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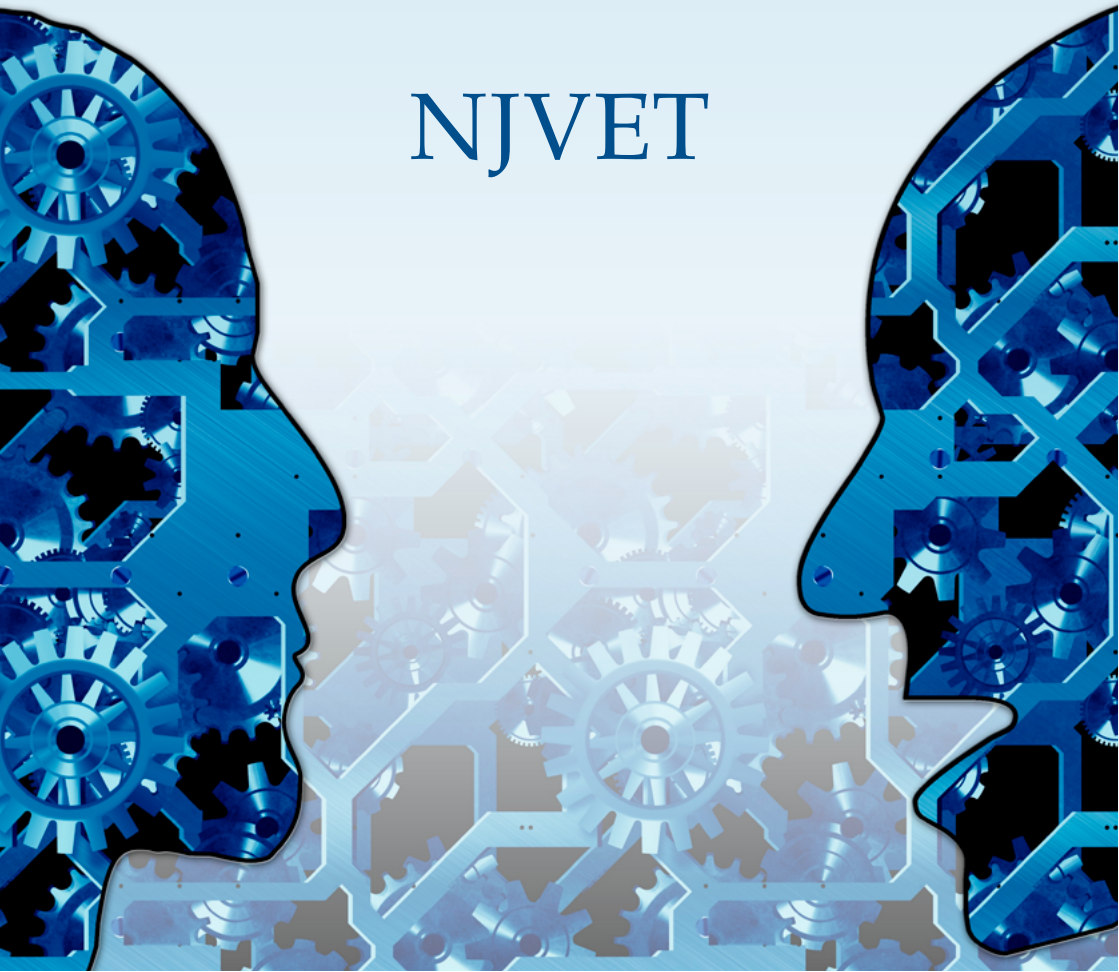




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Editorial: Autumn 2024

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Welcome to the last issue in volume 14 of our journal. This is the first volume with as many as four issues, and we have published 25 research articles, which is more than ever before in one year. This has been possible primarily thanks to all researchers in the field of vocational education and training (VET) who have chosen to submit and publish their research in the *Nordic Journal of Vocational Education and Training*. We also want to thank all anonymous reviewers who make invaluable efforts to help the authors improve their texts. And not the least we are grateful to the guest editors who have made it possible to publish two special issues in 2024. As mentioned in the editorial of the first issue this year, the editorial group now consists of editors from four of the Nordic countries, and we look forward to continued cooperation in our group as well as with all of you who are involved in the journal in other ways.

This issue includes five research articles from authors in Denmark, Finland, Norway, and Sweden. It should be noted that two of these articles build on cooperation between researchers in different Nordic countries, which means an added value of the journal – not only articles from different countries are published, but also articles from research projects which are international, at least in a Nordic sense.

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Editorial
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The five research articles

The first article, *Evaluating labour market–educational programme fit: A case study on aligning supply and demand for competences using a generic approach*, is written by **Laura Felby, Jacob Nielsen, Anna Roesen, Morten Mathiasen,** and **Sune Müller**, and is based on a cooperation between authors from Denmark and Norway.

In recent years the labour market is rapidly changing and there is an ongoing debate over the alignment between graduate skills and employability. In this article, the alignment between the supply of competences of the multimedia design programme and the corresponding labour market demand in Denmark is examined empirically by looking into 300 representative advertisements. A generic method for evaluating labour market-educational programme fit, based on Bloom's Revised Taxonomy (BRT), is presented. Areas of misalignment are identified, and it is being discussed how the educational programme can use the information to align the supply with the demand for competences.

The second article, *Boundary objects as a starting point for reflective learning in vocational education and training classrooms*, is a contribution by **Monika Øgård** from Norway. The Norwegian VET system combines learning at school and at work. The aim of the article is to explore how students' experiences in the workplace can be brought back to school context through thematic assignments. The thematic assignments are regarded as boundary objects.

Empirical material is collected through semi-structured classroom observations and student diaries during their work placements. The author argues that if VET teachers pedagogically organise the use of thematic assignments to facilitate students' learning and reflection, they can serve as boundary objects. Under the guidance of teachers, the use of thematic assignments enables students to integrate their work experience with their school learning, develop their understanding of vocational concepts, and develop reflection. The articles also emphasise that for thematic tasks to function as boundary objects, teachers need to plan and guide the students' reflection process.

The next article, *Vocational students' citizenship education as a conditioned practice: School leaders' and teachers' perspectives of history, religious education, science studies, and social studies* written by **Katarina Kärnebro, Kristina Ledman, Torbjörn Lindmark, Eva Knekta,** and **Christina Ottander** from Sweden reports on a study of teaching and learning conditions in key subjects for citizenship formation in Swedish VET programmes. As these programmes have become more market oriented, they risk marginalising citizenship education. Four subjects that traditionally have played important roles in this – history, religious education, science, and social studies – are now only taught as very minor parts of the programmes. The authors report results where there are clear differences in the school leaders' and teachers' views of the conditions. School leaders articulated problems related to internal frame factors, such as the teachers' engagement and students'

attitudes to the subjects, while teachers referred to external frame factors, such as the organisation of teaching.

The fourth article is the other one that builds upon Nordic cooperation. It is called *Vad är väsentligt för att lyckas i arbetet som yrkeslärare? En studie av yrkeslärarstudenters berättelser* (What is essential for success in vocational teachers' work? A study of vocational teacher students' stories) and is written by **Petri Salo, Mattias Nylund,** and **Ingrid Henning Loeb** from Finland and Sweden. The authors argue that understanding the qualitative aspects of vocational teachers' professional development is crucial for surpassing conditioned themes such as competence, identity, and structure. The article examines how success and failure are perceived in VET teacher-student empirical narratives produced in Sweden and Finland, highlighting empathy and socially diverse practices. The article employs the 'theory of practice' to analyse the VET teacher-student narratives, emphasising the interconnected actions involved in specific practices and the material-economic, cultural-discursive, and social-political aspects that shape and influence these practices. The article suggests that VET teachers' work has central conditions and factors, and these aspects are interrelated. Interrelatedness extends beyond viewing the VET teacher as an actor with personal-professional competence, interests, and intentions within a given structural context. A complex and interconnected understanding transcends that. The article's findings show that social, collegial, relational, cultural, and organisational aspects are essential and intricate. Successful practices depend on didactically and pedagogically reflective actions closely linked to their relational spheres. Furthermore, the narratives illustrate that an inclusive work environment supports successful teaching. Favourable cultural-discursive arrangements are characterised by trustworthy affirmation, collaboration, and support.

The fifth article, and the last in this volume, is *Hvordan kan videregående skole forberede elever – som planlegger å bruke lærekandidatordning – for varig arbeidslivsdeltakelse?* (How to prepare vocational students – aiming to utilise the training candidate scheme – for lasting employment) by **Eva Martinsen Dyrnes, Torunn Lien, Dan Roger Sträng,** and **Simen Tutvedt** from Norway. This article concerns the school's role in the inclusion of learners following a training candidate system in Norwegian VET into the labour market. The training candidate system leads to partial and not full vocational competence, and the research question addresses the school's contribution to how pupils succeed in the training candidate scheme. The data consists of qualitative interviews with former participants in the training candidate scheme, and with staff at schools who provide special needs education for training candidates. The study results show that particularly important factors for these students' completion of the training candidate scheme comprise the pupil's social competence and endurance at work as important properties for the candidates' empowerment to maintain lasting employment. Further importance for the training candidates' participation at work is

attributed to the quality of the teacher–pupil relation as essential, and the quality of the school's networks in local businesses leading to work opportunities for the candidates.

Looking forward

We are now looking forward to 2025, and we already know that many new articles will be published in volume 15, which will begin with a special issue on academisation and academic drift of VET. There will also be a new NordYrk Conference in June, this time at VIA University College in Aarhus, Denmark, where we look forward to meeting you in person and take part of new research that will result in future publications in this journal.

Nordic Journal of Vocational Education and Training, 2024

Evaluating labour market–educational programme fit: A case study on aligning supply and demand for competences using a generic approach

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Abstract

There is a long-standing debate within academia and practice on how specific educational programmes and educational systems, in general, prepare students for the labour market after graduation. This article contributes to this debate by exploring to what extend Bloom's revised taxonomy (BRT) can be used to investigate the degree of alignment between the demand of the Danish labour market and the supply of competences. We present a generic method for evaluating labour market–educational programme fit that can be used across educational programmes. This method is developed and tested in a case study in which BRT is used to investigate the alignment between the curriculum and labour market demand for skills, knowledge, and competences. We compare the curriculum of the multimedia design programme with relevant job advertisements. This comparison involves a qualitative analysis of both the programme's learning goals and the advertisements' content based on qualitative and abductive coding. We identify areas of misalignment and discuss how the educational programme can use the information to align the supply with the demand for competences.

Keywords: curriculum development, employability, graduates, Bloom, job ad analytics

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Introduction

In recent years, the public debate over graduate skills and employability has increased (Collet et al., 2015; Griffin et al., 2012; Olo et al., 2021). The labour market is rapidly changing due to technological, economic, and societal trends, and educational systems try to balance subject-specific knowledge and institutional norms (Hopmann et al., 1995), while providing students with the skills, knowledge, and competences in demand in the labour market. This is a moving target because there is no guarantee that the competences and skills needed today will also be in demand tomorrow (Barnett, 2012; Giridharan, 2020; Kress, 2000). In a competitive, globalised (Song et al., 2022) and knowledge-based economy (Collet et al., 2015), a pressing question thus is how educational systems prepare students for the labour market.

Educational programme curricula are the educational systems' means of navigating the intersection between the rapidly changing labour market and an unknown future (Hopmann et al., 1995). Curricula often specify expected learning outcomes based on learning taxonomies (Irvine, 2021). These taxonomies communicate the knowledge, skills, and competences that students acquire through educational programmes and are often used to define learning objectives without a direct link to the labour market, including the employability of students after graduation.

Considering the widespread use of learning taxonomies and the challenge of preparing students for an unknown future, we address the following research question: *To what extent can Bloom's revised taxonomy be used to investigate the degree of alignment between labour market demand and educational programmes' supply of competences?* Our point of departure is an investigation of the multimedia design programme at Business Academy Aarhus (BAAA). We perform a qualitative analysis of national and regional curricula, as well as a representative sample of 300 job advertisements from 2018–2021 in which 'multimedia designer' appears in the job text. Subsequently, we evaluate the labour market–educational programme fit in terms of supply and demand for skills, knowledge, and competences based on our targeted search for relevant job advertisements.

As part of the study, we have developed and used an analytical framework based on Bloom's revised taxonomy (BRT) (Anderson et al., 2001). This framework is used in combination with Jobtrend, a job ad analytics tool and database developed at BAAA. Together, they constitute a generic approach to evaluating labour market–educational programme fit. The study has both research and practical implications. We show and discuss the value in using BRT (Anderson et al., 2001) in assessing the quality of educational programmes in light of labour market demand and needs. We also provide a generic approach that heads of studies, policymakers, and other stakeholders may use to help

ensure alignment between what students are taught and their subsequent employability.

Taxonomies of learning

In educational development, different learning taxonomies or classifications are widely used. The common denominator is that these taxonomies describe different levels or stages of learning and knowledge (Irvine, 2021). Different taxonomies are often used to construct learning goals or descriptions of learning behaviour. Therefore, taxonomies 'provide a useful tool in distinguishing the appropriateness of particular learning outcomes for particular module levels' (O'Neill & Murphy, 2010, p. 2). Taxonomies can, for example, be used within a course or across an educational programme and, therefore, may have varying impacts on teaching and learning (Irvine, 2021).

The earliest taxonomy is that of Bloom et al. (1956). This taxonomy distinguishes three domains relevant to educational outcomes (Ferris & Aziz, 2005): cognitive, affective, and psychomotor skills. It has served as inspiration and been adapted by several subsequent taxonomies, including, but not limited to, Ferris and Aziz (2005), Krathwohl (2002), and Anderson and Krathwohl et al. (2001). Other widely used taxonomies include Collis and Biggs' SOLO-taxonomy (structure of observed learning outcome) (Biggs & Collis, 1982, 1989) and Fink's taxonomy (2003, 2013).

This study draws on BRT (Anderson & Krathwohl, 2001, p. 70). Just like the original taxonomy (Bloom et al., 1956), BRT contains six categories of learning objectives within the cognitive domain. The six categories represent a hierarchical structure of the domain, ordered from 'simple to complex and from concrete to abstract' (Krathwohl, 2002, p. 212). The underlying premise is that students must master the first category, or level, to advance to the next one. However, unlike the original taxonomy, BRT allows the categories to overlap (Krathwohl, 2002). Whereas the original taxonomy uses nouns and passive verbs, the revised taxonomy uses active verbs, in recognition of students as active learners. BRT is commonly used to identify learning goals, such as knowledge, skills and competences, evaluate course and curriculum design, and identify creative thinking (Irvine, 2021, p. 19).

Employability and curricular development

The link between taxonomies and the ability of educational systems to prepare students for the labour market is captured by the concept of employability. There are multiple definitions of what employability means (Boahin et al., 2014; Hillage et al., 1998; Olo et al., 2021; Williams et al., 2016), and whether it should be seen as a positive means to build human capital and improve individuals' opportunities in the labour market or as a direct threat to academic learning,

pedagogies, and curricula (Jackson, 2014; Olo et al., 2021, p. 91; Wheelahan & Moodie, 2021). In this article, we understand employability as the ability of graduates to obtain and maintain a job based on their knowledge, skills, personal abilities, and beliefs (Hillage et al., 1998; Knight & Yorke, 2002; Olo et al., 2021). From this perspective, employability is not a threat to academic learning, but a natural extension of it. In educational systems and the development of curricula, graduate skills are a vital component of employability. Based on the articles mentioned above, this article defines graduate skills as the generic and subject-specific skills that graduates should gain and develop during their education. It also sets graduate skills apart from employability skills. Graduate skills are *directly related* to the discipline and the educational system, while employability skills are developed and maintained both *within and outside* the educational system. Employability and graduate skills encompass both subject-specific and generic skills. Subject-specific skills are those that are technical and academic related to a particular discipline, while generic skills are broader and more transferable, applicable across different roles and contexts (Bridgstock, 2009).

One place where these skills and competences are explicitly formulated is in job advertisements. According to Rios et al. (2020) job advertisements typically require that employers articulate in their own words the specific skills and competences that employees must have. Due to word limitations on job advertisements, they may be unable to list all the required skills and are more likely to highlight the desirable skills that are uncommon among applicants. Job advertisements also offer information about the general needs of the labour market for so-called 21st century skills across various jobs and sectors (Rios et al., 2020). It's crucial to keep in mind that job advertisements only offer a limited perspective of reality. They don't provide data on the actual skills or competences possessed by successful candidates or demonstrate the real skills or competences required for a job (Harper, 2012).

However, several studies have shown that it is difficult to establish a clear link between graduate skills, curriculum design, and labour market demand (Holmes, 2001; Mahajan et al., 2022; for a review, see Olo et al., 2021). These studies suggest a discrepancy or misalignment between what is taught in higher education and what the labour market needs. Some authors argue that a discrepancy between education supply and labour market demand has negative implications for graduates' general job satisfaction and the firms in which they are employed (Lee & Sabharwal, 2016; Rhorbach-Schmidt & Tiemann, 2016). Other studies focus on the link between employability and learning taxonomies, specifically Bloom's taxonomy and BRT. Examples include studies of teaching and learning formats (Stoyanova & Yovkov, 2016), educational programmes (Kulkarni et al., 2017; Thurner & Böttcher, 2020), and employability as an integrated part of curricula with regard to an extracurricular activity (Daubney,

2021). In the present study, we foreground learning taxonomies to identify potential discrepancies between the educational curriculum and the demand for competences in the labour market. However, it is important to remember, that learning taxonomies and the educational system does not bear the sole responsibility for graduate employability – nor does the students for their employability skills. As Jackson (2014) writes; 'disciplinary knowledge, macro-economic and labour market conditions […], learning transfer […] and job mobility […] each influence employability´(p. 238).

When considering the vocational curriculum, it becomes evident that there is a persistent tension between the subject-specific and general competences that students need to develop throughout their education. This tension results in a constant need to balance, on the one hand, the subject-specific knowledge, skills, and competences required for a specific profession and, on the other hand, the general competences needed across contexts, roles, and society in general (Kriese et al., 2022).

In addition, a certain degree of misalignment is inevitable when curricula must navigate between current and future demands, cultural reproduction and transmission of tradition (Hopmann et al., 1995), just as a critical stance to external factors and influences on curriculum development is important (Krause, 2022). However, in this study, we argue that learning goals can be used to evaluate labour market–educational programme fit with the aim of reducing misalignment.

Finally, it is important to remember that the focus in further education should not only be on preparing students for the workforce. It also plays a critical role in promoting social mobility and civic engagement. The curriculum should aim to develop well-rounded individuals capable of critical thinking and making meaningful contributions to society (Joseph Jeyaraj & Wald, 2020). Striking a balance is key, as the curriculum should aim to develop both job-relevant skills and a broader social awareness. However, for the purposes of this article, the focus will primarily be on the connection between the curriculum and the labour market, particularly through job advertisements.

Research design and methodology

To investigate the degree of alignment between labour market demand and educational programmes' supply of competences, we consider job advertisements and learning goals to be proxies for this demand and supply. Therefore, we analyse a representative sample of specific job advertisement and the curriculum (in which the learning goals are specified) of an educational programme using BRT. Labour market demand is identified using Jobtrend (Mathiasen, 2022), a job advertisements analytical tool and database. Our

investigation is a case study of a multimedia design programme, but we present a generic approach to evaluating labour market–educational programme fit that relies on job analytics. Thus, our generic approach is applicable to any educational programme that expresses learning objectives.

Using the Jobtrend tool

Jobtrend (Mathiasen, 2022) is used to harvest and analyse job advertisements in Denmark. The tool relies on web scraping to collect and store job advertisements from two major job websites, Jobindex (2022) and Careerjet (2022). Jobtrend provides job ad analytics for efficient and reliable insights into trends in job market competency demands. BAAA utilises Jobtrend as one of several methods to design new degree programmes and to redesign existing ones. Thus, Jobtrend provides data-driven insights that point to content elements of curricula that are relevant and irrelevant in preparing students for the job market. Besides the possibility of creating custom searches within the job data, Jobtrend identifies and monitors 19,604 predefined and standardised competences found in job advertisements, which have been identified and validated by the classification of 'European Skills, Competences, Qualifications and Occupations' (ESCO) project (European Commission, 2022). In addition, Jobtrend enables analyses of vocational competences across the curricula of BAAA programmes. The tool queries the job advertisements database based on user-specified search criteria, for example, to find advertisements that correspond to specific search criteria. The identified job advertisements can then be subjected to statistical as well as qualitative analyses to gauge trends in demand. Its database contains all job advertisements since 2018, and trends in labour market demand can therefore be analysed. At the time of writing, the database had indexed 51,063,425 competences in 2,199,260 job advertisements.

Case description – BAAA and multimedia design

Our case study revolves around the multimedia design educational programme at BAAA, a Danish school of applied sciences. According to the international standard classification of education (ISCED), BAAA's educational programmes can be classified as academic profession (AP) degree programmes at level 5 and bachelor of science (BSc) programmes at level 6. At these levels, BAAA provides a wide range of undergraduate programmes which are vocational and primarily target the private sector. The heads of studies work closely with representatives from hiring companies to align curricula to labour market needs. The duration of all programmes varies depending on the degree level, ranging from two to three and a half years.

Multimedia design is an academy profession, or what UNESCO calls a short-cycle tertiary education, which is defined as an education 'designed to provide

participants with professional knowledge, skills and competences. Typically, they are practically based, occupationally-specific and prepare students to enter the labour market' (*International Standard Classification of Education*, 2012, p. 48). It is a 2-year programme that provides knowledge and skills in user interface design (UI), user experience design (UX), digital content, programming, and business understanding. It is a project-oriented programme with a strong focus on group work. The first three semesters include a variety of subjects with a focus on project work. This is followed by an internship where students learn to apply their skills and competences in practical settings. Through the programme, students build a portfolio of work showcasing their creative skills in multimedia design, as well as documenting their intercultural competences, knowledge, and experience. Graduates typically work with web solutions and mobile services design and development, utilising their competences in digital media, innovation, and idea development. Overall, the programme is explicitly oriented towards the labour market, through its practice orientation.

In 2019, a total of 911 students graduated from the multimedia design program. According to a 2022 joint report by the Ministry of Education and Statistics Denmark, 12–21 months after graduation, the average unemployment rate for these graduates was 16.9 %. In comparison, graduates from all other Danish AP degree programmes had an average unemployment rate of 12.5 % during the same period. This means that the multimedia design programme had approximately 35 % more graduates who were unemployed compared to similar programmes.

During our investigation, BAAA employed Jobtrend to identify relevant and irrelevant components of curricula to better prepare students for the job market. This, combined with the high unemployment rate after graduation, makes it a relevant object of study.

Data analysis

Our study employs a qualitative method of data analysis, which involves coding and categorising competences by two of the authors. After collecting curriculum-related documents and job advertisements, the data were coded in Nvivo using BRT as a framework to categorise the educational programme's supply and labour market demand for competences. The reliability of our coding (O'Connor & Joffe, 2020) was assessed by randomly selecting and coding 35 job advertisements (of the 300 advertisements analysed), leading to discussions and code revisions. After the revisions, the assessment of intercoder reliability resulted in a Kappa statistic of $\kappa = 0.75$, which indicates an acceptable level of agreement among coders (McHugh, 2012). Having verified the intercoder reliability, the remaining 265 job advertisements were coded by one of the authors.

As a starting point, the six hierarchical categories in BRT were used to identify and categorise the supply and demand for competences. Each competence was coded as belonging to one of the taxonomical levels. We identified action verbs that were instrumental in the coding process. Table 1 provides an overview of the BRT definitions, the actions verbs, and examples from the job ads.

Table 1. Taxonomic categories (BRT), action verbs used for coding, and examples of coded text (adapted from Anderson & Krathwohl, 2001).

Category	BRT definition	Action verbs	Job ad example
1. Remember	Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers	Define Label List	
2. Understand	Demonstrate understanding of facts and ideas by organising, comparing, translating, interpreting, giving descriptions, and stating main ideas	Understand Know Comprehend	'Knowledge and understanding of programming (HTML 5)'
3. Apply	Solve problems to new situations by applying acquired knowledge, facts, techniques, and rules in a different way	Prepare Apply Produce	'Produce graphic design and pictures for printed media'
4. Analyse	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalisations	Analyse Compile Examine	'Analyse data'
5. Evaluate	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria	Advise Evaluate Optimise	'Evaluate social media campaigns and ads'
6. Create	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	Develop Create Produce (indepen-dently)	'Create visual universes and identities'

Because BRT categories have been criticised for not leaving room for subject-specific skills and knowledge, we relied on an abductive coding approach to discover and code competences outside the scope of the taxonomy. The abductive coding considers that BRT is developed in an educational context, and its use, therefore, needs to be adapted to the job advertisements context. Thus,

this abductive coding process revealed the need for an additional seven categories of codes to allow for more fine-grained data coding. Subsequent analysis of the required competences revealed that only 47.7 % of the total number of coded statements (n = 2,435) were based on BRT, while 52.3 % fall into these additional categories. For instance, work experience and character traits are demanded but not explicitly supplied when analysing the educational programme. The additional coding categories are:

- Professional qualities, for example, how you approach tasks and how you make use of competences in your work.
- Character traits, for example, personal traits that identify who you are as a person.
- Experience, for example, previous experience and know-how.
- Lifelong learning, for example, an ad that underscores the need for further competence development through education.
- Technical competences, for example, using a specific piece of software, method, etc.

This coding provided overall insights into the taxonomical misalignment of supply and demand of competences in terms of the six BRT categories, for example, remember, understand etc. However, it did not yield insights into any potential misalignment in terms of specific work tasks, for example, graphic design, data analysis etc. for each of the six BRT categories. To adequately investigate the degree of taxonomical misalignment in terms of specific work tasks, a second round of coding was conducted. These two coding processes constitute a framework for investigating misalignment at two levels. All coded BRT competences were categorised based on the theme of the work task, for example, social media (SoMe), programming etc. Therefore, after the first round of taxonomical coding of competences, these competences where then coded a second time based on the theme of the work task, for example, graphic design, SoMe, programming etc. In doing so, we were able to identify not only misalignments at an overall taxonomical level, but at a work task level, for example, whether programming was supplied at a low taxonomical level but demanded at a high taxonomical level. The curriculum competences were divided into 10 categories that capture different work tasks on the labour market, and analysis of the job advertisements yielded an additional 13 categories of work tasks (visualised in Figure 2). In the following, the supply and demand for competences will first be examined separately.

Results

Curriculum

Without the additional coding categories, BRT captures 91.5 % of the total 141 competences identified in the curriculum. The remaining competences in the programme was coded into the category of character traits. Thus, the analysis reveals that BRT provides an optimal framework for categorising curricula.
When looking at the distribution of competences across BRT categories on the supply-side, the data shows an uneven distribution. Approximately two-thirds of the competences fall into categories at the three lowest taxonomic levels, whereas the three highest levels only account for 31.8 % of the supplied competences. In fact, the 'analyse' and 'create' categories only account for 1.6 % and 6.2 % of the 129 identified BRT competences, respectively. Besides 'analyse' and 'create', however, the distribution is more even. The distribution is visualised in Table 2.

Table 2. Descriptive statistics of coded competences in curricula.

Code names	**Total # of competences**	**% of curriculum containing competence**	**Distribution of % for each set of codes**	**% of total competences**
BRT codes	129	100	100	91.5
1. Remember	30	100	23.3	21.3
2. Understand	30	100	23.3	21.3
3. Apply	28	100	21.7	19.9
4. Analyse	2	50	1.6	1.4
5. Evaluate	31	100	24.0	22.0
6. Create	8	100	6.2	5.7
Additional codes	12	100	100	8.5
Professional qualities	0	0	0	0
Character traits	12	100	100	8.5
Experience	0	0	0	0
Lifelong learning	0	0	0	0
Technical competences	0	0	0	0

Job advertisements

Without the additional coding categories, BRT captures only 47.7 % of the total 2,435 competences identified in the 300 randomly selected job advertisements. The remaining 52.3 % of the competences were categorised as one of the five additional codes. This result underlines the need for additional coding when using the BRT framework on job advertisements, as it proves a suboptimal fit for categorising demanded competences job advertisements. Like the results of the supply-side, when looking at the distribution of competences across BRT categories on the demand-side, the data shows an uneven distribution. 83.2 % of the total 1,162 BRT competences fall into the three lowest levels, while the three highest levels account for 16.8 % percent of BRT competences. More specifically, the 'apply' level accounts for most BRT competences by 74.8 %, while the lowest level 'remember' accounts for 0 %. The distribution is visualised in Table 3.

Table III. Descriptive statistics of coded competences in job advertisements.

