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## Editorial: The first issue of NJVET in a new shape

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Welcome to the Nordic Journal of Vocational Education and Training (NJVET). With this journal, we want to create a forum for research on vocational and professional education and training, with a particular focus on issues at stake for vocational education and training (VET) in the Nordic countries. The journal is published online and open access, and there are no submission or article processing charges.

This is the first issue of NJVET in its new shape. We have put effort into the renewal of our website, submission and publishing system, guidelines for contributions etc. Altogether we hope that this will contribute to strengthening the quality of our journal, and also of Nordic VET research in general.

In this first issue we can present contributions from four Nordic countries – Denmark, Finland, Norway, and Sweden. Nevertheless, relevant contributions from outside the Nordic countries are most welcome! We encourage publication of articles in English, which makes the audience of our research results much broader, but we also offer the opportunity to publish in the Nordic languages. In this issue, articles are published in English, Danish, and Norwegian. You should also note that we make a difference between research articles, which have undergone a double-blind peer-review by at least two anonymous re-

viewers, and magazine articles that contain other types of materials, discussions, minor studies of VET etc. The magazine articles are not subject to double-blind peer review, but are reviewed by the editors. We also welcome relevant book reviews. However, this issue does not include any book review.

## Five contributions

In this issue we present five contributions:

**Annica Isacsson** from Haaga-Helia University of Applied Sciences, Finland, starts the issue with a magazine article. In *Learning with companies (LeWiCo) through the use of Facebook in the context of vocational hospitality education & digital spa marketing* she presents and discusses findings from an international VET project, with a focus on the use of social media 'to foster self-directed and co-constructive learning in a social environment.'

The four peer-reviewed research articles are from Denmark, Sweden, and Norway. In *Professionel identitetsudvikling gennem uddannelse til erhvervsskolelærer i en empirisk undersøgelse på en diplomuddannelse* (Developing professional identity during vocational teacher education) **Henriette Duch** from VIA University College, Denmark, presents a qualitative study where she analyses different ways of developing the professional identity as vocational teacher during teacher education. **Daniel Alvunger** from Linnaeus University, Sweden, is involved in two research articles. In *Vocational teachers taking the lead: VET teachers and the career services for teachers reform in Sweden* he studies the career reform that introduced 'first-teachers' as a new category of teachers in the Swedish school system, through two cases of VET first-teachers. Further, in *Introducing a critical dialogical model for vocational teacher education*, Alvunger and his colleague **Carl-Henrik Adolfsson**, also from Linnaeus University, conceptualise and present a model for vocational teacher education based on critical hermeneutics and the methodology of dialogue seminars. Finally, **Hilde Kjærnet Haugen** and **Ketil Hegerstrøm Haugli** from Oslo and Akershus University College of Applied Sciences, Norway, present a study of internship in vocational/professional education, based on a case from a dental technology program – *Betydningen av ekstern praksis i tannteknikerstudiet* (The relevance of internships in the dental technology program).

We are looking forward to new contributions and future issues of our journal, with interesting studies of varying aspects of vocational and professional learning, education, and training.



# Learning with companies (LeWiCo) through the use of Facebook in the context of vocational hospitality education & digital spa marketing

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## Abstract

There is still lack of information on how to best implement social media in project collaboration and tourism marketing education despite the fact that social media offer interesting intercultural learning opportunities and enriching learning environments. This article aims to describe an example of an international, collaborative learning project conducted on Facebook in the context of vocational hospitality education/spa marketing. The aim of the Facebook project was to enhance work-based pedagogy, and to construct flow in learning.

The article adopts a case study approach to describe in detail how Facebook was used to foster self-directed and co-constructive learning in a social environment.

The findings presented in the article are based on the postings of participating students in Facebook, and on teachers and project team reflections. Overall, the project was a success and led to the construction of a useful, current and engaging knowledge base in the context of spa marketing.

Moreover, the students appreciated the informal learning environment, and the teachers learned how to enhance learning without suffocating the learning process with too many guidelines or information. The students learned how to collaborate independently, and in pairs, and to take responsibility of their own learning.

**Keywords:** Facebook, work-based learning, vocational hospitality education, digital spa marketing

## Background

Purpose-Emerging technologies offer an ever-expanding variety of means to support and enrich learning environments. However, there is currently a lack of information on how to best implement new media in tourism and hospitality education. The objective of this article is to shed light on how Facebook (FB) was used in the context of a vocational Nordic project, and more specifically related to self-directed and collaborative learning.

The Nordplus funded 'Learning with companies' (LeWiCo, 2012–2015) project aimed at critically evaluating and sharing work-integrated learning practices in three countries, in the context of vocational hospitality education. The purpose was to learn from each other, and to enhance work-based pedagogy by among other things producing a joint hospitality educational module involving students, teachers, project team and companies.

The project partners represented both higher vocational education (Haaga-Helia University of Applied Sciences, Porvoo campus), vocational education (Voru County Training Centre and Etterstad Videregående skole), and vocational teacher education (Tartu University, Høgskolen i Oslo og Akershus, and Haaga-Helia School of Vocational Teacher Education), in three countries.

At one of our first LeWiCo project meetings it became apparent that tourism, and more specifically digital spa marketing, was a common interest that the vocational institutions and companies shared and wished to produce a joint educational module within.

Spa tourism is important in all Nordic countries, especially in Estonia and Iceland (that we also visited as part of the project), and has been studied little, at least from a digital aspect among Nordic vocational hospitality students. Hence, relevant questions to study seemed to be: what digital means, sites, and tools do companies use in order to attract clients, how are digital possibilities managed, and last but not least: how can Facebook be used to enhance collaboration and self-directed learning among Nordic groups?

Within the project frame we visited many spas (Hotel Haikko Manor & Spa, Color Line, Kubija Hotel and Nature Spa, Dorpat Spa, and Blue Lagoon). We learned from them about their practices and collaboration with vocational schools.

The project team decided that the LeWiCo joint module/study would be produced in the context of digital spa marketing, and more specifically on how spa companies use websites, videos and social media in their digital marketing, and for a deeper understanding of customer behaviour and needs.

As the project partners and involved teachers represented three countries, it was decided that the target countries and content for analysis were digital spa marketing specifically in Norway, Finland, and Estonia, and the virtual site for content sharing and analysis was Facebook.

In practice, the teachers integrated three classes during autumn 2014, and a total amount of sixty students and six teachers in the joint LeWiCo module and implementation.

We decided to use Facebook for the joint module due to geographical distance, and because of the following FB features:

- a) access and familiarity,
- b) easy tool for sharing pictures, sites, links and videos, and
- c) collaborativity and interactivity

Facebook, as a learning tool builds on previous studies executed within Finland and the US (Isacsson & Gretzel, 2011; Gretzel, Isacsson, Matarrita, & Wainio, 2011).

A school cannot impose its students' to create a FB profile. Opposition towards Facebook, however, was not a factor here. One teacher though was quite concerned that his private profile would be accessible to his students. There are three kinds of group options on FB; public, closed, and secret. A secret study group site on FB for the joint study was founded with access and visibility only for members. We decided furthermore that not all students would be active on FB as that could cause chaos.

Each school hence involved six students as active members on FB. Those students formed pairs, who became part of a mixed group representing six students with two students from each country. Each group had their own target country to study.

Hence eighteen students, three mixed groups, and six pairs from three counties in addition to six teachers were active on FB. The rest of the class functioned as silent members. The 'silent' members participated, searched for information and supported the study and class project through participatory background work.

We decided to use English as the common language for the module. As 80 % of the students in Etterstad Videregående skole are immigrants the project teacher also involved an English and ICT teacher in the process, to guide and counsel the Norwegian students also language- and ICT-wise. Moreover, as the students from Haaga-Helia and Voru were around 18–20 years of age, the Norwegian students were 16–17 years.

In order for the students to get acquainted with each other it was also decided that all pairs in the study would produce a video to present themselves to the other members on FB.

In this article we decided to apply case-study as methodology in order to provide detailed description and information of the order of events.

Theoretically, the general impression is that social media is here to stay as the digital in general and social media in particular have given people a social forum and media to express themselves. Social media provides an excellent me-

dia for learning, debate, co-construction, collaboration and social presence. Many customers as well as students are interested in web-based content, and expect company/educational presence and interaction.

In this project we tried to engage the world-of-work in our project. The teachers representing the project partner institutions responded very well and were easily engaged. The companies on the other hand willingly gave interviews, they presented their educational collaboration upon visits, related to among other things internships, joint projects, and strategies related to spa marketing. However, when we tried to engage them in the Facebook project, they did not actively participate or engage themselves. They were interested in the findings, but did not wish to be present on Facebook, as we interpreted it, due to lack of confidence, time, and experience on how to interact in social media.

As we were not successful in engaging companies actively in the experiment, the students instead analysed how different companies interact and present themselves on the web, thus involving the spa companies.

In psychology, flow experiences have repeatedly been linked to a host of positive outcomes for adolescents, including commitment and achievement, higher self-esteem, and less anxiety (Csikszentmihalyi, Rathunde, & Whalen, 1993). Sometimes, an activity captures our attention so completely that the rest of the world seems to disappear. We become so totally engaged in what we're doing that time becomes distorted, somehow it seems to both slow down and to fly by unnoticed. In such a state, we perform better, forget ourselves, and become one with what we're doing. Csikszentmihalyi describes flow as 'the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it' (Csikszentmihalyi, 1990, p. 4). Others have described flow as 'the ultimate in harnessing the emotions in the service of performing and learning' (Goleman, 1995, p. 90). Flow and self-directed learning was strived at in the project, and for some part that was accomplished. In this experiment as in all learning, the state-of-flow was a desired state of learning, and it was assumed that Facebook could provide such an engaging environment.

### **Practical implications**

Each group thus had a target country (Estonia, Norway, Finland) in which they identified/analyzed spa digital marketing communication from points of view of storyline, drama, humor, target group, innovation, ambience (audio, visual, taste, olfactory, touch), emotional experience, services/treatments, facilities...

Guidelines for students and teachers were presented on Facebook as follows: teachers facilitate, monitor, guide, encourage and involve language and marketing, ict-teachers if needed/available.



Preparation: Johanna and Annica form LeWiCo/Facebook group and post guidelines (and videos on spa marketing using social media). All partners involve companies to participate.

Week 1: students form groups, choose target country and prepare introductory videos on themselves that are shared within group (week 43).

During weeks 2-3, the pairs within groups post two (2) times a week a web-link, article, video, web-page or similar with argument on why they think the spa marketing communication in their post is good, poor... Each pair comment on other pairs' postings within group four (4) times a week with arguments other than thumbs up.

Week 4 - students go through all postings and reflect on learning, postings, quality on postings, problems, assignment, Facebook as an area for learning, own activity, others' activity, collaboration, self-, pair-, and group-reflection, guidance, process, innovativeness...

Within the project group it was furthermore decided that a prize for best student pairs in each country would win a study trip to Tartu. Best in this case was measured through insight, activity, and engagement on Facebook within the frame of the project. Teachers involved in the experiment were allowed fit in theory, visits and information as they found fit, in order to meet the school curriculum, learning objectives, and standards.

Comments were popping up on Facebook prior to start.

Estonian teacher on FB prior to study: You know what? We will start the project by visiting Kubija Spa. The Sales and Marketing Manager will give us the first intro and then we will get the customer experience. After the visit: we got several ideas how to learn and how to contribute into Kubija Spa marketing.

Comment by Finnish student on FB prior to study: We are visiting the Finnish Holiday Club Saimaa on Monday. What do you think about their summer marketing video?

Comment from Norwegian teacher on FB: My students are currently working on the videos - two by two in English - the results we can hopefully introduce on Wednesday 23 and Thursday 24.

Comment from Finnish teacher on FB: My students have already chosen the countries they wish to study and analyze. We will start tomorrow. Maybe you could inform us which countries your students have chosen.

It took a little while to get started due among other things to the lengthy production of the introductory videos, and for timetables, classes, and schedules to fit in. The plan to involve students and teachers was hence prolonged in the process from two to three weeks in order to get everyone and everything on place.

## Postings on Facebook

### Example one - boring website

Posting by a Norwegian student: The modern XX Spa Hotel offers a luxurious spa area with indoor and outdoor pools. At the Spa, you take advantage of different types of saunas, whirlpool, children's pool and an outdoor pool that is open all year. The room at the the XX Spa & Conference Hotel feature air conditioning, satellite TV, minibar, and free Wi-Fi is available throughout the hotel. Comment 1 (by Norwegian student): I was at this hotel two years ago and it's amazing! the service was good and the cigar bar was really nice :) Respond by Norwegian student (who posted): I agree!! :D

Comment 2 (by another Norwegian student): Nice hotel with interesting facilities.

Comment 3 (by Estonian student): Yes, the hotel is very amazing and wonderful, but the website is boring. I would like to get the same feeling (wow effect, pleasant feeling etc) from the website what I get from the hotel. It's my opinion but What do you think guys??

Respond by Norwegian student (who posted): I agree with you Kaili!

Comment 4 (by another Estonian student): When Tallink is mainly known as Cruise ships, then I think they want to keep this uniform design on their web pages. But I agree with you Kaili, I would also like to get some emotions when arriving on their website, because when I saw pictures of their hotel rooms first time, I had to admit that they have very nice and original interior.

Comment 5 (by Finnish student) I have actually never been to this hotel/ spa but if you guys say it's amazing it probably is. Your positive comments about the place makes me wanna go there but not the web page itself. It's like you say, the web site maybe doesn't reflect the "amazingness" of the place? Seems to be huge and have everything a spa enthusiast needs though. Good finding!

The posting received seven likes, and the students seem to be in agreement that the actual experience is (was) better than the site. Apparently the fact that some students had visited the place engaged them to partake in the discussion. Furthermore, the Norwegian student who posted engaged herself in the conversation, which kept it going, and the Estonian student who had a question and comment about the website lacking the wow effect element and emotions also raised interest.

### Example two - humour added

Posting by a Finnish student shows a video from a famous spa hotel.

What do you think about the different marketing video of XX Congress Wellness Hotel? The use of the famous Finnish TV crew Dudeson's to attract attention in a funny and different way. Comment by a Norwegian student: This is so incredibly awesome. What's even more awesome is The Dudesons actually did it! Respond by the Finnish student (who posted): Well if you give permission to them to fool around of course do it. I'm surprised that they didn't destroy everything there :D (three likes) Comment by an Estonian student: This is awesome :) I like it - it is short, funny, catchy :) Respond by the Finnish student (who posted): yes it's. The

marketing that they have comedy in it and by that way you remember it better. The posting received 10 likes.

The Finnish student who posted had an argument that humour and differentiation matters. The student cleverly engaged the co-students by raising a question which is crucial in order to attract engagement on FB. The argument here was that digital marketing videos should be short, different, funny and hilarious in order to catch – at least – childrens’ and youth’ attention.

### Example three – healing products

Posting by an Estonian student: What do you think about these kind of spas, which are using THANN products? Comment by Estonian student (who posted). THANN-Oryza promotes environmentally-friendly products, supports human rights, and is against the use of child labour and animal testing. Comment by Estonian student (who posted). A link with more information about THANN. Comment by Finnish student: Wow, I haven't heard about THANN before. Seems really great, they could have more information about THANN in their website so people know what THANN really is. I think it is a miss because there is not much information about it.. - I, now know much better after i read the article about THANN that you posted! Four likes. Respond by Estonian student (who posted): Exactly. I was thinking the same. I had to search more about these products. But point is good. They should emphasize the meaning and producing of THANN on their website - why is it good and why people should prefer these products over the others :) Comment by Finnish student (another). I think it's great that they are using products like Thann because it shows that they are taking some responsibility for the products that they use and it is a good marketing strategy also. Five likes. Comment by Finnish student (same as previously). We did a study visit to Holiday Club XX yesterday and they have Thann products for sale in the Spa. So they also try to sell products, not only use them on treatments! This is one of the products. Respond by Estonian student (who posted): I would like to try these products at home as well:) Comment by Estonian student (another): XX. Exactly my idea. Comment by Norwegian student: I have never heard about it before, but it seems like a great idea for a product. I would also like to try these product at home:) Three likes Seven likes in total.

This spa has a product innovation that they use both in their marketing and on site. Apparently powerful, at least from the consumers’ perspective who consider sustainability and eco-friendly aspects. The eco-aspect seemed to be important also for the students and clearly raised the engaging factor.

### Example four – emotions missing

Post by Norwegian student. XX SPA is around 30 min. from Tallinn. The spa is where they have relaxing and refreshing spa service, modern water palace, wide range health and beauty packages, long bill of fare and wide range like restaurant and wine shop and they have various activities for active holidaymakers like tennis and golf. Comment by Finnish student. It's nice that they include nature and especially the sea in their treatments and services. The mud that consists of seaweed and other stuff which cleanses the skin is pretty interesting, it's nice that the ingredients are also available closeby. Five likes. Comment by Estonian student. While watching videos and pictures, it seems this hotel is very spacious and with really pretty views, being on the webpage though, it doesn't bring up any emotions and attractiveness. The design should be in joyful and lighter colours.

What do you think about this web page? Do you think web page design plays big role in marketing?

Comment by Estonian student (another). Yes, I think web page design plays big role in marketing. In website you get information of hotel, spa, prices etc. People get their first emotions on hotel website. Through the text you can impart facts, with the help of picture, it is better to sell products.

Comment by Norwegian student. I think if they provide relevant and attractive pictures with each Spa treatment, it would attract more tourists. Secondly they do not have any life-guards there, which gives an uncertain impression to visit there.

Nine likes. The comments are very professional and beneficial for any company wishing to partake in the results of our study. Maybe as a result of active teacher engagement. However, it seems that many companies do not put enough effort or thought into digital marketing, even though clearly this is the number one marketing channel of today.

### Example five – nature rocks

Posting by a Finnish student.

This hotel is located near the sea, we thought that the view is very relaxing.

Do you think about the surroundings when you visit a spa? This company values honesty and wants to create an atmosphere of relaxation while remembering the ethical standards. How important is it that the company's values match your own values? Comment by Norwegian teacher: Another good choice in the south west. The conference facilities are great. Comment by Estonian student: Only one look to those pictures brought the sound of waves to my mind. Pictures are truly gorgeous and give a three-dimensional feel. Love the interactive homepage and the opportunity to see a 360 degree view from different rooms. To answer your question, yes, surroundings are important for me. Though there is a saying that do not judge a book by its cover but first impression is often the key point when you choose where to go. I deeply value nature and authenticity so I will always choose spas which appreciate the same things. Respond by Finnish student: The view of the fjord and mountains is amazing! I agree that the first impression is important when choosing a hotel. (Seven likes.)

It is interesting to see how the Nordic students value nature, although one would assume that it is often taken for granted and not valued as much by ourselves as by international tourists. Clearly, this example manifests the power of nature and first impression.

### Example six – different content in different languages

Post by Estonian student. While visiting their website I am getting a really warm feeling inside and the website design just invites to visit their Spa. But, I found content different while comparing their site languages.

Comment by Finnish student: It should definitely be available to everyone and I'm wondering why it isn't? What a weird mistake. It kind of signals "we don't care about our foreign customers as much as the locals" or something. Also next time I check and analyze an Estonian spa web page, I'm gonna switch the language to Es-

tonian as well just to make sure I'm not missing anything haha ;) Comment by Norwegian student: Good offers and reasonable prices. Comment by Estonian student: I don't know if it is a mistake or they don't think it is necessary. That is why I would like to know if it changes anything in you Spa choice, M.? Would you stop visiting this spa if this option is missing? Or does the web page design compensate spa packets and this option?

Of course there is opportunity to propose them to show this option on other languages.

Respond by Estonian student: XXgood if you think the price is reasonable for you. But turning attention to the difference of web pages, does it play big role in your choice and if so, why?

Comment by Finnish student: If I'm really determined to visit this spa I would go, virtual tour or not... Me visiting a spa isn't only dependent on this feature. But this is nonetheless a really annoying marketing mistake and it should be corrected.

In this case, the students noticed the spa because of its wonderful digital features that communicated warmth. However, the students noticed that content was different when turning from Estonian to English. Is the spa aiming at only attracting Estonian clients?

### Example seven - age limit

Post by Finnish student: This concept is something we haven't heard of before and we think it is very interesting. In a discussion within our group we find it a little demeaning towards the customers. Have you heard of it before? Do you think this is necessary? Do you think it is appropriate to have an age limit of 16 years? What do you think is proper spa behaviour?

Comment by a Finnish student: <http://www.grand.no/en/SPA/Spa-etikette/> Even Grand hotel in Oslo has a set of rules on their website. Is this common in Norway or is this something that just exclusive hotels ask of their customers?

Comment by a Norwegian student: This is another hotel where I have worked, great staff, lovely spa with view toward the main street in Oslo. Many famous people have enjoyed their stay here.

Comment by an Estonian student: You have chosen a very interesting spa to analyse. When I looked this „etiquette“ section on their homepage, it gave me somehow an aggressive feeling. I had the impression that this institution is profit-oriented and doesn't care much about its visitors. I cannot feel the warmth and hospitality. This age restriction seems a little foolish to me too because they overlook families whose little ones would like to join their parents or enjoy some water fun by themselves. I think spas need rules but not so strict ones. Respecting other privacy and peace, following safety instructions and the basic rules of procedure would be totally fine by me.

Comment by Norwegian student (another): J. I think the reason that it is age limits in many Norwegian spas is that many people in Norway wants to have a weekend free for stress and many in Norway think that children is stressful, and many need to just have a break for their everyday life. (4 likes.)

This is a contradictory post and of type of marketing that some feel uncomfortable with, and raises arguments for and against. The different types of feelings

among students may be constructions of cultural, political and social factors, and involve issues and sensitive topics on what is right, fare, correct, equal?

## Reflections

The spa study outcomes revealed that universal, transferable values such as sustainability, honesty, and human rights matter also in spa marketing and service/product consumption. It also revealed that certain interesting features such as warmth, nature, and humour raised interest and enhanced interaction. Moreover, lack of translation, difficult navigation, virtual tours and visualization seemed important. The students interacted well among peers from other Nordic countries and as stated by the teachers 'quite independently'. The students showed self-directedness, and navigated quickly on the Internet, and were able to identify interesting web sites and arguments to share. Students did not show signs of shyness. Collaboration did not have to be pushed. It was there. They did not use an academic language, but rather one quite appropriate for teenagers on Facebook. The students overall seemed quite comfortable with the exercise.

Customers, represented here by students, have values that are important to consider both in vocational education and in the production of digital and authentic spa services. Honesty, ethics, authenticity, environment friendliness, human rights, in addition to animal testing, and child labour, matters, and were mentioned. Needless to say; price and value for money matters too.

From a marketing perspective students also commented on ambience, innovativeness, interactivity, wow-effect, emotions that the presentations arouse, and on humour, visual (light, joyfulness, boredom), audio (language), technicality, first impression, and attractiveness.

The companies should hence invest on value-based presentations that affect multiple senses in order to be effective and attractive (Isacsson, Alakoski, & Bäck, 2009).

Virtual tours are popular and could be used more often to communicate ambience, atmosphere and value statements. Virtual tours are not so dependent on language, and are easy to link. Pictures are also important as are videos. Using humour to differentiate is a strategy that can work, at least for certain group of customers. All in all this study reveals that spa companies and hotels do not exploit the possibilities that digital spa marketing offers and entails.

While analysing students' behaviour on Facebook it became apparent that this assignment arouse involvement, engagement, collaboration, flow as well as self-directed learning. One student commented that the guidelines were not clear enough, and that the flow of comments was overwhelming at times. This same student ended up doing his final thesis together with his pair on digital marketing inspired by the LeWiCo project. In projects as such, it is a strategy

not to monitor, guide, control or kill creativity by giving too many guidelines. Hence, we felt the guidelines were sufficient. The students' were rather self-responsible, but would not have managed the project without the endless support, know/how, and guidance from their respective teachers.

The teachers involved did a fantastic job supporting the project by coaching the students in doing videos, in supporting the identification and analysis of web based digital spa material, in organising spa visits, in offering theoretical background, in making distinctions between different categories of spa (resort/hotel, destination, mineral springs /thermal, medical) etc. All teachers were active and resourceful. They worked more as coaches than teachers in this module.

The six most successful students met in Tartu in February 2014. They were shy, and did not really start communicating before a visit to the Tartu Science Park was organized where the interaction began and another video was produced. It is interesting to see how videos have become the way to communicate and interact in youth everyday life.

Reflection by a Norwegian teacher who integrated a three-year educational class with higher educational ambition in the module. He also integrated an ICT- and an English teacher in the process (Etterstad VGS is a multicultural vocational institute):

Etterstad VGS integrated the LeWiCo project for in-depth-tourism-studies. Most students participated with great enthusiasm, only a few were not actively involved. The inactive students blamed it on poor English. The students did not form the group themselves, instead the professional and contact teacher formed the students groups, considering among other things the participants characters and professional experience. Two students were most effective, engaged and active, measured on all levels. They were hence chosen to participate in the award trip to Tartu. The two first days they were shy and silent, but found their voices at the trip, and participated among other things in a science park video that is available on YouTube. The experiences of all students and teachers, except the ones with language difficulties, were very positive, and all wish to participate in similar projects in the future. As a professional and contact teacher for students with three years of tourism as specialty the project was found to be a great way of handling tourism marketing competence development, including theory and learning. The students worked fairly independently and showed great interest for their specialty. The learning objectives were gained and it supported other subjects too. The students gained professional insight and understanding of the spa markets in Norway, Finland and Estonia.

For Etterstad VGS this project has given my students new possibilities, to use work-related English. Furthermore, they have had the opportunity to interact and meet with students in their home countries. I have personally enjoyed to interact with vocational teachers in different countries, and continued to keep in touch with a few. It has been rewarding to discuss common problems with teachers.

