

TTnet thematic workshop

Results of the TTnet project on:

“Professionalisation of VET teachers for the future - PROFF”

(May 2002 – May 2003)

Session 3: Draft Background paper

"In-depth analysis of case studies" (Pia Cort, TTnet Denmark)

Themes:

- 1. Pedagogical update**
- 2. Vocational update**

In the following, the ten case studies collected in connection with the TT-Net Proff project will be analysed within the themes of “pedagogical” and “vocational” update of teacher competences.

Before going into the analysis, it is, however, necessary to clarify exactly what is meant by “pedagogical update” vs. “vocational update”. Taking the target group “vocational teachers” into consideration it may be difficult to distinguish between the “pedagogical” and “vocational” update of their competences. What is the “vocational update” of a teacher’s competences if not a “pedagogical update”? However, vocational teachers are very often to bridge two different professions: the teaching profession and a skilled occupation. So it may still prove valuable to make the following distinction: an update of the teachers’ vocational skills i.e. the competences they have acquired as skilled workers or professionals within a specific trade or sector. And an update of their pedagogical/didactical qualifications i.e. the competences they need to perform as teachers i.e. the competences in use in the interaction between teacher-students-subject matter-learning environment.

So with this distinction in mind, the project co-ordinators set out to classify¹ and analyse the cases, and it still proved difficult to maintain the distinction as many training activities naturally include both elements and actually strive for making the vocational-pedagogical competence dimensions interact. This is probably one of the distinctive features of the vocational teacher role that their competences are partly embedded in working life and thereby in a practice which continues to develop and renew itself - outside the world of the school. It is therefore important to keep the teachers up-to-date on both pedagogical and vocational matters, and to bridge the world of work and the world of school so that the teachers are able to ensure that the students acquire up-to-date vocational skills in demand at the labour market.

In the following, we have, nevertheless, chosen to treat the themes of vocational and pedagogical update separately. This has been done primarily for the sake of analysis. However, as there are many overlaps between the two themes, the theme of “pedagogical update” has been dealt with more extensively.

1. Pedagogical update

1.1. Goals

1.1.1. Target groups

The cases to be collected in this project were to focus primarily on teachers. However, by *not* defining the concepts of teachers and trainers in the first phases of the project, the case studies happened to reflect different national perspectives on and definitions of teachers. So the cases comprise other target groups than teachers (defined as persons teaching at a vocational school and within the context of the formal VET system). Hereby one of the transnational trends in the training activities accidentally stood out: many of the training activities comprehend different target groups both different groups of personnel at vocational schools and in private companies and public organisations. This is actually also the case when it comes to the pedagogical update of competences.

In regard to the “pedagogical update”, five of the training activities cover different target groups:

- educational assistants, trainers, coaches and teachers (NL);
- teachers and school staff (PT);
- teachers, workplace instructors and management (FIN);
- teachers and HRD personnel from enterprises and organisations which are part of the schools’ network (FIN);
- teachers and middle management (DK).

The underlying logic is that organisational changes require efforts at more than one level in order to take effect and that an understanding of other functions in the organisations is essential in the implementation of changes. In the Danish case “Reform Competence Project”, there is a clear expectation that changes will be easier to implement if all groups of personnel (who have a stake in the changes) are involved. The background for this project is a primarily pedagogical reform of the Danish VET system, and an experience from the first years of implementation that middle management may act as a barrier for the reform implementation.

(¹) See appendices A and B.

In two of the Finnish cases, a twinning arrangement between workplace instructors and teachers has been set up in order to ensure the exchange of experiences. So here the interaction between a pedagogical and a vocational update is established by using the strengths of different actors in the VET system. The teachers add to their vocational skills and the workplace instructors to their pedagogical skills.

So a fruitful synergy is created by involving different actors in the training activities.