Code names	**Total # of competence**	**% of ads containing competence**	**Distribution of % for each set of codes**	**% of total competences**
BRT codes	1162	75.7	100	47.7
1. Remember	0	0	0	0
2. Understand	98	24.7	8.4	4.0
3. Apply	869	72.7	74.8	35.7
4. Analyse	39	9.0	3.4	1.6
5. Evaluate	85	19.7	7.3	3.5
6. Create	71	15.0	6.1	2.9
Additional codes	1273	98.7	100	52.3
Professional qualities	356	56.7	22.5	14.6
Character traits	346	52.7	21.8	14.2
Experience	302	50.3	19.1	12.4
Lifelong learning	13	4.3	0.8	0.5
Technical competences	256	53.3	16.2	10.5

Comparative analysis

A comparative analysis is needed to evaluate the degree of alignment between the educational programme's supply and labour market demand for competences. Overall, BRT is better at capturing the supply of competences from the educational programme compared to the demand of the labour market. 91.5 % of the total coded competences in the educational programme are captured by BRT, while 47.7 % of the total coded competences in the job advertisements are captured by the framework. The distribution of competences across the BRT levels for the supply and demand of competences (Tables 2 and 3) is visualised in Figure 1. The competences demanded are very application-oriented ('apply'), whereas the supply is more evenly distributed between levels. The demand for textbook knowledge ('remember') is also noticeably absent for demanded competences, although it constitutes a significant part (23.3 %) of the competence supply of the educational programme. However, the comparative analysis indicates that there is alignment at the higher taxonomic levels of 'analyse' and 'create'. However, all though there seems to be alignment between these levels for the supply and demand of competences, they constitute a small percentage of the total supplied and demanded competences.

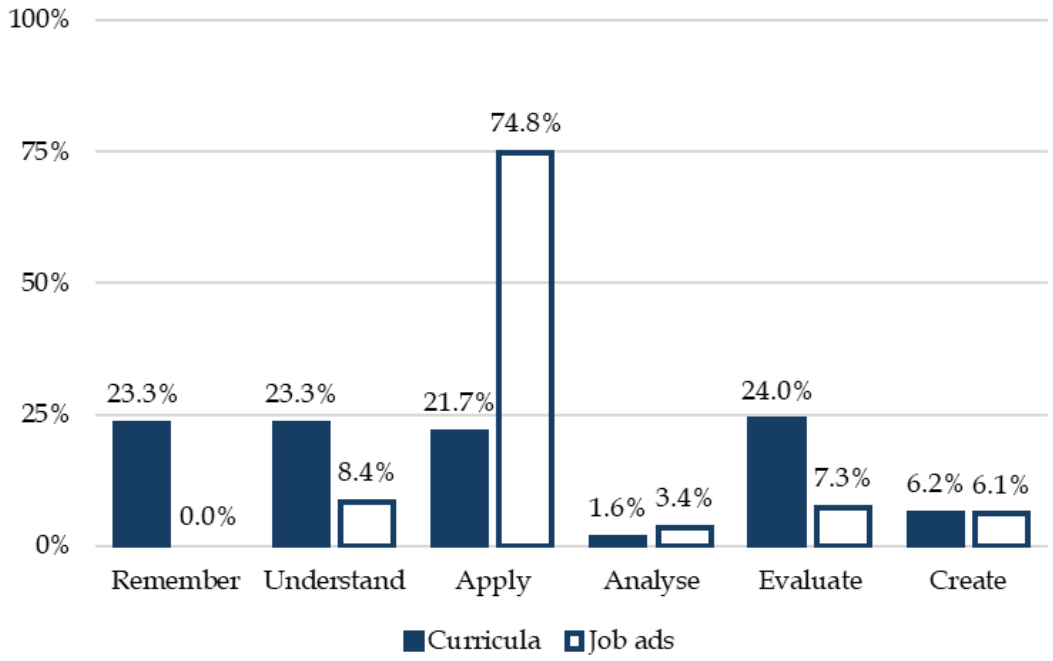


Figure 1. Supplied and demanded BRT competences in percentage of each dataset.

As part of the comparative analysis of the degree of alignment, the supplied and demanded competences were coded into categories of work tasks, which made

it possible to identify not only misalignments at an overall taxonomical level, but at a work task level for example whether programming was supplied at a low taxonomical level but demanded at a high taxonomical level. The misalignment between labour market demand and the educational programme's supply of competences as they relate to work tasks is visualised in Figure 2. Overall, the figure reveals several work tasks that are not mentioned in the educational programme but are demanded by the labour market, and vice versa. Alignment between supply and demand were identified for 4 of 22 work task, while the remaining 18 work task themes were either only demanded or supplied. The degree of alignment between the educational programme and the labour market with respect to work tasks is visualised in Figure 2. It illustrates a high degree of misalignment.

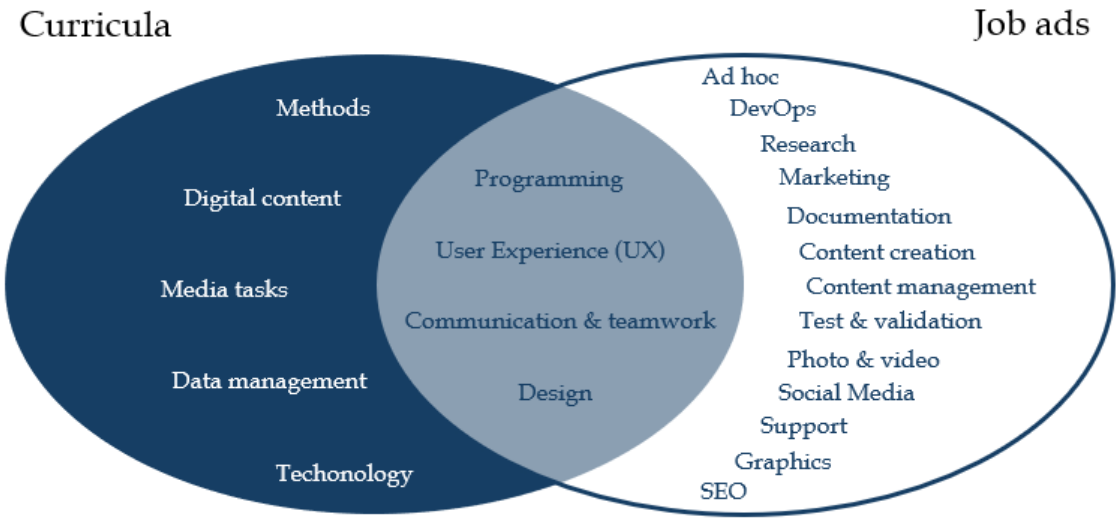


Figure 2. (Mis-)alignment of multimedia design work task themes supplied and demanded. A fifth aligned work task called 'various tasks' is not included in the model, as it included a wide range of atypical tasks.

Figure 2 shows a high degree of misalignment regarding work task themes. Nevertheless, it might be the case that there is alignment across the taxonomical levels for each of the aligned work tasks. However, when looking across the distribution of BRT levels within each of the four aligned work themes, the general misalignment in the distribution across BRT levels for supplied and demanded competences is evident. The demanded competences are more application-oriented while the supply of competences is focused on the three

lowest levels. We exemplify this in Figure 3 by showing the distribution of competences between BRT categories for the work task 'design'.

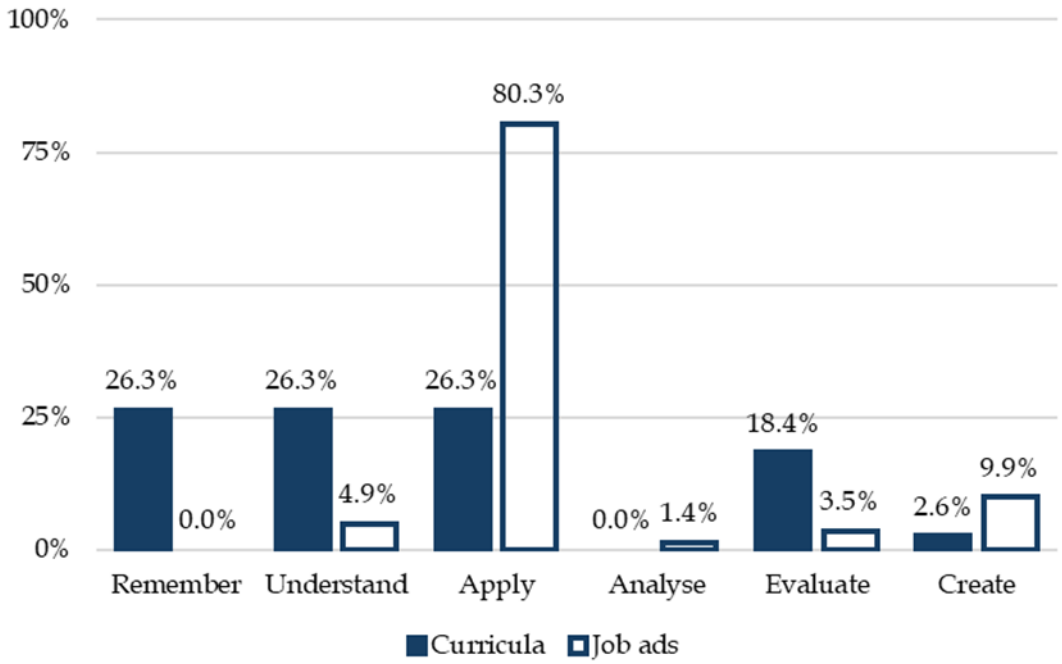


Figure 3. Distribution of competences across BRT categories for the 'Design' work task.

Discussion

Based on our analysis, we see a misalignment in terms of the supply and demand for lower-vis-à-higher-level competences. In the curriculum, almost 50 % of the learning objectives are formulated as competences at the level of 'remember' or 'understand', the two lowest taxonomic levels. Learning goals at the lower taxonomic levels are, however, essential for further competence development and the ability to solve more complex tasks (Anderson & Krathwohl, 2001). Nevertheless, our analysis shows that the labour market does not necessarily value candidates with textbook knowledge or that they are able to establish connections 'between the 'new' knowledge to be gained and their prior knowledge' (Anderson & Krathwohl, 2001, p. 70) as the 'apply' level accounted for almost three thirds of the demanded BRT competences while 'remember' accounted for 0 %. Additionally, the labour market demands competences at higher taxonomical levels as exemplified in Figure 1. Candidates should be able to apply their knowledge to create value for the hiring company. This is potentially problematic for the employability of graduates if the curriculum emphasises 'remember' and 'understand' learning goals when they are required

to have 'apply' and 'create' competences. If the job ad competences, however, demanded lower taxonomical levels, this would not have been problematic as lower taxonomical levels are a prerequisite to the higher. This mismatch between competence supply and labour market demand can potentially have negative implications for graduates' job satisfaction and their sense of being under- or overqualified, as argued by Lee and Sabharwal (2016) and Rohrbach-Schmidt and Tiemann (2016).

In general, the results indicate that, although one of the overall goals of the educational programme is to provide graduates with the competences demanded by the labour market, there is a misalignment between supply and demand. While some of the acquired competences are demanded by the labour market, others are not and vice versa. This finding supports extant research of mismatches between what is taught in higher education and labour market demand (Olo et al., 2021). The comparative analysis reveals that competences related to, for example, the work task themes 'SoMe' and 'marketing' are required of multimedia designers, while 'digital content' and 'media assignments' are not, although they are taught it in the educational programme. Additionally, the analysis reveals that there is misalignment between the taxonomic levels of competences supplied and demanded for specific work tasks.

In the following, we present our method as a generic approach to evaluating labour market–educational programme fit that others can use to determine the degree of alignment between an educational programme's supply and labour market demand for competences. The method can be seen as an attempt to bridge the gap between what is supplied and what is in demand, as well as a method, that can be used to engage in critical dialogue between institutions and labour market, as well as between institutions, faculty and students in order to 'identify curriculum principles and anchor points to guide decision-making and deliberations about how to evaluate and prioritise responses to these external factors and influences.' (Krause, 2022, p. 48).

Prior to the four-step process, it is important that curriculum-related material (such as course descriptions, syllabi, course- and programme regulations) is selected and collected.

1. **Targeted search for relevant job advertisements.** The first step is to search for job advertisements targeting graduates of the particular educational programme. Using a job ad analytics tool like Jobtrend makes large-scale searches for representative samples of advertisements manageable. Since job advertisements may be relevant to graduates of more than one programme and because graduates may apply for atypical jobs, a targeted search for advertisements requires in-depth knowledge of the programme, as well as insights into the link between curriculum, competences, and employability.

2. **Choose a taxonomy of learning.** The second step is to choose a taxonomy as an analytical framework. The choice of framework influences the ability to identify, understand, and address questions and problems of misalignment between labour market demand for and educational programmes' supply of competences. Using a taxonomy makes it possible to highlight 'the breadth, or lack of breadth, of the objectives and items' (Krathwohl, 2002, p. 213). BRT or another taxonomy may be useful depending on the context and analytical purposes.
3. **Abductive coding and thematic categorisation.** The third step is to code and categorise the data. A qualitative and abductive analysis allows for a flexible and inclusive coding process, which helps ensure that all competences (in both the curriculum and job advertisements) are coded. Such an approach supports a holistic and nuanced analysis of the alignment between supply and demand for skills, knowledge, and competences. Check coding helps to strengthen the reliability of the data coding. When all competences are coded, a subsequent coding is carried out to analyse work theme misalignment.
4. **Evaluate the degree of alignment.** The fourth step is to analyse the degree of alignment in general and in relation to specific work task themes to generate insights into possible changes to curriculum design by identifying unmet labour market needs. By comparing themes of competences across the curriculum and job advertisements and how they are distributed in terms of taxonomic levels, it is possible to discern similarities and differences and determine the degree of alignment. As argued earlier, iIt is worth mentioning that 100 % alignment is neither desirable nor possible as the curriculum and job advertisements differ in nature. The curriculum is written, among other things, to guide lecturers in selecting relevant educational content, and job advertisements are written to attract candidates for vacant positions. However, a higher degree of alignment can positively affect the employability of the candidates.

Following this four-step process provides valuable input to quality assurance and educational development processes. It is arguably time-consuming, and automation through machine learning would therefore be an important next step. Text mining by means of, for example, natural language processing (NLP) is one possible avenue and the subject of future research. Automation would support an ongoing assessment of the alignment and needed adaptations to educational programmes in response to changing trends and labour market demand.

Although we developed the method based on a single case study, we consider it relevant to use in other educational programmes and job market sectors

because it relies on a generic approach that is not tied to the multimedia design programme. Additionally, the approach can be used with a variety of taxonomies as a basis for alignment analyses. This would require, that the learning objectives are identified based on the framework of the chosen taxonomy.

There are limitations to both the suggested four-step approach and our use of BRT in this study. The taxonomy is developed as an educational instrument, which makes it particularly useful when creating and comparing learning goals, assessment criteria, etc., but it is not equally applicable outside educational systems. First, the language used in, for example, curricula and job advertisements differs significantly. Educational programmes often specify learning goals based on a taxonomy, while labour market demand, as expressed in job advertisements, is expressed as competences written in a language that is not limited by the nomenclature of a taxonomy. Language differences make comparisons more challenging and time-consuming, hence the need for NLP. Second, the work task themes and competences identified in the two data sets are quantitatively and qualitatively different. Our analysis reveals that the demand for work task and competences exceed the supply, and the work task themes found in the curriculum are broader and less specific compared to those in the job advertisements. This difference affects coding and categorisation. Third, our analysis reveals that labour market demand for competences, which is not relatable to BRT, account for 57.7 % of all competences. Among these, professional and personal competences are the most sought-after, followed by experience and technical competences. This calls for further investigation of how to capture and incorporate competences beyond BRT and similar taxonomies to achieve a more nuanced and precise picture of the degree of alignment. However, we were able to evaluate the labour market–educational programme fit in this particular case study by using BRT.

The use of job advertisements can shed light on one aspect of the discrepancy between curricula and the labour market. However, this approach focuses primarily on measurable criteria of the labour market–educational programme fit. Future studies should explore this fit using more qualitative research methods, such as conducting interviews with key stakeholders, for example educators, students, and employers. This will help provide context to the data-driven insights provided by data analytics tools like Jobtrend and add nuance to our understanding of misalignments.

Despite these challenges and limitations, we argue that the suggested four-step approach has several strengths. Most importantly, it enables a value-creating evaluation of the alignment between labour market demand and the supply of competences by educational programmes. However, the coding process must consider, for example, personal and professional competences that are not covered by the analytical framework used. These should be considered as part of

educational development and quality assurance processes in dialogue with teachers, educational leaders, and other stakeholders. Consequently, this study shows that a taxonomy like BRT is insufficient as an analytical framework when formulating or revising learning goals when considering the needs of hiring companies. To ensure employability and help graduates enter the labour market, there needs to be an increased focus on competences and skills beyond those described by learning taxonomies, such as personal and professional competences. Initially, our four-step method can be used to illustrate and hopefully develop a shared language between the curricula aspects of specific competences and labour market demand, including a focus the competences developed through educational programmes, thus helping the graduate – and the institutions – by bridging the potential gap between graduate skills, curriculum design, and labour market demands (Holmes, 2001; Mahajan et al., 2022; Olo et al., 2021). Finally, our four-step process is a much more data-driven and evidence-based approach that will necessitate changes to organisational routines and processes when developing educations, instead of, or in addition to, using experts and company representatives as critical information sources when changing educational content.

Conclusion

Through a case study, we explore to what extent BRT can be used to investigate the degree of alignment between labour market demand and the supply of competences from an educational programme. We examine empirically the alignment between the supply of competences of a multimedia design programme and the corresponding labour market demand, as evidenced by job advertisements. We rely on a job ad analytics tool to extract and analyse a sample of 300 representative advertisements through qualitative, abductive coding. The result is compared to an analysis of the educational programme's curriculum. Although the results are linked to a specific case, we argue that our method can be used by others as a generic approach when developing and revising curricula while considering labour market-educational programme fit. We suggest a four-step process that can be adapted to other educational programmes and contexts. By following our approach, we argue that it is possible to transition from 'curriculum' and 'labour market demand' to 'curriculum in demand'. Our approach can be used to identify competences that are needed but not taught and competences taught but not needed. It requires, however, new work practices around curriculum development and revision.

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Boundary objects as a starting point for reflective learning in vocational education and training classrooms

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Abstract

This article examines the use of thematic assignments developed by vocational education and training (VET) teachers in Norway that focus on students' work practices. In the Norwegian VET system, students attend two years of upper secondary school, followed by two years of apprenticeship at the workplace. The aim of the article is to point out how their work practice experiences can be brought back into the classroom by using specific boundary objects called 'thematic assignments'. The article examines the following research question: *How does working with boundary objects in the classroom contribute to students' understanding and elaboration of vocational concepts?* The data sources consist of semi-structured observations in the classroom and diaries written by the students during their work placements. This study is based on the idea of boundary crossing, using reflection and writing tasks to support students' elaboration of vocational concepts. The discussion argues that the classroom is an appropriate environment for the elaboration of technical terms, that is, the development of vocational concepts via a specific boundary object. This article also discusses writing diaries as a starting point for students' reflections to support the development of naive vocational concepts into more elaborate ones through experiencing their use in the workplace.

Keywords: boundary crossing, boundary object, reflection on/for action, elaboration of vocational concepts, workplace learning, perspective taking/making

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Introduction

A well-known challenge in European vocational education and training (VET) is the integration of school and workplace learning. There seems to be a tension between school-based education and students' practical vocational experiences (Guile & Griffiths, 2001), and the two learning sites often seem to function as separate parts of the students' education (Aakernes, 2018; Eiríksdóttir, 2020; Esmond, 2021; Hiim, 2017; Mårtensson, 2022). Ceelen et al. (2023) emphasise the lack of research on how pedagogical practices can support students' learning from their work experiences. This study helps reduce this research gap. Integrating learning from both places could strengthen the role of the teacher in VET: 'If learners cannot connect what they learn in different settings, it is very likely that what they have learned in educational settings remains inert' (Bakker & Akkerman, 2019, p. 351).

In Norway, the primary model for VET consists of two years of school-based learning by vocational teachers with professional experience, followed by two years of apprenticeship at the workplace. During the first two years of a student's education in Norway, students are taught a subject known as vocational specialisation (YFF). This subject, which offers students experiences in enterprises in the private or public sector, is considered a prerequisite for work choices and later work-life (Utdanningsdirektoratet, 2021b). Hence, school-based and work-based learning should complement each other throughout the student's apprenticeship programme. After attending the VET programme Sales, Service, and Tourism (year 1), followed by Sales and Tourism (year 2), students have the opportunity to become apprentices in trades including sales, service, and tourism. However, students in this programme spend more time in the classroom during the school week than in other vocational programmes (Aakernes et al., 2022). School-based learning in a classroom without practical workshops makes it difficult to provide students with experiences that simulate real work situations (Heggen et al., 2015). Therefore, it is necessary to look for practice-oriented enrichment in the school-based part of students' education from the first year. In 2021, Sales, Service, and Tourism students who entered the programme from lower secondary school without certified knowledge and with ungraded subjects increased from 12 percent to 14 percent (Aakernes et al., 2022). This indicates the need for work-oriented classroom activities, especially as many students are at risk of dropping out of upper secondary school (NOU 2019:23).

Moving between different learning sites is referred to as boundary crossing (Engeström, 1987) and is widely acknowledged within vocational education. In VET, students typically meet in at least two learning sites. This type of education, which combines school and workplace learning, is called dual vocational education, and it is recognised as a training approach throughout Europe (Cedefop, 2022). According to curricula and state guidelines (Utdannings-

direktoratet, 2021c), Norwegian VET students are expected to learn across boundaries because their learning sites are both school and the workplace. Therefore, it is vital to understand the advantages of boundary crossing. This study aims to provide insight into boundary object learning. By exploring the use of thematic assignments developed by VET teachers in collaboration with local enterprises, the study sheds light on the contribution of these thematic assignments to students' understanding of vocational concepts. The term 'boundary object' refers to an artefact that fulfils a bridging function between different sites, such as work and school (Akkerman & Bakker, 2011a). In this study, the boundary object, a written assignment called 'thematic assignment', relates to the vocational concepts students encounter in a Sales, Service, and Tourism programme.

Qualitative data are used to shed light on the application of boundary objects in the classroom context. The research question is as follows: *How does working with boundary objects in the classroom contribute to students' understanding and elaboration of vocational concepts?*

The following section first presents the research background and the thematic assignments, followed by a discussion of the conceptual framework of boundary crossing, experience, and reflection in boundary learning, and the writing of diaries to develop and elaborate vocational concepts.

Background

Norwegian VET is, as mentioned earlier, based on school and workplace learning. Both contexts have formal structures with curricula. However, although there are curricula for workplace learning, these are only a starting point for local curricula developed by the VET teachers. In the school-based part of VET education, the Norwegian VET canon of subjects consists of common core subjects and occupation-specific subjects, including the subject of vocational specialisation. The overall aim of vocational specialisation is to provide students with experiential glimpses into occupations before deciding their educational and professional paths (Utdanningsdirektoratet, 2021c). Vocational specialisation enables students to engage in a work environment to develop social and vocational knowledge and skills (Utdanningsdirektoratet, 2021a). Therefore, vocational specialisation is considered the primary learning environment for VET students during the two first years of school-based education (Utdanningsdirektoratet, 2021c) by providing them with opportunities to experience actual work situations. This is realised through work placements in this subject during the first two years. During the work placement, each student has a contact person at work. This person, referred to as 'supervisor at work', supports and guides the student and provides contact between the workplace and the VET teacher.

Vocational programmes and upper secondary schools have a variety of ways at their disposal to organise the subject of vocational specialisation. Some schools or programmes choose various periods for this subject, for instance, four weeks at a time, and others choose two days per week. There are multiple solutions, due to both local context and VET teachers' didactical choices. In addition, some schools and vocational programmes organise the subject differently in years one and two. Table 1 is a typical example of how schools organise their subjects in the first year of Sales, Service, and Tourism.

Table 1. Timetable for a week the first year of Sales, Service, and Tourism Programme.

Monday	**Tuesday**	**Wednesday** **Work placement**	**Thursday**	**Friday**
Mathematics	Occupation Specific	Vocational Specialisation	English	Occupation Specific
Mathematics	Occupation Specific	Vocational Specialisation	English	Occupational Specific
Science	Occupation Specific	Vocational Specialisation	English	Occupational Specific
Science	Occupation Specific	Vocational Specialisation	Social	Mathematics
Physical Education	Occupation Specific	Vocational Specialisation	Occupation Specific	English
Physical Education	Occupation Specific	Vocational Specialisation	Occupation Specific	English
Occupation specific	Occupation Specific	Vocational Specialisation	Occupation Specific	Occupation Specific
Occupation Specific		Vocational Specialisation	Occupation Specific	

The table shows that Wednesday is dedicated to vocational specialisation. On this day, students spend the entire day at their work placements.

The school as a platform for data sources

VET teachers at a local upper secondary school initiated a development project that specifically addressed the subject 'vocational specialisation'. The VET teachers involved in the Sales, Service, and Tourism programme were challenged by the lack of motivation among the students. The teachers assumed students

would be more motivated if work-based learning were more integrated with school-based learning. Two VET teachers applied for funding through the Centre of Vocational Education and Training (University of Agder, 2021) with the intention to develop assignments where students can integrate their learning experiences in both learning sites. The teachers wanted to understand and improve their students' work practice by structuring their didactic work and developing thematic assignments. The teachers collaborated with local enterprises regarding the possible content of the thematic assignments. This was done to ensure the assignments were recognisable and relevant to real work tasks.

The boundary objects: Thematic assignments

A thematic assignment consists of vocational concepts students will encounter at their work placements through vocational specialisation. These tasks are linked to the intended learning outcomes described in the Sales, Service, and Tourism programme's curriculum (Utdanningsdirektoratet, 2022) and the core curriculum (Utdanningsdirektoratet, 2021a).

An example of a thematic assignment with the concept of 'communication' involves the following: The curriculum for the Sales, Service, and Tourism programme states that 'the core element of service and hospitality involves understanding the needs and expectations of customers, guests and partners. It entails adapting communication, service offers, experiences, and services' (Utdanningsdirektoratet, 2022). In line with this, the core curriculum emphasises that 'oral skills involve creating meaning through listening, speaking and conversing with customers'. These two curricula formed the basis for the thematic assignment, where one can find examples from a workplace (see Table 2). VET teachers have developed such thematic assignments with the following concepts: added sales, communication skills, ethics, fire alarms, health and safety, networking, people, place, price, product, punctuality, shopping patterns, and sustainability.

The intention is to use the thematic assignments in three phases, as shown in Figure 1. In school, students are first introduced to a concept (e.g., communication skills) and complete several school-based tasks related to this concept. Afterwards, they receive a thematic assignment asking them to explore routines (e.g., how to communicate in their work placement). During VET teachers' visits to students' work placements, the students and teachers discuss the assignment. The final phase is when the students are back in the classroom.

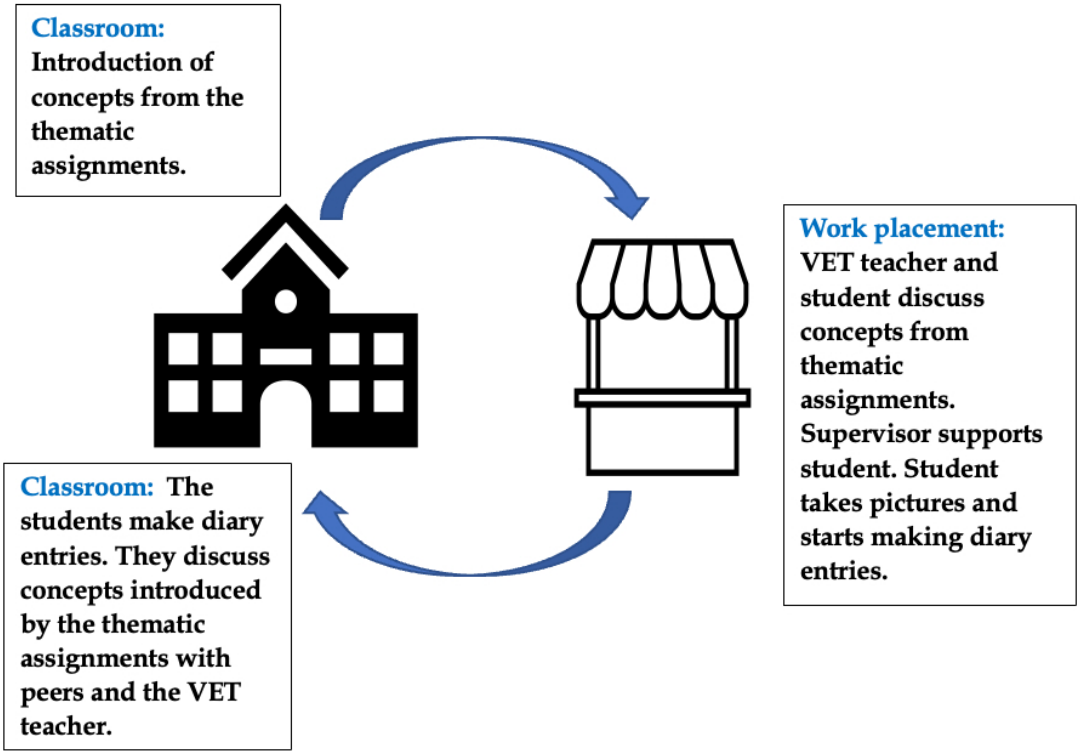


Figure 1. Use of a thematic assignment.

