft is supported by the reasoning of Tempte (1982), who believes that craft is a question of different and difficult decisions that the craftsman is compelled to make. We believe that time-geography can highlight the complexity of craft procedures in terms of the many different choices a craft person is faced with and the many different
decisions they must make and act on. Many of these decisions are made at a rapid pace by the professional. The seemingly simple crafting procedures appear here as a result of the reflective practitioner. The level of vocational knowledge can become visible through the concepts of constraints, which demonstrate how everything that occurs occupies both time and space. At the same time, reflective decisions can help to explain how, when, and where the waiter’s decisions affect the results of table-setting and serving procedures.

The results from the log (Table 3) show that silver service generates more procedures than plate service. In the same way, more questions are posed for silver service based on the concept of constraints, and thereby it becomes apparent that silver service involves more risks than plate service. This finding is consistent with Pye’s (1968) definition of craft, which states that craft involves elements of risk taking. Using time-geography, we show here that the silver service becomes more salient, partly because the serving procedures are shared between the guests and the waiter. We are suggesting that silver service can be referred to, in the words of Pye (1968), as a ‘workmanship of risk’. On the other hand, plate service can be compared to a task that is performed on the basis of security, giving it more of a predetermined nature, and can be referred to as a ‘workmanship of certainty’ (Pye, 1968). Therefore, we suggest that silver service can be categorised as more of a craft procedure than plate service.

Conclusion

By studying the waiter’s craft from a time-geographical perspective, and comparing plate serving with silver service in two logs, we have come to understand the waiter’s different levels of knowledge for table-setting and serving. The logs, together with the notation, clarify three categories of knowledge as time, space, and individual, which together communicate parts of the waiter’s vocational knowledge. When the waiter, in words and through illustrations, describes choices and decisions for her craft procedures, it is possible to visualize, communicate, and understand, how she masters and predicts time, materiality, and spatiality. Such a theoretical approach intellectualises the waiter’s crafting procedures, which is important in educational situations. Furthermore, in the professional world, too, it becomes possible to demonstrate that the waiter has a great understanding of time, space, and materiality and how these elements interact. This makes it possible to give the vocational role of a waiter a higher status.

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according to table setting and serving. His interest is to increase the knowledge, which is often unarticulated and difficult to convey, for further use in research educational areas as well as in professional practice.

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Åsa Öström is PhD and professor in Culinary Arts and Meal Science, Campus Grythyttan, Örebro university. Her field of research include sensory research from an interdisciplinary perspective such as basic research in complex meal and multisensory settings. Current research focuses on developing methods in sensory science that assess food combinations and how sensory experiences can be communicated.
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Book review
Youth on the move: Tendencies and tensions in youth policies and practices
Kristiina Brunila & Lisbeth Lundahl (Eds.)
Helsinki University Press, Finland, 2020 (https://doi.org/10.33134/HUP-3)

In the anthology *Youth on the Move: Tendencies and Tensions in Youth Policies and Practices*, the authors investigate one of the most urgent social problems today: ‘… the extended and uncertain transitions from school to work and higher education, and how they shape the interests of young adults, including those outside of education and work’ (p. 1). Combating youth unemployment and youth poverty through strategies and measures to manage youth transitions are issues high on local, national and supranational policy agendas, and the book critically examines this ‘transition machinery’, with a special focus on young adults not in employment, education or training (NEET). This is done by combining perspectives from policies and practices with those of young people themselves. The book argues that when young adults’ unemployment and poverty are treated as individual deficiencies on the part of the young adults, measures also become individualistic and place responsibility and agency on the young adults rather than on social and formal structures and conditions for young adult lives and transitions. Hence, one of the key arguments in the book is that ‘… by focusing on the ways in which subjectivities of young people are constructed by policymakers, professionals such as teachers and youth workers, academic researchers, and young people themselves, some ideas and assumptions of problematic transition and their taken-for-granted “good intentions” could be challenged’ (p. 7).
The book consists of an introduction where the theme of the book is presented, two main parts and an epilog. The two main parts are: Part 1 – **Young people’s trajectories and identities**, which consists of chapters 1–5 and addresses young people’s own perspectives, and Part 2 – **Young people’s transitions: Policies and new forms of governing**, which consists of chapters 6–8 and addresses policies and official practices.