1.1.2. Themes/background

The background for most of these training activities is reforms of VET systems or other major legislative or labour market changes. One might say that the training activities are answers to specific problems. The reform of a VET system may create changes in the teacher profiles and hereby pushes for new training activities whereby the teachers can acquire these new competences. E.g. in Denmark, Finland and Norway, the background for the “Reform Competence Project”, “Developing on-the-job-learning and vocational skills”, “Vocational Pedagogic in Enterprises” is major reforms of the VET system which has radically changed the demands to the teacher/trainer competences. In the case of Norway, a new structure for the initial VET programmes has been introduced. The trainees are now to spend two years at school followed by two years of apprenticeship. The latter has accentuated the need for a quality assurance of the training places and of the pedagogical skills of the workplace instructors/in-company trainers.

1.1.3. Aim

As can be seen from the above, the aim of these case studies is very often to qualify the teachers to meet the new skills requirements set off by VET reforms. This may be in regard to educational planning, curriculum developments, and the implementation of new elements into the VET system. That is for example common for the Finnish cases that aim at improving the interaction between school and working life. This is very closely connected with the Finnish VET reform and its increased focus on on-the-job learning i.e. inclusion of six months of on-the-job learning and skills demonstrations in the VET programmes. The Finnish VET programmes have up until now been school-based and therefore a need for bringing the VET programmes closer to working life has arisen. The Finnish cases and their strong focus on familiarising teachers and students with working life bring forward the very “trivial” fact that “innovation” depends on the context. In dual training systems, interaction is integrated in the VET programmes and although this interaction may prove more or less successful, it is not regarded as an “innovative” feature. In this respect, there is no doubt that the countries can learn from each other.

1.2. Competencies developed

1.2.1. Knowledge/skills

Most of the training activities provide the participants with factual knowledge on developments in the VET system and of VET reforms and their consequences for the actors. Being focused on “pedagogy”, the training also provides the participants with knowledge on

- new educational/pedagogical methods and theories;
- the integration of ICT in teaching (DK).

As to the pedagogical skills there are some clear transnational trends to be detected. In many of the training activities, focus is on qualifying teachers for more “student-oriented” approaches i.e.:

- coaching,
- guiding,
- supervising,
- tutoring.

There is clearly a change in the teacher role which is brought about by a stronger focus on learning, on the students and their individual learning styles, and by the greater flexibility of the VET brought about by modularisation and increased possibilities of credit transfer/recognition of prior learning. This necessitates a need for more individual guidance of the students and the ability of the teachers to assess the strengths and weaknesses of their students and on this basis guide them through VET.

Another skill, which is in focus in these cases, is the ability to co-operate with other teachers in the planning and implementation of the teaching. The teachers are expected to co-operate and create synergy between different subjects in thematic/interdisciplinary teaching.

One case stands out compared to the other cases and that is the Portuguese case with its focus on “pedagogy of documentation”. The aim of this training activity is to qualify teachers to work as “information guides” in school libraries. The Portuguese case provides a good example of the “expansion” of functions that teachers are expected to undertake. The teachers are to learn about documentation methods and information search in order to be able to guide students in their search for information.

However, the training activities do not focus solely on the “pedagogical update”. The teacher functions are not isolated but perceived as a whole and therefore the activities also provide the participants with skills that support teachers in other functions e.g. project work and management, administration, research-related activities.

Overall, the cases confirm the trend away from an isolated teacher role to teacher teams and more diverse teacher functions. Teachers are to have a very broad span of skills in order to be able to perform in their profession.

1.2.2. Concepts

The cases represent innovative training activities and thus a common ambition is to develop new and more up-to-date models for the continuing training of vocational teachers. Some of the transnational trends to be pointed to are the use of

- dual training;
- modularisation;
- OJL;
- study circles/experience exchange groups.

These methods are not new, but it is quite obvious that the idea of lifelong learning, the focus on different learning contexts, the interaction between these learning contexts, and team working have had a huge influence on the way that we perceive training and skills development. The interaction between practice and theory is increasingly in focus. The challenge is to create training activities which are close to

the practice of the teachers and which support them in their present – and future – functions but which also challenge their practice. So very often the teachers have to reflect on practice and reflect on how theory and practice might “fertilise” each other.