The school's VET teachers have developed a table describing the students' competence development based on the given curriculum (Utdannings-direktoratet, 2021b). The table was created in collaboration with local enterprises and includes the vocational concepts the students should look for in their work placements.

Table 2 is an example of the first part of one of the thematic assignments VET students encounter. The assignment presents the vocational concept of 'communication' and supporting questions, which are meant to help students complete the thematic assignment, and students can ask their supervisors at work for guidance if needed. Supervisors at work will also have access to these assignments and the opportunity to prepare answers to students' questions and strategies to support the students.

During planned visits to students' work placements, VET teachers and students discuss the vocational concept in the thematic assignment presented above. The teacher encourages the student to discuss and show visible signs (if relevant) or indicators related to the vocational concept. The teacher can then adapt questions to the student's understanding and work context. Students also keep diaries and document the vocational concept with photographs and in

writing. Subsequently, students discuss the vocational concept with their teachers and peers in the classroom (see Figure 1).

Table 2. Example of a thematic assignment.

Thematic Assignment: Communication Skills

- Evaluate yourself based on the criteria in the table below. Where do you place yourself?
- Talk to your contact person in the company, and together, find out where the company believes you are in developing your key competence 'communication skills.'

Did you and your company have the same perception of your communication skills during your internship? What was different, if anything?

Theme	At the Beginner Stage	In Progress	Competent	Excellent
Communi-cation Skills	You greet customers and colleagues and respond to simple questions. You make eye contact with colleagues, mentors, and supervisors. You call and directly inform your supervisor if you are sick instead of sending a text message…	… and you are a bit more open to dialogue and small talk with customers and colleagues while maintaining eye contact. You proactively approach customers because you understand when they need help…	… and you can conduct and sustain conversations with customers appropriately and satisfyingly. You greet new customers even when you're busy and understand the consequences of poor communication…	… and you communicate with customers based on their needs. You have a good dialogue with colleagues and supervisors and understand the importance of your body language, facial expressions, tone of voice, and pace in communication.

Suggestions for questions you can ask your supervisor during your internship:

- 'What do you think is important for effective communication here at work?'
- 'Why is it important to communicate well?'
- 'What does good communication mean for the company?'
- 'What can I do to improve my communication skills?'

Boundary crossing in VET education

Boundary crossing in VET education refers to students' participation in two learning sites and how different boundary objects can contribute to bridging the gaps and enhancing students' learning (Engeström, 1987). This study applies the

following definition of boundaries: 'a sociocultural difference leading to discontinuity in action or interaction. Boundaries simultaneously suggest a sameness and continuity in the sense that within discontinuity, two or more sites are relevant to one another in a particular way' (Akkerman & Bakker, 2011a, p. 133).

Furthermore, boundary crossing refers to 'efforts to establish or restore continuity in action or interaction across different practices' (Bakker & Akkerman, 2014, p. 225). For example, VET students encounter differences and similarities between school-based and workplace learning regarding expectations and guidance. By appreciating these differences and acknowledging practices, students can view their own and others' experiences and practices through new lenses (Akkerman & Bakker, 2011b). The students need support in reconstructing, negotiating, and reflecting upon these differences, their skills and knowledge (Veltman et al., 2024). The classroom could be a context in which to do so.

Boundary objects are intended to contribute to and support students' learning. The boundary object alternates between the students' learning contexts. This contributes to continuity and sameness while simultaneously acknowledging the differences between the two learning sites (Akkerman & Bakker, 2011a). The 'thematic assignment' in this study aimed to bridge this gap for VET students. According to Star (2010), the boundary object is not self-contained; the object cannot replace communication and collaboration between different parties and contexts. Thus, to ensure collaboration and communication, the VET teachers play a pivotal role in VET. A boundary zone is where different perspectives from the workplace and the school context can be integrated (Tuomi-Gröhn, 2003); thus, it could be either the workplace or school, depending on the support. Riis and Brodersen (2021) discuss the boundary object and the risk of it becoming a 'tool', thus only bringing information from one context to another. They emphasise that the potential of the boundary objects needs to be appropriately realised and that the practice of the 'tool' and VET teachers' involvement must be addressed if the tool will take the task to function as a boundary object.

It has been argued that supervisors at work lack the time and commitment needed to support students' development (Arinaitwe et al., 2022; Löfgren et al., 2022; Mårtensson, 2022). Using a boundary object when planning students' work placements could address this challenge and thus ensure supervisor commitment to student activities and learning. The supervisors are aware of the students' tasks at the workplace by having the thematic assignment at hand.

Experience and reflection across boundaries

Integrating experiences across sites can be supported when workplace learning is collaboratively planned and evaluated from both school and workplace

perspectives (Billett, 2010; Billett et al., 2008; Schaap et al., 2012). Although reflection connected to work experiences may add new meaning and increase learning, guidelines and structures are needed (Billett, 2014).

Akkerman and Bakker (2011a) discuss reflection connected to boundary crossing as a vital factor in boundary learning. Knowing what to expect from students' reflection is specified by perspective-taking and perspective-making (Akkerman & Bakker, 2011a, 2011b). These concepts are inspired by Boland and Tenkasi (1995), who stress that cognitive maps and narrative structures help to support perspective-making, thus supporting students in making meaning of their experiences.

Moreover, listening to other students' perspectives, considering other students' experiences from the work placement, and seeing their own experiences through these experiences could be understood as perspective-taking. Students might create new perspectives based on this. This process of perspective-making and perspective-taking can support students elaborating on their previous understanding of vocational concepts.

Dewey (1938) refers to experience as a relationship between operational experience and feelings connected to an activity. Experience from the work placement and reflection on work activities can create more openness to new experiences and learning. These experiences are also linked to thoughts and feelings, not only the activities. Students experience when they are active in a social setting, such as interactions with colleagues, work tasks, problem-solving, and meeting expectations, within the context and values of the workplace. Dewey (1938) also emphasises that experiences that bring new or unfamiliar aspects can be a starting point for reflection and learning. According to Dewey (2005), concepts are built on experiences which include reflection. New situations have the potential to encourage students to question their previous knowledge. For students to learn from their experiences, they would benefit if the process of reflection is appreciated, planned, and supported by teachers. To strengthen their understanding and elaboration of vocational concepts, students must be given the opportunity and support to reflect on their experiences. Reflection-on-action is planned reflection 'away from' the on-hand action and reflecting upon the actions at work and considering what was done, all of which contribute to understanding the steps taken as well as seeing whether they could be developed further (Schön, 1983, 1987), for example, when looking back at experiences at the work placement. Classroom activities could be a context for reflection on previous work experiences and preparation for future workplace experiences (Billett, 2001, 2017). This leads again to boundary-crossing and refers to how teachers can support students' boundary-crossing (Arts & Bronkhorst, 2020; Bronkhorst & Akkerman, 2016; Veltman et al., 2024).

Understanding and developing vocational concepts through writing

Writing diaries (journals or logs) during the work placement has become increasingly common in Norwegian VET programmes. During the first two years of students' education, this approach is applied in the subject of vocational specialisation, where students often attend work placement to get experiences that enhance their learning (Nore, 2015; Nore & Lahn, 2014). E-portfolios are increasingly used, and software applications have often been developed to address this issue. However, as discussed by Enochsson et al. (2022), VET teachers experience several barriers to using specific digital applications that link school and work learning for their students. Therefore, the VET teachers in this study decided not to rely on a specific application or software.

Ortoleva et al. (2016) state that the role of writing in education often has two intentions: students meet expectations about learning to write, and writing enhances learning throughout their learning path. It is known that written coursework can enhance vocational learning outcomes in many areas, for example, by developing ideas and concepts related to vocational experiences (Billett, 2016).

'Writing is a means for reliving and recapturing experience to make sense of it, to learn from it, and to develop new understanding and appreciation' (Wade & Yarbrough, 1996, p. 64). Writing can help students who alternate between school-based and workplace learning, by allowing them to connect experiences and theories from both contexts. However, the VET teacher must be aware of students' competence to ensure that writing is not yet another barrier. Students who struggle with writing or lack the motivation to write need support and active guidance from the teacher (Wrenn & Wrenn, 2009). Such students might benefit from alternative forms of reflection, such as verbal communication or a digital tool, for example, taking pictures. Schwendimann et al. (2015) discuss how journal writing can be beneficial when integrating knowledge from different contexts. Therefore, writing journals can support students in reflecting on their workplace experiences and integrating them into the classroom.

Methodological approach and research design

The aim of the research was to analyse how the thematic assignments contribute to the students' understanding and elaboration of vocational concepts. The following section will present the research design and a description of the data analysis.

Table 3. Design of the field research.

Participants	**Data collection**	**Where are the data collected?**	**When are the data collected?**	**Analysis method**	**Overall methodology**
24 students and 2 VET teachers	10 semi-structured observations	In the classroom	Before students' work placement, when introduced to the thematic assignments	Reflexive Thematic analysis	Field research
24 students and VET teachers	10 semi-structured observations	In the classroom	After students' work placement, when working on the thematic assignments		
13 students	25 diaries oriented on thematic assignments from 13 of the 24 students observed	Digital files	After the second classroom observations		

Research design

In this field research, data were collected from semi-structured observations of 24 students and two VET teachers at a local school. In addition, 25 written diaries connected to the students' work placements were gathered. The data collection process followed the boundary learning-circle. This emphasises that the research focus was on teaching and learning at school, that is, what happens in the classroom. Table 3 shows the research design.

Observations of students in the VET Sales, Service, and Tourism programme were conducted when they wrote diary entries connected to the thematic assignments and when the students and VET teacher discussed these further in the classroom collectively. The observations were semi-structured, as a prepared scheme was used to support them (Polit & Beck, 2018). The method was chosen to gain insight into how students worked on their assignments and what they discussed during class. During the observations in class, notes in a prepared scheme were taken, and the observation was intended to capture moods and

body language (Hammersley & Atkinson, 1996; Thomson & Hall, 2016). During these observations, the researcher also had informal talks with the students and teachers. They were encouraged to describe their experiences with the thematic assignments (Walford, 2008). Engaging in informal discussions with the students and teachers led to them sharing their thoughts about the assignments (Hammersley & Atkinson, 1996) and capturing the students' activities in the classroom. The data were originally in Norwegian, and selected quotations are translated into English to illustrate the results.

Researcher's position and reflexivity

This qualitative study strives for insight through reflexive interpretations. Insight was achieved through dialogue with the participants, where different perspectives and practices met, and internally within the researcher (Alvesson & Sköldberg, 2018; Berger, 2015). The researcher took notes throughout the process to ensure awareness of her thoughts in a dual role as a researcher and a former project leader. 'Reflexivity is commonly viewed as the process of continual internal dialogue and critical self-evaluation of the researcher's positionality, as well as active acknowledgement and explicit recognition that this position may affect the research process and outcome' (Berger, 2015, p. 2). The researcher's role was continuously questioned due to her closeness to the project, particularly in how the researcher can influence the research outcomes (Berger, 2015).

Table 4. Phases of analysis.

1	Familiarising myself with the data from observations and written diaries.
2	NVivo software was used to structure the data. The coding process started with meaning units: what happened during the observations, and what did the students write? Initial codes developed.
3	Codes were sorted into larger groups and themes based on shared meanings derived from the codes.
4	Themes were revised. The data and the coding structure were checked several times to determine whether themes represented the data or whether the analysis was thorough enough.
5	Themes were defined and named, thus ensuring to capture the essence. Three themes were decided on.
6	Writing the article and illustration of analytical work.

Reflexive thematic data analysis of classroom activities

The data were analysed via reflexive thematic analysis. A theoretical, inductive approach was used to identify, analyse, and report different patterns in the data. The research question drove the coding session. Data from the classroom observations and the written content of the students' diaries were used to identify patterns. The analysis was based on Braun and Clarke's six phases, shown in Table 4 (Braun & Clarke, 2021, 2022).

Table 5. Examples from the coding process of data from observations and diaries.

Meaning unit **Data:**	**Condensation**	**Codes**	**Themes**
A student stops writing. The VET teacher asks the student, 'Why do you think they placed this product by the entrance?'	The VET teacher asks the students questions when they stop writing	The VET teacher adapts the questions, both level and amount, to the individual student	VET teachers' adaptive guidance Reflection across boundaries
A student says, 'I find it difficult' while looking into the air	The student cannot answer question	The student finds it challenging to find examples for the work placement questions. Does not understand the concept	VET teachers' adaptive guidance
The VET teacher asks, 'Could the company benefit if the sign were placed elsewhere?' The student writes: 'I think this is a good place'	The student writes short answers	Diary as a tool for further reflection	Writing diaries as a starting point for students' reflection
In the assignment: 'Give an example of a poster or banner and explain why it's placed there'. The student writes: 'See picture above'	The student answers with photographs	Questions exemplified by using photographs	Writing diaries as a starting point for students' reflection

The phases of analysis resulted in the definition of three themes, and the coding process is shown in Table 5. It was valuable to look beyond the words and actions of the participants (Braun & Clarke, 2021, 2022). By looking more closely at the meaning of the words, namely the context in which they were expressed and in relation to similar quotations, it was possible to understand that the student

found it difficult to link theory to practice and needed more guidance from the VET teacher. An example from Table 5 is when one student said, 'I find it difficult.' If the words had only been analysed semantically, the resulting interpretation would have been that the questions were complicated, that the student lacked the necessary writing skills, or that there was too little time to finish their writing.

Results

The results are structured as three main themes from the analysis related to the research question. The themes are 'Writing diaries as a starting point for students' reflection', 'Reflection across boundaries', and 'VET teachers' adaptive guidance'.

Writing diaries as a starting point for students' reflections

The analysis shows that writing diaries is an opportunity for students to start their process of reflection. The student group in this study was accustomed to writing about their experiences at their work placements. The data show that the students wrote just a few words and exhibited little reflection in their written work. Instead, the students use pictures to exemplify their answers in the thematic assignments.

The following example shows how the reflection process started with a question in the assignment:

> 'Give an example of a poster or banner and explain why it is placed there.'
> The student wrote:
> 'See picture above.'
>
> The following is another example of a question in the assignment:
> 'Could the company benefit if the sign were placed elsewhere?'
> The student wrote:
> 'I think this is a good place.'

The written material from the students' diaries consisted mostly of short answers. However, despite the lack of words, the pictures showed that the students understood the questions and identified which images were related to and hereby answered the questions in the assignment. The students' writing alone did not demonstrate or indicate a complete understanding of the vocational concepts they encountered at the workplace. Hence, the students' opportunities to answer questions with pictures also helped them express themselves and expanded the data sources for the researcher's analysis.

The writing process initiated a dialogue between the students and the VET teacher. This classroom activity functioned as a starting point for elaborating on vocational concepts. In one example, a VET teacher stood beside a student

writing in a diary in the classroom. The student looked at the assignment rather blankly. The VET teacher asked, 'I see you have taken a picture outside the shop. What does this picture show?' The student answered the teacher, and they continued discussing the vocational concept. After talking to the teacher, the student seemed encouraged to answer and showed better understanding. Even though the students wrote little, the photos taken at the workplace were used to 're-live' their experiences at work and bring them into the classroom.

Some students did not want VET teachers' support while writing their diaries, and they answered their teacher with few words. This could be understood as a lack of motivation for writing but could also indicate students not understanding the concepts in the thematic assignment. Writing diaries in the classroom can support student learning process by being a starting point for further reflection. However, the writing must be facilitated and supported by VET teachers.

Reflections across boundaries

The data show that planned reflection in the classroom, related to thematic assignments, contributed to the students' understanding of vocational concepts. In the classroom, firstly, the students wrote diary entries connected to the thematic assignments, followed by a discussion on the vocational concept with the teacher and peers. This planned activity was intended to allow students to re-present and re-live their experiences at work in a group discussion and relate these experiences to vocational concepts.

In the classroom, the teacher initiated the discussion by asking the students to share their experiences from their work placement related to a specific vocational concept. The teacher encouraged students to participate by referring to their experiences from their work placement, which were often situations the teacher had observed when visiting the student. During this classroom discussion, the students listened to various examples and saw how vocational concepts were understood in different contexts and how tasks are solved differently in other work environments. As well, the students observed differences and other practices, which may help them see their own experiences from a new perspective.

Experiences from work were mediated through their writing of diaries and re-presented by using their own words in further discussion. For example, in a discussion about the vocational concept of 'place', the teacher asked the students why the grocery shop is by the shopping centre entrance. After some silence, one student answered, 'It's placed near the car park'. Then, several students started answering: 'Because it's inconvenient to take all the food down the stairs', 'Because they use a trolley', and all the students seemed to agree on why the shop should be placed precisely where it is. This can be understood as a 'moment of learning'. When students successfully formed their thoughts about the issue at

hand, it seems they experienced an elaborated understanding of the vocational concept.

The teacher moved on and asked about the placement of a shop at which none of the students had their work placement. This leads to a generalisation of the vocational concept. During this discussion, the students understood the concept discussed and connected the concept of 'place' to their work placements. In addition, many students understood the vocational concept of 'place' connected to other students' placements and unfamiliar work environments. Due to the VET teacher's guidance and support, the classroom discussion seemed to open the students to participation. The students' understanding was more visible during the discussion with the teacher and peers than during the writing process.

VET teachers' adaptive guidance

The VET teachers' role in supporting the students and adapting this support to the individual student was decisive when bringing the students' experiences from the work placement into the classroom. When the students were encouraged to answer questions in the thematic assignments in the classroom, the teacher supported them by asking questions and encouraging them to participate. The questions in the thematic assignments concerned vocational concepts related to the workplace, and the VET teachers supported the students by bringing examples from student workplaces into the discussion.

The vocational concepts in the thematic assignments were met and prepared in the classroom before work placement by ordinary classroom activities, for example, group work and discussion with peers and teacher. This prepared students for further introduction to the concepts during their work placements and could be considered reflection-for-action. Working with the thematic assignment again in the classroom after their work placement supported students in bringing work experiences into the classroom. It was apparent that the VET teacher's role in using the thematic assignment was crucial, both in preparing for the work placement and by facilitating reflection after the placement.

In one of the classroom discussions, the students initially remained entirely silent when the teacher asked questions related to the thematic assignment. Then, after some reflection time, the teacher asked one of the students a more precise question: 'Do you remember that sign outside your shop? The one that shows the deal of the day. What do you think is the purpose of that sign?' The student answered the question. Then, the teacher showed the students example of another sign. Still, the students remained silent. The teacher asked another student a more specific question and got an answer demonstrating an understanding of the concept discussed. Following up, two more students gave examples of the vocational concept from their work placements without being asked. When the teacher supported students by bringing examples from their

work placements back into the classroom in this discussion, they contributed to the students' understanding and elaboration of vocational concepts. When students saw other examples, they were able to see their work placement through them.

The analysis shows that VET teachers used the thematic assignment as a mediating artefact in guiding students individually and collectively. During writing, the teachers adapted their guidance according to the students' level of competence, supporting either the writing itself or student understanding of the thematic assignment. The planned activities in the classroom seemed pivotal in supporting students' development of vocational concepts; however, this depended on how the teacher supported the activity.

Discussion

These findings illustrate how writing can serve as a means of reliving and recapturing experiences to make sense of them, learn from them, and develop new understanding and appreciation, as discussed by Wade and Yarbrough (1996). This re-living of the experience can potentially open the students up to new experiences and contribute to their understanding of concepts. Using photos and the VET teachers' questions fosters further discussion with their teachers and peers. Connecting experiences from their work placement to vocational concepts in the thematic assignments can support their development and understanding of vocational concepts. Schwendimann et al. (2015) discuss how, for example, journal writing can be valuable when connecting knowledge from different contexts, and Billett (2016) stresses that writing can contribute to students' development of ideas and concepts. When students write in diaries, they are supposed to relate their experiences from the work context with the concepts met in the school-based part of their education.

Writing is a tool to support perspective-making in the classroom. This enables students to make meaning of their experiences from the work placement through narratives (Boland & Tenkasi, 1995). Other findings show that writing alone leads to little reflection, but when guided and supported by VET teachers, writing connected to the assignments can serve as a starting point for further reflection. Making narratives through diaries supports students' perspective-making and further perspective-taking through dialogue with others in the classroom. However, analysis of the diaries shows that only a few students demonstrated reflection through perspective-making if not supported by the teachers while writing.

The guidance from the teachers was realised differently: some students received guidance on the writing process, and others were guided to support their understanding of the vocational concept. Ortoleva et al. (2016) discuss two

benefits of writing: Students can learn how to write, and they learn through writing. Some students used only a few words when writing in the diary and showed little interest in receiving support for their writing. One conclusion one can draw is that students might be unmotivated for this writing task or for writing at all. Wrenn and Wrenn (2009) state that writing could be an additional barrier and, hence, could decrease motivation. This must also be considered when students write diaries connected to concepts.

Using thematic assignments in the classroom, both diary writing and having a discussion supported by the VET teacher, was a planned activity after work placements. This opportunity to reflect could be understood as planned reflection-on-action since the students are encouraged to reflect upon their experiences (Schön, 1983, 1987). When students reflect on what they have experienced during their placement, they can increase their understanding.

The findings reveal that students can relate what their peers share to their own experiences. Listening actively and sharing their experiences broaden their comprehension of the discussed concept. Students not only draw examples from their workplace but also discover new instances in unfamiliar settings. This active engagement can be seen as the students demonstrating perspective-making and perspective-taking (Akkerman & Bakker, 2011a; Boland & Tenkasi, 1995). If writing diaries aids in students' perspective-making, it also appears to support individual students in classroom discussions in further perspective-taking. The guidance and support from VET teachers seem to have opened the door for student participation in classroom discussions.

It is worth noting the diversity of learning styles among students. They demonstrate their understanding of vocational concepts in various ways, including through writing (Akkerman & Bakker, 2011a; Boland & Tenkasi, 1995). Even those who use fewer words in their diaries can still be seen as engaging in perspective-making, as their writing serves as a starting point for further discussion. The classroom discussions further highlight the students' diverse learning styles, with some describing their own experiences related to the concepts and others absorbing the experiences of their peers. This diversity enriches the learning environment and fosters a deeper understanding of the concepts.

The results show that planning and facilitating reflection are vital. This coincides with Billett (2001), who states that workplace learning must be planned for by preparing the students for their next work placement, ensuring support in the workplace, and facilitating reflection when they return to school. This could strengthen students' understanding of vocational concepts as well as introduce them to new ones.

When VET teachers support students by bringing examples from the work placements into the classroom, they contribute to students' understanding and

elaboration of vocational concepts through perspective-making and -taking (Boland & Tenkasi, 1995). Since students show different levels of understanding, teachers adapt by using questions and examples from the placements. These students need support in reconstructing, negotiating, and reflecting upon these differences, as well as their skills and knowledge (Veltman et al., 2024). The classroom could be a context in which to do so. This may support students by fulfilling a bridging function and further developing vocational concepts (Akkerman & Bakker, 2011a).

The classroom seems to be a 'boundary zone' since the VET teacher uses thematic assignments as boundary objects. This is by being a context for bridging a gap when using a boundary object as a mediative artefact in the guidance of the students (Tuomi-Gröhn, 2003). According to Star (2010), a boundary object is not self-contained, as it depends on communication and collaboration between different contexts. The results show that the teachers conduct and initiate this communication and collaboration. Hence, the teacher's role is vital if a 'thematic assignment' is to work as a boundary object. Riis and Brodersen (2021) emphasise that a boundary object could become a 'tool' or container. If a thematic assignment only 'transports' information from the workplace into the classroom, students will not benefit from the assignment's potential. By having a VET teacher who facilitates learning by planned reflection and supporting the students, the thematic assignment can restore continuity in the learning (Bakker & Akkerman, 2014).

Conclusion

This study shows that thematic assignments can serve as boundary objects when VET teachers plan and facilitate their use. Consequently, such assignments can be instrumental in students' reflection on vocational concepts and for their understanding and elaboration during classroom activities.

The teachers use thematic assignments before, during, and after their students' work placement and in the classroom with the intention of enabling students to integrate their experiences from both learning sites through teacher guidance (Billett, 2001, 2010; Billett et al., 2008; Schaap et al., 2012). Students' workplace experiences are taken back to the classroom by using the thematic assignments, including diary writing, which works as leverage and is a springboard for classroom discussion. This finally enables them to participate in other students' learning experiences. Through this external perspective, this kind of 'another-mind' experience, their understanding of vocational concepts broadens and deepens.

Reflection through written assignments or diaries has often been neglected or removed from work tasks (Wegener, 2014). However, the results show that VET

teachers facilitate students' reflections on work situations in the workplace prior to reflection in the classroom. This is seen through the discussions and contributes to reflection 'on-action' in the classroom (Schön, 1983) but also 'for-action' to prepare students for new workplace experiences.

By enabling students to see and discuss different perspectives related to their experiences from work placements, the VET teacher's facilitation contributes to students' reflection processes. Therefore, for VET teachers, having organised a plan and developed a method for the use of the boundary object is a prerequisite for boundary crossing (Bakker & Akkerman, 2019; Veltman et al., 2024). Without teacher support and adaptive guidance, the experiences gained during work placements will be left unused and will not contribute to an elaborated understanding of vocational concepts.

Using thematic assignments supports VET teachers and students in finding examples of theoretical vocational concepts from work placements and bringing these concepts into the classroom, though not only functioning as a tool or a container by transporting information from one site to another. The assignments integrate learning from two contexts and are a starting point for further reflection facilitated by teachers. Encountering vocational concepts in different contexts and reflecting on the concepts through perspective-making and perspective-taking could support students' development of vocational concepts (Akkerman & Bakker, 2011a; Boland & Tenkasi, 1995).

The concept of boundary crossing was applied in the analysis to frame a central empirical finding: VET students' connection-making between school and work by using the boundary object 'thematic assignment' needs to be supported by conscious framing from VET teachers. This support contributes to establishing continuity across different practices and facilitates reflection across boundaries (Bakker & Akkerman, 2014). Supporting VET students' reflections at school and the workplace through boundary objects fosters the development of naïve concepts into more elaborate ones.

The Norwegian Completion reform (St.meld. nr. 21 (2020–2021)) aims to help more students complete their education and enter the labour market. Although Norway has one of the lowest NEET rates (young people who are neither in employment nor in education or training) in Europe, early school leaving is still a significant issue (Cedefop, 2024). A focus on boundary-learning could be crucial to breaking the cycle for students who are low achievers (Aakernes et al., 2022), and the findings validate the emergence of new practices that combine the benefits of school-based learning and work placements.

Although this research relates to a Sales, Service, and Tourism programme in Norwegian VET, thematic assignments and their use can be relevant to other vocational programmes, including outside of Norway. This study indicates that school- and work-based learning can be linked pedagogically through classroom

activities using thematic assignments. It is evident that the role of the VET teacher is of great importance in preparing students for work placements and facilitating their sharing of experiences when they return to the classroom, thus supporting their vocational concept understanding and development.

Acknowledgment

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Vocational students' citizenship education as a conditioned practice: School leaders' and teachers' perspectives of history, religious education, science studies, and social studies

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Abstract

Swedish vocational education and training programmes have become increasingly aligned with labour market demands and employability, with consequent risks of marginalisation of citizenship education and formation. Four subjects that have traditionally played important roles in this, history, religious education, science, and social studies, are now only taught in short courses that are minor elements of the programmes. To obtain insights into the teaching and learning conditions in these key subjects for citizenship formation in Swedish VET programmes, school leaders and teachers were interviewed. The analysis, informed by frame factory theory and Biesta's conceptualisations of three functions of education, revealed clear differences in the school leaders' and teachers' views of the conditions. School leaders articulated problems related to internal frame factors, such as the teachers' engagement and students' attitudes to the subjects, while teachers referred to external frame factors, such as the organisation of teaching. However, when talking about the VET students and their learning, both school leaders and teachers expressed notions of the students as in need of qualification and socialisation, thereby focusing on preparation of the students for their future professional and civic roles, with little room for substantial subjectification.