Flow was accomplished by most students, but not all. Sometimes the amount of discussions was overwhelming. One can argue that the knowledge that was constructed was superficial, but the teachers reflected a lot with the students about the different spa companies' strategies, uniqueness, ecological choices

and preferences, in class. The shy students got their voices through, on FB. The students were engaged and even a small competitiveness could be detected. The competitiveness was set on a healthy level, and Facebook really succeeded in this case to create a relaxed, socially viable and easily accessible learning experiment. The students produced the content, the teachers facilitated and supported the learning processes with the help of theory and excursions, discussions, and reflections. The experiment certainly would have looked different if the companies would have actively responded and engaged themselves in the environment. Work-based pedagogy is enhanced by this article, as it serves as an example on how to apply social media in intercultural collaboration within a specific area of teaching. The findings can easily be adapted to different contexts.

### Notes on contributor

**Annica Isacsson** is a research manager at Haaga-Helia University of Applied Sciences, School of Vocational Teacher Education in Finland. Her research interest within vocational education lies in new learning environments and solutions, such as game and entrepreneurial pedagogy. Previously Annica has worked as a Principal lecturer within tourism at Laurea University of Applied Sciences and did research on e.g. multimodality in learning. She has been involved in numerous European projects and recently led a learning project in Tunisia financed by the African Development Bank.



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# Professionel identitetsudvikling gennem uddannelse til erhvervsskolelærere i en empirisk undersøgelse på en diplomuddannelse

(Developing professional identity during vocational teacher education)

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## Abstract

New vocational teachers in Denmark already have an education when they become teachers. They also have several years of work experience. Regardless of educational background and employing college, they have to attend the same course when they are employed at a vocational college. It is mandatory to complete the Diploma of Education in four years. During that course, the teacher is in transition to become a professional vocational teacher. Drawing on theories of identity the aim is to analyse the development of a professional identity. The terms 'professional identity', 'personal identity' and 'identity of the profession' are defined.

The main finding is that vocational teachers develop new ways to act and think. They develop the professional identity in interaction with colleagues and students from other vocational colleges, but the development is individual.

The research project takes a qualitative approach. Four vocational colleges are selected as cases of maximum variations, and focus group interviews are conducted at each college.

**Keywords:** professional identity, vocational teacher, teacher education, case study, focus group interview

## Grænsekrydsning og lærerudvikling i professionskvalificering

Et mål med den pædagogiske læreruddannelse for erhvervsskolelærere i Danmark er at give erhvervsskolelærere status og uddannelsesniveau svarende til professionen som folkeskolelærer (Undervisningsministeriet, 2010). Professioner kan beskrives som en eksklusiv erhvervsgruppe, som i kraft af deres abstrakte viden har en officiel rettighed til at træffe beslutninger og vurderinger og afgrænse sig fra andre erhvervsgrupper (Abbott, 1988). De professionelle rettigheder og kompetencer er ofte knyttet til uddannelse (Freidson, 2001; Smeby 2008). Semi-professioner adskiller sig fra professioner ved en uddannelsesvarighed på mindre end fem år, ved en anden tilgang til viden og andre opgaver end de klassiske professioner (Etzioni, 1969). Semi-professioner har mindre autonomi. I den forstand er det en semi-profession at være dansk erhvervsskolelærer.

At indskrive erhvervsskolelæreren i professionsteorien åbner for en historisk og teoretisk diskussion af, hvad en profession er. Her anvendes Molander og Terums definition. Denne definition er et kompromis og en sammentænkning af tidligere professionsteorier:

Med begrepet profesjon forstår vi en type yrkesmessig organisering av arbeid. En bestemt personkrets – personer med en viss utdanning – gis retten til å utføre visse arbeidsoppgaver, og til å gjøre det mer eller mindre autonomt. Til grunn for denne retten eller jurisdiksjonen ligger en anerkjennelse av arbeidsoppgavenes samfunnsmessige betydning og av deres karakter av det vi har kalt "praksis". (Molander & Terum, 2008, s. 20).

Ud fra den definition bliver funktionen som erhvervsskolelærer en profession, da lærerne ansættes på erhvervsskoler på baggrund af formelle krav til uddannelsesbaggrund og erhvervs erfaring, hvorefter de obligatorisk skal tage en pædagogisk uddannelse, en diplomuddannelse (se uddybning nedenfor). Deres praksis er undervisning og relaterede opgaver på erhvervsskoler, som samfundsmæssigt både har et alment sigte og et erhvervsmæssigt sigte. Standarden for funktionen knytter sig dels til det erhvervsområde, de uddanner til, og til statslige standarder for erhvervsskoler.

I professionen konstrueres den professionelle identitet. Det sker i et samspil mellem professionen og personligheden (Hansbøl, Krejsler 2008). Professionel identitet er imidlertid et vanskeligt begreb ifølge Hansbøl og Krejsler, da det ændrer sig historisk som følge af ændringer i stats- og styreformere. Identiteter konstrueres i et felt, der er "spændt ud mellem kulturelle idealer, marked, stat og karriereønsker." (Hansbøl & Krejsler, 2008, s. 53). Konstitutionen af identiteten sker bl.a. gennem læreruddannelsen, som initierer udviklingsprocesser. Avis og Bathmaker finder, at personer som tidligere har arbejdet i produktionsorienterede erhverv bærer den kultur med sig. Det er afgørende for deres identitet som lærere, men det er også med til at gøre dem sårbare (Avis & Bathmaker, 2006). I et andet studie finder de samme forfattere, at lærere oplever en

modsætning mellem en idealiseret identitet fra læreruddannelsen og en realiseret professionel identitet i deres undervisning (Bathmaker & Avis, 2007). De finder også, at det kollegiale samarbejde kan understøtte identiteten for nogle, mens det for andre er problematisk. Reformen af erhvervsuddannelser kan også påvirke identiteten, hvilket opleves forskelligt af lærere (Vähäsantanen, Saari-  
nen & Epeläpelto, 2009).

Erhvervsskolelærere i Danmark har ved ansættelsen allerede én uddannelse, det kan være som faglært bager eller en videregående uddannelse som sygeplejerske (Undervisningsministeriet, 2014). Læreren skal desuden have relevant erhvervs erfaring. Erhvervsskolelæreren bevæger sig mellem en erhvervs kontekst og en uddannelses kontekst, da han skal uddanne elever til erhvervet. Dette beskrives i professionsforskning med bl.a. begrebet grænsekrydsning (Heggen, 2008). I denne tradition ser man på grænsekrydsning mellem kontekster, der kan give den studerende erhvervsskolelærer flere parallelle opholdssteder: som underviser i sit fag, som formidler af sin erhvervs erfaring fra sit tidligere virke og som studerende på en diplomuddannelse. Man kan vælge at anskue grænsekrydsningen som et problem, hvis fx disse kontekster socialiserer til forskellige kundskaber og kundskabsforståelser, som ikke nødvendigvis har gyldighed i et andet kulturelt læringsfællesskab (Lave, Wenger 2003). Smeby og Heggen taler om kohærens i stedet for grænsekrydsninger. De opdeler i et biografisk perspektiv, et uddannelsesperspektiv og transition fra uddannelse til profession (Smeby & Heggen, 2014; Heggen, Smeby & Vägen, 2015). I denne tilgang mener man ikke, at afstanden mellem erhverv og uddannelse kan overvindes. Det står i modsætning til fx Schöns ideal om at overvinde afstanden (Schön, 2013).

Bathmaker og Avis taler om tre traditioner for at se på formationen af den professionelle identitet (Bathmaker & Avis, 2007). Den ene er sociokulturel med Lave og Wenger, den anden inspireret af etnografiske tilgange i Chicago traditionen, og den tredje tradition anvender Bourdieus begreb habitus.

I et nyt studie af Köpsén analyseres lærerkvalifikationer i Sverige i forskellige kontekster (Köpsén, 2014). Ud fra et sociokulturelt perspektiv undersøger hun faglæreres identitet. Hun finder fx, at lærerens opmærksomhed i et uddannelsesforløb rettes mod betydningen af tætte relationer til de studerende, og at undervisning også handler om at opdrage til livet og fremtidigt arbejde frem for kun at fokusere på erhvervsfaget. Hun skriver: "This study shows the need for such vocational competences; however, it also shows there is more involved in teaching a vocational subject than only being a competent hairdresser, vehicle mechanic, carpenter, tinsmith, preschool-teacher, electrician, waitress and so on" (Köpsén, 2014, s. 207).

Köpsén finder, at det er nødvendigt at være kompetent både til lærerjobbet og til faget, og at erhvervsskolelærernes identitet er knyttet både til identiteten som lærer og identiteten fra tidligere erhverv. Lærernes stærke tilhørsforhold til

deres første beskæftigelsesidentitet ses også i andre studier (Robson, Bailey & Larkin, 2004). Robson finder det nødvendigt med uddannelse, hvis erhvervsskolelærere skal magte denne dobbelte professionelle identitet (Robson, 1998). Læreruddannelse er afgørende for at høre til i lærerfællesskabet, nogle har primær identitet i erhvervet, nogle kæmper for at bevare erhvervsidentiteten, andre har givet op og har kun læreridentitet (Fejes & Köpsén, 2014).

Artiklens formål er at analysere erhvervsskolelæreres professionelle identitetsudvikling gennem en diplomuddannelse. Dispositionen er følgende. Indledningsvis redegøres for den formelle ramme for læreruddannelsen og dermed konteksten for den professionelle identitetsudvikling. Så følger et metodeafsnit og et teoriafsnit. Derefter præsenteres resultater og analyse af, hvorledes lærerne oplever og beskriver deres udvikling. På den baggrund afsluttes artiklen med en diskussion af, hvorledes forskellige aktører omkring erhvervsskolelæreren kan understøtte udviklingen af den professionelle identitet.

## Uddannelse til erhvervsskolelærer i Danmark

I både Danmark og EU generelt er der en arbejdsmarkeds- og beskæftigelsespolitisk dagsorden med opmærksomhed på erhvervsuddannelsessystemet, hvor lærerne skal være med til at løfte erhvervsuddannelsernes image, gennemførelsesprocent og tiltrækning af unge (Regeringen, 2014; Cedefop, 2009, 2015). Med forskellige reformer af erhvervsuddannelser stiller det forskellige krav til lærernes pædagogik (Louw, 2013). Kravet til erhvervsskolelæreres pædagogiske uddannelse skal ses i dette lys, og da uddannelsen løftes til diplomniveau fra 2010, får erhvervsskolelærerne et uddannelsesniveau, som svarer til folkeskolelærernes i den danske kvalifikationsramme (Uddannelses- og forskningsministeriet, 2015). Uddannelsen til erhvervsskolelærer er i Danmark en etårig pædagogisk diplomuddannelse. Uddannelsen kan være Diplomuddannelse i Erhvervspædagogik. I praksis vælger mange erhvervsskolelærere denne uddannelse (Danmarks Evalueringsinstitut [EVA], 2015). Som titlen indikerer, er denne uddannelse en særlige retning inden for det pædagogiske fagområde målrettet professioner inden for erhvervsuddannelsessystemet. Diplomuddannelsen skal være afsluttet fire år efter lærerens ansættelse på en erhvervsskole. Lærerne kan tage en anden uddannelse fx en akademiuddannelse, som er på et lavere niveau.

Diplomuddannelse i Erhvervspædagogik er forankret i "Bekendtgørelse af lov om erhvervsrettet grunduddannelse og videregående uddannelse (videreuddannelsessystemet) for voksne" (Uddannelses- og forskningsministeriet, 2014). Det overordnede formål og strukturen fremgår af loven: Kap 1 § 1. "videreuddannelsessystemet for voksne har til formål at give voksne mulighed for at forbedre såvel erhvervskompetencen som den personlige kompetence ved at gennemføre grunduddannelse og videregående uddannelse." Det vil sige, at

uddannelsen udvikler to kompetencer: erhvervskompetence og personlig kompetence. Jeg ser professionel identitet som et potentielt element i begge kompetencer med udgangspunkt i en bred kompetenceforståelse (Illeris, 2012).

Desuden kobles uddannelsen til erhvervsskolelærer også til livslang læring, da diplomuddannelsessystemet fra 2000 er et parallelt uddannelsessystem for voksne (Rasmussen, 2014). Med et institutionelt rammeværk for livslang læring kan en voksengruppe bevæge sig fra en erhvervsuddannelse til en mere generel uddannelse. Dette er muligt, da ansatte på en erhvervsskole har adgang til de to første moduler i Diplomuddannelse i Erhvervspædagogik. Når de har bestået disse, har de generel adgang til diplomuddannelser. For andre studerende er adgangskravet en videregående uddannelse.

## Design og metode

For at få indsigt i professionel identitetsudvikling gennem uddannelsesforløbet er der valgt et heuristisk udgangspunkt, som fx de britiske uddannelsesforskere på erhvervsskoleområdet Avis og Bathmaker anbefaler, for at forstå det særlige felt, som har en relativ begrænset forskningstradition (Bathmaker, Avis 2013). Udgangspunktet er således empirisk frem for en diskussion af professionsbegrebet og professionsteoriens forskellige ståsteder.

Med henblik på at sikre et bredt udsnit af erhvervsskolelærere, er der valgt lærere fra de fire store skoleformer: en social- og sundhedsskole, en teknisk skole, en handelsskole og en kombineret handels- og teknisk skole. Skolerne er forskellige i størrelse, har en vis geografisk spredning og forskellige rammer for lærere på diplomuddannelsen. Der er således tale om cases med en stor (men ikke maksimal) varians (Flyvbjerg, 2010; Neergaard, 2007). Lærere ansat på de forskellige skoleformer har generelt forskellig uddannelsesbaggrund, så erhvervsskolelærere er en meget differentieret gruppe (EVA, 2015). Derfor er det tilstræbt at maksimere variansen (Flyvbjerg, 2010; Neergaard, 2007).

Data er en del af et fire-årigt ph.d.-projekt, hvor der indgår observationer, dokumentanalyser og fokusgruppeinterviews med ledere på de fire skoler og med erhvervsskolelærere. Datagrundlaget for artiklen er fire fokusgruppeinterview i foråret 2015 med erhvervsskolelærere fra hver af de fire skoler (Halkier, 2008). Lærerne er da et stykke inde i deres diplomuddannelse. På den mindste skole deltog tre lærere i interviewet, hvoraf to havde afsluttet uddannelsen. Fra den største skole deltog seks lærere. Samlet deltager 20 lærere i interviewene. Interviewene er semi-strukturerede med få overordnede temaer, som i det enkelte interview har fået forskellig fylde. Interviewene er transskriberet, og citater i artiklen er justeret til skriftsprog.

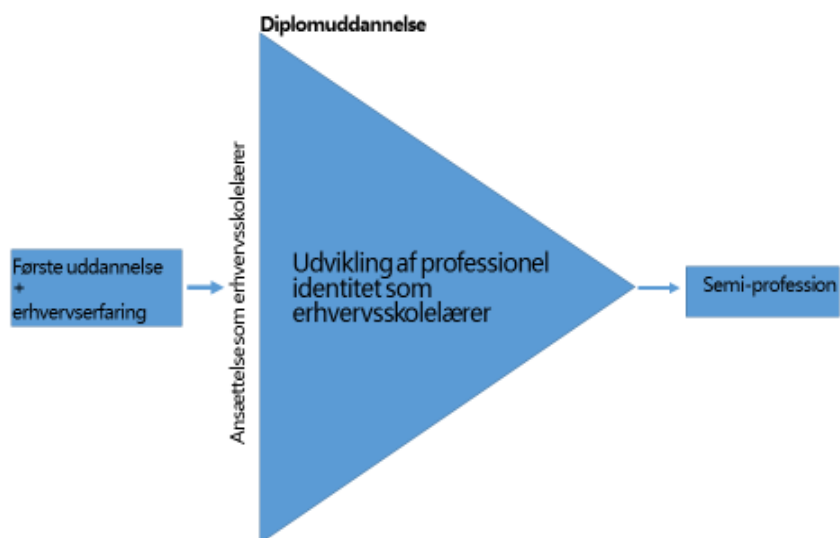
Data er kategoriseret i forhold til, hvordan lærerne beskriver deres udvikling gennem diplomuddannelsen (Kvale & Brinkmann, 2009; Kristiansen & Krogsrup, 2015). Kategorierne var læreridentitet, personlig identitet, kollektiv identi-

tet, studie- og almene kompetencer, fritidsliv, privatliv, samfundsperspektiv, arbejdsplads og undervisning. Efterfølgende er Heggens teori om professionel identitet læst (Heggen, 2008). Kategorierne fra data viste sig at kunne rummes i begrebet professionel identitet. Data har således udfoldet og konkretiseret begrebet professionel identitet på erhvervsskoleområdet.

For at sikre at baggrundsfaktorer ikke var entydigt forklarende, er den enkelte respondents udsagn fulgt gennem fokusgruppeinterview, så køn, uddannelsesniveau og skoleform i de enkelte emner har været synlige. Der er således hentet inspiration fra en narrativ tilgang, da de enkelte respondenter tydeligt talte i narrativer (Riessman, 1993). Analyserne er dog foretaget med respekt for helheden og dialogen i fokusgruppeinterview. Det er fx tydeligt, at respondenterne inspirerer hinanden og er i dialog i interviewet. Metoden er inspireret af den konstruktivistiske retning inden for anden generation af Grounded Theory Methods (Charmaz, 2009).

I kvalitativ forskning er der ikke tradition for visualiseringer, men en simpel model kan illustrere artiklens tilgang til professionel identitet (Kvale & Brinkmann, 2009). Modellen nedenfor viser, læst fra venstre side, at erhvervsskolelæreren påbegynder diplomuddannelse på baggrund af en anden uddannelse og på baggrund af ansættelse på en erhvervsskole. Undervejs i uddannelsesforløbet får læreren mere erfaring som underviser, hvorfor der vil være et samspil mellem uddannelsesforløb og undervisningserfaring. Udviklingen af den professionelle identitet kan derfor ikke alene tilskrives diplomuddannelsen. Den studerende lærer bevæger sig mellem kontekster, mellem at være praktiserende underviser og studerende på diplomuddannelsen. Lærerens første uddannelse og erhvervsfaring, undervisningserfaring og uddannelsesforløbet leder sammen hen mod en semi-profession som erhvervsskolelærer. Nedenfor analyseres udelukkende udviklingen af professionel identitet.





Figur 1. Model for professionel identitetsudvikling for erhvervsskolelærere.

## Identiteter i uddannelse

Jeg anser de forskellige kontekster som et strukturelt vilkår, som læreren og andre aktører har forskellige muligheder for at handle i (Bourdieu, 1996). Teorivalget i forhold til erhvervsskolelæreres udvikling gennem en diplomuddannelse er som sagt foretaget på baggrund af data. Artiklen anvender Kåre Heggens tre forskellige identitetsbegreber: professionel identitet, personlig identitet og professionsidentitet (Heggen, 2008). Udviklingen af den professionelle identitet starter ifølge Heggen, når man begynder en professionsuddannelse, men den udvikler sig fortsat i det professionelle virke. Professionel identitet "handler om kven ein er og ønskjer å vere" (Heggen, 2008, s. 321), dog er artiklens empiri afgrænset til udviklingen undervejs i et uddannelsesforløb. Med fokus på individet står begrebet i modsætning til eksterne forhold, og individforståelsen i begrebet er, at man kontinuerligt udvikler sig i et samspil med sine omgivelser. Den professionelle identitet bygger på selvidentiteten, der af Mead beskrives som et selv, der består af et "Jeg" og det sociale "Mig", som altid interagerer på baggrund af et samspil med omverden (Mead, 2005). Heggen definerer begrebet således: "Profesjonell identitet kan forståast som ei meir eller mindre medviten oppfatning av "meg" som yrkesutøver, når det gjeld kva type eigenskaper, verdar og haldningar, kva etiske retningslijer eller kva ferdigheiter eller kunnskapar som konstituerer meg som ein god yrkesudøvear." (Heggen, 2008, s. 324). Begrebet må forstås normativt og defineres og redefineres konti-

nuerligt. I uddannelsesforløb er der et samspil mellem uddannelsen, identiteten, den studerendes sociale og faglige baggrund og kundskaber fra både uddannelse og erhverv.

Ifølge Heggen hænger den professionelle identitet i større eller mindre grad sammen med professionsidentiteten. Professionsidentiteten er kollektiv, da den bygger på organisationers organisering af professionen med henblik på jurisdiktioner og fx løn- og arbejdsvilkår jf. Abbott. Så professionsidentiteten har et mere organisatorisk niveau, og individet må i sin professionelle identitet forholde sig til professionsidentiteten.

Artiklen har til formål at komme tættere på begrebet professionel identitet i den erhvervspædagogiske kontekst gennem analyser i en erhvervspædagogisk sammenhæng. Det strukturelle spillerum, konteksten, som konstruktionen af professionen forgår inden for, medtages ikke i analyserne. Nedenfor følger formidling og analyser af data om professionel identitet, først overordnet derefter i en dybere analyse af, hvorledes udviklingen af den professionelle identitet giver erhvervsskolelærerne nye måder at handle og tænke på.

### Professionel identitet

Respondenter taler direkte om udvikling af lærerrollen eller -identiteten på baggrund af diplomuddannelsen. Nogle siger, at diplomuddannelsen ikke forandrer noget, fx siges at "enten kan du lide at være lærer eller ikke". Det er altså noget, man har i sig, og derfor kan man ikke tale om at udvikle en professionel identitet. En diplomuddannelse udvikler derfor heller ikke den professionelle identitet, og citatet rejser derved en diskussion af, om en erhvervsskolelæreruddannelse er nødvendig og hensigtsmæssig. Et andet synspunkt er, at den professionelle identitet er knyttet til lærerens tidligere uddannelse og erhvervs erfaring. En kvinde fra social- og sundhedsskolen ser i højere grad sig selv ud fra sin første uddannelse og som en del af sundhedssystemet. Det forandrer lærerjobbet ikke. Det afgørende for hendes identitet ligger altså før diplomuddannelsen, hvorfor man igen kan diskutere nødvendigheden af en læreruddannelse. Hun ser sig mere som underviser i kraft af sin tidligere erhvervs erfaring.

De respondenter, som nævner en forandring, udtrykker det på forskellig vis fx en "forandret identitet", at have forladt sin tidligere identitet i sundhedssektoren, "identitetskrise" og "transformation". Sådanne udsagn indikerer, at det er en ret voldsom udvikling, som lærerne gennemgår. De skal finde deres "meg" som professionsudøvere, hvilket kan være svært. Fx kan omtalen af en identitetskrise handle om, at det ikke er nemt at flytte sin professionsidentitet fra det første erhverv til lærerjobbet. Respondenten understreger i sin udtale af ordet, at det er en krise.

Nogle anvender samme beskrivelse gennem interviewet, mens andre veksler i beskrivelsen fx mellem "stærkere identitet" og "transformation". Man kan derfor ikke nødvendigvis tillægge det enkelte ordvalg stor betydning. For nogle

respondenter spiller den første uddannelse en stor rolle, de taler om at "gå på to ben", det ene ben er deres første uddannelse, mens det andet er at være lærer. I sådanne tilfælde står lærerens første erhverv altså centralt, og erhvervsskolelærere kommer til at fremstå som særlige i forhold til andre professioner, hvor man ikke uddannes og ansættes netop på baggrund af tidligere erfaringer. Dermed bliver professionel identitet som erhvervsskolelærer også noget særligt. En kvinde fra handelsskolen fortæller om at have fået en "ny status", hun er blevet lærer, hvilket opleves som stort.

Ud over den overordnede omtale af synet på sig selv som lærer, findes der i data flere relaterede emner. Et emne handler om at have fået forståelse for, at erhvervsuddannelser kan ses i et samfundsperspektiv, der er et formål for uddannelsen om at uddanne til demokratiske borgere, sikre fremtidens arbejdskraft og et dannelses- og uddannelsesperspektiv, som rækker ud over det enkelte fag i uddannelsen. Et andet emne er bevidsthed om kompetencemålene i uddannelsen og faget, og et tredje emne er den personlige udvikling for elever både i uddannelsen og i erhvervsmæssige sammenhænge. Desuden berettes om studie- og almene kompetencer som de studerende lærer gennem uddannelse, får genopfrisket eller kæmper med. Sådanne udsagn indikerer, at udviklingen omfatter mange ting. Det handler både om det perspektiv, man ser lærerjobbet i dvs. værdier og holdninger i den professionelle identitet, og det handler om færdigheder og kundskaber i forhold til at forstå og omsætte mål for erhvervsuddannelser.

Enkelte studerende lærere finder det vanskeligt at anvende uddannelsesviden i deres undervisning, mens de øvrige i generelle termer og i eksempler fortæller om deres anvendelse. De fortæller, at de er blevet "mere selvsikker", "afklaret", "refleksiv", "mere fri" og at de har fået ny inspiration. Som udøvere af erhvervet har de således fået nogle nye egenskaber. De beretter også om ny tilgang til elever og mere fokus på metoder frem for indholdet i undervisningen. Man kan sige, at lærerne får nogle holdninger undervejs i uddannelsen, som får dem til at foretage nogle nye prioriteringer. Nogle erhvervsskolelærere taler om den mere abstrakte del af udvikling i form af teoriudvikling, mens andre taler konkret om anvendelse af evaluering, planlægning og organisering af undervisning. Man kan med Heggens definition tale om kundskaber og færdigheder som led i den professionelle identitet.

Ovenstående analyse af professionel identitet i interviewmaterialet indeholder således både forståelser af lærerrollen i forhold til den første uddannelse, at se uddannelsen i et samfundsmæssigt lys, at tilegne sig generelle kompetencer og udvikle undervisning på baggrund af en ny faglig viden.

### **Nye måder at handle og tænke på**

Udviklingen i den professionelle identitet fremgår i interviewene af andre måder at tale eller tænke på. Som svar på, hvilken udvikling de oplever gennem

diplomuddannelsen, fortælles om at være blevet mindre "skolastisk" og mere "rummelig" og "mere rolig". Der er en opmærksomhed på det menneskelige aspekt af en erhvervsuddannelse frem for alene et fagligt aspekt, som knytter an til lærerens første erhverv.