In the Dutch case, a very good example of the new approaches to training is provided. The training activities are tailor-made to the Institutes of Vocational Training and Adult Education (ROCs) and reflect different contextual factors: a new labour market agreement, the fear of a large exodus of teaching staff at the ROCs, and a need for educational innovation. So in a co-operation among the ROCs, teacher colleges and Fontys a new demand-based training and teaching system has been developed for staff at the ROCs. The system that has been designed provides a four-year route taking into account sub-competences corresponding with the job profiles of the different ROC personnel groups. The model is based on the dual training principle and has an in-built progression, which gives access to further education and to the “ordinary” teacher training programme.

In the Finnish META programme, a new collegial model for pedagogical innovation and development has been established. The training is based on the interaction between different groups and activities i.e. collegial groups established within the same institution, inter-institutional networks built around a certain theme and training camps arranged two to three times per year. And in the Danish EUD-IT, a new programme for a pedagogical driver’s licence integrating both team work and organisational IT development has been developed.

Common for these training activities is the interaction between practice and theory, and that the participants are expected to co-operate and exchange ideas and experiences during the training, and these elements are very often supported by the use of ICT.

1.2.3. Impact

It is difficult to evaluate the impact of the training activities. Some of them are still in their early stages and have not yet been evaluated at a national level. However, it is evident that new learning pathways for teachers and other actors in the VET systems have been created. In the Finnish Tukeva project, 1,500 Finnish teachers have acquired new academic pedagogical skills.

1.3. Modes of delivery

There are very clear transnational trends in the methods by which the teachers and other actors in the VET system are to acquire new pedagogical skills.

1. The training activities are based on bottom-up approaches. The participants are to define their own needs and are able to “colour” the training activities accordingly. So there is no longer a fixed curriculum for the teacher training and it is not based on lectures but rather reflects and interacts with the daily practice of the participants.
2. The training activities are based on co-operation among the participants and the exchange of experience so that different practices found at different vocational schools or in other parts of the VET system are put into perspective and a reflection-on-practice process is set off.
3. All of the training activities are based on the interaction between theory and practice i.e. between on-the-job and off-the-job learning. As already described, the training activities are closely related to the daily practice of the teachers and take point of departure in the functions of the teachers and the other VET actors involved.

4. In most of the cases, ICT is used as a tool to support learning and to facilitate communication between the participants. E-learning is not an activity in itself but is one of many pedagogical tools, which are taken into use in order to create a motivating and inspiring learning context.

1.4. Accreditation

Five of the training activities are formally accredited (Dual Trajecten Bve (NL), Vocational Pedagogic in Enterprises (NO), Continuing Education of Teachers within the scope of school libraries (PT), TUKEVA (FIN), and EUD-IT (DK). However, most of the cases provide possibilities of credit transfer in regard to further or higher studies. So the training activities become part of continuous learning pathways for the teachers. There are so to speak no “dead ends” but instead more flexible and individual learning pathways are made possible.

2. Vocational update

2.1. Goals

2.1.1. Target groups

As already described in the analysis of the “pedagogical update”, the cases represent other VET actors than the teachers. This is also the case of the training activities, which primarily aim at updating vocational skills.

In the Finnish case META, teachers, workplace instructors and management are the target of the training activities. In TELKKA, a sort of twinning arrangement between teachers and workplace instructors is set up in order to create synergy between the two groups. And in the Italian case “Higher education pathway”, focus is solely on executives and managers from public and private vocational centres, employment centres, regional and provincial administration and trade union organisations. The participants are primarily staff at middle management level. And as is the case of the Danish “Reform Competence Project”, the Italian training activity reflects a recognition of the importance of updating the qualifications of middle management to manage teachers’ (human) resources in order to attain the aims of new reforms and legislation. The mode of delivery is actually also common for both cases; they are based on interaction between practice and theory and on experience exchange among the actors.

2.1.2. Themes/background/aim

The need for a vocational update of central actors in the VET system stems from political reforms. In Finland, VET has traditionally been school-based. One of the benefits was believed to be the independence of training from the interests of the employers. However, in the 1990s the questions arose on how VET can function without real contacts with the world of work, and efforts to bring working life and VET closer together were initiated. The two cases (META and TELKKA) reflect these efforts. So the aim of the Finnish cases is to bring working life and VET closer together and improve the co-operation between VET institutions and companies/industry.

