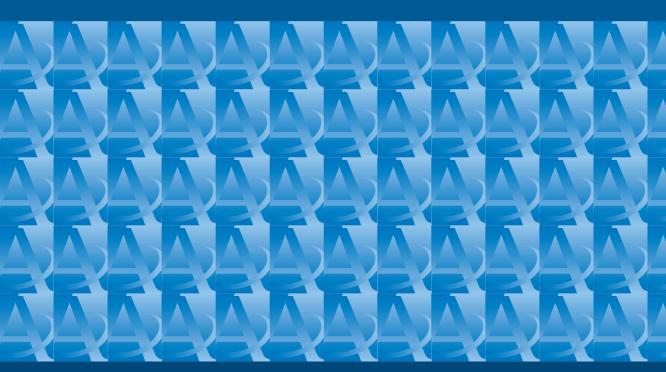
Pirkko Anttila Päivi Kukkonen Petri Lempinen Carina Nordman-Byskata Keijo Pesonen Soili Tuomainen Risto Hietala Anu Räisänen



WE HAVE EVIDENCE!

How vocational skills demonstrations have been implemented in practice

Summary



Publications of the Finnish Education Evaluation Council 48

We have evidence!

How vocational skills demonstrations have been implemented in practice

Summary

Pirkko Anttila Päivi Kukkonen Petri Lempinen Carina Nordman-Byskata Keijo Pesonen Soili Tuomainen Risto Hietala Anu Räisänen



THIS PUBLICATION

CAN BE OBTAINED FROM:

The Finnish Education Evaluation Council P.O. Box 35

FI-40014 University of Jyväskylä, Finland

Phone +358 14 260 3220 Fax +358 14 260 3241

E-mail: ier-customerservices@jyu.fi

www.eved.fi

Publisher: The Finnish Education Evaluation Council, Jyväskylä 2010

© The Finnish Education Evaluation Council and authors

Translation: Tuija Modinos, Donald Adamson Cover and graphic design: Martti Minkkinen

Layout: Kaija Mannström

ISSN 1795-0155 (printed version) ISSN 1795-0163 (pdf)

ISBN 978-951-39-3903-8 (printed version) ISBN 978-951-39-3904-5 (pdf)

Printed by University Printing House Jyväskylä 2010

To the reader

This report is a summary of an evaluation which assessed the implementation of vocational skills demonstrations; more specifically, it evaluated the implementation of all vocational skills demonstrations introduced into vocational basic education in 2006.¹

The evaluation focused on vocational skills demonstrations in vocational basic education. Thus, the objects of the evaluation included the vocational education providers and institutions, together with the qualifications and fields of study offered by these institutions. The contents, which were framed in accordance with a commission from the Ministry of Education (10/521/2008), covered the following aspects:

- the applicability of the system of vocational skills demonstrations in practice, and in particular the planning, execution and evaluation of the vocational skills demonstrations in collaboration with working life;
- the achievement of the goals set for the vocational skills demonstrations;
- the cost effects of the vocational skills demonstrations;
- the administrative effects of the vocational skills demonstrations, including requests for re-assessment.

¹ Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. 2010. NÄYTTÖÄ ON! Ammattiosaamisen näyttöjen toteutuminen käytännössä. Koulutuksen arviointineuvoston julkaisuja 45. Jyväskylä.

The evaluation was organized through a network of evaluation experts during 2008–2009. The data were collected from the education providers and also from qualification groups. In addition, the evaluation made use of some other data. The assessment was designed as a development-oriented evaluation, and it was criteria based.

This report discusses and summarizes the collection of the evaluation data. It presents the analysis and results for each object of evaluation, and highlights those areas which, on the basis of the assessment, require further development.