Særligt i interviewet på den tekniske skole kommer udviklingen frem i en længere monolog, hvor Uffe fortæller om sit ændrede menneskesyn. Han fortæller, at i hans tidligere erhverv var mennesker nogle tal på en produktionslinje. Lønnen var en udgift, og for den skulle man yde optimalt. Hvis man ikke kunne det, måtte man forlade jobbet. Sådan ser han ikke på det mere, han er "blevet mere rummelig". Uffe mener, at hvis man ikke er eller bliver rummelig undervejs, så kan man ikke være erhvervsskolelærer. Han fortæller, at det rækker ud over lærerjobbet, det gør noget ved personen:

Det tror jeg på, det gør, for hvis det er den her rummelighed, jeg har på erhvervsskolen, og den er væk, når jeg sætter mig ud i min bil, så virker den ikke, så er det jo en facade. Det duer ikke, det kan blive nødt til at være ægte. Det skal være lige så ægte som den stolthed, jeg har af mit fag og den faglige identitet, jeg har. Hvis den ikke er ægte, så kan eleverne gennemskue det, og så går der et splitsekund, og så er der ingen respekt, så kan vi ikke nå dem. Så jeg tror på, at hvis det ikke er ægte, så fungerer det bare ikke.

Uffe argumenterer med begrebet "ægte" for, at rummeligheden og menneskesynet ikke bare kan være påtaget. "Det skal være lige så ægte som stoltheden af faget". Senere i interviewet giver han et eksempel på det ændrede menneskesyn. Hvor han tidligere så en lærling som en produktionsfaktor, ser han ham nu som en ung mand. Den unge mand havde tidligere været lærling hos Uffe, men han fyrede lærlingen i prøvetiden. Uffe beretter om, da han senere møder den unge mand på erhvervsskolen:

Jeg så jo akkurat det samme, men kunne så også stadigvæk mærke, at nu ser du lige pludselig en ung mand i stedet for en, der skal bare producere. Det var en øjenåbner for mig. Det er så spørgsmålet, hvor ligger ens værdier, hvad er det for et fokus, man har. Det er måske nok i virkeligheden det, der sker. Man får ændret sit fokus. Det kan man sige. Om man gennemgår en transformation, eller hvad man gør, det kan godt være, men det er nok i virkeligheden ens fokus, der bliver ændret.

Uffe kalder det en "transformation", og i refleksionen åbner han op for, om det nu rent faktisk er en transformation eller et ændret fokus. Herved bliver samspillet mellem diplomuddannelse, at være erhvervsskolelærer og det tidligere erhverv overvejet. Selvom han nu ser noget nyt i situationen med lærlingen, taler han ikke imod den logik, som findes i en produktionsverden. Han ser i stedet på den unge mand med lærerøjne. Man kan sige, at Uffe har udviklet en professionel identitet, som er båret af andre holdninger og værdier, end han tidligere havde. Han har mulighed for som lærer at vægte andet end produktionen. Man kan se det som et dilemma, at skulle have flere blikke på lærlingen, men man kan også se det som en nødvendighed i professionen at kunne forstå

og skifte mellem to perspektiver – et produktionsperspektiv og et uddannelsesperspektiv. Det er et led i den professionelle identitet at kunne og turde prioritere mellem perspektiverne.

I slutningen af interviewet har gruppen af lærere på teknisk skole opbygget en fortrolighed, som i en humoristisk form får mændene til at tale om udviklinger uden for erhvervsskolen. Uffe fortæller, at samtalen i hjemmet har forandret sig, og Ole fortsætter:

For mig kan det være den måde, jeg har reageret over for nogen på tidligere. Er det den kamp, man skal tage eller prøve at gribe det an på en anden måde. Jeg har selv en kone, der er uddannet på universitet. Jeg er nok kommet lidt tættere på hende frem for bare at være en håndværker.

Rasmus tilslutter sig og fortæller om den ændrede relation til sin kone, hvor de nu har et fælles sprog. Både Ole og Rasmus taler om refleksioner inden handlinger, om at have forskellige handlemuligheder at vælge mellem. Man kan både se det som en afsmitning af diplomuddannelsens indhold, hvor flere tilgange og perspektiver på området indgår, eller man kan se det mere generelt i forhold til at være i gang med en videregående uddannelse. Respondenterne oplever og fortæller om det, som ændringer relateret til uddannelse. Derfor kunne der være tale om ændringer i selvidentiteten jf. Mead. De mere private og biografiske ændringer er ikke i sig selv interessante i artiklen, men i sammenhæng med de tidligere nævnte oplevelser af ret voldsomme forandringsprocesser, kan det sige noget om, hvordan værdier og holdninger ændres undervejs i diplomuddannelsen. Ændringer i den professionelle identitet kan derfor også have betydning for selvidentiteten. Dog siger Uffe, at alder og livssituation også kan have en betydning, så forandringer kan ikke alene tilskrives uddannelsesforløbet. Jeg mener heller ikke, at man kan sige noget om, hvornår der sker en udvikling i den professionelle identitet alene på baggrund af diplomuddannelsen. Der kan ikke tales om kausalitet. Man kan heller ikke adskille, hvornår selvidentiteten udvikles, eller hvornår den professionelle identitet udvikles. Diplomuddannelsen sætter dog en udvikling i gang i forhold til de fleste erhvervsskolelærere, sådan oplever de fleste respondenter det. Da de fleste tager diplomuddannelsen på deltid, får erhvervsskolelærerne også mere erfaring som undervisere undervejs i uddannelsen. Selvom diplomuddannelsen ikke er en vekseluddannelse, må man forvente, at der sker et samspil mellem uddannelsen og erfaringen som lærer. Diplomuddannelser skal bygge på de studerendes erfaringer. De studerende udarbejder fx eksamensopgaver ud fra deres erfaringer som lærere. Dette samspil undersøges nærmere i andre dele af ph.d.-studiet, som artiklens data er en del af.

### Udvikling gennem samspil med kolleger og medstuderende

Samspillet med kolleger og medstuderende kommer frem på flere forskellige måder. En fortæller, at hun nu bedre forstår sine kolleger og deres tilgang til uddannelsen på grund af videnskabsteori på diplomuddannelsen. Hun kan altså bedre forstå andres værdier og holdninger, andres professionelle identitet. En anden ser sig nu som et fuldgyldigt medlem af lærergruppen på skolen, da hun nu har en teoretisk læreruddannelse. For hende er der in- og eksklusionsmekanismer knyttet til diplomuddannelsens kundskaber.

Der er også i alle interviews en diskussion af fokusgruppens position i forhold til andre erhvervsskolelærere. Med den forskellige uddannelsesbaggrund i mente (faglærte, korte, mellemlange og videregående uddannelser), er det måske ikke tilfældigt, at denne diskussion særlig ses på handelsskolen og social- og sundhedsskolen, hvor der er det højeste uddannelsesniveau. Respondenterne drøfter, om de lærer af at være sammen med erhvervsskolelærere fra andre uddannelser. Lærere fra handelsskolen diskuterer, hvordan andre læreres skrive- og læsefærdigheder influerer på deres udbytte af uddannelsen. De studerende fra handelsskolen bliver frustrerede, og siger, at ikke alle studerende lærere forbereder sig til undervisningen. Nogle læser ikke og møder op til undervisningen for at forstå pensum, og andre medstuderende "har haft nok ved bare at kunne overskue at læse tekster", men, som den akademisk uddannede Ulla siger "det er slet ikke den måde jeg arbejder på". Hun pointerer dog også, at "vi havde rigtig mange gode diskussioner". Der kommer en ambivalens til syne. På den ene side har de studerende gode diskussioner, på den anden side er der et forskelligt udgangspunkt og forskellig tilgang til studiet, måske så forskelligt, at man ikke kan anvende hinandens viden i sin undervisningspraksis på erhvervsskolen: "det beriger måske min verden men det beriger måske ikke nødvendigvis min praksis", fortæller Dorthe. Hun er fascineret af at høre om arbejdet som smed eller landmand, det giver hende indsigt i en anden verden, men hun betvivler, om det er relevant for hendes undervisning. Overordnet ser jeg disse refleksioner og positioneringer mellem forskellige lærergrupper som et potentiel element i udviklingen af den professionelle identitet. Siden det er vigtigt for respondenterne, for det er ikke noget interviewer har spurgt til, kan det være, at den professionelle identitet udvikles på baggrund af en fælles udvikling. Den enkelte lærers værdier og holdninger kan fremstå tydeligere gennem en spejling i andres professionelle identitet. Det kan også være, at der er tale om en sortering og vurdering i forhold til et uddannelseshierarki.

De studerende fra handelsskolen er ikke i tvivl om, at de lærer af medstuderende, men de problematiserer, om læringen har relevans for deres funktion som lærer. De studerende fra social- og sundhedsskolen har lignende overvejelser og positioneringer af sig selv i forhold til andre studerende. Det interessante ved at være sammen med andre lærere fra andre erhvervsskoler er, at der kan drages paralleller vedrørende de ting, som handler om erhvervsskoler generelt.

Lærerne har de samme didaktiske og relationelle udfordringer. I modsætning til de studerende fra handelsskolen er de studerende fra social- og sundhedsskolen ikke i tvivl om, at studiet sammen med andre erhvervsskolelærere giver dem nye perspektiver.

På diplomhold med mange forskellige erhvervsuddannelseslærere finder man de tværgående fælles pædagogiske og didaktiske udfordringer. Da erhvervsuddannelserne er struktureret ens, og respondenterne mener, omverden ser ens på erhvervsskoler - "den måde vi i virkeligheden bliver anskuet" - så er der måske elementer, der kan pege på en fælles professionsidentitet. De oplever, at erhvervsskoler rangerer lavt, og der kan være et fællesskab omkring jurisdiktioner og arbejdsvilkår.

Respondenter fortæller endvidere om forholdet mellem den første uddannelse som sygeplejerske og professionen som erhvervsskolelærer. På social- og sundhedsskolen eller sammen med andre fra samme skoleform er det så indforstået, hvordan man placerer sig mellem at være sygeplejerske og lærer på en erhvervsskole. På diplomuddannelsen har de som lærere på en social- og sundhedsskole fokus på at være undervisere, når de er sammen med lærere fra andre erhvervsskoler. Når der er hold med kun social- og sundhedsskolelærere, så "går der nemlig fnidder fnadder i det. Vi er fuldstændig ens, ikke også". På blandede hold er de nødt til at fokusere på underviserfunktionen: "når det er gartneren der sidder ved siden af mig ikke også men så er vi undervisere".

I interviewet er der en uafklarethed i forhold til, om det er godt med blandede hold. Det kan fortolkes som en del af social- og sundhedsskolelærernes professionelle identitet. "så alligevel med den fagidentitet, man har. Det er undervisningen, der kommer i fokus". Blandede hold har mere fokus på professionen som erhvervsskolelærer. Det ser ud som om, de blandede hold er med til at udvikle både en professionsidentitet og en professionel identitet, men det handler mest om sidstnævnte.

På tværs af erhvervsskoler taler flere af respondenterne om udviklingen i det kollegiale samarbejde på erhvervsskolen. Uddannelsen giver mod på didaktiske diskussioner med kolleger og bedre forståelse af kollegers forskellige tilgange. Det kan dog være svært at drøfte sin nye viden på arbejdspladsen, hvis kolleger afviser ideer. Der tales også om opgaver på organisationsniveau, at kunne bidrage med nye ideer og deltage i forsknings- og udviklingsaktiviteter, så diplomuddannelsen åbner for opmærksomhed på nye opgaver på erhvervsskolen. Det gør den også i forhold til at se nye jobmuligheder, at få selvtilid og bekræftelse gennem succes i uddannelsesforløbet. Det kan være en udvikling af professionel identitet at indgå på nye måder på erhvervsskolen, at kunne se sig selv bidrage bredere som professionsudøver end tidligere. Men nye karrieremæssige perspektiver er andet end udvikling af personlig identitet.

## Professionel identitet i en erhvervsskolekontekst

Begrebet professionel identitet har i Heggens definition sammenhæng med både personlig identitet og professionsidentitet. Konkluderende på analyserne ovenfor kan siges, at professionel identitet inkluderer studerendes oplevelser af ændringer i privatliv og menneskesyn, hvilket kan fortolkes som en del af den personlige identitet, men analyserne viser kun ansatser til sammenhæng med en professionsidentitet for alle erhvervsskolelærere. Selve begrebet professionel identitet kommer i analyserne til at rumme fagligt indhold, handle- og tænke-måder og kollegiale relationer.

Professionel identitet går på tværs af kontekster: den studerendes første uddannelse, tidligere erhverv, diplomuddannelsen og professionen som erhvervsskolelærer. Det er også vist i andre studier (Bathmaker & Avis, 2007; Köpsén, 2014; Fejes & Köpsén, 2014). Hvis man vil understøtte den professionelle identitetsudvikling på tværs af kontekster er det teoretiske ståsted afgørende. En sociokulturel tilgang, jf. Lave og Wenger, vil henvise til, at praksisfællesskabet i konteksterne skal være sammenstemmende og meningsfulde for at blive identitetsskabende. En konstruktivistisk eller pragmatisk tilgang som hos Schön vil henvise til, at erhvervsskolelæreren skal lære refleksion i handling og refleksion over handling. I tankegangen om kohærens jf. Smeby og Heggen vil man fx henvise til Erauts forslag om at arbejde med overgangene mellem kontekster (Eraut, 2004).

Nogle respondenter taler om at gå på flere ben, dvs. kombinere erfaringer fra forskellige kontekster. Med afsæt i tænkningen om kohærens og artiklens konklusioner om professionel identitet kan man drøfte, hvordan erhvervsskoler og diplomudbydere kan understøtte udviklingen af den professionelle identitet både med henblik på, hvordan den udvikles, og på uddannelsens indhold. Hvordan er det fx hensigtsmæssigt i diplomuddannelsen at knytte an til de biografiske erfaringer fra første erhverv og uddannelse, og hvordan kan ledere på erhvervsskoler skabe rammer for at integrere viden fra diplomuddannelsen.

Uddannelse kan hjælpe lærere til at magte dobbeltidentiteten og er afgørende for lærerfællesskabet (Fejes & Köpsén, 2014; Robson, 1998). Artiklen viser, at for mange lærere igangsætter uddannelse en udvikling. Der er dog mange henstående diskussioner omkring pædagogisk uddannelse af erhvervsskolelærere. Hvis erhvervsskolelæreren først er semi-professionel, når han har afsluttet diplomuddannelsen, skal han så først på dette tidspunkt kunne foretage de beslutninger og vurderinger, som ligger i professionen? Eller kan man alternativt forvente, at den professionelle identitet hos erhvervsskolelærere hurtigt udvikles, så nye lærere straks kan varetage funktionen?

Både i artiklen og i andre studier findes, at forandringer ændrer den professionelle identitet og det påvirker andre relationer (Avis & Bathmaker, 2006; Vähäsantanen et al., 2009). Ændringerne i den professionelle identitet, som be-



rører kollegiale og familiære oplevelser, kan skabe sårbare aktører. Man skal finde en ny måde at begå sig kollegialt, så man kan anvende den professionelle viden, men acceptere, at kolleger ikke altid ønsker de samme forandringer. Og det er ikke sikkert, at alle ændringer giver så positive ændrede familiære relationer, som i empirien her. Det er oplagt at drøfte dette i de relevante kontekster.

Man kan sige, at begrebet professionel identitet favner formuleringen i bekendtgørelsen for diplomuddannelsen om, at diplomuddannelser skal skabe en professionel og personlig kompetenceudvikling, hvis man har en bred kompetenceforståelse jf. Illeris. Professionel identitet for erhvervsskolelærere kommer til at være rundet af et første erhverv, et menneskesyn og et bredt syn på uddannelsesopgaven både set i et samfundsmæssigt perspektiv og som elevsyn. Professionel identitet er didaktisk tænkning og handling, og professionel identitet dannes i et samspil med den personlige identitet. Artiklen viser forskelle i svarene hos respondenter fra forskellige erhvervsskoler, men svarene viser også forskelle internt på skolerne. Professionel identitet ser således ud til at have nogle fælles træk, men er også et individuelt fænomen. Professionel identitet dannes i et samspil mellem kognitive aspekter på uddannelsen, i den studerendes undervisning på erhvervsskolen og i diskussioner med andre studerende på diplomuddannelsen. Det vil sige, at professionel identitet dannes både i forskellige kontekster og i relationer.

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# Vocational teachers taking the lead: VET teachers and the career services for teachers reform in Sweden

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## Abstract

In 2013 the Swedish government launched a reform on career services for teachers that introduced first-teachers as a new category of teachers. Since this reform still is in the process of being rolled out, we know fairly little of its impact, especially concerning VET teachers that are appointed first-teachers. This paper explores and analyses two cases of VET first-teachers with focus on the implications on educational leadership practices in their work with school improvement where 'distributed leadership' is used as a lens for understanding the characteristic features of leadership practices. The results show that the VET first-teachers consider themselves to represent an important educational leadership being process leaders for creating a culture built on mutual trust, turning the focus of school improvement from a 'top-down' perspective to change 'from below'. They become 'brokers' and a link between school management and their colleagues, even if there are some difficulties. Moreover they visualise different practices and foster a new awareness – concerning e.g. assessment and the relationship between school and work-place – that seem to influence collegial discourse.

**Keywords:** vocational teachers, educational leadership, school improvement, advanced skills teachers

## Introduction

Over the last 20 years transnational organisations have become increasingly important as actors and shaping forces in curriculum-making and educational reforms (Andersson-Levitt, 2008; Nordin & Sundberg, 2014). Trends of standard-based assessment, accountability and teacher professionalism for increased quality influence national educational policy and trickle down to district and school levels. In this case Sweden is no exception. The Swedish school system has undergone a number of extensive reforms during the last five years: a new school legislation and new curriculum for the compulsory school and upper secondary school. Apart from this, the Career services for teachers (CST) reform was launched by the Swedish government in 2013. The overall aim was to provide new career paths for teachers within the profession, reward skilled teachers and create conditions for school development. What makes this reform interesting is that it has introduced 'first-teachers' (förstelärare) as a category of teachers without any thorough consideration or analysis of implications for the management of schools and school improvement.

In international curriculum and educational leadership research there is an ongoing discussion on approaches to policy as leadership in terms of enacted practice and curriculum making (Uljen, 2015; Wahlström & Sivesind, 2015). This has called upon the necessity of a dialogue between educational leadership studies and curriculum studies. Even if the enactment of the CST reform itself is not the main issue here, this article in many ways positions itself within that dialogue. The aim with this article is to explore and analyse two cases of vocational education and training (VET) first-teachers with special attention to how they experience their position as first-teachers and the implications on educational leadership practices in their work with school improvement. VET teachers are rarely targeted in evaluations and studies of educational reforms, but their previous work experience and professional identity, the fact that they must handle the relationship between school and work-life and the theory – practice-relationship as immanent parts of the VET – that is dealing with a complex and multifarious context – make them particularly interesting to study from out the perspective of leadership practices. The research questions are as follows: How do the VET first-teachers characterise their leadership practices in interaction with colleagues and principals? What implications do they distinguish in terms of the organisation of collegial practices, the relationships between different agents in the local school and school improvement? Finally, how can the leadership practices of the VET first-teachers be analysed and understood from the concept of 'distributed leadership'?

Datnow, Hubbard and Mehan (1998) argue that the process of educational reform enactment is framed within a 'conditional matrix' consisting of context-specific conditions, social agents and their actions. Processes are not linear but

characterised by 'co-construction' (ibid.). This leads to different outputs which also is underlined in research on school reform and school effectiveness (Sterbinsky, Rossa & Redfield, 2006). Principals and teachers are crucial in curriculum work related to sustainable school development according to Adolfsson and Håkansson (2014), especially principals' understanding and learning of how to manage long-term school improvement, as well as principals' ability to challenge the teachers in developing teaching strategies (Adolfsson & Håkansson, 2014). A crucial point is that factors that bring about change are embedded in practice. This implies that the question of educational leadership in a local setting must be theoretically addressed. Following the argument of Uljens (2015) it can be claimed that any educational leadership theory must deal with on the one hand curricular issues such as the relationship between institutional education and economics, politics and society and on the other hand the moral and value-based aspects of professional leadership. In this article a theoretical framework and the concept of 'distributed leadership' will be used for analysing educational leadership practices of VET first-teachers.

### **The CST reform in context - career services and school improvement**

There is a growing concern in many Western countries that the number of teachers is decreasing. For over two decades there have been quite many policy initiatives to prevent teacher turnover and increase attraction to the teaching profession through career pathways for teachers (Fisk Natale, Bassett, Gaddis & McKnight, 2013). Another dimension is the emphasis on the importance of the teacher, from both educational research (Hattie, 2009) and in international reports like *Teachers Matter* (OECD, 2005).

The efforts to strengthen teachers' skills and the status of the teaching profession are often combined with initiatives to promote school improvement through 'collegial learning'. According to the Swedish National Agency for Education (2013a) collegial learning can be defined as a 'concluding term for different forms of professional development where colleagues acquire knowledge through a structured co-operation in the everyday practice' (p. 25). So far there is no common definition of collegial learning in international research (Stoll, Bolam, McMahon, Wallace & Thomas, 2006), but there are some general aspects such as a reflective and collective way of sharing and working together in order to develop teaching and to learn about one's own practice. Altogether such actions are supposed to support the learning of the pupils and students (ibid.). Studies show that teachers develop their professional skills when working together collegially through for instance observations, analyses, networks and lesson studies, but it is essential to be aware of the significance of local and contextual factors (Sundstrom Allen & Topolka-Jorissen, 2014).

When the former government introduced the CST reform in July 2013 the ambition was to promote the status of the teacher, provide career opportunities

and to appoint skilled teachers that could be key actors in school improvement. The reform also meant to reward skilled teachers through a quite substantial salary raise (about 540 € for a first-teacher, about 1,080 € for a lecturer per month). In 2014 the reform was expanded to include about 17,000 career services, that is about one out of six teachers (Swedish National Agency for Education, 2013b). Today there is about 14,000 first-teachers (Swedish National Agency for Education, 2014). An important aspect is that the CST reform actually is optional for municipal and free schools and it is very open in its design. This means that there is a variation between municipalities regarding the number of first-teachers, their positions and assignments, recruitment and the organisation for first-teachers.

The CST reform is founded on the principle that the responsible authority appoints and decides the assignment for the first-teacher. To be appointed, a teacher must be certified and have a minimum of four years of documented excellence in teaching. It is required that the teacher has the ability to improve student achievement and teaching (Swedish National Agency for Education, 2013b; Government grant ordinance 2013:70). The state authority allocates a number of positions for first-teachers and/or lecturers and funding is based on higher government grants (Government PM, 2013). It is also up to the municipalities and free schools to create the assignments and in this respect there are some general descriptions of what first-teachers are supposed to do: be responsible for introducing newly employed teachers, coach other teachers, initiate pedagogical discussions and lead projects aimed at improving teaching, be responsible for exams in upper secondary school or adult education, support teacher students on internship or lead a subject. As a result of this, it is hard to be specific about the formal role of the first-teachers. However, an important aspect is that first-teachers in no way are responsible for the budget, staffing or performing any formal tasks that the principals do. The principal leads the school and is responsible for the educational leadership, which also is regulated by the Swedish Education Act (SFS 2010:800).

Compared with career programmes in Poland, Scotland, England and Australia there are many similarities to the CST reform in terms of the aspirations to strengthen the status of the teaching profession. At the same time there are differences. While the mentioned countries have two or more career steps, the CST reform only includes one step. Another difference is that the criteria for being appointed or to be promoted are far more detailed and elaborated than in the Swedish reform. Furthermore, the criteria are based on various needs and tasks for the teachers who are appointed. As described above the regulations for the appointment and the assignments are vaguely defined in the CST reform: first-teachers can work with a number of different tasks where the final decision is made by the responsible authority (Ministry of Education, 2012).



So far we know little of the impact of the CST reform in Sweden because it is so recent, but previous research has shown that first-teachers might strengthen the idea of distributed leadership in schools and at the same time also challenge, to some extent, existing leadership relations and authority – primarily that of the principal (Alvunger, 2015). There are however several international examples of similar reforms. In the USA, National Board Certified Teachers (NBCT) have existed since 1987. It is an extensive process to be certified and the tests last for almost a year. It is voluntary to take the tests and half of those who apply become certified. Regarding student achievement and learning studies indicate that NBCT teachers are more effective than non-certified teachers, especially in certain subjects (Bond, Smith, Baker & Hattie, 2000; Vandevooort, Amrein-Beardsley & Berliner, 2004). Another career programme – which not is nationally recognised with certification – in the USA is the ‘Teachers Advancement Programme’ (TAP). An evaluation of the programme using a randomized mixed-method approach shows significant achievement gains on TAP-schools compared to controls. However, the magnitude of gains varied by school and fidelity of implementation. According to implementation the importance of principals and assistant principals roles and actions in high-performing TAP-schools was stressed. They were strong leaders who rigorously evaluated teacher performance, regularly monitored student achievement, recruited and selected skilled master and mentor teachers et cetera. Moreover the highest achieving TAP-school had considerable district support (cf. Schacter & Thum, 2005). Other examples are ‘Advanced Skills Teachers’ (AST) which was introduced in the early 1990s in Australia. According to Watkins (1994) a problem in the implementation of AST was that the required teaching skills rarely were controlled. The CV and the interview played the most important part in the classification process (1994). In a later study by Ingvarson and Chadbourne (1997) there were indications that AST teachers tended to be marginalised in small isolated ‘enclaves’. A common mistake when implementing was that the role and position of the AST in the leading and management structure was unclear (ibid.). More recent studies from the implementation in England show that the AST themselves see their appointment as a recognition of being skilled teachers and they experience a higher professional status. Moreover they believe that their work influence the quality of teaching and student achievement (Fuller, Goodwyn & Francis-Brophy, 2013).