In chapter 1: **Young citizenship – Academically high-achieving middle-class students in transitions talk about participation**, Maria Rönnlund deals with some of the strongest discourses of European citizenship through concepts such as ‘individual agency’, ‘self-responsibility’ and ‘self-regulation’ in relation to Swedish high-achieving middle-class students. Rönnlund shows how the strong Nordic educational tradition of participation and learning to become a democratic citizen, in later years, lost ground to the idea of the citizen as having a more market-oriented role, but also to the idea of citizenship as related to personal identity. Through her analysis, Rönnlund shows that young people take up these new dominant discourses and understand themselves through these, thus understanding and interpreting failure to e.g. participate in the school council as a ‘personal shortcoming’ rather than a result of a rational consideration or an active choice. Rönnlund also points to an interesting dilemma for these young people as they struggle to position themselves against complex ideals: they need to be agentic and communicative according to the dominant discourse of individual, self-responsible and self-regulating agency but at the same time they need to downplay their activeness according to social norms of modesty, e.g. by not talking too much or being too loudly. High-achieving students are often left out in studies on participation and transition, and the chapter is important in filling this knowledge gap, underscoring the point that ‘... even this “low-risk” group of students struggles to respond to the complexity of being a “good” and successful student-citizen’ (p. 30).

In chapter 2: **Social background and labour market careers of young people – A comparison of two cohorts of Finnish young people not in employment, education or training (NEET)**, Tero Järvinen critically examines the assumption that being outside education and the labour market is fatal to one’s future life course and labour market chances. The study compares two NEET cohorts aged 16–18 before and after the economic recession of the early 1990s. In light of the facts that 1) NEET are one of the main target groups for policies of education and employment across Europe and 2) reducing the number of NEET is a key benchmark of the EU youth strategy, it is interesting that Järvinen shows that despite the more difficult socio-economic situations of that time, the NEET of the mid-1990s had succeeded better in finding their place in working life than the NEET of the mid-1980s. Järvinen offers two explanations for this. It might have to do with differences in individual features of the two NEET cohorts. It might also have to do with much more effort being put into reducing dropout, early school leaving and interruption of upper
secondary education since the beginning of the 1990s. Thus, from this interesting angle, the chapter examines the central theme of the book: the significance of paying attention both to structures and individual agency when addressing young NEET school-to-work transition opportunities.

In chapter 3: Transitions from school to work – Icelandic young people in NEET, Jóhanna Rósa Arnardottir compares education and first job opportunities of the NEET group to young people who study or are employed. Young Icelandic people of the NEET group have not been studied very much in the past and in this regard Arnadottir’s study brings important new knowledge about the transitions of Icelandic young belonging to the NEET group. Arnardottir concludes that lack of job opportunities rather than lacking talent affects young people in a NEET situation. Thus, despite differences when comparing Iceland to EU and other countries, the same tendency stands out, namely that structural conditions rather than e.g. (lack of) motivation, skills or talent are important to take into account when understanding young NEET transitions from school to work. However, this was also the starting point of the study following the opportunity structure theory and in this regard the conclusion is not surprising.

In chapter 4: Winding paths through school and after – Young Swedes of migrant origin who failed upper secondary school, Michael Lindblad and Lisbeth Lundahl also highlight how conditions rather than individual features are important in the understanding of young NEET people’s situations in Sweden. Through narratives from 21–23-year-old Swedes with migrant backgrounds without upper secondary qualifications, Lindblad and Lundahl point out how the transitions of these young people are shaped by scarce symbolic and economic capital as well as lack of support from school. It is a well-known fact that multiple factors outside school contribute to school failure and dropout. However, less attention has been payed to how school itself may contribute to failure. In this regard, the study presents new and important insights that can help support better school paths and transitions for young NEET, and especially those with migrant backgrounds, as well as other groups of young people struggling to get a foothold in school and/or the labour market.

In chapter 5: ‘Learn skills and get employed’ – Constituting the employable refugee subjectivity through integration policies and training practices, Ameera Masoud, Tuuli Kurki and Kristiina Brunila also look critically at how structures and conditions – in this case discourses – shape the understanding of Finnish refugees. Through their analysis of official documents of integration policies and practices, as well as interviews with young migrants, training managers and teachers, they show how the discourse of employability overlooks the skills and interests of the refugees and reduce them to a homogeneous group of ‘not yet employable’. They also convincingly show how policies and the discourse of employability put the responsibility for not succeeding in the transition to the Finnish labour market on the individual refugee: ‘Since they are mature, they need to show commitment, as
if that is the only thing hampering their employment’ as the authors put it (p. 111). The study is important in emphasising the risks and possible consequences associated with making employment the (only) measure for refugees’ integration. In this respect, the study holds an important message, not only to Finland but to all countries facing the task of integrating refugees in the society and the labour market.

Chapter 6: Young people and transitions in upper secondary education in England – The influence of policy and the ‘local opportunity landscape’ is written by Ann Hodgson and Ken Spours. Like the other two chapters in the second part of the book, they look at how institutional technologies and discourses (the ‘transition machinery’) are at work in the policies and governing of youth transition. In this chapter, the authors look at national policy on curriculum, qualifications, institutional accountability and governance, and highlights how this has interacted with a local marketised environment of competing institutions and impacted the opportunities for learners to progress within, and complete, English upper secondary education (USE). The chapter focuses on the group of ‘middle attainers’, and shows how USE in particular has limited the transitions of young people in this group, in risk of ‘… becoming the new education “precariat”’ (p. 140). The chapter thus provides useful and important insight into the transitions within the English upper secondary education system of this large but somewhat overlooked group of students in the UK.