In Italy, political efforts to reorganise the VET system can be seen. In the wake of a number of initiatives, reform of compulsory training, development of higher technical training and education courses, reform of the overall VET system, a need for updating the vocational skills of the middle managers has arisen, along with a need for strengthening the inter-institutional networking and co-operation.

2.2. Competencies developed

2.2.1. Knowledge/skills

In the Finnish cases, the actors are to acquire knowledge of working life i.e. new technologies, new skills requirements and working culture so that they on this basis can improve the teaching at school and ensure that the trainees leave the VET system with immediate useful skills. Consequently, the skills to be developed/updated via participation in these training activities are primarily the vocational skills of the teachers. However, as already mentioned the training activities very often update both the vocational, pedagogical and personal skills of the participants. Of personal skills should be mentioned the ability to communicate and co-operate with other professional groups. In the case of TELLKÄ, the participants also develop their pedagogical skills: the workplace instructors have their pedagogical skills updated by co-operating with the teachers and the teachers have their vocational skills updated by co-operating with the instructors.

In the Italian case, focus is primarily to improve the participants' knowledge of other VET institutions. The skills developed/updated via the training are the following:

- the ability to manage relations and partnerships;
- the ability to plan and implement programmes;
- the ability to manage structures and organisational processes;
- the ability to manage human resources;
- the ability to manage financial resources;
- the ability to evaluate results and control the quality of training.

2.2.2. Impact

In the Italian case, a positive impact on intra- and inter-institutional co-operation can be detected. A network-based culture has been developed among the participating training institutes.

In the Finnish cases, the training activities are to improve the overall attractiveness of the VET teacher profession. Whether this objective has been attained or not still needs to be evaluated on a long-term basis. However, the training has contributed to the well-being and motivation of the teachers. A more innovative and agreeable teaching environment has been created at the schools and co-operation with working life has been improved.

2.3. Modes of delivery

2.3.1. Sharing/collaboration

A transnational element to be detected – not only among these three cases – is the focus on improving networking and co-operation between different actors in the VET system. This theme is dealt with separately.

2.3.2. Blended approaches

In all of the cases, different pedagogical approaches to the training of teachers, trainers and management are taken into use. The daily practice of the participants is to interact with theory delivered via class room teaching, seminars, workshops, etc.

2.3.3. *ICT*

ICT is used as a tool in all of the training activities. In META, a web-tool for sharing opinions, ideas, materials and methods has been developed. This web-tool also functions as a discussion forum for the teachers. In the Italian case, distance learning is one of different modes of delivery. And in TELKKÄ, ICT is also used as a tool, although it is not central for the training activity.

2.3.4. *Top-down/bottom-up*

As mentioned under the theme of “pedagogical update”, the participants are to actively define their own training and adapt it to their own and the institution’s needs. In the Italian case, the participants formulate and work with their own project ideas. And in TELKKÄ, the teachers map the goals for their training. So again clear transnational trends towards tailor-made and participant-centred training activities are detected.

2.4. Accreditation

2.4.1. *Incentives*

In both the Finnish cases, there is a strong focus on improving the personal well-being of the teachers and hereby also improve the teacher performance and the overall attractiveness of the profession.

2.4.2. *Formal/non-formal*

All three training activities are formally accredited and provide access to further studies via transfer of credit.

