

Today's theme of VETteach:
VET teachers' further training
and learning at the workplace

Introducing the theme of the day

- Sweden starts with two presentations
- Each other country has a short presentation (20 minutes incl. 5 minutes discussion)
- Concluding discussion
- How to proceed after VETteach?
- Next session – 16 June

A recruiter, a matchmaker, a firefighter

- Swedish vocational teachers'
relational work

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Aim, theory and method

- The aim is to study what characterises VET teachers' relational work concerning WBL.
- Sociocultural theory - the work that VET teachers carry out at the boundary between school and the workplace as part of WBL
- Interviews with 15 teachers
- Three different vocational programmes at upper secondary level: (1) Child and Recreation, (2) Building and Construction, and (3) Handicraft.

Being a recruiter

- Consists of the various ways of finding placements. Teachers use their social network, obtain help from administrators, let students find their own placements, and are approached by companies asking for students.

I was out driving and saw a company car, [and I thought] ‘I haven’t seen that one before, I wonder who it is’. So I followed. And we drove all the way to the office, as it was the manager himself, and we went in and talked to him. ‘Yes, we could try that’... You have to be a bit pushy, you can’t just sit and wait for things to happen. (Birger)

Being a matchmaker

- Act as matchmakers between the student, the workplace, and the supervisor
 - Key aspect – find a good learning environment
- Matchmaking is either tacit or improvised
 - Tacit: when the VET teachers know the students and the workplace well
 - Improvised: when teachers receive lists from administrators with workplaces and supervisors to match with students

Cecilia, an experienced teacher from the Child and Recreation programme, has all the information she needs at her fingertips:

I have such a large network, and as soon as there is someone who has special requirements for their placement, then almost immediately a bell rings for me – who, where, what place. And then there's a period in which the decision matures, you just let things rest, and suddenly the penny drops. So almost all the time I'm using my network, contacts and so on, and then the right person always gets into the system in some way. It's quite weird, really. That it comes to you, somehow.

Being a firefighter

- "Fire/Burning" - metaphors for what can happen when students and supervisors come together in a work placement
 - Several reasons for the relationship collapsing were identified:
 - the student was not ready for work placement
 - the relationship did not work,
 - the supervisor had not fully appreciated what it meant to have an apprentice.
 - Preventive work with both students and supervisor
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Billy says:

You also have to evaluate why it didn't work. Then you learn about the personal chemistry. About the student, and about the supervisor. Then we come back to what we discussed earlier [...] that it is important to get to know your supervisors and students. And this is also something that is part of our role as [VET] teachers. We have to carry out tasks like this all the time, but it is not stated in our working instructions that we should spend time on this. And it could mean going out and trying to mediate between a supervisor and a student who are not on speaking terms.

Key findings

- The importance of their personal connections and networks in the local community
- The work with WBL is a balance act between being a teacher and/or a craftsman
 - A teacher who has a solid base in the curriculum and a skilled craftsman can coexist with the supervisor, the workplace and the student

Mårtensson, Å., Andersson, P., Nyström, S. (2019). A recruiter, a matchmaker, a firefighter: Swedish vocational teachers' relational work. *Nordic journal of vocational education and training*, 9(1), s. 89-110.

VET Teachers' Continuing Professional Development for Industry Currency in the Initial Occupations

VETteach 9 June 2021

Based on research by
Per Andersson & Susanne Köpsén

A project investigating Swedish vocational teachers' Continuing Professional Development (CPD), focusing the vocational subject (typically their initial occupation).

A minor topic in an era of major school reforms.

Note: Swedish VET teachers responsible for students' learning, including the workplace-learning parts of VET.

General interest:

The ways Swedish VET teachers (upper secondary level) handle the demand of industry currency when they have left their initial occupation and become teachers. And how this is related to the development of teaching.

- ... I was one day at the hospital a year ago, and I would say that I went from unconscious incompetence to conscious incompetence. I realised how much I did not know. That was just frustrating.

(Nurse and VET teacher)

- Then we have CPD days at school, education and pedagogy and... it is worse with our occupational knowledge, there it is not much CPD.

(Carpenter and VET teacher)

Research questions

1. What are vocational teachers doing to maintain and develop their vocational, workplace-related, subject knowledge? I.e. how do they maintain a relevant vocational identity?
2. What does the vocational learning mean for the formation of a vocational teacher identity including both a relevant vocational identity and a teacher identity?

3. What does this formation of identity mean for the development of pedagogy and teaching within vocational education?
4. What conditions are influencing the subject/vocational learning and identity formation among vocational teachers?
5. What differences could be identified between vocational areas and teaching subjects concerning these questions?

Research methods

- Quantitative and qualitative
 - Statistics on participation in a national initiative
 - Data from the Swedish National Agency of Education
 - A survey
 - Distributed by Statistics Sweden, adding registry data
 - 886 responding VET teachers
 - Semi-structured interviews
 - 30 VET teachers from all (12) vocational programmes; upper secondary school and adult education

Dual professionalism and CPD

Dual professionalism (Fejes & Köpsén, 2014):

Competent in teaching *and* to participate in today's occupational practice related to the teaching subject.

CPD:

We include all activities that could enhance the work even if not designed for this, thus not only organised (formal and non-formal) education and training, but also informal learning among VET teachers.