In chapter 7: Economic worries – therapeutic solutions? Entrepreneurial and therapeutic governing of transitions of young people, Kristiina Brunila, Katariina Mertanen and Sari Mononen Batista-Costa writes about how young Finnish people, through entrepreneurial and therapeutic discourses, learn to recognise themselves as responsible for their careers and self-actualisation. Thus, the chapter shows in an interesting way ‘… how entrepreneurial and therapeutic discourses indeed work together to govern young people’s transitions’ (p. 150) and form educational practices as a form of governmentality, as well as the effects of this on young people and their imagination of themselves and others. The chapter is particularly interesting, because Finland for some years has been at the forefront of performance, effectiveness and quality in regard to education and considered a fore-runner in entrepreneurial education. Therefore, the chapter holds an important message to all educational systems in Europe and elsewhere moving towards market-oriented entrepreneurial and therapeutic education and support systems.

In chapter 8: Ethical and care-oriented, but still psychological and ‘at risk’ – Teachers’ construction of young people’s transition from school to society, Sara Irisdotter Aldenmyr and Maria Olson looks at Swedish teachers’ descriptions of their teaching for health promotion. As in chapter 7, a critical perspective on the therapeutic education ‘regime’ is applied, and – in accordance with this perspective – it is highlighted that in order to help young people’s transitions and futures there is a need for ‘… not more intervention but rather more critical reflection on the
intervention programmes that are in use in many schools in Western society’ (p. 169). The chapter points to three youth transition discourses that stand out: a psychological risk discourse, a role model discourse, and an ethical discourse of care. It is convincingly shown how these discourses work together with different notions of youth and the needs of young people in order to make safe and good transitions into adulthood, each discourse making certain educational practices seem legitimate and necessary. The chapter brings the teachers’ perspective to the forefront and, in doing so, presents important new knowledge about how teachers see themselves as part of various types of therapeutic educational processes imbedded in the ‘life competence education’ which has been part of the Swedish compulsory school system over the last two decades.

Overall, Youth on the Move: Tendencies and Tensions in Youth Policies and Practices constitutes an important work on how young people’s transitions from school to work and higher education currently play out, mainly in the Nordic welfare countries but with an outlook to Iceland and the UK. It is shown how young people themselves understand these transitions, discourses and practices, along with their impact on their identity and future aspirations. Furthermore, it is convincingly shown how policies, educational programmes and other institutionalized framework constitute powerful discourses that shape how young people learn about themselves and understand their identity while navigating transitions. The book covers a variety of educational systems from different countries. All the chapters are well positioned in their respective fields. They provide thorough analysis of young people’s transitions and the specific education systems and policies and provide a pamphlet of interesting perspectives and important findings.

However, a discussion of the apparent dilemma many of these young people are facing in trying to balance the individualising discourses and their ambitions to e.g. also ‘do something for others’ or ‘for the greater good’ would have been interesting – that is, the dilemma between the individual and the community. Especially in relation to the environmental crisis, which has put the young generations of today in a very special position.

Furthermore, there is a tendency – not marked though – in the different chapters that the overall conclusion to the respective studies seems to have already been predicted or given from the outset: the strong message of the book is that young people’s chances for successful transition are not solely dependent on themselves but also to a large degree affected by social structures and institutional conditions and that this should be taken into account when working with initiatives to support the transitions of young people. However, a critical examination of this outset, as well, might have lifted the analysis further.

In many of the chapters, the Vocational Education and Training sector is in play as one of the key educational programmes that absorb and is expected to re-
skill young adults. This is an interesting finding and it might have been interest-
ing with a discussion on how and why this particular upper secondary education
programme is the preferred educational programme for young NEET adults’ re-
skilling and transition, be it migrants, refugees or other.

However, these are minor objections, which does not remove the overall im-
pression of the book: it presents solid, highly relevant and nuanced new
knowledge on different young people’s transitions in different time periods and
in a variety of countries with different education and support systems and labour
markets. Thus, the book holds an overall important message to all professionals
working with young adult transition, from policymakers to leaders and educa-
tional practitioners: while recognising young people’s agency, it is important to
challenge neo-liberal arguments of enhancing individual enterprise, flexibility
and innovation and also look to the importance of social conditions and institu-
tional structures for young adult transition within school, and from school to
work or higher education. As it is stated in the epilog: ‘Young people blame them-
selves for failures that result from structural and institutional factors, and from actors,
such as parents, teachers and decisions makers, who are more powerful than the young
persons in the transition field.’

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