Pedagogical Update – Appendix 1 A

Case	Dual Trajecten Bve (NL)	Vocational pedagogic in enterprises (N)	Continuing education of teachers within the scope of school libraries (PT)	META (FIN)²
<p>Goals</p> <p>Target groups</p> <p>Themes</p> <p>Aim</p>	<ul style="list-style-type: none"> - Educational assistants - trainers - coaches - teachers <p>Reform of VET 97/98 New teacher training programme in demand from Institutes of Vocational Training and Adult Education (ROCs) New Labour Agreement. Early retirement Need for educational innovation.</p> <p>The aim is to develop a new demand-based training and teaching system with the design of a four year route taking into account sub-competencies corresponding with the job profiles of the different functions in the ROCs (cf. target group).</p>	<p>Trainers in enterprises and companies</p> <p>With Reform 84 the Norwegian VET system was reformed introducing a 2 – 2 model i.e. two years of school-based training and two years of in-company training. This meant that companies would have more formalised responsibilities and obligations for the training of trainees in their last two years of VET.</p> <p>The aim of the programme is to develop the pedagogical knowledge, awareness and competences of trainers.</p>	<p>Teachers School staff (management and administration)</p> <p>Policy initiative to encourage reading habits and practices in the Portuguese population. School libraries. New ICT. The schools as open learning centres. “Teaching to learn”</p> <p>To train teachers as “information guides” in school libraries. To train teachers for the “pedagogy of documentation”</p>	<ul style="list-style-type: none"> - Teachers - instructors - management <p>Reform of VET system Competition Team work Attractive working environment</p> <ul style="list-style-type: none"> - to raise the quality of learning, teaching and management via long-term collegiality - to create a model of collegial work in regard to development of pedagogy <p>Other themes of the networks in regard to pedagogy:</p> <ul style="list-style-type: none"> - web-based pedagogy - curricular development - learning methods - pedagogical leadership - special needs education - general subjects
Competencies developed				

² Main aspect of META is the idea of collegiality and working together to improve both the pedagogical methods and ties to working life.

Case	Dual Trajecten Bve (NL)	Vocational pedagogic in enterprises (N)	Continuing education of teachers within the scope of school libraries (PT)	META (FIN) ²
<p>Knowledge</p> <p>Skills</p>	<p>Knowledge of educational developments and reform.</p> <p>Different competences acc. to target group:</p> <p>Educational ass.:</p> <ul style="list-style-type: none"> - educational developments - coaching and instruction - management of the learning environment - general professional competencies <p>Trainer</p> <ul style="list-style-type: none"> - educational developments and reform 1 - instruction and coaching - management of learning processes - general professional competencies 2 - vocational competencies <p>Coach</p> <ul style="list-style-type: none"> - educational developments and reform 2 - coaching and tutoring - communication and leadership - development of competencies - assessment and work-based coaching <p>Teacher</p> <ul style="list-style-type: none"> - developing training and teaching - management and leadership - supervising in educational environments - vocational pedagogic - vocational competencies 	<p>Knowledge of the national education system i.e. goals, content, structure, regulations.</p> <ul style="list-style-type: none"> - the ability to carry out formal and administrative tasks in relation to trainees - the ability to create a stimulating learning climate - the ability to define responsibilities and organise tasks of those who shall plan and support the trainee - to develop a programme of the work and the learning processes of the trainee - to collect and develop learning materials - to instruct - to counsel - to evaluate and give feedback - to develop and arrange the final test to obtain the craft/journeyman's certificate 	<p>Knowledge of project work and of documentation.</p> <ul style="list-style-type: none"> - the ability to manage school library projects - the ability to work in teams - the ability to plan and structure the learning processes of the students using the school libraries 	<p>Knowledge on new approaches to teaching</p> <ul style="list-style-type: none"> - ability to develop and innovate teaching together with other teachers - ability to initiate development activities - ability to take active part in processes of change