The collection of the data and the analysis of the results

- 1. The aim of the evaluation was to assess the system of vocational skills demonstrations; it was intended that the information would support further development of the system and serve the purposes of those working on this development, including education providers, educational institutions and administrative bodies. The evaluation further examined the special characteristics of various qualifications and fields of study. It was also seen as a tool for highlighting good practices, and for determining the factors leading to success or failure.
- 2. The assessment took a development-oriented approach. The evaluation model used was the Common Quality Assurance Framework (CQAF) approved by the European Union. The assessment paid special attention to systematicity among education providers, and to overall management in the selected areas of assessment.
- 3. The assessment encouraged the active participation of education providers, educational institutions, students, and representatives of working life in the planning and execution of the evaluation, and in dialogue and collaboration. The assessment was based on a shared understanding that highlighted the multiplicity of the actors involved.
- 4. The data were collected at various stages from the education providers and from qualification groups. It was intended that all the education providers would be included in the sample. In addition, the qualification-based data were col-



lected as a selective sample, so that within the sample there would be 1–2 qualifications from every educational provider. Furthermore, the bodies responsible for vocational skills demonstrations answered a survey questionnaire aimed at them in particular. Altogether, 93.2% of the education providers returned data (in whole or in part). In addition, some other data were utilized.

- 5. The education providers described their actions related to the vocational skills demonstrations, and produced quantitative data. In addition, the qualification groups and the bodies responsible for vocational skills demonstrations described their own actions. Furthermore, for the purposes of self-evaluation the education providers organized a team of experts from a wide range of sectors. The qualification-based data produced in this way emphasized, in particular, pedagogical questions and the special characteristics of various qualifications and fields of study. The self-evaluation produced information on the areas of strength and the areas requiring further development, in relation also to the purposes of the education providers themselves. In addition, it produced information on good practices. As a further measure, the evaluation group paid six on-site visits to different locations in Finland.
- 6. The national evaluation took the form of an assessment by a network of experts. The external evaluation group included six experts.
- 7. The evaluation data were analysed in two phases. The data produced by the education providers were analysed during the first phase. The overall understanding created in this way was deepened during the second phase through information provided by the qualification-based data and other sources, including interviews and six site visits.
- 8. The assessment was based on predetermined criteria. In addition, the interpretative analysis included a rating (0–195 points) and a personal report from every evaluator. For the purpose of assessing the results of the evaluation, the evaluation group set 57% of the total as the target level, corresponding to a grade of 2.75.
- 9. The assessment of good practices emphasized the following criteria for good practices: they should be creative and innovative; they should be sensible and well-motivated; they should be pedagogically feasible and applicable to working life; they should demonstrate applicability as best practice, and be suitable for distribution as a good practice.



- 10. The evaluation also utilized material collected by the Finnish National Board of Education: records of costs and procedures, follow-up information on learning outcomes, and various other follow-up reports.
- 11. Interviews with authorities were carried out after most of the results had been analysed. The interviewees included experts from the Ministry of Education and the Finnish National Board of Education.
- 12. The interim report on the evaluation was delivered to the Ministry of Education on August 30, 2008.





Results

The education providers were awarded points ranging from 9 to 178, and were then categorized according to the points given (see Figure 1). Figure 1 shows that a significant proportion of the education providers fell into the 81–100 point category. The points indicate considerable differences between the education providers.

In addition to their total point score, the education providers were given a point score in relation to the target level set by the evaluation group (= 3 points, equivalent to grade 2.75).

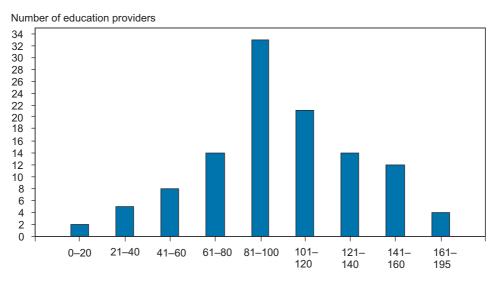


Figure 1. The distribution of points given to the education providers (maximum = 195 points).



- Based on the total points scored, 31.9 % (n = 36) reached the target quality level, while 68.1 % (n = 77) did not reach it.
- Altogether, 15.9% (n = 18) of the education providers exceeded the target level in all the areas examined, and 49.6% (n = 56) exceeded the target level in some of the areas evaluated.
- 34.5 % (n = 39) fell below the target level in all the areas evaluated.
- None of the education providers reached the maximum or fell to the bare minimum of points.

The following list presents in alphabetical order the education providers who, in all the areas examined, exceeded the quality target set by the evaluation group. Most of these education providers are small or medium-sized units, maintained by the private sector. However, this group also includes large education consortiums and large cities. In addition, this group includes units maintained by the Evangelical-Lutheran Church, and folk high schools.