Keywords: citizen formation, upper secondary school, vocational programmes, educational functions, frame factors, subjectification

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Introduction

The national curriculum for Swedish upper secondary school states that all programmes and activities should be permeated by education for democracy (Swedish National Agency for Education, 2011). This is conceptualised here as any education that contributes to students' development of citizenship and hence both individual students' democratic participation and democracy in society. We base our notion of citizenship education on *pedagogic rights* as advocated by Bernstein (2000). This is the right for all individuals to acquire the means for critical understanding and new possibilities, the right 'to be included socially, intellectually, culturally and personally' (p. xx) and the right to participate in 'procedures whereby order is constructed, maintained and changed' (p. xxi). The first of these rights is dependent on students' acquisition of 'powerful' esoteric/theoretical knowledge, which refers to their development of intellectual, social, moral, and civic power (Wheelahan, 2007; Young, 2008). A critique is that certain conceptualisations of such knowledge are underpinned by a rationalistic bias, favouring propositional and theoretical knowledge. This bias may exclude practical and tacit elements that are important for the students' understanding and personal development (Carlgren, 2020). Following Biesta (2009, 2020, 2022) we also recognise three key functions of citizenship education: qualification through acquisition of the knowledge and skills needed to participate in democratic processes; socialisation to the norms and values of society; and, most importantly, subjectification (i.e., becoming a subject). Although the three functions are interlinked, subjectification should be at the centre of education according to Biesta (2020). Subjectification is a relational process that provides students opportunities to meet the world as a subject, or first person, involving the acquisition and use of knowledge that is potentially transformative for both the individual and society (cf. Hopmann, 2007).

The Swedish 3-year vocational education and training programmes (VETPs) include compulsory courses in history, religious education, science studies, and social studies. They were gradually included in VETP curricula from the late 1980s to 2011 due to their perceived potential to promote citizenship education (Hellstenius, 2011; Ledman, 2014). Despite the official stipulation that democracy should permeate all education, citizenship education is less prominent in VETPs than in the higher education preparatory programmes (HEPPs) in Swedish upper secondary schools (Nylund et al., 2017). Moreover, the 2011 curriculum reduced the emphasis on democratic objectives generally, and hence the proportion of time allocated to the foundational subjects[1] in the VET programmes (Nylund, 2011). Arguments for this decision were to a large extent based on an understanding of VET students as mainly practically oriented and not interested in learning theoretical subjects (Terning & Tsagalidis, 2020). A conclusion of previous research is that VETPs tend to be heavily oriented towards socialisation

in line with workplace and work sector cultures, with consequent marginalisation of citizenship education and subjectification (cf. Nylund et al., 2020; Rönnlund et al., 2019). Partly to assist efforts to counter this marginalisation, a research and development project (further described in the Methodology section) was established in which teachers and researchers collaborated to develop teaching and didactical knowledge about citizenship education in the four mentioned foundational subjects. The collaborative process in the project raised questions regarding conditions influencing associated classroom practices. This article presents the results from an interview study with upper secondary school leaders responsible for VET programmes and teachers of the four subjects. The aim is to enrich understanding of conditions that influence teaching and learning in the four subjects – as key elements of the students' citizenship education – in Swedish VETP settings. The research was guided by the following questions: What are school leaders' and teachers' respective knowledge and perceptions of the possibilities and constraints in teaching and learning in history, religious education, science studies, and social studies? What perceptions and logics inform the citizenship education enabled by courses in the four subjects, and which functions of education (qualification, socialisation, subjectification) are emphasised in them?

Swedish citizenship education and VET

Following a reform in 1970, upper secondary schools in Sweden have offered both VETPs and HEPPs, and now 30 percent of the upper secondary students attend a VETP (Swedish National Agency for Education, 2024). The VETPs are largely gendered, reflecting gender divisions in the labour market, with some programmes directed towards 'feminine' caring work (e.g., the Health and Social care programme) and others towards 'masculine' production work (e.g., the Building and Construction programme), but there are also some less gendered, service-oriented programmes (e.g., the Hotel and Tourism programme) (Swedish National Agency for Education, 2024). In the Swedish context, VETPs are mainly chosen by students with parents with no higher education (SCB, 2023). The VETP curriculum has also been found to reproduce social positions (Nylund et al., 2017).

As upper secondary vocational education is organised very differently in different national contexts (Kap, 2015), it is difficult to generalise this particular case to other countries. However, there has been a clear tendency in recent years, in Nordic and many other countries, to shift the focus in upper secondary VETPstowards employability, strongly aligned with labour market demands and at the expense of education for democracy (cf. Jørgensen, 2018; Nylund et al., 2018). Consequently, the students have fewer opportunities to develop critical

thinking and engage with societal and political issues (Ledman et al., 2018; Nylund et al., 2017, 2020; Rosvall et al., 2020; Rönnlund et al., 2019).

The longstanding vocational–academic divide influences perceptions of the nature and role of VET (e.g., Nylund et al., 2018) and its presentation in, for example, policy documents (Nylund et al., 2017). The associated discourses carry presumptions about vocational students (Terning & Tsagalidis, 2020) and reproduce social order and positions (Carlbaum, 2012). Practical knowledge is often regarded as easier to acquire and less 'powerful' than theoretical knowledge in both educational settings and society at large (Carlgren, 2020). Teachers, study and career advisors, and principals, also often reportedly have preconceptions that VET students lack the ability or motivation to tackle theoretical subjects (Johansson, 2009; Olofsson & Panican, 2020), with consequently low expectations for their achievements.

In contrast, VET students have reportedly found teaching of foundational subjects to be too elementary (Korp, 2012; Rosvall, 2012). Students' experiences of foundational subject teaching depend on how teachers transform and realise the curriculum, a process that is strongly conditioned by inner and outer frame factors (cf. Dahllöf, 1999). Thus, these factors warrant attention, but they have been largely neglected. There has also been little investigation of Swedish VET students' own perceptions of citizenship education and their citizen identities. A study by Knekta et al.(forthcoming) found that most Swedish VET students think that citizenship education is important and expect to engage in future elections, but few of them think it is likely that they will express and discuss their opinions in public contexts. These findings indicate that VET students' citizenship education may require strengthening. As a base for that, more knowledge of the possibilities and constraints for teaching VET students and their provision of opportunities to acquire citizenship education is needed.

History, religious education and social studies (e.g., Foster & Crawford, 2006; Englund, 2005; Hartman, 2000; Ledman, 2014; Sigauke, 2013; Thornton, 2017) have long been ascribed important functions in citizenship education, and the importance of science studies for citizenship formation is also increasingly recognised (Evagorou et al., 2020; Hodson, 2003). However, following Yuval-Davies (2011), it is important to recognise that notions of citizenship and individual opportunities for citizenship formation are interrelated with identities formed by power structures. Citizenship education tends to be informed by a traditional conceptualisation of the citizen as white, male and middle class (Arnot, 2009; Yuval-Davies, 2011). This ideal carries norms that have been shown to reduce the visibility of democratic identities and engagement of other social groups (Reay, 2008; Schutz, 2008), but there has been little investigation of the processes involved and their implications. In summary, there are apparent needs for a deeper understanding of the factors that influence citizenship education and

the associated practices and processes, particularly in Swedish VETPs. This study seeks to contribute to such understanding.

Methodology

This study was part of a collaborative research and development project in which the authors were initially invited to collaborate with teachers who saw a need to find ways to jointly develop citizenship education in Swedish VET settings. The teachers were involved in teaching history, religious education, science, and social studies at two upper secondary schools in one municipality in northern Sweden. In the collaborative process of the project an apparent need was identified to increase knowledge of how conditions constrain teaching and learning in the four subjects in the VETP settings. To elucidate these conditions, we (the authors) interviewed both school leaders and teachers. It should be noted that we do not regard these four subjects as the sole contributors to citizenship education. On the contrary, we believe that citizenship education should permeate education in all subjects.

Interviews

The two schools were located in a medium-sized town, and they were run by the municipality. One school largely offered VETPs, while the other school only offered two VETPs, the rest being HEPPs. In total, six school leaders and ten teachers who actively taught one or more of the four subjects were interviewed. The teachers involved had pronounced interest in citizenship education and participated in the collaborative developmental project. The school leaders who were interviewed were responsible for different VETPs and therefore of interest for this study.

The interviews with the school leaders were conducted to capture possible variation in their notions of citizenship education, and their views on the organisation and teaching of the four subjects in the VETPs that their schools offered. Due to the pandemic, the school leaders were interviewed via Skype. The interviews were semi-structured (Kvale & Brinkmann, 2014), and the questions concerned citizenship education, both generally and specifically regarding needs of their VET students. The school leaders were also asked about their views of the teaching practices in the VETPs for which they were responsible, such as team composition and teacher collaboration. We also posed questions about the general conditions and frames for teaching and factors that influenced the scheduling of subjects and positioning of subjects in different grades. The interviews lasted between 50 and 70 minutes.

The teachers' views were explored through group interviews, which reportedly allow deeper exploration of the discussed issues than interviews with

single individuals, as interactions of the interviewees promote the emergence and exploration of important themes (Wibeck, 2000). The ten teachers were interviewed in three groups of three or four, and encouraged to reflect on their teaching, especially regarding possibilities, constraints, and limitations for learning. Among other matters, they were asked to reflect on potentially relevant organisational aspects, such as the timetabling, sequence of courses, composition of student groups, and the curricular framework. We also invited the teachers to share their experiences and perceptions of others' preconceptions of vocational students, and factors that they thought helped or hindered the students' learning in their subjects. The group interviews lasted between 45 and 60 minutes. All interviews with teachers and school leaders were recorded and transcribed. The teachers and school leaders have been anonymised using numbers to protect their confidentiality. The project received ethical approval from The Swedish Ethical Review Authority (Dnr 2020-01188). The interviews and analysis were done in Swedish, and selected quotes have been translated into English to illustrate the results in this article.

Theoretical concepts

Teachers work in complex settings with myriads of contextual factors and have equally numerous personal characteristics. Hence, according to a model by Dahllöf (1999), possible teaching and learning achievements in any given setting are conditioned by both external and internal 'frame factors'. *External frame factors* may be related to available teaching time, teaching groups, school premises, policies, and schedules, while *internal frame factors* may include various characteristics of the teachers and school leaders, such as their social backgrounds, identities, and values. Frame factors may also range from micro-scale variables such as specific classroom practices (Lindblad & Sahlström, 1999) to macro-scale variables such as societal structures (Lundgren, 1999). Thus, both macro and micro perspectives may be important when addressing the implementation of educational policies, the knowledge acquisition and learning results that are (and can be) achieved in practical classroom situations, and the frame factors that help or hinder the possibilities (Lindblad et al., 1999; Lindmark, 2013). Frame factor theory is often applied in classroom studies or analyses of teachers' practices, but here we apply it also to school leaders since they are pedagogic leaders and thus responsible for ensuring that students acquire knowledge and skills specified in the curriculum.

Frame factor theory focuses on learning that can be achieved within given frames. Biesta (2009, 2020, 2022) argued that education should be designed to allow students to meet the world, by helping them to become subjects who can influence their own lives and society as it changes. This existential element of education is the core pedagogical task according to Biesta (2020) but is often not

recognised as an important objective in subject teaching or subject didactic research (Jägerskog et al., 2022). Biesta (2020) also identified three key functions of education that cannot be separated as students need to learn about the world and obtain tools required to live in it as it is both now and in the future. Two, *qualification* and *socialisation*, have obvious importance for preparing them to engage in professions and civic society, through acquiring existing knowledge and learning to conform to existing practices and norms (Biesta, 2009). However, practices and norms change, and new knowledge emerges, so students must also learn to participate in a changing world through *subjectification.* Hence, teachers should encourage each student to be a subject in the world, stimulate their desire to be active, and enable them to act or refrain from acting. The goal is for the student to achieve 'qualified freedom', 'in and with the world' (Biesta, 2022, p. 3), through being empowered and enabled to engage with the world. Subjectification does not have predefined goals, and it may even be regarded as conflicting to some degree with goals of qualification and socialisation (Hasslöf & Malmberg, 2015), so achieving an appropriate balance between the three educational functions is not straightforward, but important. Education must also fulfil three criteria to be subjectifying (Biesta, 2022). First, it must be disruptive in the sense of offering a confrontation, *interruption*, between the learner's own perceptions and reality. Second, there must be pauses and time for reflection, *suspension*, in which learners have opportunities to figure out what the interruptions mean for them and to test, fail, and repeat in the learning process. Finally, since confronting gaps between one's own perceptions and realities of the world can be challenging, s*ustenance* in the form of support and nourishment from the teacher is needed (Biesta, 2022).

Analytical method

The analytical process included both inductive and deductive approaches (Vaismoradi et al., 2013). In a first analytical step, the interviewees' responses were subjected to thematic analysis to identify patterns in them and obtain a rich description of their content (Braun & Clarke, 2006). The frame factor theory was then applied in an analysis of what frame factors that were highlighted and whether they were external or internal (cf. Dahllöf, 1999). This meant that we focused attention on variables that the interviewees described as conditioning the teaching and learning process, for example available time, students' knowledge and motivation, group size, and subject content. In a third step we used Biesta's conceptualisations qualification, socialisation, and subjectification (interruption, suspension, sustenance) to identify what functions of education the interviewees made relevant when talking about the conditions for teaching and learning the four subjects and the VET students' citizenship formation. In the following result

section, both frame factor theory and Biesta's concepts are deployed simultaneously.

School leaders' and teachers' views of VET students' citizenship education

In the result section we here first present the school leaders' expressed views of VET students' citizenship education and then those of the teachers. The views have some similarities, but also some role-related differences.

School leaders' views

In the interviews, school leaders highlighted the importance of citizenship education by emphasising several key areas that should be addressed in education. They all expressed beliefs in the importance of fostering democratic values, promoting human rights, and countering prejudice. Some of them expressed beliefs that students need both knowledge and courage to want to act in society. Some also highlighted the importance of general knowledge and that school should provide a common frame of reference. The following quotation illustrates a school leader's recognition of the importance of both general knowledge and the school's mission to shape future citizens:

> I think that this is the kind of knowledge that every member of Swedish society should have, some foundations. Everyone should know our history, world history from different perspectives, and have some knowledge of religions and their meanings, both historically and in the present. To have some knowledge of society and how it is structured. Sustainable development-oriented thinking in science studies… We shouldn't just train plumbers, welders or carpenters, we also have a social mission to somehow provide future society with some types of competent citizens. Where do different opinions come from? From different perspectives. (School leader 3)

The quoted school leader clearly regarded 'general' knowledge of various aspects of society as important for qualification, in terms of Biesta's educational functions. The leader also clearly acknowledged the importance of socialisation in the statements that students should have some knowledge of the world and social structures. The last two sentences of the quotation also provide hints of the importance of subjectification, but in terms of the development of 'competent' citizens. This implies that learning about society and how it currently works, in a qualifying manner (cf. Hasslöf & Malmberg, 2015), may be most crucial. The school leader also mentioned the importance of learning about different opinions, different perspectives and their origins, implying that students should have opportunities to confront interruptions of their views of the world. However, the school leader mostly stressed needs for students to 'learn about', rather than learning to actively engage in shaping the world and social structures,

thereby subordinating the subjectifying function of citizenship education to the other functions.

The interviews revealed that there is a belief that it is more challenging to teach vocational students about the four subjects than students of other programmes such as HEPPs, partly because of the heterogeneity of groups taking the various vocational programmes, in terms of both students' backgrounds and motivation. Some of the school leaders also emphasised that many VET students need special education or expressed perceptions that the students are not interested in the four subjects and may even choose not to complete some courses as they can graduate without the associated credits. Overall, school leaders conveyed ideas that the students themselves want to omit some subjects in their education. One school leader highlighted the challenges of VET students' disinterest in the four short courses as follows:

> Well… it's a bit different, I'd say. Many students choose a vocational programme because they're interested in practical things and not much of a theoretician. We also see that the theoretical elements in vocational programmes can be difficulties, just like the theoretical elements of other subjects. For the teachers, it's very much about adapting the teaching and making it as practical as possible. It may not be as easy in these fifty-credit courses […] Students prefer doing things practically and using them in the theoretical aspects, rather than the other way round. (School leader 4)

The school leader here clearly expressed views that students' conceptions of the subjects and their lack of interest in the subjects are fundamental problems in teaching, indicating that the students' lack of motivation is an internal frame factor that teachers should consider. Through the gaze of Biesta's three functions, knowledge in the four subjects is described here as purely theoretical, and as something to be provided, in a qualifying sense. The VET students' socialisation into the teaching practices of the four subjects is described as problematic and foregrounded, while the subjectification function is not articulated at all.

Both the positioning and in between order of the four courses in the programmes are influenced by workplace-learning periods and other subject courses. The school leaders stated that they faced organisational problems and argued that the position and chronological order of the four courses in the vocational programmes were often inherited from previous school leaders. The following quotation illustrates problems that 'inherited' organisation can lead to:

> It's something that's been inherited, this is how it has been. I'm not really sure if, how far back, if the teachers have known about it or if it's just […] Like now, I've been lucky enough to have a teacher who has had social studies [course] 1a:1 and social 1a:2 in the Child and Recreation programme for two years in a row, and he has got to know both how the programme works and the other teachers, who teach other subjects, and has been curious to find out for himself: what do you work on in your courses, is there something we can do together? I think it's a great advantage that the same teachers come back when you want to build on such things. (School leader 2)

We interpret the inherited organisation emphasised by this school leader as an external frame factor that was considered unfortunate, and the mentioned teacher's commitment and interest in overcoming the organisational problems as highly advantageous internal frame factors. Thus, the school leader allocated much of the responsibility for the students' success to the teacher, at least in this case.

Furthermore, some school leaders noted that external conditions, such as financial constraints, result in large teaching groups, with students enrolled in different programmes studying together. Recruiting separate teachers for the courses of each of these programmes would be too costly, as there are generally too few students, according to the school leaders.

Another organisational problem identified from the school leaders' statements is that the history, religious education, science and social studies teachers often make short-term contributions to the vocational programmes because they are not regular members of VETP teacher teams. Instead, they are often members of teams that are generally engaged in HEPPs, such as the social sciences or natural sciences programmes. They are described as 'satellite teachers' who are not evenly distributed across the teams. The school leaders highlighted these teachers' limited involvement in VETPs and greater engagement in other programmes. Thus, the individual teachers' engagement was a significant internal frame factor.

School leaders also stressed that VET students would benefit from more student-centred pedagogy. However, this is challenging because the courses are short, they must be taught in large groups, and the subject teachers need to teach many groups to fulfil full-time teaching requirements. This fact, that the teachers must engage and try to establish relationships with numerous students of many heterogeneous classes is seen as an unfortunate external frame factor.

To summarise, the analysis of the interviews with the school leaders indicates that they tend to see qualification as the main mission of history, religious education, science studies, and social studies courses for VET students. However, the overall goal of the VET programmes is seen as socialisation into the vocations and professions that lie ahead of the students. The subjectifying functions of the subjects are thus subordinate. Theory and practice are also constructed as opposites in the school leaders' discourse, so the four subjects are seen as solely theoretical. This is not surprising given the traditional academic–vocational divide, associated assumptions regarding the subjects, and corresponding overall organisation of the schools. The school leaders recognised that external frame factors affect teaching, but largely attributed the deficiencies in citizenship education to internal frame factors, especially characteristics of the teachers and their teaching, together with the students' disinterest and unwillingness to learn the subjects.

Teachers' perspectives

The teachers particularly emphasised the importance of external frame factors. They expressed beliefs that the organisation of the teaching often posed obstacles, for example, their courses are often placed at times in the schedule when the students' energy is running out. The teachers also argued that it is difficult to collaborate across subjects in the current organisation, because of a variation of where the courses are positioned in the three-year VETPs. For example, in the same vocational programme, social studies courses may be placed in year one and history in year two, making cross-curricular teaching of social studies and history impossible. The following quotation describes the alienation that these subject teachers may experience in the VETPs:

> At the school, no foundational subject's teacher in these subjects is a member of the Child and Recreation programme teacher team. Therefore, there is no feeling of teaching together with other teachers. One doesn't have time to attend other team meetings and misses out on what is happening in the programme. I'm an 'outsourced teacher' and sometimes find out things at the last minute, for example, about schedule changes, […] or project work week that I haven't been informed about. One is forgotten because one is not part of the team. (Teacher 5)

The teacher here describes herself as a satellite teacher and that the organisation of teaching also implies a sense of subordination to other subjects and teachers, especially vocational subjects. This feeling is reinforced by teachers' perceptions that the students have little interest in history, religious education, science, and social studies:

> All [students] talk about Swedish, English and maths because you have to pass them. In our programme at least, you don't pass if you don't take any of those [courses]. Then there's the fact that they usually prioritise the programme-specific subjects, that's what they've aimed for when they chose our programme. So sure, maybe our subjects end up last, but it doesn't feel like they're losing status, I still think it feels like it's important that we spend time on them. (Teacher 2)

This teacher clearly believed that students prioritise their vocational subjects, sometimes to the detriment of other subjects, especially the interviewed teacher's subjects, because the students focus on passing courses in subjects that are essential for graduation. However, the quotation also suggests that the students still consider the four subjects to be important. Thus, the problem may be due to external frame factors, such as the lack of requirement for the students to pass the courses to obtain their vocational qualifications, rather than students' lack of interest in the subjects.

An insight that emerged from the interviews is that the workplace-learning periods in the various programmes are placed so that the opportunities to acquire in-depth knowledge in the four subjects are reduced. For example, a period of workplace learning may interrupt the teaching of part of a social studies course,

which raises difficulties for both the teacher and students, as illustrated by this quotation:

> They don't really lose just five weeks, because in the week before they go on workplace-learning you can't start anything. Now I've finished a section until the autumn holidays, and they've done tests and so on, but they haven't finished before the workplace-learning period, so that week is almost lost. One can't … what should you start with? When they come back for just two weeks before Christmas. It feels like a lot of time just disappears. (Teacher 5)

The teacher here refers to the organisation as a problem for teaching and students' knowledge acquisition. External frame factors such as the positioning of workplace-learning and its interruption of the courses have a negative impact. The teacher needs to plan carefully to be able to finish the modules and carry out tests. This is a consequence of the subjects' subordination to other content in the programme that clearly provides vocational qualification. However, the interviewed teachers emphasise the qualifying and socialising functions of their own subjects. This can be seen in the talk of tests and their needs to teach in ways that easily can assess measurable knowledge and the need for working with modules, or predefined teaching material that must be processed appropriately, rather than creating more open learning opportunities where the students can explore their own relation to the subject.

The teachers think that the fact that their teaching groups usually consist of students from different vocational programmes, so-called joint classes, can be a major pedagogical obstacle. In practice, this means large groups of students that also change in composition over time. This makes it more difficult to create a classroom climate in which the students can be at ease. It also complicates attempts to link subject matter to the future professions of the students, for example, linking students' experiences of, and interests in, hairdressing or construction to the content of social studies courses. The advantage of stable groups over time and the difficulties associated with joint classes for students of multiple programmes is highlighted by the following teacher:

> And they know each other since they've had all of these courses together. They have Swedish together in year one, so we've had them in the same group there. But […] when the budget governs the decisions, on some occasions the Technical [programme students] must be with Restaurant [Food and Management programme students] and so on. And that has not turned out well. (Teacher 1)

The formation of joint classes seems to be entirely due to effects of external frame factors. Yet, the participating teachers recognised that building stable relationships and continuity are highly important for successful teaching. According to their experiences, students need relational pedagogy and a safe classroom environment to learn their subjects. The content of the subjects must be processed through dialogue both between students and between students and teachers.

Having discussions, trying out ideas and practising taking a stand are considered as important elements of the subjects. The teachers express that limitations of available time make it difficult to develop relationships, especially in large groups. This problem is also often exacerbated by the fact that the teachers need to teach several of these short courses, and hence numerous students:

> Then there's also … I feel that when I started a few years ago, I had seven religion courses at the same time in parallel. It's completely hopeless. If you have 50 credit courses, you shouldn't have so many. Then I think you burn yourself out pretty quickly. It worked when I was fifteen years younger, but now I don't think I could cope with having seven groups at the same time. (Teacher 3)

The experience described by the teacher in this quotation is common. A consequence of the multitude of relationships is that teachers require a lot of extra commitment to get to know all the students, and it is difficult to find time to help everyone. Time and opportunity for building relationships between the students and between the teacher and students would also increase possibilities for subjectification, since the teachers would have more chances to identify the *interruption* needs of individual learners and help them to actively invest in the learning by being 'in and with the world' (Biesta, 2022). This is hindered by the conditions, as emphasised in this quote:

> Yes, but it's a lot about not knowing each other, I think, and that can lead to underperformance, they don't dare to say, they don't dare to speak up. And that can inhibit the group dynamics above all. (Teacher 4)

Under current conditions, with the identified external frame factors, it is difficult for the students to make own meaning of the knowledge conveyed in the four courses. There is no time to suspension, that is, pausing to try out and deepen the students' knowledge, and little opportunity for teachers to provide sustenance, that is, supporting each student in their individual point of process (cf. Biesta, 2022).

To summarise the teachers' views, the teachers clearly regarded external frame factors as major obstacles to their teaching, including organisational constraints (necessitated by financial restraints) such as the limited available time for the courses, their position in the schedule and in relation to workplace learning, group sizes, and joint classes. In practice, these frame factors collectively result in subordination of the four subjects. The teachers stress the need for relationship building and relational teaching when teaching VETP students in their subjects. Although this can be interpreted as the teachers wanting to make room for subjectification in their teaching, the prevailing logic underpinning their views of their subjects and the students appear to implicitly regard the students' qualification and socialisation into the existing social order as the most important educational functions. When talking about their subjects and the conditions for

teaching, the primary focus for the teachers seems to be to transfer general and decontextualised subject knowledge and norms to their students, rather than enabling and empowering them to apply the acquired knowledge in subjectification and development of their citizenship.

Concluding discussion

As anticipated, we detected role-related differences in school leaders' and teachers' perceptions of the possibilities and constraints in teaching and learning in the four focal subjects, as well as their views on the citizenship education provided by the courses and the emphasised educational functions.

School leaders noted that the VET programmes' structure was largely inherited, making changes difficult due to scheduling and financial constraints. They believed VET students primarily need qualification and socialisation and saw value in citizenship education but faced obstacles such as students' lack of interest or ability to assimilate these subjects, which according to Knekta et al. (forthcoming) is in contrast with students' own views. The school leaders found it more challenging to provide citizenship education to VETP students compared to HEPP students and identified a lack of cooperation among teachers across subject boundaries and insufficient adaptation of teaching methods to VET students' motivations and abilities. They perceived individual teachers' reluctance to integrate vocational aspects into their subjects as a major constraint and an internal frame factor.

In contrast, teachers emphasised external factors like time, scheduling, group composition, and group size as obstacles to subject development, believing these issues could be resolved with more thoughtful organisation. They felt budgetary considerations often outweighed pedagogical ones in school leaders' decisions, leading to the concerns of the teachers being overlooked. Teachers viewed workplace-learning periods as limiting due to the breaks they caused in courses and did not see workplace-learning as part of citizenship education, missing opportunities for collaboration with vocational teachers and workplace staff. They also highlighted problems with joint classes, arguing that they hinder trustful relationships due to large, changing groups, and did not consider the potential benefits of joint classes, such as opportunities for subjectification through interactions with diverse students (cf. Biesta, 2022).

Teachers and school leaders shared some common perceptions of vocational students as disinterested in the four subjects and perhaps not well prepared for learning them. If we apply Biesta's concepts to this, qualification and socialisation dominates both teachers' and school leaders' statements in how they express their views of the VET students and what the students need to know and what kind of person they should learn to be to become employable (cf. Terning &

Tsagalidis, 2020). Subjectification thus becomes invisible in the talk about the students, and their education appears rather instrumental. If subjectification is viewed through the lens of qualification and socialisation in this way, one might ask if subjectification might happen at all (cf. Hasslöf & Malmberg, 2015). Also, the talk about the VET students is to a large extent focussed on their 'becoming' future employees or citizens (cf. Colley et al., 2004). This is in stark contrast to subjectification, which is not a process of becoming, but is happening here and now (Biesta, 2020).