### **Distributed leadership**

A traditional view on leadership is that it depends on individual characteristics and qualities. Against this notion there are those who claim that leadership as practice is relational (Pierce & Newstrom, 2007) and enacted by and stretched out over the people in an organisation (Spillane, Halverson & Diamond, 2001; Leithwood, Mascall, Strauss, Sacks, Memon & Yashkina, 2007). In their work on

leadership practice and its connection to the improvement of teaching and learning Spillane et al. (2001, 2004) developed a distributed perspective on leadership practice where it 'is constituted in the interaction of leaders and their social and material situations' (Spillane et al., 2001, p. 27). Leadership is something that is co-performed or 'co-produced' as Ludvigsson (2009) points at in her study on how principals and teachers understand each others thoughts and actions in every-day work. Ärlestig (2008) and Törnsén (2009) underline the importance of a leadership practice and structures that contribute to frequent communication between teachers and principals in matters concerning teaching and learning. In a study on principals in upper secondary school, Johansson, Erlandsson and Dåderman (2014) show the varying conditions and circumstances that principles are engaged in and how they seem to be caught in a 'leadership paradox'. Principals need ideals for their leadership and collegial support but in an organisation subject to changes there is limited time for reflection (ibid.).

A general observation in research is that distribution of leadership functions and roles has a positive impact on organisational development and change (Harris, 2012; Leithwood et al., 2007; Leithwood, Mascall & Strauss, 2009; Larsen & Rieckhoff, 2014). Even though the number of impact studies are limited, there are indications that what Leithwood et al. (2009) name as 'planful alignment' tends to have more positive implications on school improvement processes in both a short-term and long-term perspective in comparison to other patterns of distribution (ibid.). A similar argument is made by Hallinger and Heck (2009) who underline that sharing of leadership responsibility from the principal to teachers underpins the creation of effective professional learning communities in schools.

It is an undisputable fact that distributed leadership has been one of the most influential and contested concepts in research on educational leadership for more than over ten years (Harris, 2012). The focus on the idea of shared or multiple leadership has resulted in a great number of studies. In brief, over the last years we have seen a booming trend of the usage of distributed leadership in research. One reason for this is that the concept has paved the way for new perspectives on leadership practice (Harris, 2012, 2013). At the same time some researchers question the empirical evidence for distributed leadership (Harris, 2012; see also Jones, 2014) and the tendency to use it as a universal solution for managing organisations (Jones, 2014). Critics also argue that it is a 'rhetorical' and politically correct concept which reflects the hegemony of accountability and a neo-liberal agenda on quality in global education policy. It is currently in sway among politicians, officials and school stakeholders (Corrigan, 2013).

One of the most important features within the framework of distributed leadership is that leadership practice involves multiple agents with both formal and informal roles and rests on the interaction of people in an organisation

(Bennett, Wise, Woods & Harvey, 2003; Spillane et al., 2004). An essential aspect is mutual trust and the following quote from Harris (2013) captures both the salient features of the concept and the implications that a re-designing of an organisation according to the principles of distributed leadership may have on its agents:

Distributed leadership implies a fundamental change in the way formal leaders understand their practice and the way they view their leadership role. Distributed leadership means actively brokering, facilitating and supporting the leadership of others. It does not mean, as some would suggest, that everyone leads or that everyone is a leader /.../ Distributed leadership underlines that heads are only a part of leadership practice in any school as there are inevitably many other sources of influence and direction. (pp. 546-547)

Over the years there has been a number of leadership functions identified in leadership research. Spillane, Camburn and Stitzel Pareja (2009) have for instance provided a distinction in principals' leadership between administrative tasks (scheduling, budget, staff), curriculum and instruction tasks (planning lessons, instruction in classroom, assessment of students), professional growth and fostering relationships (ibid.). In the analysis of leadership practices in the work of the first-teachers this study will use four categories developed by Leithwood et al. (2009):

- Setting direction: this function includes the articulation and fostering of a vision and goals for the group/organisation; expectations.
- Developing people: a leader gives personal attention and presents intellectual stimulation and support for the individual that in turn becomes a way of forming practices and values for the work of the individual/group
- Redesigning the organisation: improvement can be facilitated by the creation of collaborative structures and processes. The leader has a function to promote an organisational learning culture that supports the learning of both teachers and students.
- Managing the instructional program: monitoring the progress of students' achievements and school improvement; staffing and protecting staff from external pressure that is negative; allocating resources.

In their study on patterns of distributed leadership in a large urban school district in Canada, Leithwood et al. (2007) underlined – which is similar to Harris' conclusion in the quote above – the importance of facilitation and support from the formal school and district leaders:

Distributing leadership to others does not seem to result in less demand for leadership from those in formal leadership positions. However, it does produce greater demand: to coordinate who performs which leadership functions, to build leadership capacities in others, and to monitor the leadership work of those others, providing constructive feedback to them about their efforts. (p. 63)

The principals played a key role for the teaching staff through creating conditions and an allowing culture for developing their leadership capacity (cf. Harris, 2013). In the analysis of the empirical material an interesting aspect is to

what extent first-teachers might both legitimate and strengthen the ideas of distributed leadership in schools, but at the same time also maybe challenge, to some extent, existing leadership relations.

### **VET Education and The Upper Secondary School System in Sweden**

After having completed nine years of compulsory school (primary and secondary education) all students are allowed to study a three-year upper secondary school education. Since the early 1990s there are both public schools (lead by municipalities) and independent schools (companies, organisations, foundations) that provide educations from the national curriculum. Upper secondary education covers both upper secondary school with national programmes and upper secondary schools for learning disabilities. All in all, there are 18 national programmes (three years) which all consist of upper secondary foundation subjects, subjects common to the programme, orientations, programme specialisations and a diploma project. Six of these programmes are higher education preparatory programmes and twelve are vocational programmes. Apart from this there are five introductory programmes for pupils who are not eligible for a national programme (Swedish National Agency for Education, 2012).

On national level there is a consultative programme council with stakeholders and representatives from the National Agency for Education for each of the vocational programmes, while the school and the different workplaces cooperate through a local programme council for vocational educations. The vocational programmes can be organised as school-based or apprenticeship-based educations. Regardless of which, the students study upper secondary foundation subjects like Swedish, English, Mathematics and Social sciences, subjects common to the programme and special subjects in line with the vocation and specific orientation. In order to learn vocational knowledge, understanding the vocational culture and being socialised in the vocational community and shaping a vocational identity, the students also have parts of their education in workplaces. The school-based vocational programme must include 15 weeks of workplace-based learning (WBL) as a minimum and in the apprenticeship education WBL during at least half of the education. WBL is regulated in the subject syllabuses and is very important for the students. The school – or more specifically the principal – is responsible for WBL which only under specific circumstances may be located at the school. During WBL the students have a supervisor which must have the required vocational knowledge and experience and be appropriate as supervisors. Generally, the VET teachers visit the students during their WBL and consult with the supervisor before grading. After have finished the programme the students get a vocational degree. In some cases students can continue in further studies in vocational higher education (Swedish National Agency for Education, 2012).

## Methodological considerations and empirical material

The two cases of VET first-teachers that will be presented are 'Beatrice' and 'Albert'. They work in the same municipality, a town with 86,000 inhabitants, but in two separate public upper secondary schools for students in the ages 16–19 years old. The schools are centrally located and have both academic and vocational programmes, but differ in size: Beatrice's school has about 730 students and Albert's school has about 1250 students. Beatrice, 41 years old and with a professional background as a preschool teacher, is a teacher in subjects for the Child and Recreation Programme and Albert, 58 years old and with a previous career as construction worker, is a teacher in subjects for the Building and Construction Programme.

The VET first-teachers in this study have been selected because they started their assignments in 2013 and thus have worked for almost two years. This makes it easier to describe how they understand their position and draw conclusions on general features in their leadership practices. Another reason is that they both chose very similar assignments, that is to work with the quality of workplace-based learning (WBL) within the vocational programmes.

The study is based on a 'mixed-method' design (Cresswell, 2010). Firstly a contextual analysis has been performed focusing on the role of the VET first-teachers in the organisation as described in strategic documents, that is a document analysis. Apart from this the contextual analysis includes semi-structured interviews with Albert's and Beatrice's principals (n=4). The interviews lasted about 45 minutes and aimed at exploring the question of changes and implications more specifically. Altogether, the document analysis and interviews provides a description of the two VET contexts at Beatrice's and Albert's schools respectively. The interviews with the principals are important in order to understand how the VET first-teachers' assignments are perceived and help to make a more 'thick' description and analysis of the two VET teachers in their VET contexts.

Secondly, semi-structured interviews with the two VET first-teachers have been conducted for exploring qualities in the experiences of the first-teachers and for defining leadership practices and strategies into thematic categories (Bryman, 2004). The interviews were about two hours long and concerned questions regarding how they look upon their assignment, their strategies, how they organise management and motivate peers, their interactions and relationships with colleagues, conditions, professional development for teachers, important factors for their work like experience, knowledge and skills, their views on how the development of their colleagues, impact and implications on teaching.

In the analyses of data, thematic categories describing the general features of the leadership practices of the first-teachers have been identified from how the VET first-teachers characterise these practices in interaction with colleagues and

principals. In the discussion I will relate the thematic categories to Leithwood et al.'s (2009) categories presented earlier in this paper and present and discuss some hypotheses on what implications the work of the VET first-teachers may have on the organisation of school improvement and teaching.

Since this study builds on a case-study approach there are of course limits regarding what general conclusions that can be made on a larger scale from the description and analysis on two different cases of how VET work as first-teachers. However, it must be emphasised that the CST reform is quite new. Though this study has a somewhat limited scope is important because it takes on career pathways for teachers as a brand new field of research in Sweden and contributes to a deepened understanding of how reforms directed towards the teaching profession – such as the CST reform – have an impact at the local school level as well as teacher level. Since the CST reform is aimed at facilitating for school improvement it is necessary to evaluate the reform impacts on the core processes of teachers' collegial work. Therefore we need to learn more about the qualities and leadership practices of VET first-teachers, not least because this category of teachers in general rarely are focused on in educational reform research. In this respect the case-study approach serves as a first attempt

## Results

In the following general features in the leadership practice of the two VET first-teachers and their views on how they interact with colleagues and principals will be presented. The features overlap each other and reveal the complex and inter-twined character of how they work.

### Visualising and systematising

When Beatrice and Albert received their assignments they experienced them as sprawling and with various tasks, e.g. to develop assessment tools, communication between the school and the parents, improve interaction with companies, methodological development and so on. An interesting aspect is that both Beatrice and Albert decided to focus on the quality of WBL in the VET programmes but from different starting-points: Beatrice had observed great differences in how the VET programmes at her school organised WBL while Albert had experienced a lack of knowledge and understanding of the significance of WBL among the principals and the district leadership.

A key strategy chosen by the VET first-teachers was to visualise how WBL was planned and organised at their schools: the relationships to companies and workplaces, the time period for WBL in the programme and general views on the importance of WBL among teachers and principals. Their first step was to map views among colleagues and in the school management. Albert focused on the principals and the leadership of the district and came to the conclusion that

there was no coherent view on WBL from the curriculum, no common goals or visions, no general idea for evaluating and a vague understanding of the principal's responsibility for WBL in the VET programmes. By visualising the disparities, Albert was supported by his principal to create a systematic plan for continuous quality improvement and assurance.

Beatrice noticed that VET teachers at her school knew little about how WBL was organised in the other programmes. There was no consensus regarding WBL and different conditions for both teachers and students. In her eyes it was necessary to visualise the different practices, to emphasise the importance of WBL by highlighting the aims in the curriculum and to foster an awareness – concerning e.g. assessment – that would influence collegial discourse, not only between VET teachers but in relation to subject teachers. She stressed the benefits of a WBL of good quality and that sharing experiences and examples of best practice between the 'hard' (technical/industrial) and 'soft' (human-centred/caring) VETs would reveal common needs.

According to Albert the mapping of similarities and differences, the exploration of the potential for development and possible synergies has helped to trigger the interest and motivation among principals and teachers for working with WBL. Albert refers to this as a 'snowball-effect'. By putting words on what they do, the VET teachers have started to become aware of what works and what doesn't, but most of all the value of documentation and evaluation. This seems to have led to an understanding of WBL that in turn has pointed out new ideas and models. One of Albert's main achievements according to himself is the creation of 'the year-wheel', an overview of activities and tasks related to WBL. This has also been useful in contacts with the professional trainers in the companies. They know when they can expect students or meetings with the VET teachers at the school. Albert's principal emphasises the first-teacher as 'a significant agent in school improvement' and someone who 'works with measurable goals on a long-term basis'.

### **Brokering**

The two VET first-teachers can to a great extent be described as 'brokers': both internally in the school organisation and in relation to external agents. They take on – and are given a mandate from their principals – a leading role for communicating and interpreting information. Sometimes they negotiate between conflicting views and interests and act as a link between school management and their colleagues. A corresponding notion and expectation that Beatrice's principal had on her as first-teacher was that 'the consultative work in general will increase at the school with the help and support from the first-teacher's assignment'.

Beatrice describes her first assignment as a 'top-down' project that was necessary to anchor 'from below'. It was essential to make others follow. One im-

portant factor for this according to her was that the colleagues had to see that changes could lead to time savings and reduce the work-load. Beatrice also argued that the principal had to explicitly allocate time for the teachers to plan and work with WBL issues. Once these changes were made, she experienced that complaints about lack of time among VET teachers abated. Furthermore her colleagues became more focused on the qualitative dimensions of WBL rather than checking that the students had spent the correct amount of hours during internship. On his behalf, Albert describes a similar development in the relationship to his colleagues and principal. He also managed to get support from the principal concerning time for joint meetings between VET teachers from different programmes. His argument was that it could be possible to work more concentrated on subject integration, something that the principals had desired for a long time.

'Brokering' as a main feature does not exclusively apply to how the VET first-teachers describe themselves in relation to the principals and the teaching staff. To a great extent they consider themselves to be central for subject integration. In this respect Beatrice and Albert express that subject teachers have become interested in how their subjects may motivate and appear as relevant for the students. Furthermore, they experience that the subject teachers are more flexible and likely to adjust their plans according to WBL and specific topics in the vocational subjects. The following quote from Albert is illustrative:

The subject teachers are extremely important to integrate in this. This brings us back to the curriculum. If the WBL is placed in year three and the Swedish, Maths and English courses are in year one, then you might be able to work with Social Studies instead. This is different depending on which programme it concerns /.../ This is where we currently are working. Now we have brought up the issue of the service plans for subject teachers. How engaged are they supposed to be in WBL? How engaged are they supposed to be in the writing of reflective log books? Because there are loads that they can take part of what is written.

Albert and Beatrice state that it has taken a lot of effort to include both VET and subject teachers, but they believe that the number of subject teachers dedicated to WBL have increased. They also mention examples of teachers that visit their students in the workplaces. Beatrice exemplifies with two subject teachers: A teacher in Swedish works with report writing connected to WBL and a teacher in Maths assigns the students to collect data during WBL that later is used in lessons concerning geometry. According to Beatrice this leads to a more goal-focused teaching for the VET degree and the future working life of the students. The students can more easily see the significance of the general subjects.

Finally, the VET first-teachers can be characterised as brokers in the communication between the school and the workplaces. An example of this comes from Beatrice who during one semester experienced clashes between VET teachers and professional trainers in the Electricity and Energy Programme regarding assessment and different views on the purpose of WBL for the stu-



dents. It was a hard situation according to her, because she had had troubles to reach the VET teachers on this programme. Her strategy was to more closely involve the professional trainers in developing assessment criteria. After some time Beatrice noticed that the trainers gradually changed their approach towards WBL and the conflict was 'defused'. Another example from Albert is that he created 'clusters' of persons from different enterprises and vocations that may represent more than just one vocation/line of business (e.g. a construction worker is familiar with other trades like excavator operator, bricklayer, plumber). According to him this reduced the number of agents involved and it has eased both for VET teachers and principals in planning WBL periods.

### **Fostering a culture built on mutual trust**

When the two VET first-teachers talk about the relationship with their colleagues they often refer to their task as to motivate, challenge and change the approach towards learning during WBL. Both Albert and Beatrice express that it is not an easy task and that they too are challenged by their colleagues. The fact that first-teachers get a quite substantial raise of the salary has complicated the relationship to the teacher team. The title 'first-teacher' is also seen as a bit provoking in the traditionally 'flat' character of the Swedish school system. Together with the appointment to first-teacher comes a variety of expectations that Beatrice and Albert have to respond to.

In the beginning of their assignments Beatrice and Albert encountered suspicion, jealousy and expressions of *Jantelagen* ('the tall poppy syndrome'). Beatrice describes how two colleagues who were at odds with the school management were especially reluctant to her ideas because they thought she ran errands for the principals. For the first-teachers it has been important to work with attitudes and to be aware of that some teachers actually are scared, or as Beatrice puts it: 'I can think that they entirely are afraid of changes /.../ Sometimes I can almost guess it is about insecurity, a fear of being exposed in the open or so. Or I must take a stand'. Beatrice also says that she knows that it takes a lot of courage to spell issues and troubles out in the open. Therefore Beatrice and Albert try to establish confidence and create a collegial culture built on mutual trust.

An essential aspect in order to gain trust is availability according to Albert. His colleagues must be confident that he takes time to listen and is reachable. He has also marked the time dedicated for the assignment in the schedule. If he shouldn't meet up to expectations and commitments, the colleagues would be disappointed and question him. In this respect his experience as a construction worker plays an important role. By recognising that they share the same problems and that solutions can be worked out through collaboration, Albert has experienced that the VET teachers are more closely knit together as a group. In this respect he believes that the systematic work through the 'year-wheel' helps

the teachers because they must be confident in that everyone do their part of the work.

The VET first-teachers have no formal leader responsibilities and thus cannot make decisions over their colleagues like the principal can. Neither Albert nor Beatrice say that they want to be able to do this, but still they have to deal with situations that requires leadership abilities. Beatrice describes this in the following way:

You must show a firm leadership. Teachers are individualists /.../ You must be pretty tough. You must be clear, you must be good at explaining the purpose with a change and a development so you manage to get the others to follow you. Then you probably need to have an ability to be patient as well, that you need to meet someone several times /.../ I must say it is good to have worked as a preschool teacher.

For Beatrice, showing a strong leadership is not the same as being authoritarian, telling others what they ought to do. A strategy for her has been to invite colleagues to attend her classes and ask for feedback on her teaching. By doing this she hopes that the colleagues will become curious about her teaching. In turn she feels that it becomes easier to ask if she can attend one of her colleagues' classes. She claims that her work with WBL has made the subject teachers interested in subject integration and the vocational subjects and that this commitment is appreciated by the VET teachers. In Beatrice's eyes the work on subject integration thus provides a platform for reciprocity and creating mutual trust. Albert on his behalf emphasises the significance of clear expectations, roles and responsibilities, which he believes prevents many of the usual misunderstandings between VET teachers and professional trainers.

### **Facilitating management and capacity-building**

Many of the fore-mentioned features concern structure, organisation, relationships and interaction. Facilitation of management and promotion of capacity-building as a general feature is in many ways related to these, and as we have seen Albert describes the process of working with quality assurance of WBL as creating a 'snowball effect'. One of the main areas where the two VET first-teachers experience that they facilitate management for the principals is their leading role for planning and organising joint meetings. A strategy for Beatrice in this respect is to mark in the schedule that 'Now we exclusively are discussing workplace-based learning'.

Both Albert and Beatrice - which also is underlined by their principals - emphasise that there is a tendency that school improvement is founded on short-term solutions and there is a need for combining 'top-down' and change 'from below'. Preparing the ground for a more systematic way of working not least paves the way for collaboration, which Albert describes in the following way:

If you visualise and point at these time savings and where you in the year-wheel maybe can split up and share the questions then it becomes much more fun. You are suddenly working together for pursuing the goal of a better quality on WBL. And then you increase the motivation of the teachers to work with it. Just working together with an issue, to form groups, project groups. It can be that we are looking at formative assessment for example, and the other group will look into writing log books. How can you later connect your issues? /.../ Suddenly a teacher on the Vehicle and Transport Programme is working with a teacher in Handicraft and Hairdressing on the same topic.

Besides from creating conditions for 'crossing over' VET programme borders, the VET first-teachers experience that they help their colleagues to connect to VET teachers in other schools. An important arena and network is provided through a WBL-developer education provided by a university in their region. In his plan for working with WBL, Albert has formulated an aim that at least one of the VET teachers in each VET programme teacher team ought to have gone through an education in WBL provided by the Swedish National Agency for Education.

In many ways the VET first-teachers can be characterised as process leaders and in this respect their leadership practice concerns to sustain development work, or as Albert's principal puts it: 'He is a tremendous support for them. You can instantly tell when he's not present. Then they start to complain a little: "Where is Albert? Where is Albert?" So, he really contributes to their development.' Another dimension of facilitating is that Beatrice and Albert engage in planning the services for VET teachers and even sometimes the subject teachers. By being in direct contact with the teachers, the first-teachers have insight in the work-load and specific needs of the teachers. As described before, the VET first-teachers play an important role in co-ordinating activities during the school year, not least promoting subject integration which seem to strengthen the collaborative bonds between teachers. This is of course helpful for the principals.

## Discussion

In this closing section the main results will be related to Leithwood et al.'s (2009) categories presented earlier in this paper: Setting direction, Developing people, Redesigning the organisation and Managing the instructional program. In addition to this a number of hypotheses on what implications the leadership practices of the VET first-teachers may have on the organisation of school improvement and teaching will be presented and discussed.

'Visualising and Systematising' as a general feature in the leadership practices of the VET first-teachers can be related to key aspects within Setting direction and Redesigning the organisation (Leithwood et al., 2009). One example is Albert's 'year-wheel' which has opened up for synchronising periods of WBL between the programmes and made it clear for both VET teachers and subject teachers when and what to focus on certain themes, topics and aims in the cur-

riculum. When Beatrice talks about how her and her colleagues work has changed teaching and the organisation of WBL she stresses that it has become more quality-oriented and focused on the goals in the curriculum. She has experienced a shift: from asking the question 'how many?' in terms of the amount of hours spent on WBL teachers focus on the 'what?' and 'how?' Parallel to this development Beatrice claims that relationships between the professional trainers and VET teachers have improved, not least due to that the expectations and roles are more clearly defined and assessment criteria more thoroughly elaborated. What both VET first-teachers describe – and which the principals underline as the purpose with the assignment to work with the quality of WBL – something that can be referred to as the emergence of a new 'quality awareness'.

'Brokering' and 'Facilitating management and capacity-building' both stand out as general features that relate to what Leithwood et al. (2009) call Developing people, Redesigning the organisation and Managing the instructional program. When these functions are distributed into the hands of the VET first-teachers they lead to what can be referred to as 'closing the gap(s)'. In terms of being like brokers, the VET first-teachers act in the interface between the various sub-systems that are present in the school organisation: VET teachers, subject teachers, special education teachers, school management and so on. The two cases of VET first-teachers and their work with WBL illustrate how the collaboration and interaction is strengthened, something Beatrice exemplifies in the following way:

It is conducive for the idea of working together as a team, that you can use it in a cross-subject way of teaching. When it is time for the students to present experiences from the internship, then the Swedish teacher of course must be there because it is about oral presentations. You don't need a 'make-believe-topic' because they can talk about something they feel familiar with. So exactly this, it is motivating – we can co-ordinate and it can result in some time savings for different courses.

The work of the two VET first-teachers seems to influence collegial discourse in a positive direction through the formation of a common platform of subject integration. 'Closing the gap' as a description thus not only apply to the first-teachers in terms of being like brokers between the colleagues and the principal (cf. Alvunger, 2015). A final remark concerning 'gaps' – which however must be examined more thoroughly before any conclusions can be made – is examples of how the VET first-teachers experience an improved relationship between the school and the work places/companies. A hypothesis for future studies could be that the gap between professional trainers and VET teachers might be bridged through the leading role of the first-teachers.

The general feature 'Fostering a culture built on mutual trust' relate to Developing people and Setting direction. Subject integration is important and sig-

nals a positive value for the relationship between VET teachers and subject teachers. A central aspect and implication described by the VET first-teachers is that we can speak of the emergence of 'authenticity and a coherent view'. When teaching becomes more focused on the goals in the curriculum together with subject integration it seems like this can lead to a more holistic and authentic teaching. By relating to the work-life and build on experiences and activities from WBL in the tasks and exams in general theoretical subjects, subject teachers more likely can ask authentic questions. Moreover, when questions are conceived as genuine and related to the future occupation, Swedish, English and Maths may in general be considered more relevant and significant for the students. It is hardly controversial to suggest that a VET that endorses themes and tasks that cut across the curriculum is more likely to transcend the theory - practice dichotomy.

Since the CST reform actually still is being rolled out it is not yet possible to see the full impact of it. Still it can be argued that the reform has opened up for changes in the way educational leadership is practiced. The VET first-teachers in this study consider themselves to represent an important educational leadership in terms of being process leaders for creating a culture built on mutual trust, turning the focus of school improvement from a 'top-down' perspective to change 'from below'. This is not a totally smoothly running process but has presented challenges to existing collegial structures. However, according to the principals aspects like envy and suspicion gradually have decreased. The VET first-teachers in this study can nonetheless be characterised as 'facilitators' for capacity-building. Whether Albert's 'snowball-effect' will create an avalanche is yet to be seen.

### Note on contributor

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# Introducing a critical dialogical model for vocational teacher education

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## Abstract

The purpose with this article is to conceptualise and present what is referred to as a *critical dialogical model* for vocational teacher education that takes into account the interaction between theory/research and practice/experiential knowledge. The theoretical framework for the model is based on critical hermeneutics and the methodology of dialogue seminars with the aim to promote the development of a 'critical self' among the vocational teacher students. The model enacts an interface between theory and practice where a number of processes are identified: a reflective-analogical process, a critical-analytical process and an interactive critical self-building process. In order to include a theoretical argument concerning the issue of content, the concept of 'learning capital' and its four sub-categories in terms of curricular capital, instructional capital, moral capital and venture capital is used. We point at content-related aspects of student learning and how a critical self has the potential to promote various kinds of 'capital' and capacity building that may be of importance in the future work-life of the vocational teacher student.