Case	Dual Trajecten Bve (NL)	Vocational pedagogic in enterprises (N)	Continuing education of teachers within the scope of school libraries (PT)	META (FIN)²
Concepts	A dual training programme OJL and competencebased	A modularised training programme.	Study circles as CVT	Collegial model for innovation and development
Impact/outcome	Qualifying staff at the ROCs Creating new entry routes into the teacher training programme Collaboration between ROCs, teacher training colleges and Fontys	Qualifying trainers for the “pedagogical” aspects of training of trainees	Development of thematic dossier, pedagogical kits and brochures.	Improving the attractiveness of the VET programmes in Finland. Improving the attractiveness of the VET teacher profession. Creating an innovative and agreeable teaching environment at the schools.
Modes of delivery				
Sharing/ collaboration	Collaboration between 13 different ROCs, teacher training colleges and Fontys. Within the programme, collaboration between the participants by setting up exchange groups and group work.	The programme is based on adult education principles i.e. experiential learning, integration of theory/practice, student-orientation, collaborative learning and self-studies. Collaborative learning: the students work together during the organised programme and in projects between the learning sessions.	The teachers formed study circles and worked together developing the school libraries and the skills necessary to turn them into open resource centres.	The theme of sharing is predominant in the META project. The teachers are to form collegial groups and become part of wider networks. The aim of the teams is to support the teachers in developing and renewing their teaching.
On-the-job/off-the-job	Dual training at four levels.	The programme is based on the dual principle. The students have to do homework i.e. specific tasks related to the functions in the companies/enterprises.	On-the-job development projects.	The project is closely related to the daily practice of the teachers. The teachers are actively defining the training scheme and it is closely related to their own daily practice.
Blended approach			The training was carried out as a mix between theory, theory/practice interaction, debates and conferences.	Yes
ICT		Yes, ICT is used as part of the programme. Class-fronter as a meeting place.	?	A web-tool for sharing opinions, ideas, materials and methods has been developed. This web-tool also functions as a discussion forum for the teachers.
Top-down/bottom-up	Bottom-up. “learning by producing” meaning that the participants have to “colour” their own training for a great part.	The courses are adapted to the needs of the participants.	Bottom-up. The teachers set their own goals and worked as a team to accomplish these. These goals were close to practice and where defined within the context of their professional activities.	Bottom-up approach. The teachers define their own needs and enter the CVT voluntarily.

Case	Dual Trajecten Bve (NL)	Vocational pedagogic in enterprises (N)	Continuing education of teachers within the scope of school libraries (PT)	META (FIN)²
Accreditation Incentives Formal/non-formal	Formally certified for each level. Gives access to further education + regular teacher training via the possibility of credit transfer	<ul style="list-style-type: none"> - Personal interest - Formal competence - better background for job performance 15 ECTS.	Career advancement. Formal accreditation by the Scientific and Pedagogical Council of Continuing Education.	<ul style="list-style-type: none"> - improved co-operation between teachers - improved personal well-being The co-ordinators will have their training accredited at University level.

Pedagogical Update – Appendix 2 A

Case	TUKEVA (FIN)	Developing on-the-job learning & voc. Skills (FIN) ³	Reform competence project (DK)	EUD-IT (DK)
Goals				
Target groups	Vocational teachers at Vocational Adult Education Centres, HR people from enterprises and organisations which are part of the networks of the vocational adult education centres	Vocational teachers from South-Carelia Vocational Institute	Vocational teachers and middle management	Vocational teachers
Themes	<ul style="list-style-type: none"> - Competence development at VAE centres - professionalisation via academic degrees - networks between educational institutions and working life 	<ul style="list-style-type: none"> Reform of VET Bring working life and VET closer together Introduction of skills demonstrations in VET 	<ul style="list-style-type: none"> Reform Contact teacher scheme Team work HRM Modularisation 	<ul style="list-style-type: none"> New IT strategy for the entire Danish education system. The aim is to upgrade the IT competences of teachers and managers as part of a spearhead strategy. Focus is on the pedagogical/educational aspect of IT usage and for the teachers to learn how to integrate IT in teaching – as a natural part.

³ This provision also includes an element of vocational update of the teacher skills insofar that the teachers go through a two-month on-the-job learning period. However, the main aspect is to develop methods to include skills demonstrations in VET and models for assessment and quality control.