Biesta (2016) believes that the increased pressure on today's teachers to create effective and instrumental teaching that produces measurable results in our goal-related school system both marginalises the teacher's role and alienates the student from the world (cf. Ball, 2014). Challenging structures and making changes to create more favourable conditions for students is required if citizenship education is to be strengthened. The school leaders' comments particularly suggest that citizenship education is subordinated to VET subjects, and that perceptions of VET students as practitioners rather than theorists negatively affect the expectations placed on them and the conditions for teaching. Above all, the results show that there are organisational difficulties that affect the teaching in these four subjects and, in extension, the opportunities for vocational students' citizenship formation in terms of pedagogic rights (Bernstein, 2000). It is not only a question of what the teachers teach, but also of how the teaching provides opportunities for the students to gain an understanding of other people's perspectives, to build self-confidence to dare to express opinions and to develop action competence. The subjects require students to actively practice and apply the knowledge covered to make it 'their own'. Thus, citizenship education requires not only exposure to knowledge 'about', but also acquisition of knowledge through individuals' experiences of doing and being. This is strongly aligned with Biesta's view of subjectification, as a process in which the individual meets the world and develops uniqueness (cf. Jägerskog et al., 2022), with needs for opportunities for reality-checks, enough time for processing, and both support and patience from the teacher (Biesta, 2022).

A major problem is that the strong emphasis on educating VET students for their future professional and civic roles leaves little room for empowering them as subjects and enabling development of their citizenship in the here and now. The instrumental view of knowledge and the construction of VET students as unmotivated practitioners with limited abilities to learn theoretical subjects, and not yet fully developed citizens, underpin the conditions for the teaching and learning in the subjects. This is the main issue that must be addressed, since these views do not correspond with VET students' own images of themselves (Knekta et al., forthcoming) or support the process of empowering young people to engage with the world as subjects (cf. Biesta, 2022).

Concluding remarks

History, religious education, science, and social studies courses for Swedish vocational students are at the intersection of two hierarchical orders. They are not only subordinated to vocational subjects in the VET programmes, but also subordinated within each subject, as teachers of the subjects value (and prioritise) courses in the vocational programmes less highly than courses of the higher education preparation programmes. Thus, the courses are positioned at the lower end of two hierarchical orders, and courses for vocational students can be said to be undervalued by school leaders as well as the subject teachers. In overall conclusion, awareness of these arrangements and perceptions, together with a change of perspective, are needed to bring about change and improve the citizenship education of Swedish VET students.

Endnote

[1] Foundational subjects are included in all upper secondary study programmes. They include history, science, religious education, and social studies (50 credits each, which represents approximately 40–50 teaching hours), as well as Swedish, English, mathematics and physical education & health (100 credits each). For full upper secondary attainment 2800 credits are required, but 2500 are sufficient for graduation, so VET students can fail (or ignore) courses worth up to 300 credits.

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Vad är väsentligt för att lyckas i arbetet som yrkeslärare? En studie av yrkeslärarstudenters berättelser

What is essential for success in vocational teachers' work? A study of vocational teacher students' stories

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Abstract

This article explores VET teacher students' understanding of success and failure in VET teachers work. A theory-driven analysis, employing the theory of practice architectures is used for analysis of empathy-based stories from VET teacher students in Sweden and Finland. This approach, with its focus on practices and practice architectures, complements earlier research. The focus on complex and inter-related practices reaches beyond research themes such as competence, identity, and structural factors, and offers a multifaceted understanding of VET teachers' work. The theory of practice architectures focuses on interconnected actions undertaken in a practice and the material-economic, cultural-discursive, and social-political arrange-ments that prefigure and hold the practice in place. The results reveal that vocational teacher students focus on the teaching practice and that they emphasise, both in stories of success and failure, similar actions. Teaching practice rests on didactical and pedagogical doings that are closely intertwined with various aspects of relatings to students. The stories also show how successful vocational teacher practices are prefigured by an inclusive and permissive work environment. Favorable cultural-discursive arrangements are characterised by a culture of collaboration and support and a trustful and affirmative school leadership.

Keywords: vocational teacher students, vocational teachers' work, empathy-based stories, theory of practice architectures

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Introduktion

Vad är väsentligt för att lyckas eller misslyckas i arbetet som yrkeslärare? Det har visat sig svårt att utgående från tidigare forskning formulera ett tydligt svar på frågan (jfr Antera, 2022). Yrkeslärares arbete beskrivs som alltmer betydelsefullt och föränderligt samtidigt som det kännetecknas av ökande komplexitet (jfr Messman, m.fl., 2010; Mårtensson m.fl., 2019). Tidigare studier har haft olika fokus och tagit fasta på ett antal faktorer som formar och villkorar arbetet som yrkeslärare. Yrkeslärares kompetens och framtida kompetensbehov är ett av de återkommande temana (Antera, 2022; Lehtonen m.fl., 2018; Messman m.fl., 2010) och yrkeslärares identitet ett annat (Duch, 2016; Fejes & Köpsén, 2014). Ett tredje, mer mångfacetterat forskningsområde, berör olika strukturella faktorers påverkan på yrkeslärares arbete, såsom yrkens status, yrkesutbildningens organisering och status, läroplaner och elevers sociala bakgrund (Eliasson & Rehn, 2017; Esmond & Atkins, 2022; Mulder & Roelofs, 2012; Tarabini & Jacovkis, 2022). Den stora variationen gällande organisering och samhälleliga villkor för yrkesutbildningar mellan länder (jfr Billett, 2011; CEDEFOP, 2009), gör det svårt att få ett samlat grepp om centrala aspekter i och villkor för att uppleva framgång i arbetet som yrkeslärare. Anteras m.fl. (2022) enkätstudie med 370 svenska yrkeslärare och rektorer visar att vissa kompetenser (god kommunikation med elever, bedömning av elevers kunskaper och färdigheter och att skapa goda förutsättningar för lärande) värderas som särskilt viktiga. De påtalar behovet av fortsatt forskning om orsakerna till att dessa kompetenser prioriteras, med ett tydligare fokus på de kvalitativa elementen i dessa kompetenser och yrkeslärares professionella utveckling. Vår studie tar sin utgångspunkt i detta behov och eftersträvar att beakta såväl individuella som strukturella aspekter i vad som är centralt för att uppleva framgång eller misslyckande i yrkeslärares arbete.

Föreliggande studie bygger på en praktikteoretisk analys av så kallade inlevelseberättelser skrivna av 125 yrkeslärarstudenter under pågående yrkeslärarutbildning i Sverige och i Finland. Dataunderlaget har samlats in i en likartad organisatorisk kontext (de två yrkeslärarutbildningarna) av respondenter med en stor variation i fråga om ålder, kön, utbildningsnivå och yrkesområde. Samtliga saknar pedagogisk behörighet, men drygt två tredjedelar arbetar eller har arbetat som yrkeslärare. Studien kompletterar tidigare forskning dels genom att empirin utgörs av yrkeslärarstudenters berättelser, dels genom att omsätta ett praktikteoretiskt perspektiv. Teorin om praktikarkitekturer (Kemmis & Grootenboer, 2008; Kemmis m.fl., 2014) används för analys av inlevelseberättelserna. På så sätt riktas intresset inte mot yrkeslärare som individer eller mot strukturella faktorer utan mot yrkeslärargärningen, vilka slags aktiviteter och handlingar som utgör lärarpraktiken och hur praktiken villkoras av olika arrangemang. Det praktikteoretiska perspektivet möjliggör en helhetsgestaltning av ett komplext studieobjekt.

Studiens syfte är att undersöka vad yrkeslärarstudenter framhåller som väsentligt för att lyckas eller misslyckas i arbetet som yrkeslärare. Två frågeställningar har väglett studien: (i) Vilka aktiviteter och arrangemang framträder som centrala i yrkeslärares berättelser om framgång och misslyckande? (ii) Hur är dessa aktiviteter och arrangemang relaterade till varandra?

Förhoppningen är att fördjupa förståelsen för yrkeslärares arbete och bidra till ett samtal om hur aspekter blottlagda i tidigare studier – kompetens, identitet och strukturella faktorer – samspelar.

Forskning om yrkeslärares arbete och yrkeslärarutbildning: Tre återkommande teman

Forskningen om yrkesutbildning är enligt Mulder och Roelofs översikt (2012) komplex och mångfacetterad. Detsamma gäller för forskning om vad som formar och villkorar yrkeslärares arbete. I vår genomgång av tidigare forskning om yrkeslärares arbete och yrkeslärarutbildning identifierade vi tre övergripande teman med intresse för vår studie. De tre teman är (1) betydelsen av yrkeslärares kompetens, (2) betydelsen av yrkeslärares identitet samt (3) betydelsen av strukturella faktorer. Yrkeslärarutbildning och yrkeslärarstudenter är ett relativt outforskat område, såväl internationellt som i de nordiska länderna (Henning Loeb & Gustavsson, 2018; Siirilä & Laukia, 2021). För att kontextualisera syftet med och utfallet av vår studie gjorde vi en genomgång och översiktlig innehållsanalys av den forskning som publicerats i tidskriften *Nordic Journal of Vocational Education and Training* och den finska tidskriften *Journal of Professional and Vocational Education* de senaste tio åren (2014–2023). Endast 34 (13%) av de 253 vetenskapliga artiklarna i de två tidskrifterna behandlade yrkeslärarutbildning och/eller yrkeslärarstudenter. De centrala temana i dessa artiklar är kompetens, identitet, strukturella faktorer i fråga om yrkeslärautbildning samt olika didaktiska aspekter inom yrkesundervisningen. De sammanfaller i stort med de teman som identifierats ovan gällande forskning om yrkeslärares arbete generellt.

I fråga om yrkeslärares kompetens och vad den utgörs av framhålls betydelsen av att yrkeslärare har ett starkt engagemang i sin bransch och sitt yrkesområde. Detta för att hålla sin yrkeskunskap uppdaterad (Andersson & Köpsén, 2019; Mårtensson m.fl., 2019). Flera studier påvisar hur lärarna förväntas tillhandahålla både specifika yrkeskunskaper och färdigheter (*skills*) inom sina yrkesområden och generiska kunskaper relevanta för yrkesutövandet. Yrkeskunnandet framhålls som centralt, den pedagogiska kompetensen i relation till yrkeskunnandet som specifik (jfr Lucas m.fl., 2012). Messman m.fl. (2010) påtalar vikten av yrkeslärares yrkeskunskap och professionella utveckling, både som lärare och som verksam i yrket, för att kunna agera responsivt gentemot mot utvecklings-

tendenser gällande både teknologi och studenternas alltmer heterogena bakgrunder. Antera m.fl. (2022) identifierar pedagogisk och didaktisk kompetens, ämneskunskap och ämnespedagogik och professionell utveckling som centrala teman i forskning om yrkeslärares kompetenser.

Gällande yrkeslärares identitet påtalar forskningen behovet att hantera en tudelad identitet, både som branschföreträdare och lärare (Köpsén & Andersson, 2018; Nylund & Gudmundsson, 2017) och att detta påverkar såväl synen på kunskap och undervisning som det professionella agerandet. Enligt Koski-Heikkinen (2013) formas identiteten i en interaktion mellan en yrkesidentitet och ett personligt yrkesjag. Vidare tar forskningen fasta på hur identiteten formas av delaktighet i kollektiva praktiker. Framgång i yrkeslärares arbete förutsätter att man överskrider gränserna och balanserar mellan en yrkesämnespraktik, en lärarpraktik och en lärargemenskap (Fejes & Köpsén, 2014) och förmår kombinera en undervisnings- och fostranspraktik (Maunu, 2018).

En fjärdedel av de nordiska studierna om yrkeslärarutbildning och yrkeslärarstudenter behandlar olika aspekter av kompetens och identitet, exempelvis Lyckanders (2022) studie om yrkeslärarnas kompetenser i yrkesdifferentierad undervisning. Kukkonen m.fl. (2014) studerade det narrativa identitetsarbetet som framträder i yrkeslärarstudenters berättelser om sina studier. Resultaten visar att övergången från ämnesexpert till lärarprofessionen inte enbart bygger på nya kunskaper utan förutsätter tid och utrymme för att omformulera de centrala meningsstrukturerna som gäller för yrkeslärar-identiteten.

Det tredje temat i tidigare forskning om yrkeslärares arbete handlar om strukturella faktorer, såsom betydelsen av organisering av yrkesutbildningen, till exempel utformning av läroplan (Billett, 2011; Esmond & Atkins, 2022; Nylund, m.fl., 2017) samt elevernas sociala och kulturella bakgrund (jfr Avis m.fl., 2012; Eliasson & Rehn, 2017; Tarabini & Jacovkis, 2022). Även avseende dessa aspekter framträder variationer mellan olika utbildningar och länder. Ett återkommande tema behandlar hur elevernas sociala bakgrund (klass, kön och etnicitet etc.) påverkar och formar yrkeslärares arbete (Klope, 2020; Nylund m.fl., 2018, 2020). Eliassons och Rehns studie (2017) visar hur lärare inom vård- och omsorgsområdet upplever en rad utmaningar i sin yrkesutövning, på grund av att deras ideal i fråga om den professionella identitet som eleverna förväntas utveckla utmanas av verksamhetens villkor. Villkoren handlar dels om utmaningar som rör elevernas motivation och språksvårigheter, dels om utbildningens och yrkets status.

Även i den nordiska forskningen om yrkeslärarutbildning och yrkeslärarstudenter är strukturella faktorer, såsom yrkeslärarutbildningars struktur, läroplaner, innehåll samt genomförande och utveckling (t.ex. Asghari & Berglund, 2020) av intresse. Olika aspekter av den verksamhetsförlagda

utbildningen, såsom handledningens centrala former och funktioner, (t.ex. Martikainen & Sivenius, 2017) eller kvalitetsutveckling genom digitala trepartssamtal (Walkert, 2018) ingår i detta forskningstema.

Det fjärde forskningstemat i den nordiska forskningen om yrkeslärarutbildning och -studenter behandlar olika didaktiska aspekter (t.ex. Alvunger & Grahn Johansson, 2018), såsom lärande (t.ex. Ruhalahti m.fl., 2018), kunskapskonstruktion (t.ex. Lagercrantz All m.fl., 2018) samt undervisningsmetoder och arbetssätt (Karstensen & Lier, 2020). Dessa teman kan relateras till forskningen om yrkeslärares kompetenser som betonar pedagogisk och didaktisk kompetens (Antera m.fl., 2022).

Sammanfattningsvis kan man konstatera att forskningen har tagit fasta på och belyst en mängd faktorer av betydelse för yrkeslärares arbete. Arbetet präglas av en hög grad av komplexitet (Lehtonen m.fl., 2018; Weelahan, 2010) och lärarna måste förhålla sig till och hantera förväntningar och krav från samt förändringar inom sitt yrkesområde och inom yrkesutbildning. I båda fallen handlar dessa om innehåll, arbetsmetoder och möten med olika grupper av människor, inte minst alltmer heterogena elevgrupper. Tidigare forskning har i regel fokuserat på antingen individuella aspekter, såsom lärares kompetens eller identitet, eller på strukturella aspekter, såsom organisatoriska förutsättningar och elevers sociala bakgrund. Intresset har sällan riktats mot hur dessa aspekter kan tänkas hänga samman och samverka. Dessutom är yrkeslärarstudenters röster svagt representerade inom tidigare studier.

Yrkesutbildning och yrkeslärarutbildning i Sverige och Finland

Yrkesutbildningens organisering i Finland och Sverige har flera likheter. Länderna har en gemensam historia som nordiska välfärdsstater och ett utbildningssystem som representerar en universalistisk modell med staten som central aktör (Virolainen & Persson Thunqvist, 2017). I både Finland och Sverige är en jämförelsevis stor del av yrkesutbildningarna skolförlagd, även jämfört med övriga nordiska länder. Samtidigt skiljer sig länderna åt i att integreringen mellan yrkesinriktade utbildningar och högskoleförberedande utbildningar är mer långtgående i Sverige än i Finland. Sedan 1970 har gymnasiala yrkesinriktade och högskoleförberedande utbildningar i Sverige en gemensam läroplan och förläggs ofta i samma byggnader, medan dessa utbildningsvägar är mer separerade och regleras av olika läroplaner i Finland. De senaste decennierna har bägge länderna haft en liknande policy- och läroplansutveckling, med en betoning av anställningsbarhet som utbildningarnas huvudsyfte, och en rörelse mot att kunskap organiseras utifrån föreställningar om centrala kompetenser. Gällande dessa tendenser har läroplanen i Finland präglats i större utsträckning av föreställningar av kompetens, medan läroplanen i Sverige präglats mer av anställningsbarhet ur ett arbetsgivarperspektiv (Nylund & Virolainen, 2019).

Precis som yrkesutbildning generellt kännetecknas även yrkeslärarutbildningarna i de europeiska länderna av en stor variation gällande reglering, finansiering, status, struktur och innehåll (CEDEFOP, 2009). Denna mångfald avspeglas även i forskning och samlad kunskap om yrkeslärares arbete. Utbildningssystemen i Sverige och Finland inkluderar yrkesutbildning och har en likartad historisk framväxt med en stark statlig styrning (Lundahl m.fl., 2010; Virolainen & Stenström, 2014). Yrkeslärarutbildningen i de två länderna representerar en specifik typ av organisering av utbildning jämfört med länder som till exempel Skottland (Avis m.fl., 2012) och Österrike (Henning Loeb & Lassnigg, 2018). Yrkeslärarutbildningarna i Sverige och Finland styrs och regleras politiskt och juridiskt genom skollagar och ramverk. Även om genomförandet av yrkeslärarutbildningen har decentraliserats, kan den med hänvisning till statlig styrning och reglering betraktas som ett uttryck för en nordisk modell. Trots att yrkeslärarutbildningar i Sverige och Finland har olika antagningskrav, olika omfattning och delvis olika utformning (jfr Kaiser m.fl., 2020), genomförs de på ett relativt likartat sätt, till exempel med samarbete och lärande i grupp som metod (Isacsson m.fl., 2018). I båda fallen erhåller studenter en pedagogisk behörighet för att vara verksam i gymnasieskola och vuxenutbildning (Sverige) eller andra och tredje stadiets yrkesutbildning (i Finland).

Praktikarkitektur som teoretisk referensram

Genom att använda oss av ett teoridrivet och deduktivt tillvägagångssätt och genom att rikta uppmärksamheten mot praktiker och praktikarkitekturer avser vi att bidra med kunskap som kan fördjupa förståelsen för yrkeslärares arbete, med utgångpunkt i yrkeslärarstudenters, det vill säga framtida yrkeslärares, föreställningar. Avsikten är att bidra med kunskap om hur aspekter som kompetens, identitet och strukturella faktorer, de centrala teman i tidigare forskning, samspelar och samverkar. Även datainsamling med hjälp av inlevelseberättelser grundas i ett intresse för praktiker och praktikers sammanhang. Praktikteorier riktar intresset mot och studerar det som sker och hur saker och ting ”görs” i en specifik praktik (Nicolini, 2012). Med en praktikteoretisk ansats avser vi att identifiera och analysera praktikens och sammanhangens betydelse i yrkeslärarstudenters berättelser om sin framtida yrkesutövning.

Den praktikteori som vi använder oss av är teorin om praktikarkitekturer. Teorin har utvecklats i utbildningssammanhang, inledningsvis av Kemmis och Grootenboer (2008). Det finns två grundläggande utgångspunkter i teorin om praktikarkitekturer. Den ena handlar om att förstå praktiker som temporärt och spatialt situerade. En praktik (t.ex. en under-visningspraktik) hänger samman med och utgörs av mänskliga aktiviteter som är invävda i varandra men kan särskiljas analytiskt (Kemmis m.fl., 2014, s. 36), nämligen:

- säganden – det som sägs
- göranden – det som görs
- relateranden – hur människor relaterar till varandra och allt annat i den specifika praktiken.

Den andra grundläggande utgångspunkten är att en praktik hålls på plats, påverkas av och påverkar vad som med teorins begrepp benämns som *arrangemang*. Precis som för aktiviteterna är arrangemangen invävda i varandra men kan särskiljas analytiskt. De består av (Kemmis m.fl., 2014, s. 32):

- Kulturella-diskursiva arrangemang, medieras genom språk i en semantisk dimension
- Materiella-ekonomiska arrangemang, medieras genom handling i en fysisk dimension
- Sociala-politiska arrangemang, medieras genom relationer i en social dimension

I sammanhanget av denna studie, då en framtida lärarpraktik inom yrkesutbildning är i fokus, kan kulturella-diskursiva arrangemang utgöras av professionella diskurser samt lagtexter, förordningar och kursplaner som villkorar praktikens aktiviteter. Materiella-ekonomiska arrangemang kan exempelvis utgöras av ekonomiska resurser som möjliggör eller begränsar tillgången till ändamålsenliga verkstäder, redskap och maskiner. Sociala-politiska arrangemang kan utgöras av interaktion och stödstrukturer från kollegor eller stöttning från skolledning.

Teorin om praktikarkitekturer har använts i studier inom yrkesutbildning, i studier av de arrangemang som villkorar praktiker för yrkesutbildning, yrkeslärares arbete och yrkeslärande. Den har använts för att analysera:

- hur nationell och regional policy villkorar lärande i yrkesutbildning och hur sådana villkor går emot yrkeslärares övertygelser om hur man utvecklar ett yrkeskunnande (Brennan Kemmis & Green, 2013),
- komparativa studier om stödstrukturer för elever i skolor och (förväntad) integrering på arbetsplatser (Choy & Wärvik, 2019),
- yrkeslärarstudenters kritiska reflektioner under sin utbildningstid (Berglund m.fl., 2020),
- hur yrkeslärare utvecklar sin pedagogik när de undervisar (Francisco, 2020), och
- hur yrkeslärare utvecklar sin pedagogik och stöd för studenter, i grupper med nyanlända, som genom yrkesutbildning och lär sig svenska (Green m.fl., 2017).

Datainsamling och datamaterial

Datainsamlingen genomfördes med hjälp av inlevelseberättelser (*empathy-based stories*). Metoden bygger på antagandet att respondenterna använder sig av sin erfarenhet och sina insikter för att tänka sig in i en framtida situation. Metoden är öppen, den ger respondenterna frihet att formulera sina uppfattningar, förväntningar och värderingar i fråga om det fenomen som studeras. Respondenterna betraktas som erfarna och kunniga aktörer i den socialt och kontextuellt konstruerade verklighet som de beskriver i sina berättelser. Som Wallin m.fl. (2019) framhållit avses inlevelseberättelser ge uttryck för logiska, rimliga och möjliga resonemang och förhållningssätt i fråga om studieobjektet, samt för institutionell och professionell tyst kunskap om den ifrågavarande kontexten. Ett dataunderlag insamlat genom inlevelseberättelser öppnar ofta upp för nya perspektiv och förståelser för det fenomen som forskningsintresset riktas mot (Nikanto & Eskola, 2018).

Yrkeslärarstudenter vid Göteborgs universitet och Åbo Akademi ombads i anslutning till sina studier, utifrån en ramberättelse, leva sig in i ett framtidsscenario och skriva en berättelse om vad som hänt och vad de gjort för att det givna scenariot förverkligats. Berättelserna förväntas utgå ifrån och relatera till de förutsättningar, aktiviteter, interaktioner och kontextuella faktorer som har lett till framtidsscenariot i ramberättelsen. Instruktionen var kort och innehöll en variation i förhållande till utgången av det tilltänkta scenariot (Wallin m.fl., 2015) enligt följande:

> Det är hösten 2025. Du är heltidsanställd lärare på en … [uppräkning av de organisationer som yrkeslärarutbildningen ger behörighet för i Finland och i Sverige.]. Du känner dig trygg i ditt arbete och upplever att du är framgångsrik i din undervisning. Beskriv kort hur det blev så, dvs. vad har hänt och vad har du gjort!

Ramberättelsen hade två varianter. Den andra, som hälften av yrkeslärar-studenterna utgick ifrån, innehöll negationen *inte* framför orden *trygg* och *framgångsrik*. Ramberättelsen gav respondenterna möjlighet att fokusera på det som de ansåg bidra eller inte bidra till trygghet och framgång i deras arbete och undervisning.

De två yrkeslärarutbildningarna, i Sverige och Finland, utgör kontexten för datainsamlingen. I Finland anger lagstiftningen endast en omfattningsmässig ram (60 ects, alltså motsvarande 1 års heltidsstudier) för utbildningen, och innehållet beskrivs på ett mycket allmänt plan (Förordning om behörighets-villkoren för personal inom undervisningsväsendet 14.12.1998/986). Lärosäten har möjlighet att profilera utbildningarna vad gäller innehåll och utförande. I Sverige regleras yrkeslärarprogrammet (90 ects, motsvarande 1,5 års heltidsstudier) av nationellt fastställda examensmål. Utbildningsplanen och

studiegången vid de tio lärosäten som anordnar utbildningen skiljer sig åt, precis som hos de finska yrkeslärarutbildningarna kan dessa ha olika profiler.

De två i denna studie aktuella yrkeslärarutbildningarna har både likheter och skillnader gällande omfattning, innehåll och genomförande. Båda är fristående pedagogiska studier på grundnivå för behörighet att undervisa i yrkesämnen (innefattar inte studier i yrkesämnen). De genomförs på halvfart (Göteborgs universitet 3 år, Åbo Akademi 2 år) och består av studier i pedagogik, specialpedagogik, yrkesdidaktik, handledd VFU/undervisningspraktik och ett utvecklingsarbete. Studierna genomförs på distans och som närstudier, i form av föreläsningar, seminarier och självstudier (individuellt och i grupp). Yrkeslärarprogrammet vid Göteborgs universitet (90 ects) är längre än yrkeslärarstudierna vid Åbo Akademi (60 ects). Skillnaden består i huvudsak av att de verksamhetsförlagda studierna omfattar 30 ects respektive 10 ects undervisningspraktik. För antagning till de två utbildningarna krävs grundläggande behörighet men vid Åbo Akademi krävs ingen ämnesmässig behörighet.

Datamaterialet består av 125 berättelser. Dessa samlades in vid tre olika tillfällen under läsåret 2021–2022. Både i det finländska materialet (34 berättelser) och det svenska materialet (91 berättelser) ingår två grupper av studenter, den ena i början av sina studier och den andra i slutet av sina studier. Berättelserna har skrivits av studenter med stor variation i fråga om bakgrund, särskilt i fråga yrkesområden. Drygt en fjärdedel av studenterna (36 stycken) har en yrkesbakgrund inom vård- och omsorgsverksamhet. Inom yrkesområdena bygg och anläggning, barn/fritid/pedagogiskt arbete, frisör/skönhetsbranschen, hotell och restaurang, handel och försäljning, natur- och lantbruk samt transport fanns 8–10 respondenter, inom de övriga 1–5. Drygt 70% av respondenterna angav att de har arbetat eller arbetar som (obehörig) yrkeslärare.

Enligt tidigare forskning föreligger skillnader mellan olika yrkesområden, till exempel i fråga om kompetenser och den typ av yrkesperson som utbildningen avser fostra till (t.ex. Colley m.fl., 2003; Eliasson, 2019). Yrkeskulturella skillnader kunde tänkas komma till uttryck i berättelserna. För att försäkra fokusen på allmänna, genomgående mönster i materialet grupperades berättelserna i två grupper. I den ena gruppen ingick berättelser från branschen vård och omsorg, det vill säga en bransch i vilken kvinnor är i majoritet. I den andra gruppen ingick bygg, fordon och VVS, det vill säga traditionellt manliga branscher. Sett till studiens kunskapsintresse förelåg inga väsentliga skillnader.

De finländska berättelserna samlades med en pappersenkät under en lektion med studenterna fysiskt närvarande, anonymt utan att ange namn. Efter att studenterna hade skrivit berättelserna informerades de om upplägget (att de utgått både från en framgångsrik och en icke-framgångsrik ramberättelse) och innehållet i berättelserna diskuterades med studenterna. Studenterna ombads

om muntligt samtycke att använda berättelserna för forskning. Samtliga studenter var beredda, efter att ha läst igenom sina berättelser, att ge sitt samtycke. De handskrivna berättelserna transkriberades i ett Word-dokument som förvarats på en lösenordskyddad hårddisk. Datainsamlingen i Sverige följde i stort sett samma tillvägagångssätt, med den skillnaden att berättelserna samlades in med ett elektroniskt formulär. I resultatredovisningen anges citaten anonymt, dock med studenters land och yrkesområde.