Theoretical frame

A socio-cultural and situated perspective on learning (Lave & Wenger, 1991; Wenger, 1998; Wenger-Trayner et al., 2015):

- The knowledge and skills related to the vocational subjects in school are situated in specific occupational practices
- Boundary processes: boundary crossings between practices, boundary encounters, brokering, boundary objects

A theory concerning adults' participation in education (Cross, 1981):

- Three main types of barriers/drivers:
 - institutional, situational, dispositional

1. What are vocational teachers doing **that** maintain and develop their vocational, workplace-related, subject knowledge? That is, how do they maintain a relevant vocational identity?

The national initiative

- Support for:
 - Two weeks at a workplace, and
 - Different industry arrangements
- 10% of all VET teachers (981) participated during the two first years of the initiative. Among them:
 - 61% in a workplace
 - 22% in some other arrangement
 - 17% recurrent participation, 2–7 times

The survey – pre-defined activities

- **Relations to work-life through:**
 - Work in a workplace or your own business (60%)
 - Study visits to workplaces (86%)
 - Coordination of students' workplace learning (81%)
- **Vocational learning through:**
 - Participation in industry arrangements such as conferences, courses etc. (64%)
 - Studying at university level, in formal adult education etc. (23%)
 - Reading trade-related books, journals or magazines (81%, semester)
- **Development activities:**
 - Projects, e.g. with industry representatives (43%)
 - Pedagogical improvement of cases, models, training stations etc. (68%)

The interviews – learning 'at work'

- Various activities include school–work boundary processes and mean informal CPD opportunities, e.g.
 - Students' workplace learning
 - Skills competitions
 - Study visits
 - Guests from industry
- Networking as activity and pre-condition
- Reading as a way to keep up-to-date to some extent

2. What does the vocational learning mean for the formation of a vocational teacher identity including both a relevant vocational identity and a teacher identity?

3. What does the teachers' formation of identity mean for the development of pedagogy and teaching within vocational education?

CPD activities influencing teaching

- Organized CPD activities:
 - Industry arrangements
 - Conferences
 - Courses
- Informal CPD:
 - Reading
- Input useful in teaching:
 - New knowledge
 - Materials

Informal networking influencing teaching

- Teachers are developing industry networks through external activities, such as:
 - Skills competitions for students
 - Work with students' workplace learning
- Input useful in teaching:
 - New knowledge and ideas
 - Involving 'experts' from the network in teaching
 - New opportunities for external activities such as study visits

Developing teaching through external ordering

- Realistic tasks included in teaching:
 - In-school production of goods
 - Re-construction of work-life practices
 - Arrangements outside school
- Influence:
 - Development of teaching
 - But also enhancing teachers' professional development

Example: External ordering in CNC machinist training

- ... it is something different than the common tasks they do in the courses [...] To take on such real work or what you could say, external orderings, [...] the pupils do not always manage to finalize these tasks, so they need... That's why some [teachers] avoid such things. But I think it is very good, that you take such orders, and then you finalize them yourself, as a teacher [...] Then I do those things myself, and that gives me this ... what I need. I get that... keep my skills and so on, when I work and produce pieces...

Professional development and development of teaching

- Professional development in the initial occupation, and
- Development of vocational teaching
 - These are intertwined
 - CPD activities result in development of teaching
 - Development of teaching as a CPD opportunity
- VET teachers' CPD in teaching subjects is integrated with the development of teaching and with the boundary processes and boundary crossings included in teachers' daily work

4. What conditions are influencing the subject/vocational learning and identity formation among vocational teachers?

Situational factors

- The life situation 'outside work'
 - Not so important
 - A (compared to other teachers) rather high degree of separation between work and life outside work
 - 'Extra' work could be a way to earn some extra money

Dispositional factors

- Personal interest, motivation
 - Important for initiatives
 - Influence activities outside working hours
 - Networking with friends/colleagues

Institutional factors

- Support from school
 - Often lacking
 - But important
 - Organising to use the potential of learning from daily work
 - Those with weaker dispositional drivers depend on the institution

Institutional factors

- Employers and working life
 - Important for boundary processes
 - Differences depending on type of municipality
 - Stronger/weaker industrial networks among teachers
 - Varying access to workplaces

5. What differences could be identified between vocational areas and teaching subjects?

Vocational areas
Care
Construction
Practical-aesthetical
Service
Technology
Vehicles

The survey: Distribution of female and male teachers across the six different vocational areas

Vocational area	Female	Male	N
Care	87%	13%	151
Construction	7%	93%	98
Practical-aesthetical	75%	25%	193
Service	68%	32%	159
Technology	10%	90%	153
Vehicles	-	100%	87

The survey data include information on vocational area for 818 of 886 teachers. A small number reported teaching in more than one area, which means that the total number of respondents represented in the table is 841.

Gender-related vocational differences

- No significant differences (in the survey findings) between vocational areas, but:
- The distribution of female/male VET teachers between vocational areas reflects a segregated labour market
- Typically higher educational levels among teachers in 'female-dominated' vocations
- Female VET teachers participate in CPD activities to a higher degree
- And perceive a higher value created from these activities

Discussion

- How could VET teachers' work be better organised for learning at work?
- What are the responsibilities of school and of industry? And of the individual teacher?
- What are the influences on the continuing professional development of VET teachers, from the intersecting variation between vocational areas concerning:
 - Gender distribution?
 - Educational backgrounds of teachers?
- How is an ideal VET teacher identity combining being a skilled teacher *and* a skilled 'craftsman'?

Articles

- Andersson, P. & Köpsén, S. (2015) Continuing professional development of vocational teachers: participation in a Swedish national initiative. *Empirical Research in Vocational Education and Training*, 7 (7), 1-20, doi. 10.1186/s40461-015-0019-3
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Thank you!

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