Case	TUKEVA (FIN)	Developing on-the-job learning & voc. Skills (FIN) ³	Reform competence project (DK)	EUD-IT (DK)
Aim	<ul style="list-style-type: none"> - to raise the level of teacher competences by creating access to academic degrees - to increase the knowledge and skills of personnel within different kinds of educational institutions providing vocational training - to develop models for continuing vocational teacher training i.e. new methods and content, new modes of delivery, new materials, etc. - to analyse teacher roles and teacher functions - to improve the co-operation between educational institutions and working life 	<ul style="list-style-type: none"> - to provide teachers with skills to plan and implement on-the-job learning and skills demonstrations as well as assessment/evaluation and quality control - to familiarise teachers with the legislation and ideology of on-the-job learning and skills demonstrations as well as pedagogy and teaching methods - to enhance co-operation between work place and institutions - to familiarise teachers with practices in the businesses/work places 	To qualify the teachers to deal with Reform 2000 and translate the intentions of the reform into practice	<p>The aim of EUD-IT is to quality the VET teachers in the use of IT-tools within the following areas:</p> <ul style="list-style-type: none"> - educational planning - development of teaching materials - using electronic media in teaching - development of flexible and individualised learning activities - co-operation and team work in regard to IT
Competencies developed	Knowledge on new pedagogical methods and theory	Knowledge on new legislation and regulations	Knowledge of the Reform and of HRD	Knowledge of how to integrate IT in everyday teaching
Knowledge	<ul style="list-style-type: none"> - ability to plan, implement and evaluate teaching - ability to initiate and carry out development projects - ability to develop teaching - ability to use new methods in teaching 	<ul style="list-style-type: none"> - ability to plan skills demonstrations - ability to assess skills demonstrations - ability to cooperate with work places - ability to develop tools and materials for OJL/skills demonstrations 	<p>Teachers:</p> <ul style="list-style-type: none"> - ability to guide the students - ability to use the electronic education plan - ability to reflect on own practice - ability to change own practice - ability to differentiate according to the needs of the individual student - ability to work in teams <p>Middle Management</p> <ul style="list-style-type: none"> - ability to motivate teachers - ability to plan teaching according to the intentions of Reform 2000 - ability to identify competence needs of teachers - ability to initiate competence development of teachers 	<ul style="list-style-type: none"> - IT skills - Educational skills with a specific view to integrating IT as a natural element of everyday teaching - Ability to co-operate in teams
Skills				
Concepts	New models for continuing teacher training developed	To develop models for skills assessment		A pedagogical driver's licence and a EUD-IT coach course

Case	TUKEVA (FIN)	Developing on-the-job learning & voc. Skills (FIN) ³	Reform competence project (DK)	EUD-IT (DK)
Impact/outcome	New academic skills for 1,500 teachers A new system for upgrading the skills of vocational teachers	Integration of skills demonstrations in all VET programmes in Finland (2006)	Realisation of Reform 2000	Upgrading the overall IT skills of vocational teachers Qualifying the teachers for working in teams and hereby ensuring the dissemination of IT-knowledge within the institution.
Modes of delivery				
Sharing/collaboration	Collaboration between educational institutions and working life	Networking is an important element in this project. The teachers are to cooperate with work place instructors.	Teamworking is an important part of this project	Working in teams is an important part of this provision. To complete a module an assignment has to be completed and this assignment is organised as project work.
On-the-job/off-the-job	Dual training principle + academic studies.	The training takes place both on-the-job and off-the-job. The teachers have a two-month on-the-job training period.	The project takes place as both on-the-job and off-the-job learning/education. There is a strong element of action learning where the teachers are responsible for the activities and for translating theory into practice. This is combined with seminars, conferences and experience exchange groups/meetings.	The teachers take point of departure in their daily practice and develop materials and websites which are relevant to use in their teaching/at their institution
Blended approach	New blended learning models have been developed			Yes – a mix of class room teaching, self-studies, teamwork, individual exercises and distance learning.
ICT	A net-environment dedicated to scientific and applied research has been develop (Metodix)	?		An EUD-IT platform has been developed to which the participants have access.
Top-down/bottom-up	The project is the result of co-operation between universities, polytechnics, vocational teacher education colleges, educational authorities and adult education centres.	The provision is based on a bottom-up approach in which the teachers develop the tools and methods to be used when integrating skills demonstrations in VET.	The overall framework has been laid down by the Ministry of Education in co-operation with the Danish Institute for Educational Training of Vocational Teachers. Regionally a number of projects have been initiated. These projects are based on a bottom-up approach involving teachers and middle management directly in the competence development activities	The participants can choose between different modules and can hereby adapt the training to their needs. 13 modules are available.
Accreditation				

Case	TUKEVA (FIN)	Developing on-the-job learning & voc. Skills (FIN) ³	Reform competence project (DK)	EUD-IT (DK)
Incentives Formal/non-formal	<ul style="list-style-type: none"> - higher salaries - better positions - improved self-confidence Formally recognised by awarding of a degree. Pedagogical qualification (35 ECTS)	Credits can be transferred to a post-graduate degree. 22.5 ECTS. A certificate is issued. Discussion is going on whether the training should be formalised into a diploma.	Non-formal	A “push” from their students who are often better IT-skilled than their teachers. An EUD-IT driver’s licence is issued at completion of the course.