**Keywords:** vocational teacher education, theory and practice, critical hermeneutics, dialogue seminars, learning capital

## Introduction

Like any other professional trainer, teacher educators struggle with the question of how theory and practice best should be merged in education. Besides the conventional structure with theoretical studies at the universities and practical parts carried out through internship there is now a plethora of ways for organising teacher education. For instance we have seen a tremendous growth of work-based learning programmes in universities all over Europe (Lester & Costley, 2010) that in turn has forced universities to reconsider the structure and content of their educations, e.g. more flexible ways of studying through ICT and how you appreciate and validate vocational knowledge. In this respect work-based learning serves as an important conceptual framework because it, as Joseph Raelin puts it, 'acknowledges the intersection of explicit and tacit forms of knowing at both individual and collective levels' (Raelin, 1998, p. 280).

There are no quick fixes or universal solutions to the question of theory and practice in professional educations, but there are always reasons for pursuing and discussing new rationales and *modi operandi*. One established method that has been used for reflective practice and professional development in various contexts - e.g. professional educations like civil engineering, regional development and in workplace innovation (Ennals, 2014; Johnsen & Ennals, 2012) - is the dialogue seminar method. The method is based on a systematic work to articulate and explore tacit dimensions of knowledge and experiences in daily work life. It originally comes from the academic discipline skill and technology, a subject that draws on the works of Michael Polanyi (tacit dimensions of knowledge), Ludwig Wittgenstein's philosophy of language (rule-following and practice) and Hans-Georg Gadamer's hermeneutics (Göranzon & Hammarén, 2006; Mouwitz, 2006; Ratkic, 2006). The method is relatively untested in the context of teacher education and as any other method it has its pros and cons (which will be described in detail later on). At our university dialogue seminars are used in vocational teacher education (VTE). They have also been used in an education for teachers supervising teacher students during internship (Lindqvist, 2015).

However, out from many years of experience working with the dialogue seminar method, several problems and shortcomings with the method has emerged. For example, there is a lack of theoretical or research-informed perspectives, critical examination and the dialogues tend to move towards a consensus, leaving examples and experiences unquestioned. The absence of critical points may result in that a potentially valuable and extensive learning might not occur. There is a need of taking the method further and to combine it with theoretical and critical dimensions.

In this article we present a *critical dialogical model* (henceforth abbreviated CDM) for VTE. Our ambition is to conceptualise and develop a model that creates conditions for organising an education which takes into account the interaction between theory/research and practice/experiential knowledge, visualises the professional progression and learning of students and offers tools for future professional development and participation in collegial learning practices. In the discussion, we will argue that this model is applicable and suitable for adult learners and VTE students because it highlights the complex nature of vocational knowledge.

With the aim to understand and make visible the learning processes of teachers, Lee S. and Judith Shulman (2004) have developed an, for this particular context, interesting theoretical framework for addressing content-related aspects in capacity building in VTE. With the concept 'teacher capital' they develop a theoretical perspective on teachers' learning as a multi-layered system where the individual teacher is encompassed by vision, motivation, understanding, practice and reflection in a learning community within a wide context of institution, profession and policy. At the overarching level of policy and allocation of resources they identify four sub-typologies of teacher capital: Moral capital, venture capital, curricular capital and technical capital (Shulman & Shulman, 2004), concepts that will be further elaborated and related to the CDM in the final section of this article. Before this, the methodological and theoretical foundations of the CDM will be presented, beginning with the dialogue seminar method and examples of how it has been implemented in teacher education.

### Exploring professional skill and practical knowledge: The dialogue seminar method

During the 1980s a new field of science emerged that focused on changes in skill and practice of various professional groups due to computerisation and automation in information society (see for instance Göranson, 2009; Mouwitz, 2006). Ever since the early studies focus has been directed towards the relationship between tacit dimensions of knowledge and formalised/codified knowledge in workplaces and educations (Ratkic, 2006). Explorative and heuristic case studies – whereof many are based on a hermeneutical approach in the theoretical and methodological tradition of Gadamer – dominates the research conducted with-in what today is the subject skill and technology. Practical/tacit knowledge – judgment, reasoning, responsible actions, interpretation, deliberation – is considered to be the kernel of professional skill and formalised knowledge – regulations, instructions, routines – serves as a supportive structure for the professional (Backlund, 2006). An important aspect thus is to interpret and to look for

representations of tacit knowledge and skill for the promotion of professional development and knowledge formation. Another way of describing this and the interactions between different perceptions of knowledge is through the words of Bo Göranson (2009):

[W]e interpret theories, methods and regulations through the familiarity and practical knowledge we gain from being active in a practice. In the dialogue among people involved in a practice, there is some friction between the different perceptions people have based on their different experiences (different examples of familiarity and practical skills). Being a member of a practice while at the same time acquiring greater competence requires a continuous dialogue. Being professional means extending one's perspective to encompass a broader overview of one's own skills. According to this argument if we remove all the practical knowledge and knowledge of familiarity from an activity, we will also empty it of propositional knowledge (p. 128).

Following the argument above, it is obvious how practical knowledge is put at the centre of professional skill and a practice. It is important not to mystify the concept of tacit knowledge. Knowledge can be 'tacit' simply because professionals sometimes want to keep their skills and special techniques secret to avoid competition (e.g. like the Master in Medieval society). Another fact is that 'knowing' is intimately connected with 'doing', which makes it very hard to explicitly describe actions or processes that demand fast decisions (Janik, 1991). At the same time it undoubtedly poses a number of methodological problems. How is it possible to make practical knowledge and familiarity of knowledge accessible for exploration and work with it empirically? This is where the dialogue seminar method comes in.

The dialogue seminar method today serves as an underlying structure for professional development and knowledge formation within a wide range of professions. When professionals describe and talk about their skills they very often use a personal, reflective and narrative language where meaning is transferred through examples, metaphors and/or analogies. What we are dealing with is a kind of thinking that is analogical to its character, not hypothetical and theoretically abstract (Johannessen, 2002). The dialogue seminar method helps professionals to articulate and formulate certain aspects of their practice and experience. The most common way to work is to form a group of 6-8 participants. By using specific 'impulse texts' (it may be a drama, a poem, a novel, excerpts from a classical philosophical work, a picture, a movie) the purpose is to bring forth associations, images, memories, reflections and experiences from their work life. The participants prepare before the seminars by actively reading an impulse text where spontaneous associations, thoughts and reflections is noted in the margin. The notes are summarised in a personal text, which is read aloud during the seminar. All participants are invited to comment, but there is no criticism. Central themes, patterns and concepts that emerge during the seminar are noted in so-called idea protocol, a kind of summary and interpretation

of the dialogue seminar by one of the participants. Before the next seminar the idea protocol is used together with new impulse texts. Hence a reflective and hermeneutic spiral is created through a series of seminars that also can be complemented with lectures, drama and music (Göranzon & Hammarén, 2006; Hammarén, 2002).

Experiences, reflections and examples are personal and subjective but instead of disqualifying them, the dialogue seminar offers an arena for the encounter between different notions and concepts. It is an intersubjective context driven by a search for universal characteristics as well as the particularities of a profession. Most important of all, focus is on the conceptual world of the practitioner, which Sven Åberg (2008) justifies in the following way:

To study a practice is basically a quest for broadening your repertoire of ways to deal with the outside world. If the outside world is ambiguous the language to describe the practitioner's relationship to it must be able to express the inherent contradictions we are interested in. In this work, we have no use for a concept of rules that we have given a metaphysical status as the basic pattern of reality. It is rather the ambiguity we want to gain experience of, by examples, whether they are expressed in linguistic form or in actions we can see and reflect upon. (p. 186, *Our translation*)

The dialogue seminar method can thus be seen as a condition for initiating and underpinning a process of reflection within and between individuals where the language of the practitioner/practice dominates. The dialogue that evolves may be described as 'dialogues between practitioners', something we will take into account as one of two fundamental aspects of the model we intend to develop.

Nevertheless, there are risks with a far too one-sided focus on experiential and practical knowledge. One has to bear in mind that the dialogue seminar method was developed for professionals with many years of work experience. Experiences from an EU-funded project regarding mobility for VTE students and teacher students from other programmes in the South Baltic Sea region has shown that the lack of previous work experience must be taken into account when applying dialogue seminars among younger students, especially the selection of impulse texts. Even if aspects such as cultural and communicative obstacles must be regarded, it became evident after a couple of seminars that the teacher students with most worklife experience found it much easier and more rewarding to use dialogue seminars (Alvunger & Nelson, 2014).

Another weakness with the dialogue seminar method is the obvious risk that the dialogue – often unreflectedly and unawarely – tends to move towards a consensus. This tendency of harmonisation is by no means unique for this method but can be seen as typical for dialogues among practitioners in the same line of profession. It is also due to the fact that phenomena preferably are described from within, that is from a subjective perspective. From such a starting point it can therefore be seen as problematic for the individual to distance him-/herself from the own self as object of study, that is, the movement from close-

ness to critical distance is hard to achieve. During the seminars there is for certain a confrontation between different views from intersubjective encounters, but there are no theoretical or research-informed perspectives to critically scrutinise phenomena or observations. In other words, the experience-based knowledge formed in the intersubjective encounters between practitioners are not challenged or questioned in a manner that lays the foundation for progressive strategies and improvement. The absence of critical points may result in that a potentially valuable and extensive learning might not occur.

In the next part some of the critical views on the dialogue seminar method pointed out above will be developed through arguments in critical hermeneutical theory and methodology. As a next step, we will create a theoretical and methodological fundament for our model.

### The relationship between theory and practice from of a critical hermeneutic perspective

The development of a model aimed for VTE cannot sidestep a theoretical discussion on how the relationship between theory and practice should be understood. Our discussion will be based on the methodological foundations of critical hermeneutics, foremost the works by the philosopher Hans Herbert Kögler (1996) and the sociologist Jürgen Habermas (1995). Regardless if we are talking about critical hermeneutics or skill and technology and the dialogue seminar method, Gadamer's (1994) theory on the hermeneutic approach of interpretation is essential for them both. At the same time – and as the name implies – critical hermeneutics contains a refutation of some of Gadamer's basic theoretical assumptions. It is this critique that we will refer to in the first place.

The relationship between theory and practice is ever-present within the area of education in terms of on the one hand scientific research and on the other hand the everyday and complex practice within an educational institution, for instance a teacher education. Generally speaking, 'theory' is conceived as something the students meet and take part in during their campus studies at the university while 'practice' is the 'reality' and activities in the work places that theories in some sense try to say something about. Teacher education is quite often criticised for being far too theoretical and that instead of studying research students mostly appreciate what they learn during internship and that they consider this to be the most important for their future professional career. However, in a broader sense the tension between theory and practice has a very long history. Already in Aristotle's reasoning and line of thought regarding *theoria* and *praxis* as two different types of human activities this tension is crucial. This divide and opposition later formed a fundament in the Cartesian epistemological paradigm with its clear separation between subject and object and abstract



thinking and concrete action. With the emergence of positivism as a philosophy of science in the 19th century, the notion of a split between the meta-physical and physical and between interpretation and truth further deepened the view that the theoretical and practical are separate entities. Still today this notion continues to influence our views on the relationship between theory and practice.

With the breakthrough of pragmatism in the first decades of the 20th century – championed by philosophers like Charles Sanders Peirce, William James and John Dewey – the question on the relationship between theory and practice to a great extent was dealt with in another fashion than before. Peirce, Williams and Dewey stressed knowledge as relational, contextual and functional and thus not something that is possible to separate from man and human action. By this definition – that what we consider to be theoretical and propositional knowledge is embedded in practice – all knowledge in some sense is practical and the boundary between theory and practice is transcended. Together with the advent of postmodern and socialconstructivist theory from the 1960s, the notion of knowledge as contextual was further emphasised and paired with a farreaching epistemological relativism. According to this new line of argument knowledge was relative, arbitrary and contextual and the division between theory and practice was characterised as a social construction where scientific knowledge is an expression of ideological exercise of power. Elizabeth Rata (2012) describes the postmodern and socialconstructivist position in the following way:

Relativists, such as those found in postmodernism and constructivism, deny the distinction exists, claiming instead that all knowledge is ideological in the sense that it is constructed in the interests and 'voice' of a given social group. Knowledge, according to the voice discourse approach is generated by the experience of a particular social category and can only really be known by those with this experience. (p. 104–105)

We see this kind of contextualism and relativism in postmodernism as problematic and not very fruitful in the development of a teaching model for professional educations. The same goes for the traditional epistemological paradigm where theory and practice are treated as totally separate entities turns. Rather than allowing theory and practice be dissolved in each other and the lines blurred or deal with them as essentially different, we will focus on the internal relation between them as a basis for a dialogical model in which the dynamics lies in the tension between practical knowing of the contextual/praxis and the critical and analytical potential of theory.

To return to critical hermeneutics, Kögler (1996) – in coherence with Gadamer – argues that the subject's interpretation of the surrounding world is an essential factor in order to obtain an understanding of the practice or phenomenon, which you in a certain context intend to investigate. But even if you, as Gadamer would say, through the structure of dialogue succeed to challenge

different views and the pre-conception of various subjects, Kögler (1996) underlines that this dialogical process yet still risks to remain on a relatively superficial level. That is to say, by relying solely on the dialogue between subjects it is not possible to go deeper down and fundamentally challenge and question pre-conceptions and attitudes the subjects generally have regarding their own practice. Habermas (1994) expresses a similar critique when he stresses that a hermeneutical approach and way of working is inclined to end up in a kind of linguistic idealism where no factors or conditions outside of the different views or experiences of the subjects get any real space or influence in the discourse/conversation. From Habermas point of view, the arguments and 'truths' that come out of the dialogical process between subjects risk to become corrupted and 'ideologically impregnated' and hence shaped by latent power relations (1994). A problem with the hermeneutical approach of Gadamer is thus, to follow the arguments of Kögler and Habermas, that such factors are not observed and scrutinised within the frame of hermeneutical interpretation. Since the agents are so deeply involved in the practice they are a part of, pre-conceptions and actions are generally taken for granted. Therefore a 'someone' or 'something' external is required that can question, highlight and make presumptions and beliefs subject to critical examination and reflection, that is:

Beacuse the subjects take these dimensions of meaning and action for granted, it is up to *the outsider* to gain a reflective understanding of the subject's symbolic-practical background. What seems evident and natural to participants requires "explanation" and reconstruction on the part of the uninitiated interpreter (Kögler, 1996, p. 257-258).

Theory and research can in this context be seen as providing an important function for creating a reflective understanding through taking a clear position and view-point from the outside. We are not arguing that theory itself represents an absolute and objective 'truth'. Rather theory should be regarded as a fix-point that in a given moment allows the subject to navigate and find a heading among a number of possible directions. In this respect theory has an epistemological leverage through its outsider position and offers analytical concepts and a systematics that enable an abstraction and problematisation of a certain practice and the on-going activities affiliated to this practice. At the same time, theory is totally dependent on the experiences and context-specific knowledge that are derived from the very same practice; partly practice is the foundation for the content and the problems of the moment that are in focus in e.g. a teacher education, partly practice is necessary to continuously apply, test and revise the actual theory. According to Kögler's (1996) argument such a process thus could be compared to a dialogue between theory and practice with the common aim to jointly work towards a coherent and better understanding of the practice. Kögler (1996) calls the outcome of this process 'the truth of interpretation' where...:

...the 'truth of an interpretation' will then have to be the outcome of such dialogic collaboration between theorist and agent – with the understanding that the result will in itself always be to some extent perspectival and surely open to informed criticism (p. 264).

Through this dialogue between theory and practice, theory can provide a critical and more profound analysis of the practice that is being studied. Correspondingly the practitioner presents the theorist with knowledge of the context that enforces the theorist to recurrently question and in some cases revise his or her theoretical assumptions. A similar line of thought is to be found in the argument of the educational scientist Christer Fritzell (2009) who on the basis of Habermas' discourse ethics (see for instance Habermas, 1995) reasons about generalisation and validity. Fritzell argues that generalisation in a hermeneutical context could be described as a:

... movement between 'the small in the great' and 'the great in the small' where the casual nearby is seen as constituted as part in a larger context. The dialogical claims in this respect speaks in favour for a mutual, and if you prefer dialectical, relationship between theory and practice where the parties in a consensus-oriented way relate to each others' perspectives in an active motion towards validity-oriented resonance (p. 204, *Our translation*).<sup>1</sup>

In other words the critical dialogical discourse is characterised by a discussion and problematization of a certain content derived from practice where the practitioners themselves are the main agents in that dialogue. In order to allow a deeper understanding of the content and the topical questions – when the practitioners so to say get 'stuck' and don't manage to go any further in their discussions – theory is introduced to critically question and challenge the experiences and pre-conceptions of the practitioners. This is thus accomplished through relating theory to practice and to illustrate how the actual phenomenon that currently is in focus can be understood as part of a larger context. The result of this analytical procedure is thereafter brought back to the complex practice with the purpose to make it more understandable. Starting from the arguments in the previous paragraphs it can be stated that something happens along with this particular movement: Theory provides a foundation for understanding the single aspect while practice imbues theory with meaning in the specific context.

The ultimate goal with the critical dialogical process is accordingly to create a reflective distance among the agents of practice, a distance that allows new thinking as well as a new understanding regarding the actual practice. This does not only open up a space for fresh perspectives on everyday activities but also presents a potential and readiness for change. In other words, the critical dialogue is more than just a method to achieve an increased understanding for a certain concrete phenomena. It also harbours an ambition to foster an approach and awareness among the practitioners. Kögler (1996) calls such an approach as an aspiration towards a 'critical self', a concept that is constituted by a process of: 'reflexive incorporation and differentiated fusion of both perspec-

tives in one and the same agent' (p. 267). As we will discuss below we consider this strive for developing a 'critical self' as a basic fundament in a professional education. Furthermore it is an important condition for the students' capacity building during their education as well as later on in their work as teachers in continuous professional development.

### Towards a critical dialogical model for teaching and learning

If we conclude the arguments above it becomes evident that the model for teaching and learning we will present in this section consists of two major dimensions. An essential aspect is that there is an ongoing interactive process between these two dimensions where activities of reflective reading and writing, critical analysis from theoretical perspectives and research and qualified dialogues within and between groups in the shape of dialogue seminars and critical seminars overlap and complement each other.

One of the main purposes with the model is to create a forum for 'dialogues between practitioners' and by this allowing the students to 'conquer' methods and a language for developing professional skill. The main difference in relation to the traditional methodology of dialogue seminars is that theory and research at specific times serves as a general voice - or as an *advocatus diaboli* if you like - in the dialogues. In this respect the model enacts an interface between theory and practice that will promote the development of a 'critical self'. Another aspect is how processes within the model correlates to different modes of knowledge and foremost how the interplay between them not only foster a 'critical self' but also build various kinds of 'capital' that may be of importance in the future work-life of the teacher student.

We will get back to the capital concept and the question about content in the closing part of this article. In this particular section we will however focus on and describe the main processes of the model, the different steps and the modes of knowledge involved. We do so by relating to a perspective on the relationship between research and best practice that has been developed by Håkansson and Sundberg (2012):

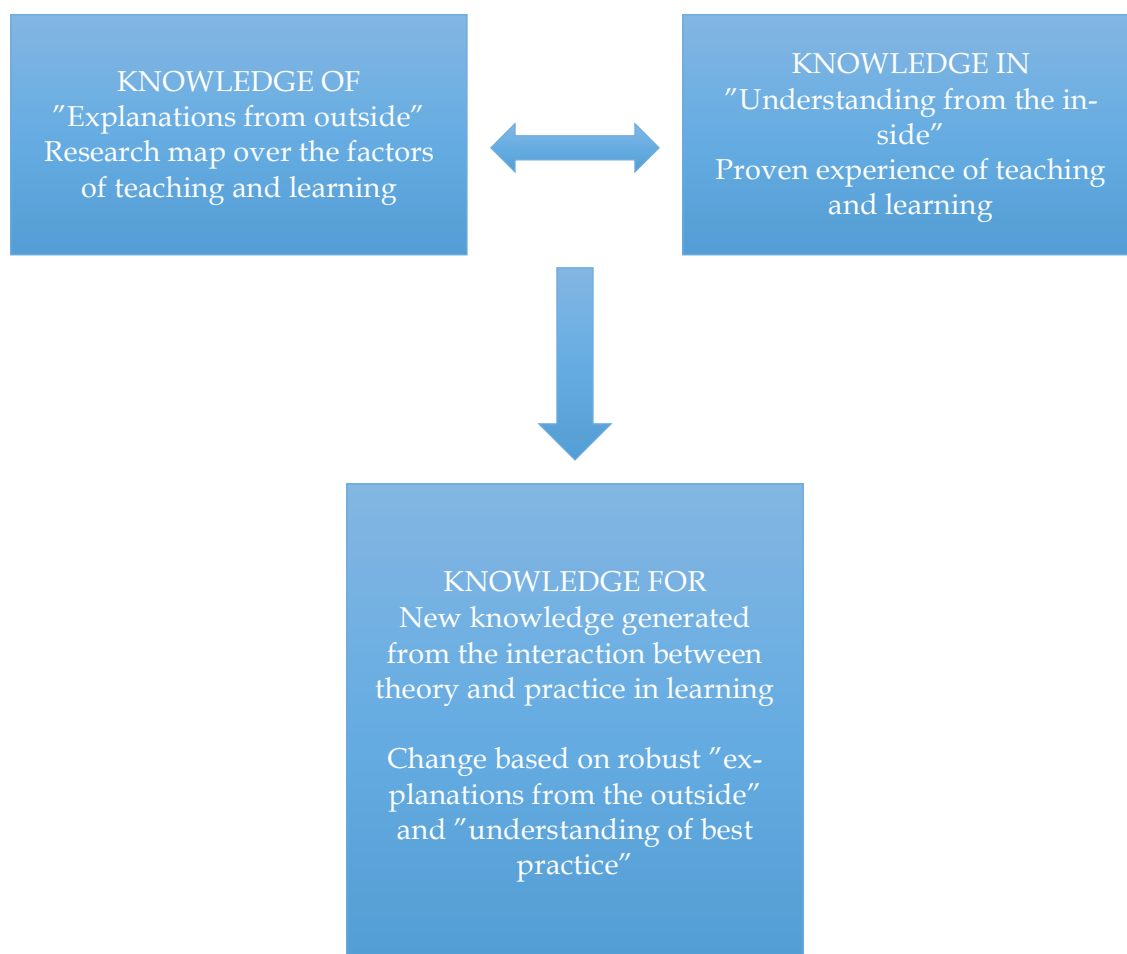


Figure 1. The interaction between research and best practice, adapted from Håkansson and Sundberg (2012).

The figure above not only illustrates the relationship between research and best practice in school development work, but also the different conceptions of knowledge embedded. These three correlates with the works of Marilyn Cochran-Smith and Susan L. Lytle (1999, 2009) concerning the three conceptualisations of knowledge they identify in teacher learning: 'knowledge-for-practice', 'knowledge-in-practice' and 'knowledge-of-practice'. Like Cochran-Smith and Lytle, we see it as essential to break with the traditional notion of hegemony of university-generated knowledge and to put forward the locally situated knowledge of teachers. Above all, we see the CDM and the aim to develop a 'critical self' as a tool for promoting 'inquiry as stance' in teacher education (Cochran-Smith & Lytle, 1999, 2009). In this respect the model becomes a way for the teacher students to understand processes behind posing problems

and dilemmas, questioning, deliberating and challenging assumptions in teaching.

It is important to be aware of the characteristics of the different on-going processes in the critical dialogical model. Before we turn to the specific steps and give examples from how we have worked with the model the processes will be described. We speak of three main processes that are closely connected. Each of these correlate to the different modes of knowledge presented above in terms of being able to explain, to understand and to change (teaching and learning). Of course the separation between modes of knowledge is an analytical construct because propositional/theoretical knowledge, practical knowledge and knowledge of familiarity/practical wisdom all are merged into one in practice. The three main processes that form the critical dialogical model are as follows:

- *The Reflective-Analogical process:* In this part the fundamental content is the students' experiences, reflections, memories, thoughts, examples etc (both in an individual and collective sense). The purpose with this process is to let the students work with experiences during internship, auscultation or other situations related to professional aspects. As has been described, a most powerful tool to access and make explicit tacit knowledge retrieved through socialisation is reflection. But the tacit dimensions are not something that just lies deeply embedded within the individual and waits to be picked up. Such dimensions must be brought forward and articulated by appealing to the creative, aesthetic and sensitive parts of the human mind. The method used is dialogue seminars and a complement can be a personal log that helps the student to make visible thoughts and emotions in relation to professional experience, which is the formation of 'knowledge in', how one does or acts in a specific situation. The process as such is characterised by analogical and metaphorical thinking. Universal dimensions in examples, analogies and metaphors are brought forward through the intersubjective sphere of the seminars.
- *The Critical-Analytical process:* While the reflective-analogical process aims at articulating the so-called tacit dimensions of knowledge in action and experiences from practical situations, the critical-analytical process has a different purpose. In this process the students study recent research and create overviews. Another important part is constructing problems and theoretical-analytical frameworks. By using results from research, the students assemble 'knowledge of', propositional knowledge, a specific topic or content. Reflection does indeed contain elements of critical thinking but in this respect the students are distanced from the object of study and look at problems from the outside. The student takes the role of the observer and analyses and looks into phenomena, experiences, examples, texts and so on from a critical perspective based on theory and research. The idea with theoretical perspectives is to bring the discussion from a concrete level of examples to a more abstract and general theoretical level. The process is characterised by critical-analytical thinking.
- *The Interactive and critical self-building process:* This process concerns the interaction between the two processes outlined above. It is in this respect a process on a meta-level and very hard to explicitly describe. The interplay between

knowledge of and knowledge in become knowledge for change, which is a knowledge underpinning action, judgment and questioning based on informed decisions and solid arguments.

As illustrated below in the figures the two first processes can be divided into several steps while the third process hardly can be specified in the same manner because we are dealing with meta-reflection and syntheses. Thus the interactive and critical self-building process is the outcome of the intersection between the former two. We will begin with describing these steps and after that give some examples of how the processes turn out in practice. A crucial point is that these figures primarily not shall be seen as cyclical in a horizontal way. Rather they are spirals where the process moves upwards as the course progresses. Another important dimension is that there is no rule saying that you after have finished a first cycle in the reflective-analogical process must enter the critical-analytical process and vice versa. There can be several cycles within each of these before you change.