Tillvägagångssätt för analys av berättelserna

Berättelserna varierade i längd och innehåll, från ett par meningar (ca 15 ord) till 14 meningar (ca 300 ord). Den genomsnittliga längden var 96 ord. Analysprocessen inleddes med en riktad kvalitativ innehållsanalys, det vill säga en deduktiv och strukturerad analysprocess (Assarroudi m.fl., 2018; Elo & Kyngäs, 2008, s. 109–112; Hsieh & Shannon, 2005, s. 1281–1283) med utgångspunkt i studiens forskningsfrågor tillika teorin om praktikarkitekturer. Berättelserna lästes igenom med syfte att identifiera innehållsligt sammanhängande meningsenheter. Detta gjordes utgående från centrala uttryck och formuleringar (säganden) i berättelserna. Det framgick att majoriteten av berättelserna utgick ifrån eller behandlade undervisningspraktiken. I följande skede utarbetades en matris med två övergripande dimensioner: aktiviteter och arrangemang (Tabell 1). Matrisen användes för att sortera meningsenheterna enligt den aktivitet eller det arrangemang som de representerade i relation till undervisningspraktiken (i den mittersta kolumnen). Exempelvis i kolumnen göranden, under aktiviteter, beskrivs några aspekter av didaktiska göranden (*pröva nya sätt att undervisa, planera och hålla lektioner i obekanta ämnen*), som sammanvävs med olika aspekter av relateranden i följande kolumn (*känner mig trygg i det relationella arbetet, lärt känna gruppen*). Av de tre arrangemangen är det de sociala-politiska som är den mest framträdande, med aspekter såsom *öppet klimat, högt till tak, att vara välkommen i arbetsgemenskapen*. Samtliga meningsenheter i de två berättelserna anges i tabellen, dock inte i den ordning som de förekom i berättelserna. Analysförfarandet syftar till att skapa underlag för att svara på de två forskningsfrågorna: (i) Vilka aktiviteter och arrangemang framträder som centrala i yrkeslärares berättelser om framgång och misslyckande?, samt (ii) hur är dessa aktiviteter och arrangemang relaterade till varandra?

Tabell 1. Kategoriseringsmatrisen och gruppering av meningsenheterna i två typberättelser.

Aktiviteter				Arrangemang		
Säganden	**Göranden**	**Relateranden Elever**	**UNDER**	**Materiellt-ekonomiska**	**Kulturellt-diskursiva**	**Sociala-politiska**
Svensk yrkeslärarstuderande – ramberättelse med trygghet och framgång						
Genom erfarenhet och trygghet i min roll …	… vågar jag prova nya sätt att undervisa på	Jag känner mig trygg i det relationella arbetet med eleverna och vet hur jag håller det relationella med eleverna på en professionell nivå.	**VISNINGS**	Fördelen med skolan är att saker och ting går i cykler. Ett läsår är innehållsmässigt hyfsat likt läsåret före och rutiner skapar en trygghet.	Jag har arbetat fram ett tryggt sätt att läsa och tolka kursmål och kunskapskriterier.	Jag har arbetat tätt med mina erfarna kollegor och fått stort stöd hos dem. Det har varit ett öppet klimat med högt i tak vilket har givit utrymme att få ställa alla "dumma" frågor.
Finsk yrkeslärarstuderande – ramberättelse med otrygghet och misslyckande						
	Nu har all min tid gått åt att planera och hålla lektioner i obekanta ämnen och jag tror att studerande känner på sig att detta inte är mitt kunskapsområde	Småningom tror jag att undervisningen blir bättre, då jag lärt känna gruppen och vet vad de tidigare har lärt sig.	**PRAKTIKEN**	Jag är nyanställd lärare vid en yrkesläroanstalt. Då jag kom hit kastades jag in i arbetet med många olika, för mig obekanta kurser.		Jag hade förväntat mig bättre introduktion och mera samarbete bland vårdlärarna. Nu finns ingen tid för detta och ingenting ordnades som skulle fått mig att känna mig välkommen i arbetsgemenskapen. Jag vill ha mera samarbete och en erfaren lärare som mentor/handledare som jag kunde bolla mina tankar med

Resultatredovisning

Resultatredovisningen inleds med att beskriva de göranden som framträder som centrala för framgång eller misslyckande och hur dessa framställs som tätt sammanvävda med relateranden. Därefter redovisas de arrangemang som framställs som betydelsefulla för framgång eller misslyckande. Avslutningsvis sammanfattas resultaten i en diskussion och konklusion av studiens kunskapsbidrag.

Didaktiska och pedagogiska göranden tätt sammanvävda med relateranden

Analysen av inlevelseberättelserna utgående från teorin om praktikarkitektur visar att göranden och relateranden framträder som tätt sammanvävda, både i berättelser om framgång och om misslyckande, om än på något olika sätt. I berättelser om framgång framträder två centrala göranden: didaktiska och pedagogiska göranden. Didaktiska göranden fokuserar på undervisningen: undervisningsplanering, inramning, struktur och variation av undervisningen. De innefattar även göranden med syfte att aktivera och göra eleverna delaktiga och hänger därmed tätt samman med relateranden. Framgångsrika didaktiska

göranden leder till en meningsfullhet och trygghet i läraruppdraget, en upplevelse av yrkesdidaktisk kompetens, uttryckt i citatet nedan.

> Arbetet känns meningsfullt o tryggt eftersom jag upplever att undervisningen till studerande varierande, jag har tydliga ramar som följs. Studerande får vara aktiva samt delaktiga. En stark inledning och avslutning inkluderas och jag lyckas få studerandes uppmärksamhet och får dem aktiva samt reflektiva. Upplägget är intressant som varvas med teoretiska och praktiska inslag (Finsk yrkeslärarstudent, handel och försäljning)

Didaktiska göranden innefattar även yrkeskunskap, att man som yrkeslärare håller sig uppdaterad inom och fördjupar sig i sitt yrkesområde. Erfarenhet och intresse samverkar, underbygger vidare metodisk utveckling och uppdaterad yrkeskunskap.

> Jag har under åren med tiden skaffat mig mer erfarenhet inom pedagogiken, hållit mig intresserad både av läraryrket och det yrkesområde som undervisar om. Jag har med tiden tagit till mig nya undervisningsmetoder, hållit mig uppdaterad om förändringar inom yrkesområdet och förhoppningsvis hittat en balans mellan yrkeslivet och fritiden. Jag har under dessa år fördjupat mig inom mitt ämnesområde och eventuellt ännu studerat vidare. (Finsk yrkeslärarstudent, övriga branscher)

Pedagogiska göranden, handlar om att bemöta de studerande på ett mer allmänt mellanmänskligt plan. Även dessa göranden hänger tätt samman med relateranden och uttrycks genom att hänvisa till aktiviteter såsom att ha god kontakt med, bygga relationer till samt se och bemöta elever med beaktande av deras utgångspunkter. Lyhördhet och bemötande ger upphov till en trygg och öppen lärandemiljö.

> Något som alltid varit viktigt för mig i mitt arbete inom [yrkesområde] är bemötande och detta är även viktigt för mig som lärare. Jag arbetar på ett sätt där jag har god kontakt med eleverna och i klassrummen arbetar jag för en trygg miljö och öppet klimat. Mitt mål är att alla ska känna sig välkomna och inte vara rädda för att misslyckas. (Svensk yrkeslärarstudent, vård och omsorg)

Pedagogiska göranden förstärker relateranden och möjliggör göranden, såsom anpassning till och utvecklande av undervisningspraktiken utgående från de studerandes förutsättningar och förväntningar. Pedagogiska göranden framträder tätt sammanvävda med didaktiska göranden.

Framgångsrika göranden och relateranden villkoras av sociala-politiska arrangemang i kollegiet, som upprätthålls genom aktiviteter såsom samtal, stöd och hjälp, och samverkar med kulturella-diskursiva arrangemang av tillit, öppenhet, trygghet och förtroende. De gynnsamma arrangemangen främjar professionell utveckling och förstärker yrkeslärares professionella roll. Den professionella utvecklingen, som underbygger didaktiska och pedagogiska göranden, kan ske informellt och individuellt i undervisningspraktiken, såsom i citatet nedan, eller genom fortbildning.

> Jag vet lite vad som förväntas av mig och vad jag kan förvänta av mig av studerande. Jag har aktivt utvecklat mig själv, tagit del av ny kunskap och nya undervisningsmetoder. Jag har aktivt lärt känna studerande, det vill säga skapa tillit och förtroende. (Finsk yrkeslärarstudent, vård och omsorg)

Den professionella utvecklingen inverkar på didaktiska göranden i undervisningspraktiken. En yrkeslärare som upplever framgång prövar olika tillvägagångssätt, experimenterar och anpassar sina göranden enligt situationens och de studerandes behov. I ett flertal berättelser beskrivs hur erfarenhet av och fördjupad yrkeskunskap i undervisningspraktiken och olika grupper ger en trygghet och professionell självsäkerhet. Det bidrar till ytterligare till utveckling av didaktiska göranden, såsom att pröva nya metoder och arbetssätt samt anpassa undervisningen enligt studerandes utgångspunkter. Dessa aktiviteter förstärker relateranden till de studerande.

> Tack vare en tjugofemårig karriär inom [yrkesområde] känner mig trygg inom mitt specialområde. Jag känner mig också trygg i mig själv. Jag vet mina styrkor och svagheter och kan tack vare min långa erfarenhet koppla teori till praktik i undervisningen. Jag tycker numera att det ger mig mycket mera, när jag kan hjälpa andra att utvecklas. (Finsk yrkeslärarstudent, handel och försäljning)

I berättelser om framgång framträder didaktiska och pedagogiska göranden som centrala och tätt sammanlänkade med relateranden. Både de sociala-politiska och kulturella-diskursiva arrangemang villkorar undervisningspraktiken. Även i berättelserna om misslyckanden är undervisningspraktikens didaktiska och pedagogiska göranden i fokus, och framställs som tätt sammanvävda med relateranden. Brister i didaktiska göranden underminerar pedagogiska göranden, och ger upphov till otillfredsställande relateranden. I citatet nedan illustreras hur en lärare, trots upplevd yrkeskunskap, beskriver misslyckade aktiviteter (inte lyckas göra tydliga kopplingar mellan teori och praktik, inte kunna anpassa innehåll för elever med specialbehov), det vill säga didaktiska göranden som utmynnar i bristande relateranden.

> Upplever det som svårt att få in verkligheten i skolan, att kunna göra tydliga kopplingar mellan teori och praktik så att det blir tydligt för eleverna. Jag har svårt att skapa uppgifter som känns meningsfulla för eleverna. Jag brottas också med uppgiften att anpassa innehållet och uppgifter till de eleverna som är i behov av extra anpassningar, känner att jag håller på att urlaka kvalitén på innehållet i undervisningen. (Svensk yrkeslärarstudent, barn/fritid/pedagogiskt arbete)

Konsekvenserna av misslyckade pedagogiska och didaktiska göranden kommer till uttryck på ett flertal olika sätt. Exempelvis i citatet nedan uttrycks hur en upplevd förväntan om ständig anpassning till elevernas förutsättningar och behov samt elevernas medvetenhet om sina rättigheter och brist på uppskattning urholkar didaktiska göranden och den yrkeskunskap som läraren utgår ifrån i sin undervisningspraktik.

> Jag tror att grunden är att undervisningen hela tiden ska anpassas efter elevernas förutsättningar och behov. Det tar tid från min yrkeskunskap som jag vill förmedla, att hela tiden behöva anpassa mig. Eleverna blir mer och mer medvetna om sina rättigheter och framför ofta vad dom inte är nöjda med och ifrågasätter skolan och mitt och mina kollegors arbete. (Svensk yrkeslärarstudent, natur- och lantbruk)

I berättelser om misslyckande beskrivs bristfälliga relateranden till eleverna, men även en upplevelse av ogynnsamma villkor som påverkar lärarens handlingsfrihet i fråga om didaktiska göranden. På liknande sätt som i berättelserna om framgång framträder göranden och relateranden som villkorade av kulturella-diskursiva och sociala-politiska arrangemang. Frånvaro av öppenhet, tillit, professionellt förtroende och kollegial bekräftelse begränsar och omintetgör framgångsrika didaktiska och pedagogiska göranden i undervisningspraktiken.

> Jag har inte tillägnat mig kunskapen för att kunna bedriva undervisning på ett adekvat sätt. Jag har kunskapen om yrket men kan inte förmedla till eleverna. Eleverna förstår inte syftet med undervisningen, de tycker det är ointressant och vill inte eller kan inte lära sig under lektionstid. (Svensk yrkeslärarstudent, barn/fritid/pedagogiskt arbete)

Sammanfattningsvis kan konstateras att även i berättelserna om misslyckande framkommer olika aspekter av didaktiska och pedagogiska göranden, deras täta sammanvävdhet med relateranden, och hur de villkoras av olika arrangemang.

Arrangemang som villkorar undervisningspraktiken

Analysen av berättelserna visar hur olika arrangemang framträder och villkorar framställningen av framgång eller misslyckande i undervisningspraktiken. Även om likheten mellan berättelserna om framgång och misslyckande är påtaglig framträder arrangemangen oftare och tydligare i berättelser om misslyckanden. De mest framträdande sociala-politiska arrangemangen handlar om en arbetsmiljö och ett arbetsklimat som i berättelser om framgång beskrivs som öppet, tillåtande och inkluderande. Att ingå i en gemenskap, att ha en känsla av tillhörighet och trygghet, möjliggör ett kollegialt engagemang, samarbete och utveckling. I berättelser om misslyckanden gestaltas det motsatta, en icke-inkluderande arbetsmiljö, i vilken man saknar tillhörighet och som inte möjliggör kollegiala aktiviteter. Även ledningen, vars betydelse oftare lyfts oftare fram i berättelser av misslyckande, ingår i de sociala-politiska arrangemangen.

> Framförallt så handlar 'framgången' om arbetet tillsammans med mina kollegor. Vårt kollegiala samarbete och tiden vi har haft möjlighet att lägga på detta, vårt gemensamma engagemang i utveckling är ingredienserna till tryggheten och framgången. (Svensk yrkeslärarstudent, transport)

De sociala-politiska arrangemangen sammanfaller med de kulturellt-diskursiva arrangemangen, som i berättelser om framgång beskrivs genom säganden, såsom öppen, inkluderande, tillåtande och trygghetsskapande samverkans-

kultur som kännetecknas av ett kollegialt meningsskapande. Samarbete och erfarenhetsutbyte med kollegor utfaller i gemensamt överenskomna principer, förutsättningar för eller tillvägagångssätt i undervisningspraktiken, en kollegial skolutveckling. I berättelser om misslyckande beskrivs det motsatta, avsaknad av dialog, erfarenhetsutbyte och samarbete.

> Jag har erfarna och goda kollegor och vi arbetar mycket tillsammans, dels genom kollegialt arbete där vi regelbundet samlas och pratar om vår undervisning och frågor som kommer upp i vardagen. Syftet är att diskutera och komma fram till gemensamma lösningar/tillvägagångsätt. Dels har kollegorna högt i tak och pratar uppgifter, bedömning och undervisning. En annan del i min trygghet som yrkeslärare är att skolan jag arbetar på har prioriterat att lösgöra tid för kollegialt arbete, därför har vi lärare också tid att faktiskt sätta oss ner ihop. (Svensk yrkeslärarstudent, natur- och lantbruk)

> Inget kollegialt samarbete finns och ingen av kollegorna ger feedback till varandra eller är med på varandras lektioner för att på det sättet utveckla varandras undervisning. Sambedömning av elever finns inte heller. (Svensk yrkeslärar-studerande, vård och omsorg)

En kollegial samverkanskultur, med som byggs upp av aktiviteter såsom stöd, feedback, utvärdering och vägledning, möjliggör och stödjer såväl personlig som professionell utveckling med fokus på undervisningspraktiken.

> Men utan stöd och feedback från de närmaste kollegorna blir det svårt att utvärdera sig själv objektivt. Jag behöver fortbilda mig inom mitt yrke både ämnesmässigt och pedagogiskt och jag behöver hjälp och stöd för att finna en väg vidare. Jag behöver hitta samtalskontakt och en stödperson för att hitta en väg vidare mot personlig utveckling. (Finsk yrkeslärarstudent, hotell och restaurang)

I berättelser om misslyckande hänvisar man till bristen på möjlighet att bolla tankar och idéer med kollegor som orsak till en upplevelse av ensamhet eller stagnation i yrkeslärararbetet.

> Jag har inte kollegor att bolla med, är ensam i min roll. Jag har inte en rektor som ger möjlighet till fortbildning, schemat är alldeles för tjockt så jag får ta gammalt material som går på rutin. (Svensk yrkeslärastudent, barn/fritid/pedagogiskt arbete)

Ett specifikt kulturellt-diskursivt arrangemang som förekommer i berättelser om framgång och misslyckande, och framställs som en aspekt relaterad till professionell utveckling, är styrdokument. Den professionella utvecklingen i förhållande till läroplanen, dess mål och innehåll framställs i berättelserna i termer av ett aktivt förhållningssätt, tolkning och meningsskapande.

> För att som det är idag behöver yrkeslärare lägga en betydande stor vikt och tid på att tolka de målen som finns, och jag tror inte att den tiden finns. Så då de mål och resultatstyrda lite mer centraliserat så att yrkeslärare faktiskt kan göra rätt tolkning och det skulle bidra till en mer likvärdig utbildning oavsett skola och område elever studerar på. (Finsk yrkeslärarstudent, frisör/skönhetsbranschen)

Ledningen beskrivs oftast kort, i allmänna ordalag. Yrkeslärarstudenter förväntar sig att ledningen visar ett professionellt förtroende genom att se och bemöta ens behov och att ledningen bekräftar dem professionellt, genom av stöd, respons, uppmuntran och uppskattning. En avsaknad av dessa leder till en känsla av osäkerhet och otrygghet.

> Jag har en närvarande chef som ser vilka behov som behöver bemötas och gör detta. Jag har vågat misslyckas och resa mig igen med hjälp av chef, kollegor och familj. Min chef har förtroende för mig och lyssnar på mig. (Svensk yrkeslärarstudent, vård och omsorg)

> Jag känner mig osäker på om jag är uppskattad av ledningen och om jag sitter säkert på min stol. (Finsk yrkeslärarstudent, hotell och restaurang)

De materiella-ekonomiska arrangemangen framträder sällan i berättelserna om framgång men förekommer något oftare i berättelser om misslyckande. Brist på medel och resurser omnämns, precis som lokaler, material eller gruppstorlekar. De mest framträdande bristerna i materiella-ekonomiska arrangemang handlar om tiden som resurs och en hög arbetsbelastning, som villkorar till exempel didaktiska göranden.

> Jag har för lite tid att skapa kvalitet i utbildningen och för lite tid att hjälpa svaga elever och för lite tid att skapa utmaningar för kunnigare elever. I och med denna tidsbrist så har jag också svårt att utöka min egen kompetens för att hålla mig ajour med ny utveckling och ny forskning. (Svensk yrkeslärarstudent, natur- och lantbruk)

Citatet ovan visar med tydlighet på sammanvävdheten i undervisnings-praktiken, hur didaktiska göranden samverkar med relateranden och hur dessa villkoras av tiden som ett av de materiella-ekonomiska arrangemangen. Genom att analysera och tolka de två meningarna i en yrkeslärarstuderandes berättelse utgående från teorin om praktikarkitekturer, med fokus på olika aktiviteter och arrangemang, får man syn på den komplexitet som ingår i och villkorar före-ställningarna om yrkeslärares arbete. Detsamma gäller för citatet nedan.

Yrkeslärarens arbete framställs som en komplex och dynamisk helhet, i vilken enskilda aspekter inte kan hanteras och förstås frånkopplade från helheten.

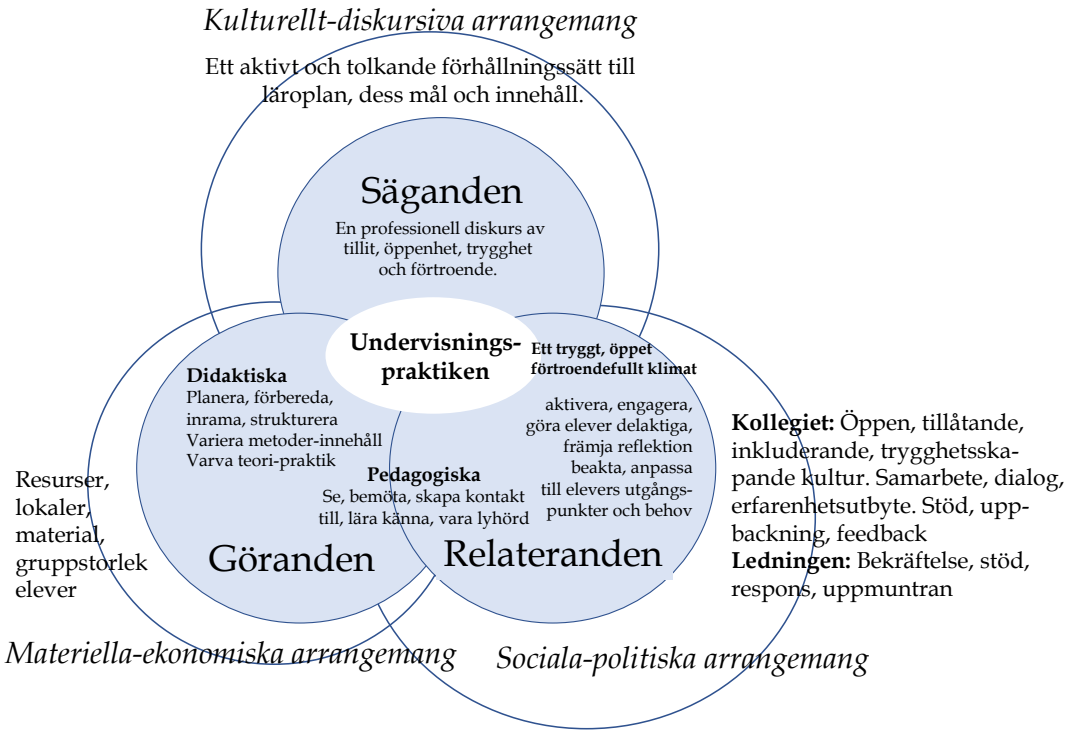
> Jag hittar inte nyckeln till hur jag ska få klassen att lära sig. För att rädda detta behöver jag hjälp. Antagligen behöver jag använda mig av mina kollegors erfarenhet om vad jag gör för fel. Vad är det som gör att det blir tråkigt eller otydligt. Jag måste prata med min chef för att kunna få hjälp att hitta strukturer för min undervisning. (Svensk yrkeslärarstudent, barn/fritid/pedagogiskt arbete)

Sammanfattningsvis kan man konstatera att arrangemangens betydelse framställs främst i berättelser om misslyckanden. Det är främst de sociala-politiska arrangemangen, en arbetsmiljö med tillgång till eller avsaknad av stöd och uppbackning från kollegor, som framträder i berättelserna. Arbetsmiljön med ett arbetsklimat av öppenhet, tillhörighet och tillit möjliggör framgång i

undervisningspraktiken, frånvaro av dessa ger upphov till misslyckande i yrkeslärares arbete. Ett kollegialt engagemang och samarbete villkorar individuell och kollegial utveckling. Arbetsmiljön och arbetsklimatet hänger samman med kulturella-diskursiva arrangemang, som formuleras i termer av profes-sionell öppenhet, tillhörighet och trygghet – eller frånvaro av dessa. Ledningens bekräftelse och trygghet utgör ett viktigt socialt-politiskt arrangemang. Styrdokument framträder som ett specifikt kulturellt-diskursivt arrangemang, särskilt för professionell utveckling.

Konklusioner och diskussion

Syftet med denna studie är att undersöka vad yrkeslärarstudenter framhåller som väsentligt för att lyckas eller misslyckas i arbetet som yrkeslärare. Detta sker utgående från forskningsfrågorna (i) Vilka aktiviteter och arrangemang framträder som centrala i yrkeslärares berättelser om framgång och misslyckande? (ii) Hur är dessa aktiviteter och arrangemang relaterade till varandra? Studiens resultat visar att oberoende av om yrkeslärarstudenter föreställer sig som trygga och framgångsrika i sitt framtida läraruppdrag, eller det motsatta, är fokus och innehållet i berättelserna väsentligen likartat. Figuren nedan (Figur 1) sammanfattar den komplexa och sammanvävda helheten av aktiviteter och arrangemang som analysen genererat. Berättelserna utgår i hög grad från och fokuserar på undervisningspraktiken, och i dem beskrivs två sammanvävda göranden, didaktiska och pedagogiska. Didaktiska göranden består bland annat av planering, inramning, strukturering och variation i undervisningspraktiken, medan pedagogiska göranden handlar om mellanmänskliga aktiviteter såsom att bemöta, lära känna och vara lyhörd till de studerande. Båda dessa göranden hänger samman med och möjliggör anpassning och beaktande av de studerandes förutsättningar och främjandet av deras engagemang, delaktighet och aktivitet, relateranden, i en undervisningspraktik som kännetecknas av ett tryggt, öppet och förtroendefullt klimat. Både i berättelser av framgång och misslyckande framträder de sociala-politiska arrangemangen som centrala för undervisningspraktiken och dess göranden. Olika former av samverkan med kollegor eller uppmuntran och bekräftelse från ledningen sammanfaller med en öppen, inkluderande och trygg arbetsmiljö. Frånvaro av dessa begränsar framgång i undervisningspraktiken. De nämnda sociala-politiska arrangemangen sammanfaller med kulturella-diskursiva arrangemang och kommer till uttryck i en professionell diskurs av öppenhet, trygghet och förtroende. Även ett aktivt och tolkande förhållningssätt till styrdokument ingår i de kulturella-diskursiva arrangemangen. Något överraskande villkoras inte undervisningspraktiken i större uträckning av materiella-ekonomiska arrangemang, såsom tid, resurser och gruppstorlek.



Figur 1. Praktikarkitekturen för framgång och misslyckande i yrkeslärares arbete.

Frånvaron av de materiella-ekonomiska arrangemangen i berättelserna kan tänkas bero på att goda materiella och ekonomiska villkor tas för givna, att de ingår implicit i framställningen av ett framgångsrikt arbete som yrkeslärare, eller att de blir sekundära i förhållande till undervisningspraktiken. Det är värt att notera är att både kulturella-diskursiva och sociala-politiska arrangemang får en så framträdande plats i både i berättelser om framgång och misslyckande. Fokus och innehållet i berättelser om framgång och misslyckande är i stort detsamma och de framstår således som varandras spegelbilder. Kollegiet och ledningen framställs som viktiga för hur man lyckas eller inte i undervisningspraktiken. I positiva berättelser beskrivs arbetsmiljön och arbetsklimatet som öppet, tillåtande och inkluderande med möjlighet till stöd och feedback, och i negativa berättelser beskrivs situationen som icke-inkluderande, och med avsaknad av kollegiala aktiviteter och stöd. Olika aspekter av professionell bekräftelse (uppbackning, uppmuntran och respons) ingår i arbetsmiljön. Vidare kan man notera att aspekter av professionell utveckling ingår implicit i berättelserna. Den professionella utvecklingen framställs som förankrad i erfarenhet och uttrycks för det mesta genom hänvisningar till informellt lärande, såsom att pröva och experimentera i undervisningspraktiken och hålla sig uppdaterad i fråga om

yrkeskunskapen. De gynnsamma sociala-politiska arrangemangen, samverkan och samarbete, stöd och feedback från kollegor, främjar professionell utveckling. Dessa resultat kan tänkas, åtminstone delvis, vara ett utfall av att teorin om praktikarkitekturer, med fokus på hur både aktiviteter och arrangemang hänger samman och samverkar i sociala praktiker, utnyttjats i analysen.

Resultaten i ljuset av tidigare studier

Trots att respondenterna i denna studie utgörs av yrkeslärarstudenter, att inlevelseberättelser använts som för datainsamling och att teorin om praktikarkitekturer använts som en teoretisk referensram överensstämmer resultaten på ett flertal sätt med tidigare forskning, till exempel om yrkeslärares kompetenser och de strukturella faktorernas betydelse. De för yrkeslärarna centrala kompetenserna av pedagogisk och didaktisk karaktär (god kommunikation, planera undervisning, färdighet i bedömning, skapa goda villkor för elevers lärande) som framträder i Anteras m.fl. (2022) studie sammanfaller i stort med det som studenterna i denna studie framställer som väsentligt i sin framtida lärargärning. Samtidigt kan man konstatera, med stöd av Anteras (2022) intervjustudie med svenska yrkeslärare, att yrkeslärares arbete är komplext och att de interpersonella kompetenserna, av vikt för att skapa nära relationer till de studerande, ingår i en helhet av kompetenser (jfr även Lehtonen m.fl., 2018; Weelahan, 2010). Framgång i arbetet förutsätter beredskap och mångsidiga kompetenser för att möta och hantera förändringar och utmaningar i ett flertal professionella kontexter och i växelverkan med många olika aktörsgrupper. Endast en del av kompetenserna kan utvecklas under yrkeslärarutbildning och den professionella utvecklingen fortsätter genom informella lärandeprocesser (Antera, 2022, s. 288). Fokusen på hur didaktiska och pedagogiska göranden hänger samman med och skapar goda förutsättningar för relateranden kan jämföras med Maunu och Tapanis (2018) studie i vilken yrkesverksamma yrkeslärare utvärderade sin yrkeslärarutbildning utgående från huruvida den försett dem med färdigheter för undervisning och växelverkan med de studerande och berett dem för att bemöta och vägleda elever.