Case	Higher education pathway for vocational training and labour policy management (IT)	META (FIN) ⁴	TELKKÄ (FIN)
<p>Knowledge</p> <p>Skills</p> <p>Concepts</p> <p>Impact/outcome</p>	<p>Knowledge of other institutions</p> <ul style="list-style-type: none"> - management of relations and partnerships - planning and programming - managing structures and organisational processes - HRM - Managing economic and financial resources - Evaluating results and controlling quality <p>Development of network based culture among middle management in training institutes.</p>	<p>Knowledge of working life and the needs of the employers/business/industry</p> <ul style="list-style-type: none"> - ability to co-operate with working life - ability to integrate working life qualification needs in teaching <p>Collegial model for innovation and development</p> <p>the attractiveness of the VET programmes in Finland.</p> <p>Improving the attractiveness of the VET teacher profession.</p> <p>Creating an innovative and agreeable teaching environment at the schools.</p> <p>Improving co-operation with working life.</p>	<p>Knowledge of working life i.e. new technologies, new skills requirements and working culture</p> <ul style="list-style-type: none"> - vocational skills (update teachers' working life skills) - pedagogical skills - inter-personal <p>An OJL model: to develop OJL/OJT pedagogy⁶. Linking teachers and workplace instructors. Motivating teachers Professional well-being Greater integration between working life and school Creating personal links between school and work.</p>
<p>Modes of delivery</p> <p>Sharing/collaboration</p> <p>Blended approach</p> <p>On-the-job/off-the-job</p> <p>ICT</p>	<p>Building networks between different educational institutions is central to this case. The participants come from different institutions and have different functions. Therefore an important aspect is for them to share their experiences and learn from each other.</p> <p>In this case various modes of delivery are used: self-studies, lab activities, distance learning, seminars, workshops, evaluation. OJL.</p> <p>The participants are to formulate and work with their own project ideas</p> <p>Distance learning</p>	<p>The theme of sharing is predominant in the META project. The teachers are to form collegial groups and become part of wider networks. The aim of the teams is to support the teachers in developing and renewing their teaching.</p> <p>The project is closely related to the daily practice of the teachers. The teachers are actively defining the training scheme and it is closely related to their own daily practice.</p> <p>Yes</p> <p>A web-tool for sharing opinions, ideas, materials and methods has been developed. This web-tool also functions as a discussion forum for the teachers.</p>	<p>Collaboration between teachers and work place instructors</p> <p>Experience exchange</p> <p>Double outcome: pedagogical update of instructors and vocational update of teachers.</p> <p>A model for OJL is developed in the project in which distance work, seminars and OJL is mixed. Not central – but used as a tool.</p>

⁶ In META vocational and pedagogical update are combined. The aim is to update the teachers' vocational skills by OJL/OJT and hereby also improve the qualifications to teach the trainees/students at the vocational college afterwards.

Case	Higher education pathway for vocational training and labour policy management (IT)	META (FIN)⁴	TELKKÄ (FIN)
Top-down/bottom-up	Adapted to local needs.	Bottom-up approach. The teachers define their own needs and enter the CVT voluntarily.	The teachers map their goals for the training and form teams with instructors
Accreditation Incentives Formal/non-formal	The course opens up for further studies at the university. The training course ends with a project examination and a certificate is issued by the Regional Authorities, the University and ISFOL. A certificate is issued and it is possible to transfer credits to further education programmes.	- improved co-operation between teachers - improved personal well-being The co-ordinators will have their training accredited at University level.	The teachers perform better in their job A certificate is issued by the Training Consortium of Central Uusimaa