Before starting, groups of 4–6 students are formed by the teacher. It is important that the students don't form the groups themselves. The reason for this is firstly that the teacher makes sure that no student will feel abandoned and left alone. Secondly, if a couple or some of the students know each other from earlier this might have a negative impact on the group as a whole and create a 'group within the group'. Thirdly, working with reflective reading and writing and seminars are personal matters that can be very delicate. It requires a careful and well-considered approach. These groups may very well be held intact throughout a course.

The general starting point is that teaching begins with a reflective-analogical process from an individual basis. In this respect the process advantageously can be initiated with a series of dialogue seminars before the students enter group work. It is up to the teacher and/or the students to choose the topic or theme which will suit best from where in the education and which year they study. If the students are about to go out on internship the process can be used as preparation or if they have returned from internship it is ideal to start off with letting them make an account of their experiences, challenges, worries, successes. Another angle can be to begin the introduction of a new topic and for instance let them read a novel that serves as a stepping-stone and introduction into the topic/theme. It is about wakening their interest and to create associations and thoughts about the topic in order to be able to move on. The different steps in the reflective-analogical processes can be described in the following way:

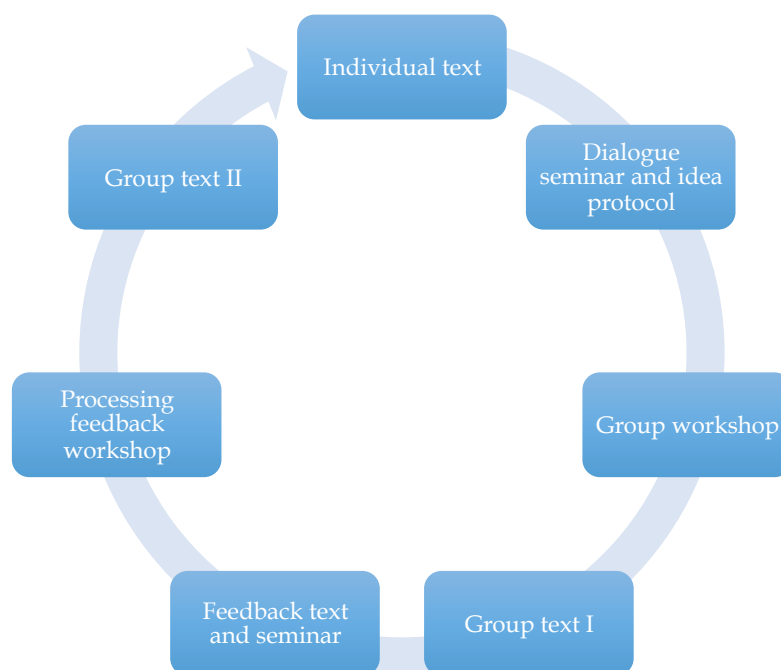


Figure 2. The reflective-analogical process.

In **step 1** (at the top of the circle) an individually written text is produced by the student. It can be based on personal experiences from internship, a fictional text, a movie, photographs, poem, a group text (from another group) or other contexts – the most important thing is that the students are advised of the frameworks in terms of theme or topic the text should address. The major point is something that evokes thoughts, associations and reflections. This text serves as a preparation for **step 2** – the dialogue seminar. The student brings hers/his text and read it loud during the seminar. The other students give formative feedback and make comments. The seminar is chaired by the teacher who also writes the idea protocol (later in the education students are assigned to write these protocols). As said above, the process may move on as in the dialogue seminar method with further seminars and idea protocols or follow from the next step into group work (from step 3, below). An obvious reason for continuing with individual texts and dialogue seminars is to have a longer preparation phase for the students in order to thoroughly reflect on experiences and examples.

After the seminar the student group process their individual texts and the of idea protocol during workshop(s). **Step 3** consists of the group writing a joint text (group text I). In the next step, **step 4**, another student group – which also follows the cycle – enters the process. The student groups exchange texts and give feedback to and discuss one another’s group texts during a seminar. This



step also concerns written feedback. In the final steps, the students work with comments from the teacher and the other group. **Step 5** is a workshop for handling the feedback and for rewriting and adjusting group text I. In **step 6** group text II is submitted. The teacher can then decide whether the process shall continue with new texts aimed at reflective reading and writing or if it should transform into a critical-analytical process.

The reflective-analogical process is built on the ideas of the dialogue seminar method. Of course it is not possible to rule out critical aspects during the seminars and in the texts but it is however of great importance that the teacher makes sure that the seminars and the dialogical character is kept within a domain where metaphors, analogies, examples, images and the subjective and personal dimensions of practice remain the main focus. As we have stated before the critical dialogical model strives to achieve and internalise what Kögler calls a 'critical self' in the student. This is why theory and research plays an important part for bringing in other 'voices' in the work. Creating this requires what we call as the critical-analytical process which consists of the following steps:

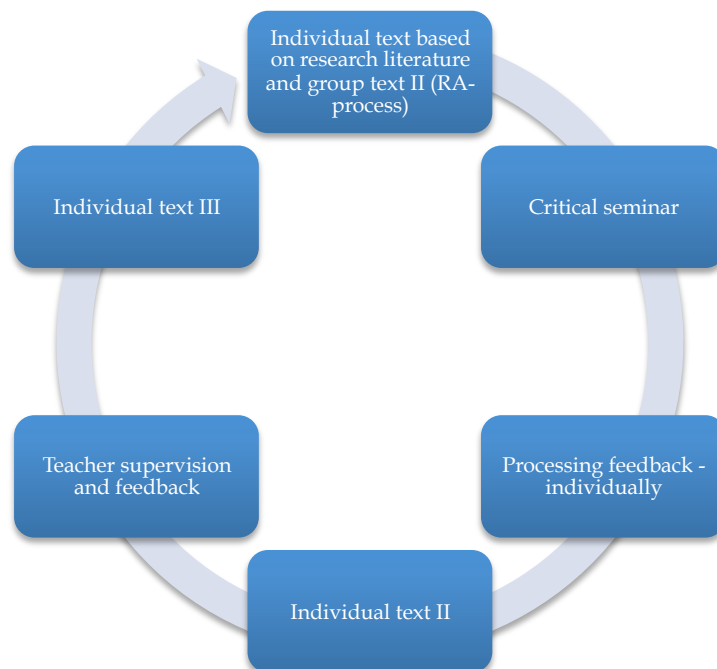


Figure 3. The critical-analytical process.

The critical-analytical process doesn't contain as many steps as the reflective-analogical process. When the students enter this process they read research literature (from the syllabus or research of their own or the teacher's choice) that

is of relevance for the subject. Compared to the reflective-analogical process the critical-analytical process aims at constructing problems, posing questions and dilemmas and applying theory. It all has to do with thoroughly examining phenomena, experiences, examples, texts and so on from a critical perspective based on theory and research. By theoretical, conceptual and analytical frameworks the students move the discussion to a more abstract and general theoretical level. In the process, texts from the reflective-analogical process are used so there is a transition between these two processes.

**Step 1** (at the top of the circle) in the process means that the student reads research-based literature and writes an individual text. It can be a review over research or a plan for an essay or thesis. The text may also be based on a series of lectures. As has been said, group text(s) II from the reflective-analogical process is included and the purpose with this is that the student out from the actual material distance her- or himself and examine the text(s) from a critical perspective. In **step 2** the individual text is discussed during a critical seminar, in line with a conventional examination of strengths and weaknesses. After the seminar the student makes eventual corrections and process the text in **step 3**. The individual text II is submitted in **step 4**. In **step 5** the teacher presents feedback and guides the student in his or her writing. The student makes corrections and writes a new version – Individual text III – which in the final **step 6** is submitted. The last individual text (III) can be a part of the student's work with a larger area of inquiry *or* the foundation for a new Individual text I in **step 1** where a group text is used along with research literature. This means that the student can go another round in the process and keep on working with the same problem but from another angle, e.g. the problem of bullying and harassment. This topic – like so many others – can be highlighted from a sociological, psychological, pedagogical or legal point of view. Of course a totally different topic can be chosen and then the students enter another area and go another round in the process. In a long-term perspective the individual texts from the student may be used to gradually create a thesis, for instance in the shape of an aggregation of various articles within a common framework.

Finally, by combining and working with the reflective-analogical and the critical-analytical processes there is clear potential for a dialogical relationship between different domains and conceptualisations of knowledge. Once again it is vital to stress that the separation between different kinds of knowledge is an analytical construct. The most important part is that this is achieved through systematic work that creates a forum for 'dialogues between practitioners' and enables the students to 'conquer' a language for developing professional skill. In the interface between theory and practice formed by the critical-analytical process a 'critical self' is developed. The relationship between the three processes involved within the critical dialogical model can be illustrated in the following way:

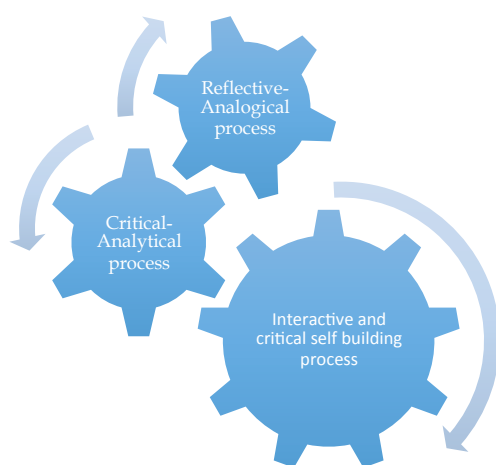


Figure 4. *The relationship between the processes.*

It must again be emphasised that we are not talking about a linear development but dealing with a progression that resembles a hermeneutic spiral. A reasonable question is if this process also is conducive to the creation of various kinds of 'capital' that may be of great importance in the future work-life of the teacher student. In the closing section of this article we will frame the CDM model within a more content-oriented discussion.

## Discussion

With the CDM – and the epistemological considerations that underpin its methodology – we have presented a suggestion for how the relationship between scientific theory and educational practice can be managed within VTE. As has been underlined in the introduction of this article, the VTE context is a particularly appropriate setting considering that the students have long experience from their previous line of work and the fact that experiential learning is an integral part of adult education (Bron & Wilhelmson, 2005; Gougoulakis & Borgström, 2006).

Our point of departure has been to focus on the qualitative differences that exist between theory and practice on an analytical level. The practical knowing and skill of a teacher – or any profession for that matter – cannot be reduced to formal and codified categories. At the same time it can be questioned if the exercise of a profession really can be characterised as 'professional' if there are no elements of theory, research and critical analysis. The CDM can be said to be based on two nowadays classical sentences that usually occur in the discussion on the theory – practice-relationship: 'Practice is not applied theory' and 'There is nothing as practical as a good theory', or like Dewey (1929) states:

Theory is in the end, as has been well said, the most practical of all things, because this widening of the range of attention beyond nearby purpose and desire eventually results in the creation of wider and farther-reaching purposes and enables us to use a much wider and deeper range of conditions and means than were expressed in the observation of primitive practical purposes (p. 17).

In the presentation of the CDM it is the procedural dimensions that have been brought forward in the first place. The question of content has indeed been sparsely dealt with since it is hard to say something conclusive about it in a limited space. The point with the model is also that it has the potential to be used for various topics and themes. However, in the work to develop knowledge, abilities and approaches for a future working life the CDM of course must be applied in relation to relevant topics and a qualified content. In didactical research during the last two decades the question of content has many times been left uncommented (Kamens, Meyer & Benavot, 1996; Uljens, 2015). This is problematic due to the fact that student learning not only must be looked upon from the view of organisation but from content and themes. The purpose with this concluding section is therefore to try to expand the discussion to include also a theoretical argument concerning the issue of content in relation to the CDM. As we pointed out in the introduction, we will build on Shulman and Shulman's (2004) different types of teacher capital for teacher learning.

With the aim to understand and make visible the learning processes of teachers Shulman and Shulman (2004) have developed an, for this particular context, interesting theoretical framework. With the concept 'learning capital', the learning of teachers is considered to be a multi-layered system where the individual teacher is encompassed by vision, motivation, understanding, practice and reflection in a learning community within a wide context of institution, profession and policy. At the overarching level of policy and allocation of resources they identify four kinds of capital that cut through the organization, school, teacher team and the individual teacher: Moral capital, venture capital, curricular capital and technical/instructional capital. The relationship and connections between the different kinds of capital is illustrated in an adapted model of Shulman and Shulman (2004):

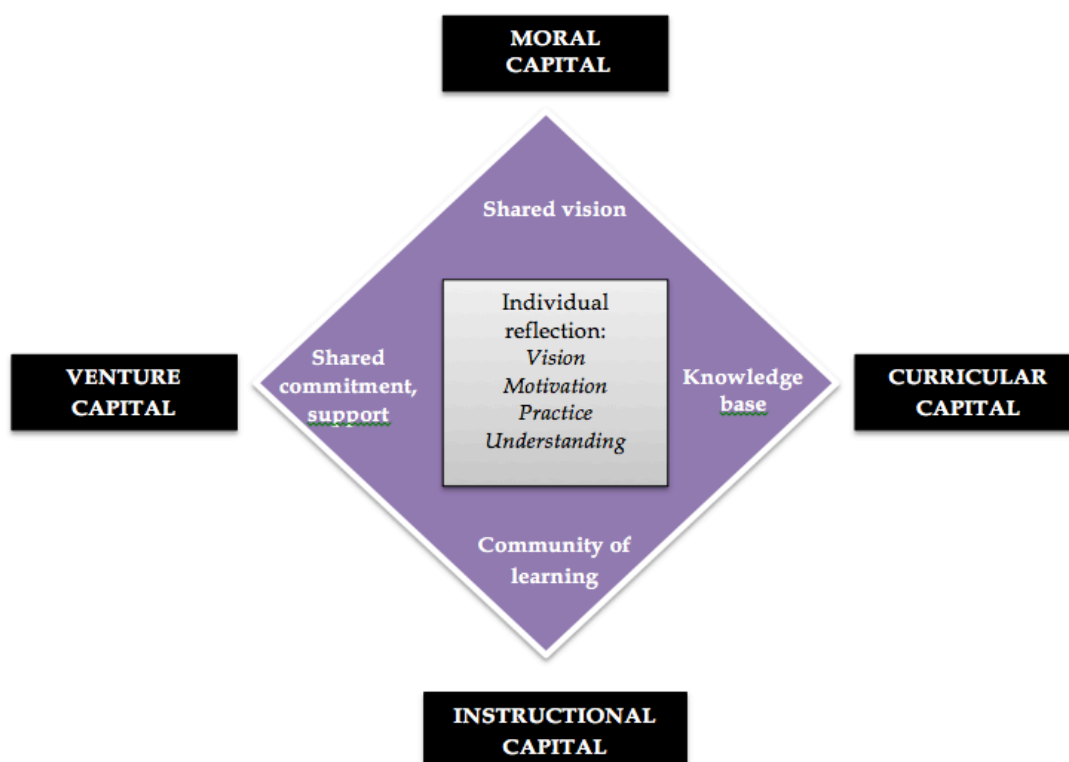


Figure 5. Four types of teacher capital, adapted from Shulman and Shulman (2004).

Each of these capitals is related and often overlaps and complements each another, but they also have their own specific meaning. 'Moral capital' refers to school actors' common and shared knowledge, insight in and visions about teaching and what needs to be developed and improved at the school practice. This type of capital may also include the ability of a principal or a leader for a teacher team to get a group of teachers to work in the common direction and share a joint aim and image of what is supposed to be accomplished. Both principals and teachers require 'curricular capital', which is a knowledge base that teachers need in their teaching practice, for example curriculum understanding, content knowledge, classroom management and organization and so on. Closely related to this kind of capital is 'instructional/technical capital', which refers to teacher's knowledges, experiences and capacities to convert or translate the curricular capital in action, in daily teaching practice. In some sense this capital also has to do with the ability to collaborate with colleagues when it regards for instance continuous professional development or collegial learning. At last, teachers can have a large curricular and a technical capital but when it comes to improve and change his or hers teaching practice he or she must have the knowledge and the competence how to do this. In other words, the individual

teacher as well as the organization needs 'venture capital'. If there is a deficit of knowledge or a resistance among teachers and principals in a school to make changes it doesn't matter if it exists a high grade of, for example, curricular capital among teachers. There will never be real and long-term changes in the teaching practice as long as there isn't a readiness and incentive for changes.

By identifying these forms of capital Shulman and Shulman (2004) present a thorough analysis of capacities for teacher learning. However, they do not further elaborate their argument concerning how and in which kinds of studies these analytical concepts can be applied (Adolfsson & Håkansson, 2014). From our side we consider the concepts as a good foundation for discussing precisely the question about content in terms of which knowledges, skills and abilities that teacher students need to develop during training as well as teachers for learning in continuous professional development.

Our point is that students during their VTE must be given opportunities to develop all these forms of capital. It is not possible to just focus on one of them. In order to be well prepared for future working life all four must be included, but of course the capacity building through the CDM will vary due to the specific content of a module in the VTE. Even if moral, venture, curricular and technical/instructional capital overlap it might be the case that a certain content may foster different kinds of capital out from which kind of process in the CDM - reflective-analogical or critical-analytical - the students are engaged in. For example working with experiences of student assessment and evaluation from internship in line with the reflective-analogical process might promote the teacher students' instructional/technical capital in the first place because a lot of the reflections and examples relate to the concrete educational practice. It is the practice of assessment that is being conceptualised through exemplification, reflection and analogies. If the teacher students instead study theories and research on evaluation and assessment along with the critical-analytical process their curricular capital might be strengthened rather than the instructional/technical capital. At the same time the interactive and critical self-building process may enhance the students' venture capital and in the progress of their education they might be more eligible to challenge their assumptions on teaching. Finally, moral capital may be encouraged through setting individual goals and to visualise beliefs, values and principles that serve as cornerstones in the gradually developing teacher identity of the students. Exactly what kind of content that is presented in the course modules is of course something for the teacher educators to decide on. It is our conviction however that Shulman and Shulman's (2004) four different types of learning capital together with the application of the CDM may provide a significant support for VTE.

Finally, the aspects that are related to practice is best described and articulated by the language and conceptual world of the practitioners and should be given room in teacher education. The student gradually 'conquers' his or hers

professional role by finding this language of practice. At the same time an essential dimension of the teacher's skill and professional knowing is to possess language and a repertoire for elucidating and critically examine the own pedagogical practice. Our ambition with the model in VTE is to help the students develop what we would like to call a 'split vision' through the 'critical self' (Kögler, 1996). Basically it is about fostering an approach that aims at challenging the things that are taken for granted in practice and notions founded on a common sense, but also to create an awareness of how different kinds of language and conceptions that are embedded in the teaching profession are at the same time contextual and related to one another. This critical self not only prepares the students for their future work as teachers but also paves the way for strategies in continuous professional development.

## Endnote

<sup>1</sup> The quote in original language, Swedish: '...rörelse mellan »det lilla i det stora» och »det stora i det lilla» där det vardagligt näraliggande ses konstituerat som del i ett större sammanhang. De dialogiska anspråken talar här för ett ömsesidigt, om man så vill dialektiskt, förhållande mellan teori och praktik där parterna förhåller sig samförståndsorienterat till varandras perspektiv i en aktiv rörelse mot giltighetsorienterad resonans.'

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# Betydningen av ekstern praksis i tannteknikerstudiet

(The relevance of internships in the dental technology program)

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## Abstract

Dental technology is a health profession that manufactures individualized dental prostheses. Production primarily takes place in privately run dental technology laboratories. The Bachelor's degree program and professional identity link to a scientific and craftsmanship tradition. The program organizes a period of 16 weeks internships undertaken at external workplaces. To obtain internships is challenging, specifically because the companies receive no compensation for lost production while supervising the students. This also hampers requirements of formal competence for teaching guidance in the industry. In 2014 lecturers from the program conducted interviews at former training businesses. The aim of this study was to evaluate the profession relevance of external business practices in the study program, and how the supervisors in the companies perceived their training responsibilities. The results indicate that external practical internships give students a real life experience in a daily professional practice that can't be imitated on the educational institution. Recruitment of potential labour is a clear motivating factor among dental companies for accepting student interns. The educational institute must continuously secure the relevance of the program, and the students' prerequisites to utilize external practices. Some mutuality in cost-benefit perspective stimulates the professional field.

**Keywords:** education, profession, external practical internship, supervision, guidance, competence

## Innledning

Tannteknikk er en helseprofesjon som fremstiller individuelt tilpassede tannerstatninger som kroner, broer og avtakbare proteser (gebiss) til mennesker som har ødelagt eller mistet sine tenner. Med profesjon menes en type yrke som utfører tjenester basert på teoretisk kunnskap ervervet gjennom en spesialisert utdanning (Molander & Terum, 2008). Godkjent tannteknikerutdanning kvalifiserer for å søke autorisasjon som tanntekniker i Norge i henhold til Lov om helsepersonell, 2001, § 48.

Tannteknikerens oppdragsgiver er tannleger, som sender avtrykk av pasientens munn som utgangspunkt for arbeidet. Produksjon og formidling av tannerstatninger foregår primært i privatdrevne tanntekniske laboratorier. Yrkesidentiteten er knyttet til en teknologisk og håndverksmessig tradisjon preget av stor material-teknologisk utvikling. I Bachelorstudiet i tannteknikk inngår 20 uker ekstern praksis, hvor en sammenhengende periode på 16 uker i bedrift organiseres av utdanningen. Utdanningsinstitusjonen har som overordnet mål å utdanne dyktige kandidater som møter samfunnets etterspørsel etter kvalifisert arbeidskraft (Høgskolen i Oslo og Akershus [HiOA], 2012). "Studentene skal i størst mulig grad delta i den daglige produksjonen av tannerstatninger" (HiOA, 2015, s. 8). "Kvalitetssikring skjer gjennom samarbeidet mellom bedrift, student og utdanning" (ibid., s. 36). Gjennom studiet er tannteknikerstudentene gjenstand for en lovpålagt løpende skikkethetsvurdering av faglige og personlige forutsetninger for å kunne utføre de oppgaver som profesjonsutdannelsen gir tilgang til (Kunnskapsdepartementet, 2006).

I forbindelse med oppfølgingen av tannteknikerstudenter i ekstern praksis gjennomførte faglærere ved tannteknikerutdanningen 11 personintervjuer med opplæringsansvarlige i daværende opplæringsbedrifter høsten 2014. Hensikten var å knytte tettere bånd mellom utdanning og arbeidsliv ved å besøke bedriftene og kartlegge praksisfeltets evaluering av praksis og studiets relevans i forhold til samfunnets behov for tannhelsetjenester og arbeidsmarkedets kompetansekrav (Helse- og omsorgsdepartementet, 2007). Problemstillingen for denne studien er todelt. Primært er det ønskelig å belyse – *Hvilken betydning har ekstern praksis i bedrift for tannteknikerstudiet og utviklingen av tannteknisk kompetanse?*

Med betydning menes her omfanget av ekstern praksis i studiet, kvaliteten på faglig innhold og veiledning i praksisperioden, studentenes læringsutbytte, og bedriftenes evaluering av kompetansen som utdannes. Det er viktig at utdanningen er på linje med trender og utvikling i dentalbransjen for å kunne legge til rette for et adekvat studieinnhold som tilfører arbeidslivet og samfunnet relevant kompetanse. Det vil si kunnskap, ferdigheter, holdninger og erfaringsbasert innsikt. I tannteknisk sammenheng kan dette handle om utfasing av foreldede produksjonsteknikker, og implementering av nye i studiets program-

plan. Et eksempel kan være konvensjonelle håndverksteknikker som helt eller delvis erstattes av digitale framstillingsteknikker, kalt CAD/CAM (Computer-aided Design & Computer-aided Manufacturing). Markedstilpasning medfører behov for jevnlig justering av studiets faglige innhold og didaktikk for at studentene skal oppleve et tidsriktig læringsinnhold. I følge Sylte (2013) er det mange yrker som utvikler og endrer karakter fordi samfunnet krever omstilling. For eksempel stilles det andre krav til helse, miljø og sikkerhet (HMS) i dag enn for få år siden (ibid.). Innen tannteknikk dreier dette seg om økte krav til arbeidsrutiner og det fysiske arbeidsmiljøet, samt dokumentasjon, sporbarhet, kvalitetssikring og personvern. Omstillingen kan også omhandle nye læringsformer og digitale læringsverktøy.

En utfordring ved å skaffe praksisplasser er at opplæringsbedriftene ikke mottar kompensasjon for tapt produksjonstid ved å ta imot praksisstudenter. Dette vanskeliggjør både forutsigbarheten i antall praksisbedrifter, men også krav til formell veiledningskompetanse i opplæringsbedriften. Praksisveilederne i de tanntekniske opplæringsbedriftene er erfarne tannteknikere. De aller fleste er utdannet etter forrige utdanningsordning med yrkesutdanning fra videregående skole og avlagt svenneprøve. Flere har i tillegg mesterbrev. De fleste er selvstendig næringsdrivende laboratorieeiere eller del-eiere. Mange har etter hvert opparbeidet seg erfaring med veiledning av tannteknikerstudenter fra høgskolen. Men ingen av veilederne har formell veiledningskompetanse. Undersøkelsen reiser derfor i tillegg spørsmålet – *Hvordan opplever praksisveiledere i bedriftene sitt opplæringsansvar?*

Intensjonen med ekstern bedriftspraksis i tannteknikerstudiet er å tilrettelegge for at studentene skal føle nærhet til yrket de utdanner seg til, og en gradvis mestring. Perioden har som resten av undervisningstilbudet alltid vært gjenstand for studentenes evaluering, men praksisveilederens opplevelse av praksis har i mindre grad stått i fokus. Både høgskolens strategiplan og kvalitetssystem legger nå større vekt på praksisfeltets evaluering, og dermed studiets relevans for arbeidsliv og videre studier: "Å være tett på arbeidslivet, med forankring i forskning og utviklingsarbeid, bringer verdifull innsikt inn i dannelsen av ny kunnskap. [...] Vi skal være nysgjerrige og åpne i møtene med samfunns- og næringsliv og utvikle ny kunnskap som gir løsninger på morgendagens utfordringer" (HiOA, 2012, s. 7).