Resultaten visar att de aktiviteter som yrkeslärarstudenter i sina berättelser framhåller som centrala är främst av allmän karaktär, relevanta och aktuella för flera lärarprofessioner. Detta kan jämföras med Levo-Aaltonens m.fl. (2018) studie om yrkeslärarutbildningens effekter på yrkeslärares arbete. Dessa visade sig vara av allmän karaktär, såsom att utbildningen ökade de studerandes kunskaper och färdigheter, fördjupade deras självinsikter och förstärkte den kollegiala samhörigheten. Även de centrala sociala-politiska och kulturella-diskursiva arrangemangen som framträder i denna studie är av allmän karaktär. Vi noterar att aktiviteter och arrangemang specifika för yrkeslärare framträder i mindre utsträckning. Detta resultat är intressant både mot bakgrund av tidigare

forskning (t.ex. Andersson & Köpsén, 2019; Mårtensson et al., 2019) och den policytendens som präglat yrkesutbildning de senaste decennierna (Nylund m.fl., 2017) i vilken anknytningen till och utvecklingen inom den egna branschen ofta betonats. Detta kan tänkas, åtminstone delvis, bero på datamaterialet och den teoretiska referensramen. Med teorin om praktikarkitekturer gestaltas relationen till representanter för det egna yrkesområdet i termer av sociala-politiska och kulturella-diskursiva arrangemang. Denna relation framträder inte i någon större utsträckning i berättelserna men kan tänkas ingå implicit, det vill säga tas för given. Det som däremot framhålls explicit av yrkeslärarstudenterna är de sociala-politiska arrangemangen; kollegors och ledningens betydelse att genom olika ageranden skapa en gynnsam alternativt ogynnsam arbetsmiljö och arbetsklimat. På så sätt kan studien tänkas kontextualisera tidigare forskning om yrkeslärares identitet och kompetens i ett sammanhang av kollektiva och ledningsmässiga ageranden. Detta antagande underbyggs av Vähäsantanens (2013, s. 88) studie om yrkeslärares handlingskapacitet (*agency*), vilken uppstår genom samverkan av individuella resurser (professionell identitet, kompetens och arbetserfarenhet) och sociala resurser (ledningskulturen och de professionella relationerna).

Att de materiella arrangemangen är relativt frånvarande i berättelserna är intressant i ljuset av tidigare studier som betonat strukturella faktorers betydelse, som exempelvis organisation, resurser och elevers sociala bakgrund (jfr Esmond & Atkins, 2022; Nylund m.fl., 2018; Tarabini & Jacovkis, 2022;). Som påtalats ovan är detta dock ett resultat som kan förstås i ljuset av att goda materiella och ekonomiska villkor ingår implicit i framställningen av ett framgångsrikt arbete som yrkeslärare.

Studiens begränsningar och förslag till fortsatt forskning

Studiens resultat och kunskapsbidrag villkoras av användningen av teorin om praktikarkitektur som utgångspunkt för en teoridriven analys och av inlevelseberättelser som metod för datainsamling. Trots att ramberättelsen är relativt öppen i sin uppmaning att framställa en framtida lärarpraktik inom yrkesutbildningen, och trots att yrkeslärarstudenter utgick från två varianter av ramberättelserna (med eller utan trygghet i sitt arbete och sin undervisning), blev resultatet överraskande entydigt. Berättelserna kom i hög grad att fokusera på undervisningspraktiken, mer sällan på andra aspekter av lärararbetet. Vi förväntade oss, på grund av variation i fråga om respondenternas bakgrund (branschtillhörighet, yrkes- och lärarerfarenhet samt de två nationella kontexterna) en större spridning och variation i innehållet i berättelserna. Den innehållsliga fokusen riktades på undervisningspraktiken med dess sammanhängande göranden och relateranden. Möjligen spelar kontexten för datainsamlingen in, att den genomfördes under pågående studier för pedagogisk

behörighet, och i två länder vars yrkeslärarutbildning till sitt innehåll och genomförande är ganska lika, jämfört med andra länders organisering för behörighetsgivande studier för yrkeslärare.

En motsvarande studie där fler länder ingick kunde möjligen ge andra resultat. Som vi inledningsvis påtalade är det svenska och det finska yrkesutbildningssystemet relativt likartade med nationellt fastställda läroplaner för gymnasieskolan respektive yrkesutbildningen. Även om det finska yrkesutbildningssystemet är mindre integrerat med högskoleförberedande utbildning och har en kompetensbaserad grundkonstruktion (Nylund & Virolainen, 2019) är den statliga styrningen och organiseringen mer lik än olik den svenska. Vi har inte funnit skillnader avseende kontext eller läroplaner när berättelserna analyserats. En motsvarande studie där yrkeslärarstudenter från Norge och Danmark ingick skulle möjligen ge andra resultat. Även om styrningen och organiseringen av yrkesutbildning i dessa länder oftast etiketteras som del av en nordisk modell är skillnaderna större än mellan Sverige och Finland, vilket även gäller organiseringen av yrkeslärarutbildningarna. Det skulle därför vara intressant att göra en liknande studie med exempelvis studenter i norsk yrkeslärarutbildning på bachelor-nivå, i vilken studier inom yrkesämnen ingår, för att pröva betydelsen av såväl empirisk kontext som metodologiskt förfarande för studiens resultat.

Syftet med denna studie var att undersöka vad yrkeslärarstudenter framhåller som väsentligt för att lyckas eller misslyckas i arbetet som yrkeslärare. Resultatet ger för handen att det är specifika villkor för och aspekter i arbetet som lärare som framhålls som centrala och att dessa aspekter och villkor är relaterade till varandra. Genom studiens design riktas uppmärksamheten bortom yrkesläraren som en handlingskraftig aktör, med givna personligt-professionella kompetenser, intressen och avsikter, i ett sammanhang med givna strukturella villkor. Den teoridrivna analysen, utgående från teorin om praktikarkitekturer, med en datainsamlingsmetod som kännetecknas av öppenhet, resulterar i en komplex och dynamisk helhet av praktiker och arrangemang. Resultatet beskriver hur sociala, kollegiala, relationella, kulturella och organisatoriska aspekter med betydelse för yrkeslärares arbete och lärarpraktik hänger samman. På så vis hoppas vi att studien utgör ett kunskapsbidrag inom forskning om yrkesutbildning och yrkeslärares arbete och bidrar till ett samtal om hur aspekter blottlagda i tidigare studier – till exempel kompetens, identitet och strukturella faktorer – samverkar.

Om författarna

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Hvordan kan videregående skole forberede elever – som planlegger å bruke lærekandidatordning – for varig arbeidslivsdeltakelse?

How to prepare vocational students – aiming to utilise the training candidate scheme – for lasting employment

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Abstract

The training candidate scheme is an accessway into the Norwegian vocational job market for learners who are unable to complete vocational training in secondary school through the ordinary apprentice scheme. This study examines how secondary school can prepare pupils, who aim to utilise the training candidate scheme. We have interviewed former attendees and (current) staff from three secondary schools that offer special needs education. We find that in particular the pupils' social competence seems to be decisive for their attainment of lasting employment. Key components of this competence seem to be maturity, dependability, and the ability to 'keep on working'. A factor that appears to be of particular importance is that a large proportion of the pupils' education is attained through performing practical tasks, especially where this work is similar to carrying out a regular job. Good teacher – student relations also seem to be crucial, as well as the school's network in the business community. Four categories illuminate our research questions: social and professional competence; relationships, motivation, and coping expectations; empowerment, citizenship, and coping with life; and preparation for working life. We use Norwegian government documents as well as self-efficacy theory and theories of learning and motivation in the discussion of these findings.

Keywords: working life participation, vocational training, adapted training, training candidate

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Innledning

I FNs bærekraftsmål nr. 8 er det sentralt å "fremme varig, inkluderende og bærekraftig økonomisk vekst, full sysselsetting og anstendig arbeid for alle" (FN-sambandet, 2023). I den norske regjeringens Fullføringsreform er målet å sikre alle å fullføre utdanningen sin. Det å ta utdanning og oppnå formell kompetanse kan ses i sammenheng med inkludering, frihet til å velge, muligheter for å leve selvstendig og bærekraftig, samt å oppleve medborgerskap (Kunnskaps-departementet, 2017). Målet er at elevene skal få bedre forutsetninger for å fullføre og bestå videregående opplæring (Meld. St. 21 (2020–2021), s. 41), enten i form av en yrkesutdanning eller en studieforberedende utdanning. Dette samsvarer med verdiene nedfelt i opplæringslova § 1-1 og § 1-3 som gir barn og unge klare rettigheter med tanke på opplæring og utvikling, samt i § 11-6 som gir rett til spesialundervisning når det ikke oppnås tilfredsstillende utbytte av den ordinære opplæringen (Opplæringslova, 2024, §§ 1-3,11-6).[1]

Forberedelse til et framtidig arbeidsliv

Opplæringen i Norge skal forberede elevene til et framtidig arbeidsliv, til selvstendighet og til å ta samfunnsansvar, samt å åpne mulige dører til samfunnet. I læreplanverkets overordnede del står det at opplæringen har som mål å fremme elevenes kompetanse og forståelse for yrkesutøvelsen og for samfunnsdeltakelse (Kunnskapsdepartementet, 2017).

Lærekandidatordningen er en vei inn i yrkeslivet for elever som ikke kan benytte seg av den ordinære yrkesutdanning i skole og lærlingeordningen (LKO). Arbeidslivet er en viktig arena, både med tanke på hver enkeltes utrustning til aktiv samfunnsdeltakelse og egen livsmestring. Å vektlegge arbeidet med en god overgang fra skole til arbeidsliv, er viktig for elevenes seinere tilknytning til arbeidslivet. Fag- og yrkesopplæringen kan ses på som et bindeledd mellom utdanning og arbeid, der målet er å kvalifisere for arbeidslivet (Gonon et al., 2008). Et spesifikt mål med fag- og yrkesopplæringen er at elevene skal bli ansettbare (Schmid & Breilid, 2022).

Både norsk og internasjonal forskning viser at det er flere faktorer som kan bidra til at elever velger å ikke fullføre utdanningen og bli formelt kvalifisert til arbeidslivet. Risikofaktorer kan påvirkes av familien, skolen, utdannings-systemet og politiske beslutninger (Alexander et al., 2021; Lamb, 2011; Rumberger, 2011; Schmid et al., 2021).

Elever med ekstra behov for støtte og tilrettelegging

Elever med behov for ekstra støtte eller tilrettelegging i opplæringen, møter ofte utfordringer som kan knyttes til overgangen fra skole til arbeidslivet. De kan bli møtt med for lave forventninger, og at det ikke alltid er samsvar mellom det

utdanningstilbudet de er tatt inn på og det opplæringstilbudet de faktisk mottar (Meld. St. 21 (2020–2021), s. 23–26).

Denne artikkelen bygger på en empirisk studie av hvordan norske videregående skoler (VGS) kan forberede elever som søker mot lærekandidat-ordningen (LKO) til deltakelse i arbeidslivet. Vi ser på overgangen til både ordinære bedrifter og bedrifter som tilbyr varig tilrettelagt arbeid (VTA) i regi av arbeids- og velferdsetaten (NAV) (NOU 2012:6, s. 19).

Hovedmodellen for yrkesopplæring i Norge kalles gjerne 2 + 2. Elever går to år på et yrkesfaglig utdanningsprogram i videregående skole. Deretter søker de læreplass i en godkjent lærebedrift (Kunnskapsdepartementet, 2024, §6-13), og blir lærlinger i to år til. For å fullføre yrkesutdanning må lærlingen bestå en fag- eller svenneprøve. Dette er en praktisk prøve der kandidaten skal vise sin helhetlige kompetanse i henhold til læreplanen for sitt yrke. For å bli godkjent som svenn eller fagarbeider, må lærlingene ha bestått alle fag i videregående skole (Kunnskapsdepartementet, 2024, §§ 9-48, 9-49).

Læreplanverket

I læreplanverket finner vi kjerneelementer som beskriver det viktigste faglige innholdet elevene skal arbeide med i de ulike fagene. Dette skal vektlegges i opplæringen, slik at elevene skal utvikle relevant kompetanse for framtidig yrkesutøvelse og deltakelse i arbeidslivet. Elevenes opplevelse av relevans i opplæringen, som videre er i tråd med deres utdanningsvalg og yrkesinteresser, kan knyttes til myndiggjøring og det å bli gitt og få ta ansvar i egen opplæring. I tillegg blir det beskrevet og tydeliggjort i læreplanenes overordnede del, hvilket ansvar skolen og lærebedriften har når det gjelder danningsperspektivet og utvikling av kompetanse (Kunnskapsdepartementet, 2017). For de ulike yrkene er det i læreplanverket også beskrevet hvilken nøkkelkompetanse yrkesutøvere trenger i det aktuelle yrket.

I overordnet del er det videre beskrevet tre tverrfaglige tema som skal prege opplæringen; folkehelse og livsmestring, demokrati og medborgerskap og bærekraftig utvikling. Slik vi ser det kan myndiggjøring både sees i sammenheng med strategier knyttet til temaene livsmestring og medborgerskap, og å gi elevene innsikt i og opplevelse av hvordan de kan ta vare på seg selv og egen helse. De skal også oppleve å være en del av et skole- og arbeidsfellesskap og ha en målbærende rolle som medborger i et demokrati, både i skolen, i arbeidslivet og i samfunnet for øvrig (Kunnskapsdepartementet, 2017).

LKO er et tilbud til elever og lærlinger som ikke vil klare å fullføre ordinær yrkesutdanning. I opplæringslova defineres en lærekandidat som en som tar sikte på å gjennomføre en mindre omfattende prøve enn en fag- eller svenneprøve etter endt opplæring. Lærekandidater har rett på tilpasset opplæring som kan være å velge ut deler av læreplanen for opplæringen i det

aktuelle faget (Opplæringslova, 2024, § 7-1, Utdanningsdirektoratet, 2024). Ordningen er modellert etter ordinært utdanningsløp, men elevene får opplæring og prøves etter læretiden i et utdrag av læreplanen i sitt yrke, og de trenger ikke ha bestått fag i videregående skole. Gjennomgått opplæring dokumenteres med et kompetansebevis (Opplæringsforskrifta, 2024, § 9-51). I dag regnes et kompetansebevis på nivå videregående opplæring som et minstekrav for varig deltakelse i arbeidslivet (OECD, 2005).

LKO er tilgjengelig både for elever som har mottatt spesialundervisning i skolen, og elever som har gått ordinære skoleløp. Det finnes ikke statistikk over hvor mange av de som blir lærekandidater som har mottatt spesialundervisning i VGS. Vårt empiriske materiale stammer fra skoler der elevene har deltatt i helhetlige spesialundervisningstilbud. Dette er elever som på forskjellige vis er ekstra sårbare – og derfor mer avhengige av virkningsfulle tiltak i sitt undervisningstilbud enn andre. Dette kan ofte gjøre det ekstra tydelig hvilke tiltak som er virkningsfulle. I tråd med en forståelse av spesialundervisning, ikke som et sett med unike metoder, men tvert imot som forsterket eller intensivert ordinær didaktikk (Haug, 2015), anser vi at faktorer som er virkningsfulle for denne gruppen også vil være virkningsfulle for alle elever. Slik kan våre funn være interessante både for spesialundervisningstilbud, heretter individuell tilpasset opplæring, og ordinære undervisningstilbud og for elever som sikter mot LKO og den ordinære lærlingordningen.

Skolens rolle

Så vidt vi kjenner til, finnes det ingen tidligere studier som har undersøkt skolens rolle i å forberede elever som søker mot LKO for varig arbeidslivsdeltakelse. Et unntak er Rokkones (2017), som har sett på skolens praksis mot elever som søker mot LKO, men med fokus på samarbeidet mellom skole og bedrift. Våre funn er i tråd med etablert pedagogisk teori og resultater fra denne studien. Samtidig framstår noen faktorer som spesielt viktige, noe som kan bidra til å peke ut mulige retninger for videre forskning.

I vår studie undersøkte vi hvilke erfaringer ansatte og tidligere elever ved tre skoler har gjort i arbeidet med å forberede elever til overgangen fra skole til arbeid og tar utgangspunkt i problemstillingen: Hvordan kan videregående skole (VGS) forberede elever, som mottar spesialundervisning og søker varig arbeid gjennom LKO, på overgangen til arbeidslivet?

Vi har i studien utarbeidet følgende forskningsspørsmål:

- Hvordan forberedes elevene på møtet med arbeidslivet?
- Hvilke likheter og forskjeller finner vi i måten VGS forbereder elever som søker mot vekstbedrifter og ordinære bedrifter via LKO?

- Hvilke kompetanser og ferdigheter vurderer skolen at elevene trenger i arbeidslivet?

Tidligere forskning

Det er gjort lite forskning på innholdet i opplæringstilbudet til lærekandidater og på skoletilbudet til elevene som forberedes til å bli lærekandidater. Et søk på "lærekandidat*" i bibliotekbasen Oria gir treff på fire forskningsrapporter og ti fagartikler. De tekstene som er relevante for vår studie blir referert nedenfor.

Lærekandidatordningen (LKO)

Lærekandidatordningen har i liten grad vært benyttet, og det er stor variasjon mellom fylkene hvor mye den tas i bruk (Markussen et al., 2018, 2019). Det finnes likevel en del forskning på innholdet i ordningen, på lærekandidatenes opplevelse av den, hvilke faktorer som påvirker og er avgjørende for opplevelsen av å lykkes og å delta i arbeidslivet (Breilid & Dyrnes, 2017; Dyrnes & Sträng, 2021; Rokkones, 2017).

Dyrnes og Sträng (2021) viser til følgende faktorer som avgjørende i arbeidet med å tilrettelegge og forberede for arbeidslivsdeltakelse:

- Tett individuell oppfølging
- Individuell tilpasning og tilrettelegging med mulighet for medvirkning og å ta styring i eget liv
- Tverrgående samarbeid og helhetlig tilnærming
- Tidlig intervensjon og forebygging på flere arenaer
- Ubyråkratiske strukturer som inviterer til kontakt og rask innsats

Myndiggjøring

Myndiggjøring vektlegges, og det vises til at det er avgjørende å synliggjøre evnene, ressursene og interessene til elevene/lærekandidatene, i motsetning til å sette søkelys på utfordringer og begrensninger. Et eksempel på praksiser som fremmer mestring og tro på egne evner, er å legge til rette for å øve på å løse yrkesoppgaver som elevene mestrer (Breilid & Dyrnes, 2017).

Dyrnes og Sträng (2021) har sitt empiriske materiale fra en studie gjort i en arbeidsmarkedsbedrift som sysselsetter personer som av ulike grunner har utfordringer med å få tilhørighet til det ordinære arbeidslivet. Resultatene er imidlertid sammenlignbare med hvordan videregående skole forbereder elever på arbeidslivet. Det er derfor interessant når jobbkonsulent i bedriften hevder at hen ikke tror at metodene fra arbeidsinkludering kan overføres til skolen slik den er administrert og fungerer i dag.

Oppfatning om at deltagere bruker arbeidspraksis i bedrifter til å styrke og utvide eksisterende kompetanse (Frøyland, 2020) kan overføres til skolen, slik den er administrert og fungerer i dag; "Ifølge dem begrenser den pedagogiske virksomheten forståelsen for verdien av elevens kunnskap og evner" (Dyrnes & Sträng, 2021, s. 12).

Breilid og Dyrnes (2017) har intervjuet lærekandidater i ulike bedrifter og virksomheter. De finner at en praksis, preget av myndiggjøring, ser ut til å være av betydning for at lærekandidatene skal lykkes med å få tilknytning til arbeidslivet. Videre pekes det på det å ta i bruk og utvikle elevens ressurser heller enn utfordringer, og å gi hen personlig anerkjennelse og respekt som signifikante faktorer. Videre finner Breilid og Dyrnes at utvidelse og styrking av de unges sosio-økologiske nettverk, medbestemmelse og støtte til utprøving av nye strategier, er bestyrkende faktorer på veien til og i overgangen til arbeidslivet (Breilid & Dyrnes, 2017).

Den tredje vei

Rokkones (2017) har studert et alternativt utdanningsprogram kalt *Den tredje vei*, som hadde som mål å gi grunnleggende kompetanse via LKO til elever med høyt skolefravær og andre utfordringer knyttet til skolegangen. Fleksibilitet, inkludert muligheten til å avvike fra normert tid, ble funnet å være "antageligvis prosjektets viktigste suksesskriterium" (Rokkones, 2017, s. 18), og praktisk arbeid ble også identifisert som en suksessfaktor. Elevene understreket betydningen av både fellesskapet i klassen og gode relasjoner til lærere, som de mente burde være støttende, klare og strenge når det var nødvendig, samtidig som de viste tillit og fulgte opp elevene (Rokkones, 2017).

Internasjonal forskning

Holmgren et al. (2024) viser i en undersøkelse av spesialundervisning i yrkesopplæringen i Sverige, at en god relasjon mellom lærer og elev, små opplæringsgrupper og tilrettelegging av klasserom og verksted med hensyn til elevenes behov har betydning for opplæringen og læringsutbytte for elevene.

Aarkrog et al. (2018) sitt datamaterialet består av spørreundersøkelser og intervjuer gjennomført med 31 studenter høsten 2017 i studien *To stay on track: New perspectives and sustainable solutions for dropout among young adults*, og ser på faktorer som påvirke elevenes motivasjon til å fullføre utdanningen. Studien viser til at det ser ut til at fokuset på elevenes egne beslutningsprosesser er av større betydning enn selve resultatet av beslutningene. Den enkelte elev skal videre ha myndighet til å ivareta og reflektere over sin egen livssituasjon både på skolen og i livet for øvrig, og ta egne beslutninger når det gjelder utdanning og framtidig yrkesvalg (Aarkrog et al., 2018).

Schmid (2020) har sammenliknet hvordan yrkesopplæringen tilrettelegges for elever med ulike utfordringer i utdanningsløpet i Norge, Sverige, Østerrike og Sveits. Hun finner at man i Sverige og Østerrike i likhet med Norge, tilpasser opplæringen rettet mot arbeidslivsdeltakelse, basert på den enkelte elevs forutsetninger og at opplæringen kan legges til både skole, verksted og bedrift etter elevenes behov og forutsetninger. I Sveits er yrkesopplæringen i mye større grad standardisert, også for elever med behov for tilpassing og tilrettelegging, men allikevel anerkjent i arbeidslivet (Schmid, 2020).

Et europeisk forskningsprosjekt i regi av European Agency for Special Needs and Inclusive Education, undersøkte hvilke faktorer som bidrar til at yrkesfagelever med særskilte opplæringsbehov kan få en vellykket overgang til arbeids-markedet. Resultatene av undersøkelsen kan sammenfattes til at eleven følges opp av kompetente hjelpere i hele overgangsperioden fra skolegang til arbeidsliv, at læreplaner og undervisningsopplegg er individuelt tilrettelagte og innovative, og en elevsentrert undervisning med vekt på elevenes evner og ressurser (European Agency, 2013).

Arbeidsinkludering

Arbeidsinkludering er å arbeide for at personer med ulike utfordringer med å kunne delta i arbeidslivet gis bistand for å mestre å komme ut i arbeid, og praksis i arbeidslivet blir i stor grad brukt som middel for å styrke deltakernes selvtillit, motivasjon og kompetanse (Frøyland, 2020). Deltakerne kan få praksis i en bedrift/virksomhet for arbeidsutprøving, arbeidstilvenning og arbeidstrening. Dette kalles *Place then Train* og her gis det tett oppfølging med tanke på livsmestring både på og utenfor arbeidsplassen. Dette er en alternativ tilnærming til *Train then Place* som går ut på å gjøre deltakerne klare for arbeidslivet gjennom opplæring i forkant av møtet med arbeidslivet (Spjelkavik, 2016). Ifølge Frøyland (2020) er det et godt empirisk belegg for at denne tilnærmingen til arbeids-inkludering gir bedre resultater enn en *Train then Place* tilnærming.

Støttet til tidligere forskning og egen erfaring ser vi at prinsipper fra arbeidet med arbeidsinkludering kan tilpasses et opplæringstilbud som forbereder elever på å bli lærekandidater. Et eksempel på hvordan man kan ta i bruk disse prinsippene er å etablere gode relasjoner mellom elev og lærer som fremmer trivsel, motivasjon, et godt selvbilde og læring (Drugli, 2012; Hattie, 2012; Urdan & Schoenfelder, 2006).

Læring og tro på egen mestring

Illeris og Nordgård (2018) beskriver i sin modell, læringstrekanten, tre dimensjoner i læringsarbeidet; drivkraft, innhold og samspill, som viser kompleksiteten ved læring. Drivkraft kan også kalles motivasjon, som de mener har sammenheng med både følelser og vilje. Illeris og Nordgård knytter videre

det de kaller drivkraftdimensjonen, til det vi kjenner som elevmedvirkning og som i overordnet del av det norske læreplanverket beskrives som demokrati og medborgerskap (Illeris & Nordgård, 2018; Kunnskapsdepartementet, 2017).

Bandura (1986) knytter læring til mesterlæretradisjonen, der eleven lærer ved å samspille med kompetente yrkesutøvere som kan demonstrere hvordan yrkesoppgaver utføres, og gi elevene muligheter til både å prøve ut og lære. Dette bidrar til motivasjon og tro på egen mestring, *self-efficacy* (Bandura, 1997). I utvikling av forventninger til og opplevelse av egen mestring, ses det å være i dialog med og få tilbakemeldinger fra andre i miljøet, som kan være i skole eller arbeidsplass, å være av betydning. Oppmuntringer og veiledning der det formidles en positiv forventning til at elevene skal mestre nye oppgaver ses her på som sentrale for utvikling av forventninger til egen mestring. Eksempler på dette er hvor det skapes relasjoner mellom lærer og elev, men også mellom elevene, ved at de kan arbeide og lære sammen og oppmuntre og lære av hverandre i et læringsfellesskap. Ifølge Bandura (1997) er det fire faktorer som har betydning for at mestringsforventning utvikles; verbale budskap, tidligere suksess, andres suksess og kollektiv suksess.

Metode

Et viktig mål med en vitenskapelig undersøkelse er å kritisk undersøke et bestemt tema fra ulike ståsteder for å oppnå et nyansert helhetssyn. Det valgte forskningsspørsmålet skal ha en klar hensikt, og oppfylle kravet til åpenhet om hva som er gjort og hvordan det presenteres.

Artikkelen bygger på en undersøkelse av hvordan VGS kan forberede elever med behov for spesialundervisning på overgangen til arbeidslivet gjennom lærekandidatordningen. Vår grunnantakelse er at forskning med betydning for skole og arbeidsliv bør ta utgangspunkt i den virkeligheten som elever og lærere selv beskriver. Vi undersøkte derfor både skoler der elevene har planer om å bli ansatt i det ordinære arbeidslivet, og der elevene søker mot tilrettelagt arbeid i vekstbedrifter. Ved å avdekke hvilke faktorer i praksiser i VGS som bidrar til at elever kan få fast ansettelse etter læretiden, sammen med muligheter for å implementere metoder fra arbeidsinkludering, søkte vi etter forståelse for skolens ansvarspraksis for fremtidig voksenliv.

Det empiriske materialet består av semistrukturerte intervjuer med ansatte og tidligere elever ved de utvalgte skolene. Fire tidligere elever fra to videregående skoler som nå er i fast jobb i ordinære bedrifter, og fire lærere fra de samme skolene, ble intervjuet. For å få et helhetsbilde av skoletilbudet tok vi utgangspunkt i ulike temaer, som klassemiljø, relasjoner mellom elever og lærere, innhold i undervisning, individuell tilrettelegging, kontakter med næringslivet og oppfølging etter skolen.

Videre ble tre ansatte (en leder, en karriereveileder og en lærer) på en videregående skole der elevene har planer om å bli ansatt i vekstbedrifter også intervjuet. Vi ønsket å undersøke en skole med yrkesfaglig utdanning og med alternativt utdanningstilbud. Den valgte skolen ville også ha erfaring med lærekandidat-ordningen. Basert på tidligere praksis med oppfølging av lærekandidater hadde vi tilgang til et nettverk av videregående skoler, som vi brukte til å velge en skole som oppfylte våre forhåndsvalgte kriterier.

Utvelgelsen av informanter kan beskrives som strategisk og basert på konkrete kriterier med relevans for forskningsspørsmålene. Informasjon fra tidligere elever, som nå hadde en fast tilknytning til arbeidslivet, sammen med lærerne deres, ga mulighet til å kartlegge de reelle suksessfaktorene knyttet til lærekandidatordningen. For elevene som søker mot tilrettelagt arbeid i vekst-bedrifter ønsket vi å utforske det systematiske arbeidet i overgangen fra skole til arbeid. For å belyse temaet fra ulike sider og få mest mulig informasjon valgte vi å bruke et snøballutvalg (Bryman, 2016) hvor pedagogiske ledere ved skolen foreslo relevante informanter. Disse fikk deretter en skriftlig forespørsel fra oss med informasjon om studien og et samtykkeskjema som de kunne signere om de ønsket å bli intervjuet.