## Aktuell kunnskap om praksisveiledning

Universitets- og høgkolerådet (UHR) er på oppdrag fra Kunnskapsdepartementet (KUD) i gang med et landsdekkende prosjekt for å se på kvalitet i praksis. Målet med praksisprosjektet er å gjennomføre et nasjonalt utviklingsarbeid som skal bidra til å heve kvaliteten og sikre relevansen i de eksterne praksisstudiene i helse- og sosialfagutdanningene slik at de kan møte framtidens kompetanse-

behov. Blant annet er det ønskelig å definere indikatorer og kriterier for hva som kjennetegner kvalitet og relevans, samt utrede behovet for godkjenning av praksissteder (Universitets- og høgskolerådet, 2015).

I en komparativ studie av praksisdelen i tannhelseutdanningene i Norge, utført av Nordisk institutt for studier av innovasjon, forskning og utdanning (NIFU) var formålet å se på hvordan praksisdelen av studiene er organisert, finansiert og administrert, og hva som gjøres for å sikre kvaliteten på praksisstudiene. Her fant man at en av indikatorene for god praksis er at praksisveileder i tillegg til formell faglig kompetanse, også har formell pedagogisk kompetanse (Elken, Røsdal, Aanstad & Caspersen, 2015). Rapporten viser også at tannteknikerutdanningen er eneste tannhelseutdanningen som ikke tilbyr økonomisk kompensasjon for praksisplasser. Dette gjør det vanskelig å skaffe tilstrekkelig antall praksisplasser, og betyr at høgskolen må tilpasse seg praksisbedriftenes behov og ikke kan stille strenge krav til opplæringen og veiledningen (ibid.).

En annen studie utført av NIFU undersøker hva praksisveiledere og koordinatører anser viktig for å oppnå god kvalitet og riktig omfang i utvalgte helseutdanninger (sykepleie, vernepleie, ergoterapi og fysioterapi). Her peker man på utfordringer i forhold til å fremskaffe gode og relevante praksisplasser, uforutsigbart samarbeid mellom utdanning og yrkesfelt, ustabil tilgang på veiledere og veiledningskompetanse, usikkerhet i ansvar og rolleavklaring, ulikt syn på veiledning og mangel på finansiering, forpliktende avtaler og kvalitets sikring. Praksisveilederne som ble intervjuet opplevde det utfordrende å finne rom for utvikling av veiledningskompetanse (kurs) på grunn av stort arbeidspress i hverdagen. I tillegg opplever de at studiene har blitt mer teoretiske, og at mangel på praksisnære øvelser går på bekostning av hvor forberedt studentene er for undervisning i yrkesfeltet (Caspersen & Kårstein, 2013).

Likeledes fant Fillingsnes og Thylén (2012) pedagogiske utfordringer knyttet til et spenningsforhold mellom teori og praksis, i sin studie hvor erfarne praksissykepleiere uten formell veiledningskompetanse ble intervjuet. Informantene beskrev utfordringer i sin veilederrolle knyttet til faglig utilstrekkelighet i forhold til å være oppdatert innen nyere teoretisk og vitenskapelig kunnskap og skolens læringsutbyttebeskrivelser. De opplevde at deres faglige kompetanse ble utfordret av studenter fra den akademiske verden. Andre utfordringer var lite tid til å veilede i en hektisk hverdag, samt å fremstå profesjonell ved både å være støttende, og samtidig stille krav til studenten. Spesielt opplevdes det vanskelig å gi en balansert vurdering til beskjedne og/eller uengasjerte studenter. Noe som kan føre til angst, tvil om egen vurderingsevne, eller sinne (Fillingsnes & Thylén, 2012).

En litteraturstudie utført av Hauge (2014) omhandler engelske og canadiske praksisveilederes grunner til ikke å stryke praksisstudenter innen sykepleie og medisin selv om læringsutbyttet ikke er oppnådd. Resultatene viser at når praksisveiledere slipper inkompetente studenter igjennom skyldes dette at veil-

eder mangler kunnskap, ferdigheter og personlig kompetanse til å møte svake studenter, utfordringer knyttet til uklare vurderingsdokumenter, manglende støtte fra utdanning, kolleger og egen sjef, frykt for "å miste ansikt", samt ressursknapphet.

I følge Lauvås og Handal (2000) er personer under opplæring per definisjon "ukyndige". Det er derfor de er under opplæring. I en prestasjonsorientert kultur er det ofte lite toleranse for det uferdige, og liten forståelse for at personer under opplæring må få anledning til å trene, feile og jobbe langsommere enn andre. Samtidig skal veiledere fra praksisfeltet foreta en kvalifisert, skjønnsmessig bedømming av studentens prestasjoner og yrkesskikkethet som ikke er underlagt samme status og ordninger som finnes i sensureringsarbeidet som foregår på skolen (anonymitet, standardiserte betingelser etc.). Likevel er kravene til rettsikkerhet de samme (ibid.).

### Bakgrunn for ekstern praksis i tannteknikerstudiet

Vesentlige deler av tannteknikerstudiets programinnhold er naturvitenskap, teknikk og formgivning. Profesjonsutøvelsen krever teoretisk kunnskap, håndlag, tekniske og praktiske ferdigheter samt form- og fargesans (HiOA, 2015). Ferdighetstrening på skolens laboratorier utgjør halvparten av studiets omfang. I 2006 ble ekstern praksis i bedrift formelt innført i Bachelorstudiet med to perioder av 8 uker. Hensikten var å forberede studentene for profesjonsutøvelsen. I følge Sylte (2013) kan teoretisk kunnskap fort bli "hengende i løse luften" og glemmes hvis den ikke prøves ut og korrigeres i dialog med virkeligheten. Hvis undervisningen ikke er godt nok profesjonsrettet vil studentene oppleve et praksissjokk i møte med den daglige profesjonsutøvelsen (Sylte, 2013). Fra 2012 ble veiledet praksis i tanntekniske bedrifter sammenslått til en periode på 16 uker i 5. semester. Bedriftspraksis organiseres ved at utdanningen skaffer og fordeler praksisplasser basert på studentenes faglige behov, ønsker og geografiske hensyn. Opplæringsbedriftene er private nærings virksomheter i størrelsesorden 2-20 ansatte fordelt over hele Norge. Som en landsdekkende utdanning anses det viktig å fokusere på desentralisert tilførsel av kompetanse, og studentenes videre arbeidsmuligheter. Som før nevnt er det utfordrende å skaffe tilveie nok egnede praksisplasser for tannteknikerstudentene. Opplæringsbedriftene mottar ingen kompensasjon for å ta imot studenter i praksis. Derfor er det vanskelig å stille krav til formell veiledningskompetanse i opplæringsbedriftene eller sikre langvarige formelle samarbeidsavtaler slik det er vanlig i profesjonsutdanninger tilknyttet offentlige helseforetak (Elken m.fl., 2015).

Synet på hvordan opplæring innen yrker og profesjoner best foregår har vekslet i takt med pedagogiske trender. Begrepet mesterlære brukes om en opplærings situasjon der eksperten/den kompetente har ansvaret for opplæring av

novisen/den ikke-kompetente. Produksjonsfellesskapet representerer en differensiert sosial struktur hvor mesterens oppgave er å sørge for at lærlingen gjennom aktiv medvirkning i produksjon tilegner seg de ferdigheter, kunnskaper og holdninger som preger yrket (Sylte, 2013). Som en landsdekkende utdanning anses det viktig å fokusere på desentralisert tilførsel av kompetanse, og studentenes videre arbeidsmuligheter (Helse- og omsorgsdepartementet, 2007). Dette er grunnen til at perioden i ekstern bedrift anses som en viktig del av tannteknikerstudiet.

For å samkjøre gjennomføringen av praksis slik at studentene skulle oppleve en mest mulig ensartet periode arrangerte tannteknikerutdanningen to-dagers samlinger for praksisbedriftene i forkant av hver praksisperiode i årene 2006–2013. Intensjonen med bedriftssamlingene var i tillegg å artikulere taus kunnskap ved at praksisveilederne ble oppfordret til å dele og reflektere over felles problemstillinger knyttet til ulike opplærings situasjoner, supplert med påfyll av kommunikasjons- og veiledningsteori. Kritikken mot mesterlæretradisjonen er at det ofte blir for mye vekt på å kopiere mesteren i stedet for at lærlingen blir utfordret på teoretiske begrunnelser og refleksjon over praksis (Sylte, 2013). Til tross for at utdanningen dekket reise og opphold gikk bedriftenes oppslutning til bedriftssamlingene etterhvert så mye ned at disse måtte opphøre. Frem til praksisbesøkene i 2014 har oppfølgingen av studentene i praksis foregått ved utsending av aktuelle planer og dokumenter og jevnlig telefonsamtaler.

I relasjon til det yrkespedagogiske aspektet ved praksisbasert utdanning peker Hiim (2013) på betydningen av det kontekstuelle ved å vise til tre teorier for relevant yrkesutdanning. Kompetansemodellen (Dreyfus & Dreyfus, 1986) omhandler en gradvis utvikling av yrkeskompetanse fra novise til ekspert. Novisen lærer ved å følge enkle regler og oppskrifter. På de neste nivåene foregår læringen stadig mer komplekst i møte med virkelige situasjoner hvor erfaringsgrunnlaget øker og oppskriftene erstattes av mer situasjonspregede tilpasninger og profesjonelle reaksjonsmønstre. Eksperten trenger ikke oppskrifter men «leser» situasjoner og handler raskt og intuitivt basert på omfattende erfaringer og stort handlingsrepertoar (Hiim, 2013).

Schøn (1983) er opptatt av at dyktige yrkesutøvere kan mer enn de kan uttrykke verbalt. Yrkeskunnskap er en sammensetning av ferdigheter og sanser hvor refleksjoner relatert til handlingen foregår hos utøvere underveis, og bevisst over handlingen i ettertid. Verkstedøvelser i yrkesrettet utdanning blir ofte for konstruert, og dermed lite kontekstpreget og relevant. Reell arbeidspraksis kan derimot fungere som et reflekterende praktikum hvor elever lærer å lære av arbeidet forutsatt ansvarlige rammer, reelle og varierte oppgaver, tilstrekkelig veiledning og at de stimuleres til refleksjon over arbeidet (Hiim, 2013).

Laves og Wengers (1991) syn på situert læring og læring som sosial prosess fremhever betydningen av å identifisere seg med et praksisfellesskap. Gjennom å delta i faglige og sosiale produksjonsfellesskap lærer man i tillegg til det rent



faglige om roller, verdier, og sosiale og økonomiske vurderinger i samspill med omgivelser preget av hvilke kolleger som er tilstede, tilgjengelig tekniske hjelpemidler, hvordan kunder/pasienter reagerer osv. Hensikten er ikke kun å lære fagutøvelsen, men å utvikle yrkesidentitet (Hiim, 2013).

## Metode

Data ble innsamlet gjennom kvalitative intervjuer med opplæringsansvarlige i 11 ulike tanntekniske praksisbedrifter fordelt på 7 fylker i Norge høsten 2014. Det ble benyttet en semistrukturert intervjuguide med 8 åpne spørsmål organisert etter følgende tema:

- Betydningen av ekstern praksis i tannteknikerstudiet
- Fordeler og utfordringer ved å være praksisbedrift
- Personlige erfaringer i rollen som opplæringsansvarlig
- Tannteknikerens fremtidige kompetansebehov
- Samarbeidspotensiale utdanning-arbeidsliv

Punktene 1, 4 og 5 har som formål å belyse første del av problemstillingen knyttet til betydningen av ekstern praksis i tannteknikerstudiet. Punkt 2 og 3 er i tillegg ment å gi svar til andre del av problemstillingen som omhandler personlige erfaringer i praksisveilederrollen.

Intervjuguide og informert samtykke ble sendt ut i forkant av avtalt besøk tilknyttet vurderingen av 3.års studentenes praksisperiode. Besøksintervjuene ble foretatt av to intervjuere og foregikk i separate rom fra produksjon. Informantenes svar ble fortløpende notert. For å oppnå et uformelt intervjuklimate hvor intervjuerne ikke ønsket å bli oppfattet i rollen som en institusjonell kontrollinstans ble det ikke benyttet lydopptak. Vurderingen var at lydopptak kan gjøre oppfatningen av intervjusituasjonen vel alvorspreget. I stedet ble informantene bedt om å gjenta eller utdype der noe var uklart, og intervjuene fikk en oppsummerende avslutning (Dalland, 2007).

Datamaterialet ble analysert etter en modell av Repstad (2007). Materialet ble først systematisert og analysert i kategoriene likt/ulikt og overraskende/uventet (Repstad, 2007). Etter inspirasjon fra en svensk studie (Mahic & Nilsson, 2014) ble deretter svarene fra hver informant knyttet til veiledningserfaringer analysert og kategorisert i forhold til den enkeltes fokus for formålet med sin veiledning (tabell 1). De to intervjuerne foretok separate analyser av resultatene som senere ble sammenstilt til felles konsensus. I følge Kvale (2004) er det ved bruk av flere tolkere mulig å oppnå en viss kontroll av vilkårlig eller partisk subjektivitet. Til tross for at påliteligheten i undersøkelsen er forsøkt best mulig ivaretatt vil det ved bruk av intervju alltid forekomme muligheter for feilkilder i selve kommunikasjonsprosessen. Det være seg om spørsmålene er riktig oppfattet av informanten, eller mulige påvirkninger i meningsinnholdet ved registrering, bearbeiding og tolkning av data (Dalland, 2007).

## Resultater

Resultatene ble innhentet i 11 ulike praksisbedrifter hvor 4 av 11 praksisbedrifter har flere enn 10 ansatte i tannteknisk virksomhet. De øvrige 7 bedriftene har 3–6 ansatte. En bedrift tok imot en tannteknikerstudent fra HiOA i praksis for første gang i 2014. Fem bedrifter har vært opplæringsbedrift for HiOA 3–4 ganger, og de resterende fem bedriftene flere enn 8 ganger.

Når det gjelder **betydningen av ekstern praksis i tannteknikerstudiet** viser resultatene at alle informantene mener praksis i bedrift er en svært viktig del av studiet som ikke kan erstattes av undervisning på skolen fordi det er viktig at studentene opplever hverdagen for å forstå kravet til effektivitet og logistikk i arbeidsutøvelsen i en produksjonsbedrift. Vedrørende omfanget av ekstern praksis i studiet sier 3 av 11 spesifikt at det er en fordel med en lang praksisperiode på 16 uker fordi dette gir kontinuitet og fleksibilitet. To av disse informantene representerer bedrifter som har hatt mer enn 15 studenter i praksis. 7 av 11 informanter mener omfanget ekstern praksis i studiet bør økes. 3 av 11 ønsker flere eventuelt kortere praksisperioder tidligere i studieløpet. Samtidig sier tre informanter at bedriftene ikke kan bruke tid på dårlige studenter. To informanter sier også at studentenes utbytte av praksis vil avhenge av den enkelte bedrifts virksomhet.

Av **faglige utfordringer og personlige erfaringer** knyttet til å ha studenter i praksis sier 6 av 11 spesifikt at det er tidkrevende å følge opp studentene fordi det skal ryddes tid i en hektisk arbeidshverdag. I tillegg sier 6 av 11 at det er veldig ressurskrevende og en belastning å ta imot umotiverte og/eller svake studenter. Det blir også problemer med kommunikasjonen når studenter behersker norsk dårlig. 3 av 11 mener det er en utfordring at ikke alle bedrifter kan tilby alle typer opplæring på grunn av variasjoner i produksjonsutstyr og fremstillings- teknikker. For eksempel er det noen som ikke lenger støper dentale legeringer som følge av overgang til digitale framstillingsteknikker, mens andre stadig benytter manuelle støpe prosesser. En opplever det utfordrende å ikke kunne alt av teori fordi man ikke fremstiller alle typer produkter. En annen sier at flinke studenter stiller mange spørsmål og dermed fremstår tidkrevende. Kun en informant nevner materialutgifter til studentenes øvingsarbeid som en utfordring for bedriften.

Av **faglige fordeler for bedriften** ved å ta imot studenter i praksis oppgir 7 av 11 rekruttering av flinke studenter og fremtidig arbeidskraft som viktig. Som **positive personlige erfaringer** sier 7 av 11 at det å være praksisveileder gir eget læringsutbytte i form av faglig oppdatering og utvikling av egen veiledningskompetanse. 4 av 11 opplever det nyttig å få innspill og kjennskap til hva som vektlegges i studiet. 2 av 11 ser heller ikke lite tid i hverdagen som noe problem. "vi prater samtidig som vi jobber", og "... utfordringen ligger i å få for midlet stoffet. Studenten må få mulighet til å spørre alle på laboratoriet og få

oppmerksomhet.” Når det gjelder **personlig læringsutbytte som følge av oppfølgingsansvar** sier 2 av 11 spesifikt at det føles gøy og meningsfullt å lære bort når det går inn hos studenten. 6 av 11 opplever rollen lærerik som bidrag til faglig oppfriskning. 5 av 11 sier de er bevisst på betydningen av rekkefølgen i opplæringen. Det å finne studentens nivå, for deretter å sette premisser og grenser. At det er viktig å være konsekvent, tydelig og løsningsorientert.

Vedrørende norske **tannteknikeres fremtidige kunnskaps- og kompetansebehov** mener 10 av 11 grunnleggende oral anatomi, tannmorfologi og konstruksjonsprinsipper er nødvendige kunnskaper for norske tannteknikere også i fremtiden. 5 av 11 tilføyer at kunnskap om bittfysiologi blir enda viktigere fremover. Hvorav 3 knytter dette behovet opp mot økende oppdrag knyttet til restaurering av store arbeider som innbefatter diagnostisk opp-voksing, implantatkonstruksjoner, og ikke minst tannoppstilling i tilknytning til dette. Det knytter seg noe uenighet om viktigheten av CAD/CAM-kunnskaper. Tre sier det er viktigst å prioritere de håndverksfaglige teknikkene i studiet fordi unge i dag har så god digital kompetanse at de tar dette lett senere. Programvarene fordrer uansett tannteknisk konstruksjonsforståelse for å kunne fremstille funksjonelle produkter. To informanter mener klinisk utdanning og kompetanse vil være nyttig knyttet til delprosesser og inn-prøving på pasient. En ser for seg et framtidsscenario hvor man under en ny profesjonstittel vil kunne tilegne seg kompetanse til å ta hånd om flere av de kliniske arbeidsoppgavene i restaureringsprosessen.

En informant sier studiet bør fokusere mindre på næringsdriftsfag for det kan man lære seg utenom. Samtidig sier 4 av 11 eksplisitt at kunnskap om kommunikasjon, serviceinnstilling og markedsføring er nødvendig for å kunne kommunisere med kundene. En femte fremhever kunnskap om lovverket som en viktig del av studiet for å kunne drive egen bedrift.

Når det gjelder **samarbeidspotensiale mellom utdanning og arbeidsliv** synes alle informantene det var positivt at utdanningen foretok personlige besøk i bedriftene i forbindelse med vurderingen av studentens praksisperiode. Utover dette foreslår 2 av 11 felles arrangementer eller temakvelder. Dette oppfattes som et ønske om at utdanningsinstitusjonen skal innta en mer samlende faglig rolle.

### Fordeling av fokuset for veilederrollen

I tabell 1 presenteres resultat fra analysen av informantenes svar i forhold til hvordan de oppfatter sin praksisveilederrolle. Lys grå markerer hovedfokuset for veilederens oppfatning av formålet med sitt opplæringsansvar i studentens praksisperiode i bedrift. Mørkere grå markerer spesielt sterkt fokus.

Tabell 1. Betydningen av ekstern praksis i tannteknikerstudiet.

Veileder	Yrkessosialisering	Produksjon og rekruttering	Formidling av fagkunnskap	Egenutvikling/veiledererfaring
A		X	X	X
B	X	X	X	
C	X		X	X
D	X	X	X	
E	X		X	X
F	X	X	X	
G	X	X	X	
H	X		X	X
I	X		X	X
J	X		X	X
K	X	X	X	

Alle informantene vektlegger primært formidling av fagkunnskap som det fremste målet for sin veiledning. Tilsvarende ser de aller fleste det som sin oppgave å hjelpe studenten å finne seg til rette i yrkesfellesskapet. Videre fokus fordeler seg slik at 50 % ser rekruttering av arbeidskraft til bedriften som formålet med veilederrollen. Mens de resterende 50 % ser personlig utvikling i sin veilederrolle som det fremste målet.

## Diskusjon

Videre diskuteres frembrakte funn i en tredelt struktur i henhold til problemstillinger og tema for intervjuguiden. Del en omhandler betydningen av ekstern praksis for studentenes profesjonsforståelse, og bedriftspraksis omfang kontra kvalitetssikring av læringsutbytte. Del to tar for seg praksisveiledernes opplevelse av egen veilederrolle. Del tre belyser hvilket faglig innhold studiet bør omfatte for å frembringe relevant kompetanse for arbeidsmarkedet.

### Praksisstudienes betydning i profesjonsstudiet

Når det gjelder første del av problemstillingen *Hvilken betydning har ekstern praksis i bedrift for tannteknikerstudiet og utviklingen av tannteknisk kompetanse?* mener flertallet av de opplæringsansvarlige at tannteknisk fagopplæring best skjer i bedrift. Alle er enige om at praksis i bedrift ikke kan erstattes av undervisning på skolen. Jamfør Hiim (2013) og Sylte (2013) kan dette skyldes tan-

ken om at først når studenten møter den daglige yrkesutøvelsen så blir opplæringen reell ved at læringen konfronteres med virkeligheten og alt hva dette innebærer i en kontekst preget av daglig produksjonskrav. Det vil si krav til produktkvalitet og produktdokumentasjon, samt å identifisere seg med kravene til effektivitet, logistikk, profesjonell kommunikasjon og samhandling (Lave & Wenger, 1991). I kontrast til andre helsefaglige profesjoner organisert innenfor offentlige helseforetak er tanntekniske laboratorier produksjonsbedrifter der eksistensberettigelse er basert på konkret produktomsetning.

Ideelt sett er det gunstig for studentene å bli realitetsorientert om yrkesutøvelsen tidligst mulig i studiet. Ekstern praksis både i større omfang og tidligere i studiet er noe 7 av 11 informanter påpeker. Utdanningens erfaringer med praksis tidlig i studieløpet har før vist seg mindre vellykket fordi det er ressurskrevende å organisere og medfører stor belastning på noen få sentralt plasserte bedrifter. I tillegg rapporterte en del studenter i denne sammenheng om at de ble møtt med en del negativ respons i form av liten tro på fagets framtidsutsikter. Dette førte i flere tilfeller til studiefrafall før faglige forutsetninger til å foreta et kvalifisert valg var oppnådd hos studenten. I kjølvannet av samfunnsendringer som økt dokumentasjonskrav, import av tanntekniske tjenester, stor material-teknologisk utvikling og digitalisering av framstillingsteknikker kan framtidsutsiktene og krav til markedstilpasning fortone seg utfordrende for profesjonsutøvere som primært har vært beskjeftiget med manuelle teknikker. I følge Sylte (2013) vil det si at yrket endrer karakter.

Ved tannteknikerutdanningen etterstrebes yrkesretting av studiets innhold og oppgaver. Tidligere forsøk med å imitere tannteknisk virksomhet gjennom undervisningsopplegget «Fyrhuset Dental» med ekte pasienter, uventede oppgaver, og fordeling av arbeidet innen bestemte tidsfrister viste seg likevel ikke i tilstrekkelig grad å fungere etter hensikten. Der arbeidsoppgavene ikke involverte levende mennesker, som pasientens og tannlegens reaksjoner, eller økonomiske vurderinger, tok ikke studentene tidsfristene seriøst fordi de ikke opplevde situasjonen reell. «Skolemodus» involverer ingen personlige eller økonomiske konsekvenser knyttet til virkelig produksjon. Med andre ord er praksis i bedrift slik Hiim (2013) beskriver betydningen av det kontekstuelle ved relevant yrkesutdanning, absolutt nødvendig for utvikling av profesjonsforståelse og yrkesidentitet. Praksisnær konfrontasjon og korreksjon i forhold til daglige problemstillinger og dilemmaer øker studentens erfaringsgrunnlag og etter hvert handlingskompetanse jamfør kompetansemodellen (Dreyfus & Dreyfus, 1986). Bedriftspraksis i tannteknikerstudiet er viktig for å unngå hva Sylte (2013) karakteriserer som praksissjokk i møte med profesjonshverdagen. Når tre informanter sier det er bra at bedriftspraksis er slått sammen til en lang periode fordi dette gir mer kontinuitet for både studenten og bedriften, så kan dette handle om utvikling av personlige relasjoner. Det vil si at studenten blir bedre inkorporert i bedriftens rutiner, kvalitetskrav og produksjonsfelleskap.

Ulempen ved for tidlig eller for utstrakt omfang av bedriftspraksis i studiet er at kvaliteten på opplæringen og studentens læringsutbytte vil variere mye avhengig av studentens faglige modenhet, den enkelte bedrifts produksjon, og praksisveileders kompetanse. Tre av informantene påpeker som eksempel variasjoner i produksjonsutstyr og fremstillingsprosesser. Noen bedrifter benytter fortsatt utelukkende konvensjonelle og manuelle teknikker, mens andre, spesielt større bedrifter produserer stadig mer digitalt. Praksisveileders faglige kompetanse vil naturlig nok avhenge av bedriftens produksjon. Studentenes læringsinnhold og læringsutbytte vil dermed variere tilsvarende, og utgjøre en risiko for forskjellsbehandling i vurderingen av praksis slik Hauge (2014) fant. Store forskjeller i studentenes praksisinnhold vil igjen vanskeliggjøre en påfølgende rettferdig eksamenssituasjon på skolen (HiOA, 2013).