Det empiriske materialet fra intervjuene ble transkribert og deretter bearbeidet videre gjennom en tematisk analyse (Braun & Clarke, 2006; Bryman, 2016). Metoden innebærer at analysen gjennomføres trinnvis, fra en generell forståelse av innholdet til en systematisk koding av data og identifikasjon av potensielle temaer av betydning for studiens forskningsspørsmål. Vi begynte med å lese transkripsjonene flere ganger, for innledende koding. Deretter ble de gjennom-gått på nytt for å avdekke hvilke temaer som var av betydning og samtidig hadde relevans for problemstillingen. Temaene som først ble dannet fra datamaterialet var forventninger, forberedelse og samarbeid. Deretter ble temaene endret til hver enkelt elevs potensial og realistiske mål, fokus på samarbeid med elever, foreldre og bedrifter, samt forberedelse til arbeidslivet.

Tolkningen av dataene var resultat av både induktive og abduktive prosesser. I tillegg til det åpenbare innholdet i utsagnene, slik det gjenspeiles i transkripsjonene, ble analysen påvirket av vår forhåndsforståelse av tidligere forskning og praksis. Vi er klar over at vår forforståelse av temaer, basert på erfaring med oppfølging av lærekandidater og praktisk kunnskap om videregående opp-læring med yrkesfaglige utdanningsprogram kan påvirke resultatene av vår undersøkelse. Våre ulike bakgrunner og erfaringer ga oss en mulighet til å se på datamaterialet fra flere perspektiver. Å strebe etter å fjerne forforståelser er ikke et mål i seg selv. Det er imidlertid viktig å være transparent og bevisst på dette, samt gjøre leseren oppmerksom på de forutinntatte meninger vi kan ha tatt med inn i studien (Hjardemaal, 2018).

Gjennomføring av intervjuer, med fokus på skole og utdanning, innebærer en rekke etiske aspekter. Det er viktig på forhånd å vurdere hvilke konsekvenser som kan oppstå i etterkant for informantene. I undersøkelsen av hvordan skolen forbereder elever med spesialundervisning på overgangen fra skole til arbeid i vekstbedrifter, kunne for eksempel foreldrenes perspektiv gitt verdifull kunnskap om elevenes unike forutsetninger. Et viktig spørsmål er hvilke muligheter og begrensninger våre undersøkelser innebærer. Informantene møter oss med subjektiv bevissthet om sine respektive roller og aktivitetene de er og har vært en del av. Et etisk utgangspunkt er samspillet med våre informanter i en felles forståelsesprosess (Habermas, 1990). De deler sin kunnskap og erfaring og vi ønsker å forstå verden fra deres perspektiv.

Teoretisk kunnskap bidrar til gode tolkninger av de innsamlede dataene, men for at forskningsresultatene skal være nyttige i skolens arbeid og videre i et samfunnsperspektiv, er det behov for både sunn fornuft og kritisk tenkning. I vårt arbeid har vi beveget oss mellom ulike teoretiske tilnærminger og praktiske beskrivelser av virkeligheten. For vide perspektiver kan utgjøre risiko for grunne og motstridende tolkninger. I forskergruppen har vi oppfattet våre forskjeller når det gjelder kunnskap, erfaring og yrkesutøvelse som berikende og komplementære faktorer. Samlet sett har det gjort oss i stand til å presentere et empirisk basert arbeid som vi mener oppfyller de vitenskapelige kravene til validitet og etterprøvbarhet.

Funn

Vi vil her presentere funnene og knytte dem til kategoriene over i presentasjonen og diskusjonen av materialet. Funnene fra skoler rettet inn mot det ordinære arbeidslivet og mot tilrettelagt arbeid i vekstbedrifter presenteres hver for seg, for lettere å kunne se likheter og forskjeller i måten de forbereder sine elever til arbeidslivet. Vi ønsker gjennom presentasjonen av funn og analyse av dem besvare våre forskningsspørsmål:

- Hvordan forberedes elevene på møtet med arbeidslivet?
- Hvilke likheter og forskjeller finner vi i måten VGS forbereder elever som søker mot vekstbedrifter og ordinære bedrifter via LKO?
- Hvilke kompetanser og ferdigheter vurderer skolen at elevene trenger i arbeidslivet?

Vi ser i vårt materiale at det er fire kategorier som trer fram som signifikante for å belyse våre forskningsspørsmål:

- sosial kompetanse
- relasjoner, motivasjon og mestringsforventning

- myndiggjøring, medborgerskap og livsmestring
- forberedelse til overgangen fra skole til arbeidsliv

Funn fra skoler som retter seg mot det ordinære arbeidslivet

Sosial kompetanse

Ifølge Illeris og Nordgård (2018) foregår læring i et sosialt samspill. Hvordan individer tilegner seg kunnskap, avhenger av hvilke relasjoner individet kan utvikle med andre, og hvordan det sosiale fellesskapet er konstruert.

Både lærere og elever framhever sosial kompetanse som avgjørende for å få og beholde en jobb. Kategorien "Sosial kompetanse" var et av temaene under intervjuene, og er som sådan en del av vår forforståelse. Sosial kompetanse er her forstått som å ha lært å oppføre seg slik det forventes på en arbeidsplass i hovedsak uavhengig av det bestemte yrket som utføres.

Underkategoriene som beskriver denne kompetansen, har oppstått induktivt, ved at intervjuobjektene har omtalt dem – f.eks. "modenhet", "pålitelighet" og "å stå i arbeid". Lærerne ser dette som viktigere enn den faglige kompetansen, mens elevene ser dem som omtrent like viktige. Det er særlig to typer sosial kompetanse som framheves; modenhet og pålitelighet.

Begrepet modenhet er her forstått i sammenheng med jobb; å utvise selvstendighet, initiativ og samarbeidsevne i et arbeidsfellesskap. Det er noe uenighet blant elevene om hvor stor rolle skolens undervisning spiller for å utvikle modenhet. Mens en annen elev sier at dette "har bare kommet når man blir eldre" understreker en annen:

> Skole hjelper ikke bare for å finne ut hva man [har] lyst å jobbe med, men også å finne sin egen personlighet […]. Det var greit å vokse opp på skolen, å bli litte grann sånn moden. (tidligere elev)

Evnen til å "stå i arbeid" blir særlig vektlagt av både tidligere elever og lærere. Alle lærerne bruker dette begrepet uoppfordret, og flere framhever at elever i tilrettelagte undervisningstilbud, med mye arbeidstrening, utmerker seg på dette området. Videre framhever både lærere og tidligere elever pålitelighet i form av å komme til tiden og følge avtaler i en jobb som avgjørende. En lærer sier; "Å møte opp til rett tid, det å kunne samarbeide med andre, det å stå i jobb, det å fikse de kjedelige dagene" (lærer 1).

En tidligere elev som mislyktes i to firmaer, sier at da han begynte i sitt nåværende firma tenkte han "nå må jeg jo bare stå opp om morgenen og komme, være på jobb. Stå på, hvis ikke så blir det aldri noe" (tidligere elev).

Faktorer som særlig fremmer sosial kompetanse

Som beskrevet over, er det særlig tre trekk ved undervisningen som synes å være vesentlige for at elevene skal utvikle sosial kompetanse; jobbnær undervisning, at lærerne fremhever hvilke krav som stilles i arbeidslivet og at elevene får tilstrekkelig tid til å bli klare for arbeidslivet. Illeris og Nordgård (2018) bruker begrepet transformativ læring, relatert til refleksjon, kritisk tenkning og bevisstgjøring og at den lærende føler seg tilstrekkelig trygg til å kunne gi slipp på det kjente og etablerte. "Skolen […] var på en måte en […] bedrift, med en skole samtidig" sier en tidligere elev. Alle informantene understreker at store deler av undervisningen er svært nær en jobbsituasjon, og at dette er viktig for at elevene skal bli forberedt på arbeidslivet. Selve arbeidsoppgavene – det å lage ekte produkter for ekte kunder – framheves som avgjørende for at skoledagen skal føles virkelighetsnær.

> Hverdagen vår her er veldig ekte. Når vi smører smørbrød her, så er det fordi det er kunder som skal kjøpe det. (lærer)

En annen lærer poengterer at det er viktig å komme i rett tid. Lærerne er opptatt av at det praktiseres et regime for krav til pålitelighet med arbeidslivet som modell. Både tidligere elever og lærere er enige om at dette blir kommunisert, men de tidligere elevenes oppfatning av det faktiske innholdet er mindre presist enn lærernes. Lærerne er tydelige på at de gjentar noen vesentlige punkter som det å komme presist, stå i arbeid og delta aktivt, og understreker at konsekvensene av regelbrudd er mye større i arbeidslivet enn på skolen.
"Skolen ga på en måte ikke slipp før du hadde fått den læringskontrakten", sier en tidligere elev. Tre av de fire tidligere elevene gikk på VGS lenger enn to år. Alle fire synes de fikk nok tid til å forberede seg til arbeidslivet. Særlig lærerne framhever at muligheten til "ekstra" tid er avgjørende for mange av elevene.

> Når måla er oppnådd, så er du ferdig. Og da er det jo noen som bruker lengre tid, og noen som bruker kortere tid. (lærer)

Myndiggjøring og medborgerskap

Det er en rekke trekk ved undervisninga som fremmer elevenes opplevelse av mestring og motivasjon, og dermed deres opplevelse av *self-efficacy* (Bandura, 1997). Samtidig synes det som om forholdet til lærerne er en spesielt viktig faktor "Jeg lærte sånn, å stå for seg selv, […] for sin egen mening" sier en tidligere elev. Alle de tidligere elevene mener også at de hadde et godt forhold til alle sine lærere. Flere understreker at dette var viktig for at de trivdes og hadde det bra på skolen, og for deres personlige utvikling og læringsutbytte. Det ble også framhevet betydningen av at lærerne viste respekt, så hver enkelt og lyttet til og tok det elevene sa på alvor. "Det hjelper meget mye det, også ha lærere som lytter, mere enn det man kan tro av og til", sier en tidligere elev. Lærerne ga uttrykk for

det samme; Aat "en forutsetning for at det skal være god læring er jo en god relasjon" og at de er opptatt av at elevene føler seg sett og ivaretatt.

Overgang skole – arbeid og forberedelse til arbeidslivet

At skolen har gode kontakter i næringslivet der elevene skal ut i arbeidslivet, blir av alle lærerne framhevet som helt avgjørende – særlig med tanke på at skolen fungerer som formidler av kontakt mellom elev og en potensiell framtidig lærebedrift og arbeidsplass. Også praksisperioder i bedrift i første og andre trinn i videregående skole, vg1 og vg2 i faget YFF (yrkesfaglig fordypning der elevene i hovedsak har opplæringen i bedrift eller annen virksomhet), i tillegg til oppfølging fra skolen i læretiden, blir sett på som viktig. En tidligere elev uttrykte dette slik: "Skolen hjelper deg med [å] få en jobb på et sølvfat". Både lærere og tidligere elever er enige om at uten skolens formidling ville svært få av elevene som benytter seg av LKO kommet ut i arbeidslivet. "Selv om […] det beste er om elevene hadde […] ordna dette selv, så tror jeg vi er avhengige av at skolen tar tak i det" uttrykker en lærer.

Praksisperiodene blir sett på både som faglig lærerike, og som en realitets-orientering for at elevene skal være forberedt på arbeidslivet. Gjennom å tilpasse praksis til elevenes gode muligheter til læring (Schmid, 2020).

Like viktig er disse periodene som en prøvetid for å få læreplass. En lærer sa: "Det er lettere å ringe til noen du veit hvem er".

To tidligere elever fikk i løpet av læretiden oppfølging fra skolen de hadde gått på. Dette framhever de som et viktig tilbud de var godt fornøyde med. To andre fikk oppfølging fra opplæringskontoret for sitt yrke, noe de ikke syntes de fikk noe særlig utbytte av. Alle lærerne var enige om at oppfølging fra skolen i læretida er svært verdifullt, og de lærerne som jobber på en skole uten et slikt tilbud ønsker at dette blir etablert.

Funn fra skole som retter seg mot vekstbedrifter

Både leder, karriereveileder og lærer beskriver at tiden elevene er tilknyttet skolen har kort varighet, og at de er opptatt av å forberede elevene best mulig på overgangen til arbeid. "Så det er nok en veldig overgang … Så ideelt sett, så kunne jeg nesten tenkt meg at skolen burde hatt et type oppfølgingsansvar noen måneder etterpå for å trygge både elevene og foresatte" (leder).

Leder sier videre at mange av elevene har hatt tett oppfølging over flere år i grunnskole og videregående skole, og det kan oppleves som en brå overgang til læretid for noen elever.

Sosial og faglig kompetanse

Lærerne er opptatt av konkrete og fagspesifikke ferdigheter, og beskriver hvordan de kan tilpasse skolehverdagen individuelt for elevene etter deres

interesseområder og kompetansemål i læreplanen, som også kan ha en praksisnær tilnærming, slik at elevene kan øve seg på praktiske ferdigheter internt på skolen før de skal gjennomføre YFF i en bedrift:

> Vi brukte en del praktisk tilnærming til faget da, hvor de fikk.. slik som her på skolen, så har vi et sykkelverksted for den som liker å skru litt og mekke litt. Så har vi tilgang til et lokale hvor vi tidligere har brukt som en bruktbutikk. (lærer)

Skolen beskriver at de har stort fokus på overordnede ferdigheter, og forsøker å forberede elevene på krav de kan møte i arbeidslivet. Lærer og karriereveileder forteller at dette kan handle om å være pålitelig, å møte til avtalt tid, være selvstendig i arbeidsoppgaver eller høflighet som eksempelvis å hilse på kollegaene på morgenen. Leder beskriver hvordan noen elever har behov for å få konkret opplæring i personlig hygiene før de har utplassering i bedrift. "Noen elever trenger å trene på at vi må lære oss å vaske oss, bytte klær, lukte godt når vi kommer ut, for noen elever er helt der" (leder).

Forberedelser til arbeidslivet

Karriereveileder og leder forteller at de tidlig informerer om overgangen til arbeidslivet. De informerer om dette på foreldremøtet i vg1 og gjennomfører individuelle elevsamtaler med hver enkelt elev i vg2 etter at de har hatt faget YFF i bedrift. Karriereveileder forteller at dette tar mye tid, men at det da blir mulig å gi konkrete tilbakemeldinger om hvilke muligheter den enkelte elev kan ha.

> Nå er jeg med på alle utviklingssamtaler høsten vg2. Hvor jeg informerer foresatte sammen med elev … hvilke muligheter som ligger til rette for akkurat den eleven. (karriereveileder)

Hver enkelt elevs potensiale og realistiske mål

Som tidligere nevnt er positive forventninger til elevenes muligheter å mestre nye oppgaver en forutsetning for utvikling av elevenes egen mestringstro (Bandura, 1997).

Skolen er opptatt av at hver enkelt elev skal nå sine mål og få utnyttet sitt potensiale, men karriereveileder forteller at de samtidig er opptatt av å kommunisere hva som er realistisk å få til og at dette gjøres i individuelle veiledningssamtaler. Skolen er bekymret for om det er rom for de elevene som har potensiale til å mestre avgrensede oppgaver i arbeidslivet. "Så det er … ja. Min bekymring går jo på det at … er det plass til alle som har potensiale? Det er jeg litt usikker på" (karriereveileder).

Diskusjon

Det er lettere å få øye på likheter enn forskjeller når lærerne beskriver mål og midler i undervisningstilbudene til elever som henholdsvis sikter mot det

ordinære arbeidslivet, og tilrettelagt arbeid i vekstbedrifter. I begge tilfeller oppfattes det som formålstjenlig å satse på praktisk undervisning. Videre blir arbeidet med sosial kompetanse, og særlig pålitelighet, framhevet som viktig for begge undervisningstilbudene. Det er også et felles ønske om å ha mulighet til å følge opp elevene videre fra skolens side etter at de har etablert seg i arbeidslivet.

Vi synes det er interessant at det er et såpass stort sammenfall i synet på hva som er viktig for elevene å mestre, og hva slags didaktikk som fremmer slik kompetanse. Dette kan tyde på at vekstbedriftene der elevene søker jobb, i noen grad stiller samme krav som ordinære bedrifter til sine ansatte. Dette medfører at en karriereveileder er bekymret for om det er plass til alle, selv i tilrettelagt arbeid som her er representert ved vekstbedrifter.

Lave forventninger

I motsetning til bildet som tegnes i Stortingsmelding 21 (Meld. St. 21 (2020–2021)), tyder ikke våre funn på at elevene i de undervisningstilbudene vi har undersøkt, blir møtt med lave forventninger. Vi ser at både elever som sikter mot det ordinære arbeidslivet og vekstbedrifter blir utfordret til å leve opp til standarden i de faktiske jobbene de søker mot. Dette betyr ikke at Stortingsmeldinga tegner et feil bilde av skolen, men det peker på mulige måter å organisere undervisninga på slik at dette ikke blir tilfellet.

En av informantene beskriver at det settes av tid til individuell veiledning med tanke på den enkeltes muligheter i arbeidslivet. Skolen er opptatt av å imøtekomme elevenes interesser, men samtidig formidle hva som er realistisk. En slik tilnærming samsvarer med tidligere forskning som viser til tett individuell oppfølging og individuell tilpasning som viktige faktorer for å forberede for arbeidslivsdeltakelse (Breilid & Dyrnes, 2017). Videre beskrives det som et av målene med fag- og yrkesopplæringen at elevene skal bli ansettbare (Schmid & Breilid, 2022). Det å ha et realistisk forhold til hva som er mulig å gjennomføre, med bakgrunn i egne interesser og kompetanse, vil ha en relevans for ansettelsen i en bedrift. Det kan stilles spørsmål om det er skolens perspektiv knyttet til hva som er realistisk å oppnå i arbeidslivet som veier tungt i en slik veiledning, da veiledningen foretas av skolen. I så måte må man anta at skolens veiledning baseres på tilbakemeldinger fra praksis i arbeidslivet og kunnskap om arbeidslivets krav og forventninger, slik at elevene ikke blir møtt med nettopp for lave forventninger, slik det pekes på i Stortingsmeldingen 21 som en utfordring for elever med behov for ekstra støtte (Meld. St. 21 (2020–2021)).

Vi finner det interessant at de faktorer som lærerne i størst grad oppfatter å forberede elevene til arbeidslivet, både kan knyttes til myndiggjøring av elevene, og derigjennom til to av de tre tverrfaglige temaene i læreplanverkets overordnede del; folkehelse og livsmestring; demokrati og medborgerskap (Kunnskapsdepartementet, 2017). Vi ser også at internasjonale studier referer til

at det å ta del i beslutninger som angår eget liv og opplæring, styrker motivasjonen for å fullføre utdanningen (Aarkrog et al., 2018). Videre ser vi også av studier av yrkesopplæringen i Sverige og Østerrike, at opplæringen der, i likhet med i Norge, tilpasses for elever med ulike forutsetninger for læring, og at elevenes behov og forutsetninger legger føringer for graden av tilpasning og tilrettelegging (Schmid, 2020). Dette kan under forutsetning av at elevene tas med i planleggingen av opplæringen, oppleves som medvirkning og myndiggjøring av den enkelte elev.

Tilhørighet i arbeidslivet er i seg selv avgjørende for både å mestre eget liv, og å delta som medborger i samfunnet. Videre er det sammenfall mellom særlig den sosiale kompetansen som trengs i arbeidslivet, og for å delta i store og små fellesskap både privat og offentlig. Det ser ut til at fokuset på sosial kompetanse, som pålitelighet og modenhet, samt mestringsopplevelse hos elevene, også ser ut til å være av betydning med tanke på å nå mål i overordnet del av læreplanverket.

At et godt forhold til lærere styrker både trivsel, motivasjon og læring er godt kjent fra tidligere forskning (Drugli, 2012; Hattie, 2012; Urdan & Schoenfelder, 2006). Det finnes egne studier om dette for elever på videregående trinn (Pomeroy, 1999), og for SEN (special education needs) -elever (Pérez-Salas et al., 2021). European Agency for Special Needs and Inclusive Education finner at måten tilsatte forholder seg til elever på, er en viktig faktor. Dette ser vi også i vårt materiale der det refereres til betydningen av gode relasjoner mellom elever og lærere i tillegg til andre ansatte som elevene samhandler med i opplæringen (European Agency, 2013, s. 43, pkt. 6.1).

Motivasjon og mestringstro

Både Bandura (1986) og Illeris og Nordgård (2018) beskriver samspillet mellom lærende individers motivasjon og opplevelse av mestring. Vi ser i det empiriske materialet at dette samspillet anses som avgjørende av både ansatte i skolen og tidligere elever. både elever og lærere som vi har intervjuet, framhever praksiser som underbygger alle de fire faktorene Bandura (1997) framhever som avgjørende for å utvikle mestringsforventning. Vi ser her at det å gi elevene oppgaver de mestrer, men som samtidig utfordrer, er en viktig faktor. Tidligere opplevelse av mestring, vil igjen gi motivasjon for, og tro på egen mestring av nye oppgaver. Samarbeid om praktiske oppgaver og arbeid, gir elevene tilgang både til kollektiv suksess og mulighet til å observere andres arbeid og strategier for oppgaveløsing. Både ansatte og tidligere elever understreker hvor viktig verbale budskap fra lærerne om hva elevene klarer og mulighetene de har, er for deres mestringsforventning. I tråd med Drugli (2012), Hattie (2012) og Urdan og Schoenfelder (2006) ser vi at relasjonen mellom elev og lærer er spesielt viktig for elevenes motivasjon og tro på egen mestring.

Lærerne på en av skolene sier de at de tar utgangspunkt i elevens interesser i undervisningen i skole og bedrift (YFF), for deretter å knytte kompetansemålene og målene for opplæringen til dette. En slik individuell tilpasning kan være av betydning for elevens motivasjon og opplevelse av mestring.

Alle elever har, ifølge Opplæringslova (1998, 2024), rett til tilpasset opplæring. Skolene, som er representert i denne studien, gir et opplæringstilbud til mange elever som ønsker å ta i bruk lærekandidatordningen. Nettopp individuelt tilpasset opplæring og anledning til opplæring i utvalgte deler av læreplanen i det aktuelle faget, er en mulighet som ligger i lærekandidatordningen. I motsetning til lærlinger, har lærekandidater rett til spesialundervisning dersom de ikke får tilstrekkelig utbytte av opplæringen. Retten til spesialundervisning er hjemlet i opplæringslova (Opplæringslova, 2024, § 7-4), og "Veileder for tilpasset opplæring og individuell tilrettelegging" (Utdanningsdirektoratet, 2024) beskriver videre handlingsrommet til å tilpasse ordinær opplæring og når retten til spesialundervisning trer inn. Videre er det anledning til å gjøre avvik fra læreplanen, uten krav om vedtak om spesialundervisning, for lærekandidater (Utdanningsdirektoratet, 2024). Med dette perspektivet kan det gis større handlingsrom for individuell tilpasning for elever som sikter mot lærekandidatordningen enn for elever som kvalifiserer for å bli lærling.

Vår forskning sett i forhold til tidligere forskning

Våre funn er i stor grad sammenfallende med tidligere forskning på dette området. Tett individuell oppfølging og tilpasning, samt å utruste elevene til å ta styring i eget liv, slik det framheves av Dyrnes og Sträng (2021), er viktige funn i vårt materiale. Overordnet fokus på myndiggjøring av elevene og på ressurser heller enn utfordringer, finner vi også hos Breilid og Dyrnes (2017).

European Agency for Special Needs and Inclusive Education viser til viktige faktorer i skolenes praksis overfor elever med særskilte behov. For at disse elevene skal lykkes i arbeidslivet, er blant annet fleksible læreplaner, elevsentrert undervisning og gode relasjoner mellom elevene og kompetente hjelpere gjennom hele opplæringsløpet av betydning (European Agency, 2013).

Rokkones (2017) finner at fleksibilitet, også med tanke på muligheten til å få utvidet tid på skolen, er av betydning. Videre finner Rokkones at mye praktisk undervisning, samt gode relasjoner til læreren kan være en avgjørende faktor for å lykkes i opplæringen. Disse faktorene framstår også som betydningsfulle i vårt materiale.

Medvirkning i beslutningsprosesser knyttet til egen opplæring, ser vi også framkommer som en viktig faktor, både i vårt materiale og i internasjonal forskning (Aarkrog et al., 2018, Schmid, 2020).

Yrkesfaglige utdanningsprogram har i hovedsak en struktur som består av to år på skole og to år i bedrift. En av skolene beskriver at de tidlig informerer om

og forbereder overgangen fra skole til arbeid. Skolen har likevel en opplevelse at overgangen fra videregående skole til arbeid kan oppleves som brå for elever som har hatt tett oppfølging i hele skoleløpet, og vi undres om skolen kunne hatt et oppfølgingsansvar i noe tid etter overgangen fra skole til bedrift.

Arbeidsinkludering

Slik vi ser det, er det liten tvil om at undervisningstilbudene vi har sett på, bruker metoder fra arbeidsinkludering i opplæringen. Dette er i motsetning til hva arbeidsmarkedskonsulentene Dyrnes og Sträng (2021) har intervjuet, synes å mene. Eksempler på dette er fokus på elevenes ressurser og evner, omfattende bruk av arbeidstrening både i tilbudet på skolene og i praksisperioder i bedrifter, og at elevene skal oppleve mestring gjennom å arbeide. En slik tilnærming kan ses i sammenheng med Frøyland (2020) som hevder at praksis i bedrift kan samsvare med arbeidsinkluderingsmetoden "Place then Train" (Spjelkavik, 2016). Selv om vårt materiale tyder på at det er mulig å bruke slike metoder, sier det ingenting om hvor vanlig dette er i VGS som helhet. Det kan stilles spørsmål ved om metoder innen arbeidsinkludering i mindre grad kan være styrt av utdanningsprogram og fagfelt i motsetning til det vi erfarer er dagens praksis.

Avslutning

Resultatene fra vår undersøkelse tyder på at den viktigste forberedelsen til arbeidslivet er å utvikle sosial kompetanse, med vekt på modenhet og pålitelighet. Virkningsfulle tiltak for å utvikle slik kompetanse synes å være praktisk undervisning med vekt på jobbnær aktivitet, at lærerne framhever kravene elevene vil møte i arbeidslivet, og at de elevene som trenger det får nok tid på skolen til å bli klare for arbeidslivet. Gode relasjoner til lærerne framstår også som nært knyttet til en slik utvikling av sosial kompetanse, og som særlig viktig for myndiggjøring av elevene.

Praksisperioder der elevene er utplassert i bedrifter/virksomheter i løpet av skoletiden, oppfattes også som vesentlige for å utvikle både faglig og sosial kompetanse, og som en prøvetid for en framtidig læreplass. I denne sammenhengen anses skolens nettverk i næringslivet som helt avgjørende for at elevene skal få praksis- og seinere læreplass.

Videre forskning

Vi mener det er behov for mer kunnskap om tilbudet til elever som går fra ordinære utdanningstilbud i VGS til å bli lærekandidater. Det vil her si et tilbud som i motsetning til det vi har undersøkt, ikke er spesialisert for å forberede elevene på LKO. Videre mener vi det er behov for å undersøke hvordan

videregående skole forbereder elever som skal være lærekandidater, på deltakelse i et arbeidsliv i stadig endring. Det kan være endringer som for mange vil føre til et behov for videre utdanning gjennom store deler av yrkeslivet. Videre forskning for å utvikle metoder som ivaretar og fremmer alle elevers muligheter til varig arbeidslivstilknytning, vil i en tid med et arbeidsliv i utvikling, ha betydning i yrkesopplæringen.

Sluttnote

[1] Ny opplæringslov trådte i kraft 01.08.2024 (Opplæringslova, 2024). Rett til spesialundervisning etter Opplæringslova (1998) er delt opp i tre rettigheter: individuelt tilrettelagt opplæring, personlig assistanse, og fysisk tilrettelegging og tekniske hjelpemidler. Begrepet individuelt tilrettelagt opplæring erstatter den delen av spesialundervisning som dreier seg om å tilrettelegge for at elevene oppnår målene i faget (Opplæringslova, 2024; Utdanningsdirektoratet, 2024). Denne artikkelen er produsert i overgangen mellom ny og gammel opplæringslov. Det benyttes derfor både begrepene "individuelt tilrettelagt opplæring" og "spesialundervisning".

Om forfatterne

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