En annen konsekvens ved utstrakt omfang av bedriftspraksis i dette profesjonsstudiet er at produksjon fort kan bli prioritert på bekostning av nødvendig fokus på refleksjon over praksis og tilegnelse av teoretisk kunnskap. Noe som har blitt oppfattet negativt ved mesterlæretradisjonen (Sylte, 2013), men som er nødvendig i profesjonsutvikling (Molander & Terum, 2008). Kompetansemodellen tatt i betraktning (Dreyfus & Dreyfus, 1986), er det som noviser i tannteknikerprofesjonen viktig for studentene å oppleve enkle oppskrifter, samkjørte regler og fastlagte vurderingskriterier inntil de ut fra egne erfaringer er i stand til å gjøre selvstendige vurderinger. På bakgrunn av den enkeltes forutsetninger vil det alltid være individuelt betinget når hver enkelt når en høyere grad av selvstendighet og kompetanse. Noen tilegner seg raskere evnen til å se og gjenskape form enn andre, og noen har ikke tålmodighet eller forutsetninger for å oppnå de nødvendige ferdigheter.

Tannteknikerstudiet er en grunnutdanning med krav til årlig studieprogresjon. Intensjonen er at alle uteksaminerte kandidater skal ha tilegnet seg den samme basiskunnskapen innenfor henholdsvis fast eller avtakbar protetikk. Det er på dette grunnlaget autorisasjon som tanntekniker utstedes. Ettersom bevilgende myndigheter ikke bidrar med ressurser til ekstern opplæring i tanntekniske bedrifter, eller tannteknikerbransjen ikke prioriterer utvikling av formell veiledningskompetanse, er det utfordrende å formalisere et langsiktig samarbeid om praksisplasser som i tilstrekkelig grad kvalitets-sikrer studentenes læringsutbytte. Dette bekreftes av Elken m.fl. (2015). Basert på at bestått utdanning og autorisasjon fungerer som sertifisering av oppnådd læringsutbytte er det i dagens situasjon ikke tilrådelig å øke omfanget ekstern praksis i studieløpet. Kvalitetsindikatorer og kriterier anbefalt gjennom praksisprosjektet (Universitets- og høyskolerådet, 2015), krav om formell veiledningskompetanse i bedriftene og forutsigbarhet i antall godkjente praksisplasser er andre viktige faktorer som må innfris før omfanget bedriftspraksis i tannteknikerstudiet kan økes. Kortere bedriftsbesøk i følge med lærer under første studieår er imidlertid

noe som kan fremme studentenes forståelse av profesjonsutøvelsen studiet rekrutterer til.

Synet på riktig omfang av bedriftspraksis i tannteknikerstudiet avhenger trolig også av bedriftens erfaringer med den aktuelle studenten. Flinker studenter oppfattes å være til glede, inspirasjon, og nytte for bedriften ved at de etter hvert kan bidra i produksjonen. Mens svake studenter blir en daglig belastning for opplæringsansvarlig og øvrige ansatte. Samtidig er det naturlig å anta at også studenten vil oppleve sin tilstedeværelse i bedriften personlig utfordrende ved ikke å innfri bedriftens forventninger. Dårlig personkjemi er en faktor som kan påvirke forholdet mellom studenten og ansatte i opplæringsbedriften negativt. Hvis en av partene mistrives kan praksisperioden fortone seg lang og tung. Dette kan medføre frafall fra studiet for studentens del, eller bortfall av praksisplass for utdanningens del. Derfor er det viktig at utdanningen bruker ressurser på å finne best mulig match mellom studentens praksisbehov og den enkelte praksisbedrift. Samtidig er jevnlig kontakt fra skolens side viktig for å sikre samarbeidet med praksisveileder og studentens progresjon slik at eventuelle uklarheter raskt kan avdekkes.

Når 6 av 11 informanter finner det utfordrende å finne tid til å følge opp studentene i en hektisk hverdag handler dette om å gi studenten nok oppmerksomhet, og få formidlet stoffet. Spesielt oppleves det veldig ressurskrevende og belastende å ta imot svake og/eller umotiverte studenter. Dette samstemmer med funn fra andre studier (Caspersen & Kårstein, 2013; Fillingsnes & Thylén 2012; Hauge, 2014).

Det er viktig at studenter som skal ut i praksis er skikket og har et godt nok faglig grunnlag til å kunne nyttiggjøre seg praksis. Det betyr ikke at bedriftene ikke skal kunne akseptere det uferdige ved en student som er under opplæring og jobber langsommere fordi han/hun har behov for å øve (Lauvås & Handal, 2000). Men bedriftene opplever det svært demotiverende å kaste bort dyrebar produksjonstid og ressurser på uengasjerte studenter. Slike opplevelser kan som før nevnt føre til at bedriftene ikke vil ta imot studenter i praksis flere ganger. Eller at studenter kommer igjennom praksis selv om læringsutbyttet ikke er oppnådd, slik Hauge (2014) fant i sin studie. Dette betyr at tannteknikerutdanningen ikke kan overlate til praksisveilederne å stå alene om vurderingen av studentens skikkethet. Utdanningen må tvert imot bli strengere i den løpende skikkethetsvurderingen før praksis slik at bedriftene slipper å ta imot studenter som åpenbart er uegnet for praksisfeltet. Typisk er studenter som kan utgjøre en fare ved bruk av maskiner og utstyr, eller helse, miljø og sikkerhet i bedriften. Studenter som ikke respekterer bedriftens ordinære arbeidstid, eller studenter som i løpet av den totale praksisperioden overhodet ikke anses kompetente til å bidra i bedriftens produksjon.

Relevans i yrkesutdanning betyr ikke bare at studiet skal ha riktig innhold i forhold til arbeidslivets faglige behov. Det må også bety at skolen sender ut ut-

viklingskompetente studenter. Det vil si studenter som viser vilje, evne, og forutsetninger til å nyttiggjøre seg konstruktiv faglig veiledning både under studietiden, og etter endt utdanning. En av informantene sier; "Å sende ut studenter i praksis som ikke er skikket er å gjøre studentene en bjørnetjeneste." Et argument som understøtter dette utsagnet er at profesjonen i Norge utgjør et lite miljø (ca. 200 registrerte bedrifter jf. Norges tannteknikerforbund 2014) hvor "alle kjenner alle". Dermed er sannsynligheten stor for at særlig svake eller uegnede studenter vil forspille sine fremtidige jobbmuligheter ved å eksponere sin utilstrekkelighet allerede før avsluttet studium. Selv om det er ugunstig for utdanningens studiepoengproduksjon har erfaringer de siste 15 årene vist flere eksempler på tannteknikerstudenter som har gjennomgått en positiv modningsprosess når de vender tilbake og fullfører studiet med kullet under.

Mangelfulle norskkunnskaper hos studentene nevnes også som en utfordring i kommunikasjonen knyttet til opplærings situasjonen i bedrift. En informant sier; "Dårlige norsk-kunnskaper er et kjempeproblem for hele tannhelse teamet som gir misforståelser og feil knyttet til journalføring og arbeidsbeskrivelser." Faren for feil behandling hos tannlegen kan forekomme dersom utsagnet medfører riktighet. Men tannteknikerstudenter skal i utgangspunktet ikke utføre arbeid direkte på pasienten selv om de kanskje skal lage noe som skal prøves inn i pasientens munn. Det må kunne forutsettes at bedriftens internkontroll forhindrer novisen i å innta rollen som ekspert. Imidlertid kan feil i den tanntekniske produksjonen som følge av misforståelser i kommunikasjonen utvilsomt påføre bedriften inntektstap i form av reklamasjoner, omgjøringer og i verste fall bortfall av kunder. I tillegg kan det være meget belastende for praksisveileder å kontinuerlig måtte sjekke ut om studenten har forstått arbeidsoppgavene han/hun er tildelt. Sammenlignet med arbeidsinnvandrende tannteknikere fra andre EØS-land (Europeisk økonomiske samarbeidsland) vil likevel praksisstudenter fra Høgskolen i Oslo og Akershus ha bak seg opptakskrav og eksamener som skal sikre en grunnleggende kompetanse i norsk, selv om uttalen kan være gebrokken. Et annet spørsmål er om profesjonen i tilstrekkelig grad har tatt inn over seg at Norge har blitt et multikulturelt samfunn, noe som tydelig gjenspeiles i utdanningsinstitusjonens studentmasse.

Selv om bedriftene ikke mottar noen form for kompensasjon for å ta imot studenter i praksis ses ikke materialutgifter knyttet til studentens opplæring som noe problem for bedriften dersom studenten etter hvert oppleves nyttig og kan delta i produksjonen. Materialutgiftene blir da en del av bedriftens inntektsgrunnlag. Muligheten for å bli kjent med nye potensielle medarbeidere fremheves som motiverende for å ta imot studenter i praksis. Hele 7 av 11 informanter ser mulig rekruttering av fremtidig arbeidskraft som en viktig fordel ved å ta imot studenter i praksis. Små produksjonsbedrifter kan være sårbare i forhold til nyansettelser. Muligheten til over noe tid å vurdere om studenten passer inn i produksjonsfellesskapet både faglig og sosialt kan bidra til å redu-



sere ressurskrevende feilansettelser. Ettersom utdanningen i Oslo er landsdekkende er det et samfunnsoppdrag å tilføre arbeidskraft regionalt. Derfor vektlegger utdanningen så langt det er mulig å legge til rette for praksis i studentenes hjemdistrikt, og å sende studenter til bedrifter utenfor det sentrale Østlandsområdet. Dette medfører derfor noe variasjon i de regionale praksisbedriftene fra år til år.

### Praksisveileders rolle i profesjonsstudiet

I forhold til andre del av problemstillingen, *hvordan praksisveiledere i bedriftene opplever sitt opplæringsansvar*, er det meget positivt å konstatere at 7 av 11 informanter opplever veilederrollen og opplæringsansvaret motiverende og kompetansehevende, og ikke bare som et tidssluk. Dette handler om personlig læringsutbytte i form av faglig oppfriskning og utvikling av egen veiledningskompetanse. Når to informanter uttrykker at det er "gøy og meningsfullt å lære bort når det går inn hos studenten" viser dette en positiv innstilling til veilederrollen og økt bevissthet til egen kunnskapsutvikling. De ser studenten som faglig teoretisk sterk, og til gjensidig nytte i egen kunnskapsoppfriskning. En av informantene sier; "... det kan være detaljer man lærer på skolen som bedriften kan ha bruk for."

Utvilsomt er det tannteknikere i daglig produksjon som besitter den fremste faglige ekspertisen på sitt felt. I følge kompetansemodellen (Dreyfus & Dreyfus, 1986) besitter eksperten intuitiv effektivitet basert på omfattende erfaring og stort handlingsrepertoar. Likevel kan det være at den enkelte profesjonsutøver i en mindre bedrift kan oppleve seg noe isolert innenfor sitt spesialfelt, eller i del-produksjonen. Ofte foregår tannteknisk produksjon ved utvikling av spesialkompetanse tilknyttet spesifikke materialer og teknikker, eller det kan dreie seg om bedrifter som har begrenset omgang og kompetanseutveksling med andre bedrifter. Som før nevnt er de aller fleste praksisveilederne utdannet etter gammel ordning, uten den grad av akademisering og fokus på teoretisk kunnskap som er tilfellet i studiet i dag. Skjæringspunktet mellom ny kontra gammel utdanning kan oppleves både fremmedgjørende og faglig utfordrende i veiledning med studenter (Caspersen & Kårstein, 2013; Fillingsnes & Thylén, 2012).

Gjennomføringen av undersøkelsen i tannteknikerfeltet viste at det er viktig at opplæringsansvarlig og faglærer får anledning til å snakke litt sammen på tomanns hånd før studenten tas inn i vurderingssamtalen. Hvis ikke kan vurderingen fort bli for "snill" i forhold til de faktiske forhold. Opplæringsansvarlig/praksisveileder kan utelate eller nedtone problemer knyttet til studentens faglige progresjon, tilstedeværelse eller skikkethet fordi dette oppleves vanskelig å si med studenten tilstede. Underkommunikasjon av tingenes tilstand kan spesielt gjelde nye praksisveiledere. Faglærer kan lettere klargjøre for studenten hva som kreves for å bestå praksis, og konsekvensene for studentens studieprogresjon ved ikke å bestå praksis. Videre kan faglærer presentere strategier for at

studenten skal nå sine formelle mål. Når faglig oppfrisking oppleves som et pluss ved det å være praksisveileder kan dette kanskje tas til inntekt for en genuin interesse for å være på linje med utdanningens utvikling. Slik Sylte (2013) beskriver en naturlig fagutvikling vil Tannteknikerstudiet aldri være helt statisk, men under innflytelse av endringer i lovverk, ressurstilgang og samfunnsutvikling.

I fokus for veilederrollen (tabell 1) vektlegger alle informantene naturlig nok formidling av fagkunnskap og innlemming av studenten i yrkesfelleskapet som det fremste målet for sin veiledning. Dette er i tråd med samfunnsoppdraget og intensjonen om samarbeid mellom utdanning og arbeidsliv (HiOA, 2012, 2015).

Deretter viser resultatene en interessant fordeling hvorav halvparten av informantene ser rekruttering av arbeidskraft til bedriften som formålet med veilederrollen, mens den andre halvparten ser personlig utvikling i sin veilederrolle som det fremste målet. Årsakene til dette kan variere. Der praksisveileder har eierinteresser i bedriften er det nærliggende å anta at rekruttering av god arbeidskraft står sentralt hos praksisveileder. Dette synes likevel ikke å stemme i alle tilfeller. For eksempel kan det være at behovet for rekruttering til bedriften ikke er akutt. Eller så kan en perspektivforskyvning fra jeget (formidlerrollen) til å se den andres behov (studentrollen), skyldes økende erfaring som praksisveileder. På samme måte som en uerfaren taler vil være mest opptatt av å få formidlet alt sitt innøvde budskap vil den erfarne taleren være oppmerksom på, og justere budskapet i tråd med responsen fra publikum. En informant sier... "En lærer også litt om seg selv når man veileder. Hvorfor gjør jeg dette sånn?!" Med bakgrunn i en håndverksmessig tradisjon besitter tannteknikere mye taus kunnskap (Schøn, 1983) som kan oppleves både uvant å artikulere og utfordrende å begrunne. Hiim (2013) beskriver dette som «å lære å lære av arbeidet», eller i dette tilfellet av veilederrollen. Dette kan være årsaken til at 5 av 11 sier de er blitt mer bevisst på betydningen av rekkefølgen på opplæringen. Først må de finne studentens nivå, for deretter å sette premisser og grenser, da det er viktig å være konsekvent, tydelig og løsningsorientert. Det vil si at når praksisveileder basert på erfaring føler seg trygg i sin veilederrolle og kan «lese» situasjonen vil dette bidra positivt til opplærings situasjonen (Hiim, 2013).

### **Relevans og samarbeid utdanning - arbeidsliv**

Til tross for at det er ressurskrevende å reise "Norge rundt" er det viktig for utdanningen å ta i øyesyn alle bedriftene der studentene tilbringer sine praksisstudier. Konteksten gir faglærer en bedre forståelse for hvilke rammebetingelser som møter studenten. Erfaringer fra denne studien viser at personlige møter i tillegg gir rom for faglige diskusjoner, og gjør det lettere for opplæringsansvarlig å stille spørsmål ved opplegg og dokumenter tilknyttet praksisperioden. Dermed gis faglærer økt mulighet til å støtte opp om praksisveileders arbeid.

Kommunikasjonen og den personlige relasjonen styrkes når man har sett hverandre ansikt til ansikt, og kan bidra til "å senke terskelen" mellom dagens og tidligere utdanning. At utdanningen prioriterer å videreføre besøk ved praksisbedriftene må ses som en kvalitetsindikator ved ekstern praksis (HiOA, 2012; Universitets- og høyskolerådet, 2015).

Vedrørende tannteknikerens fremtidige kompetansebehov er det interessant at basale kunnskaper, håndverksfaglige teknikker og manuelle ferdigheter stadig anses grunnleggende essensielle i en tid preget av en voldsom digital revolusjon hvor stadig flere tannerstatninger produseres ved bruk av CAD/CAM. På den annen side er evnen til å gjenkjenne den enkelte tanns morfologi og likhet med resttannsettet absolutt nødvendig for å kunne vurdere faglig kvalitet. Det gjelder enten tannerstatningen er manuelt eller digitalt fremstilt, i Norge eller i utlandet. Grunnleggende er også kunnskapen om bittfysiologi, understått hvor på en tannløs kjeve-kam eller i ethvert case belastningen fra tyggetrykket bør plasseres. Og ikke minst hvordan ulike lag av materialer i kunstige tenner skal dimensjoneres og konstrueres for å gi optimal funksjon og kvalitet. Tannerstatninger skal ikke kun fylle pasientens estetiske behov. Tannerstatninger må også være funksjonelt konstruert, slik at det er mulig å tygge mat og føre en samtale med normal diksjon. Når kunnskap om bittfysiologi fremheves som enda viktigere fremover skyldes dette trolig at kunnskap om bruk av digital teknologi alene ikke er tilstrekkelig. Kunnskap om tyggeapparatets bevegelsesmønster må også være tilstede ved rekonstruksjon av store arbeider der kanskje alle tennene i en eller begge kjever skal erstattes. Dermed er kompetanse innen tannoppstilling (tennens plassering på kjevekammen) ifølge flere av informantene stadig aktuelt lærestoff som utgangspunkt for digital design av store implantatkonstruksjoner. Dette til tross for at produksjonen av avtakbare "gebiss" er for nedadgående i dagens samfunn fordi folk beholder egne tenner lenger enn tidligere generasjoner.

Som følge av at fokuset på tannteknisk fremstilling nedprioriteres i tannlegestudiet til fordel for klinisk konserverende behandling ser flere informanter det som en naturlig kompetanseglidning at tannteknikeren fremover vil kunne overta enklere kliniske arbeidsoppgaver. En slik utvikling vil i så fall måtte gjenspeiles i tannteknikerstudiets faglige innhold. I følge Strategiplan 2020 for Høgskolen i Oslo og Akershus stilles det krav til ny kunnskap og nye tjenester i skjæringspunktet mellom etablerte fag og profesjoner. Samtidig er det ikke usannsynlig at en slik jobbglidning vil medføre en viss profesjonskamp.

Når det blir stadig vanligere med pasientkontakt i profesjonsutførelsen sier 4 av 11 informanter det er viktig at studiet øker fokuset på kunnskap om kommunikasjon, serviceinnstilling og markedsføring for å kunne kommunisere med kunder og pasienter. Økt bevissthet og fokus på brukervedvirkning i befolkningen kan også føre til at det blir mer vanlig å søke tannteknisk veiledning ved behov for tannerstatninger (Helse- og omsorgsdepartementet, 2007). Likevel er

ikke alle enige i at faget Næringsdrift bør oppta plass i studieinnholdet. En informant mener at dette kan man lære seg utenom. Samtidig sier en annen... "Det er vanvittig hvor mye lover og regler en arbeidsgiver i en liten bedrift skal kunne. Det er viktig å ha dette på skolen!" Dagens krav til internkontroll, kvalitetssikring og dokumentasjon blir stadig strengere (Sylte, 2013). Det er naturlig at studieinnholdet gjenspeiler samfunnsutviklingen. I tannteknikerprofesjonen er det vanlig at en del profesjonsutøvere blir selvstendig næringsdrivende. For tiden kan man også se en tendens til at tanntekniske bedrifter blir færre i antall, men øker i antall sysselsatte. I denne sammenheng vil det være naturlig med ulike bedriftsstrukturer. For eksempel kan flere selvstendige næringsdrivende velge å dele lokaler og kostbart utstyr. Dermed er det viktig at alle profesjonsutøvere har kunnskap om lover og regler, og kompetanse til å imøtekomme offentlige krav.

Å fokusere på kunnskaper innen CAD/CAM er utvilsomt nødvendig selv om tre av informantene mener dagens unge lett tilegner seg digitale programmer senere. Utdanningen er opptatt av å være teknologisk oppdatert og fremstå relevant for arbeidsoppgavene i yrkesfeltet (HiOA, 2012). Men det er kostbart for en liten utdanning å holde tritt med den raske teknologiske utviklingen. Bransjen er som nevnt preget av store forskjeller i teknologiske framstillings-teknikker. Dermed kan studiets innhold heller ikke være så fremtidsrettet at det ikke er mulig å oppdrive tilstrekkelig antall eksamensrelevante praksisplasser (Elken m.fl., 2015). Det er fortsatt slik at noen arbeidsprosesser ikke kan digitaliseres. Spesielt innledende og avsluttende arbeidsprosesser krever ferdigheter og faglig skjønn for å oppnå et godt resultat for pasienten. Det samme gjelder arbeidsprosesser knyttet til fremstilling, reparasjoner og vedlikehold av avtakbare tannproteser. Dette er arbeidsoppgaver hvor en student eller nyutdannet kandidat kan være til nytte i bedriften, og derfor stadig relevant studieinnhold.

Med hensyn til samarbeidspotensiale utdanning-arbeidsliv ble det oppfattet tydelig positivt at faglærere fra utdanningen kom på besøk til bedriftene. Møtene har vært preget av god stemning og velvilje fra begge parter. Bedriftene setter pris på å få vist frem laboratoriene sine, og mener det er viktig at utdanningen har sett bedriftene studentene sendes til. Dette er også et viktig poeng når faglærer skal sette seg inn i studentens og bedriftens situasjon. Spesielt i tilfeller hvor det oppstår konflikter, eller tvil om faglig progresjon og skikkethet.

Opplevelsen av å kommunisere ansikt til ansikt kan avmystifisere fordommer knyttet hverandres roller og agenda, og forenkle oppklaring av mulige misforståelser knyttet til praksisopplegget. Digital kommunikasjon som telefon og e-post utelater muligheten for tolkning av kroppsspråk og kongruens i samtalen, noe som er vesentlig for å forstå den andres reaksjon. Ved personlige møter senkes terskelen for avslappet samtaleflyt, faglige diskusjoner og hyppigere kontakt mellom skole og arbeidsliv. Grunnen til at praksisbesøk ikke har blitt prioritert tidligere er at det har vært ansett for ressurskrevende med hensyn til

tid og reiseutgifter. Å besøke en bedrift i Nord Norge eller på Vestlandet tar fort en hel arbeidsdag. Tilsvarende gjelder om praksisveileder skal komme til utdanningen for veilederkursing, hvor det i tillegg går med kostbar produksjonstid. En mulig vei for å etter hvert utvikle formell veiledningskompetanse i bedriftene kan være å samarbeide med de øvrige odontologiske utdanningsinstitusjonene om regionale veiledningskurs hvor også e-læring kan inngå. Gjennomføring av veilederkurs bør i så fall være poenggivende som faglig oppdatering knyttet til autorisasjonen som tanntekniker. Det er viktig å oppnå en bred forståelse i profesjonen for at utdanningen og yrkesfeltet har felles interesser når det gjelder studiets relevans og fremtid.

## Konklusjon

Konklusjonen på hvilken betydning ekstern praksis i bedrift har for tannteknikerstudiet og utviklingen av tannteknisk kompetanse er at denne perioden gir studentene en realitetsorientering om den daglige profesjonsutøvelsen som ikke kan erfares i en utdanningsinstitusjon. I dagens situasjon anbefales likevel ikke omfanget bedriftspraksis i studiet økt uten mer forutsigbarhet i antall praksisplasser, kvalitetssikring av praksisperiodens faglig relevans og tilgang til formell veiledningskompetanse.

Bedriftenes opplevelse av praksisstudenten som belastning eller nytte avhenger klart av hver enkelt bedrifts erfaringer med den enkelte student som sterk/svak. Utdanningen må derfor i større grad på forhånd kvalitetssikre at studenten er skikket, og har faglige forutsetninger for å nyttiggjøre seg veiledet praksis i bedrift. Samtidig er det viktig at utdanningen bruker ressurser på å finne best mulig match mellom studentens praksisbehov og den enkelte praksisbedrift for at begge parter skal oppleve "å lykkes". Praksisbesøk fra utdanningsinstitusjonen øker klart kvalitetssikringen av studentens praksisperiode, og samarbeidet mellom utdanning og arbeidsliv når det gjelder å ivareta et tidsriktig læringsinnhold i studiet. Til tross for digitaliseringen i tannteknisk produksjon vil tannteknikerens primære kompetansebehov stadig være tannmorfologi, oral anatomi, grunnleggende konstruksjonsprinsipper og håndverksfaglige teknikker. Kompetanse som bør få økt fokus i studiet er bittfysiologi, kommunikasjon, serviceinnstilling, markedsføring, og fototeknikk knyttet til farge- og konstruksjonsforslag.

Svaret på hvordan praksisveiledere i bedriftene opplever sitt opplæringsansvar er at rekruttering av potensiell arbeidskraft er en klar motivasjonsfaktor for bedriftene når det gjelder å ta imot studenter i praksis. Samtidig erfarer mer enn halvparten av de opplæringsansvarlige en faglig og personlig utvikling i veilederrollen basert på ønsket om å fremstå faglig oppdatert, og gjennom å artikulere taus kunnskap. Erfarne praksisveiledere er mer tydelige overfor studentene

med hensyn til rammer og premisser. Med økende erfaring utvikles større bevissthet knyttet til det pedagogiske aspektet ved egen veilederrolle.

## Takk

Forfatterne ønsker å takke praksisveilederne i de tanntekniske bedriftene for deltakelse i studien. Videre rettes en takk til studieleder Trude Myhrer ved Høgskolen i Oslo og Akershus for gode innspill i skriveprosessen. Takk også til de to anonyme fagfeller for fylldige og viktige kommentarer i redigeringsfasen.

## Forfatterbidrag

Forfatterne har samarbeidet om utarbeidelse av intervjuguide, gjennomføring av intervjuene og analyse av data. HKH er førsteforfatter. KHH er medforfatter og har bidratt i utforming av artikkelen.

## Forfatterbeskrivelse

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