Haaga Institute Foundation (Haaga Instituutti-säätiö)

Helsinki Deaconess Institute Foundation (Helsingin Diakonissalaitoksen säätiö)

Helsinki City Board (Helsingin kaupunginhallitus)

Finnish Association of People with Physical Disabilities (Invalidiliitto)

Orton Foundation (Invalidisäätiö)

Eastern Savo Municipal Federation of Education (Itä-Savon koulutuskunta-yhtymä)

Jyväskylä Municipal Federation of Education (Jyväskylän koulutuskuntayhtymä) Jyväskylä Christian Institute (Jyväskylän kristillinen opisto)

Association of Jyväskylä Institute of Home Economics (Jyväskylän Talouskouluyhdistys ry)

Mercuria Business College (Kauppiaitten Kauppaoppilaitos)

Korpisaari Foundation (Korpisaaren säätiö)

Lahti Deacony Foundation (Lahden Diakoniasäätiö)

Optima

Lahti Region Educational Consortium (Päijät-Hämeen koulutuskonserni)

Rovaniemi Municipal Federation of Education (Rovaniemen koulutuskuntayhtymä)

Foundation of Finnish Business College (Suomen Liikemiesten Kauppaopiston Säätiö)

City of Tampere (Tampereen kaupunki)

Association of Tampere Institute of Home Economics (Tampereen Talouskouluyhdistys ry)



The actions that were managed best by the education providers were related to planning and outlining, and to the practical execution of vocational skills demonstrations (Figure 2). The weaker areas consisted of follow-up and evaluation, and the systematic improvement and development of the vocational skills demonstrations.

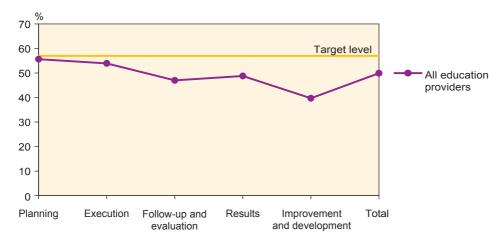


Figure 2. *The education providers' average score per area of action.*

- Large education providers exceeded the target level more often than small
 or medium-sized education providers. In addition, multi-disciplinary units
 exceeded the target level more often than units with a single discipline.
- The top 20% included both small and large education providers, single- and multi-disciplinary units, and various forms of ownership. The bottom 20%, too, included education providers from various backgrounds. All three education providers in the highest category were from the private sector. Ten education providers did not participate in the evaluation at all.
- As regards the vocational skills demonstrations, there is variation in the quality of action of the education providers, ranging from comprehensive and systematic management to delegation of the demonstrations to individual teachers. The planning and practical execution of the vocational skills demonstrations was better than the follow-up and evaluation, improvement and development, or the results obtained. Only some of the education providers have an organized feedback system for students, teachers and workplace instructors, and only some of them collect quantitatively measurable information on the vocational skills demonstrations. In addition, there was a clear need for



the teachers, teams, and units to go further in developing self-evaluation, so that they could learn from others and distribute their own good practices.

- Education providers differ from each other in terms of the techniques for improvement and development which they apply to vocational skills demonstrations. Some education providers are very development-oriented in their approach, whereas others look for national guidance.
- The education providers had differing ideas concerning the results they gained and the impact of the vocational skills demonstrations. In general, the demonstrations were considered successful. In addition, the education providers, the teachers, the students and the working life experts all agreed that vocational skills demonstrations are necessary. They also stressed that on-the-job learning has enhanced the execution and completion of vocational skills demonstrations.
- Education providers using Finnish as their primary language are somewhat better at administering the vocational skills demonstrations than units providing education in Swedish, although the differences are not substantial.
- Multi-disciplinary education providers administer vocational skills demonstrations better than single-disciplinary education providers. Single-disciplinary units are often smaller in size.
- Medium-sized and large education providers are almost equally good in all the areas examined. By contrast, small units are weaker in all the areas. Differences related to size were more discernible in education provided in Swedish.
- The average quality level of the education providers in the province of Southern Finland is better than that of the others, except for education providers in the province of Lapland, who excelled in some individual areas of evaluation. In Oulu province, half of the education providers did not reach the target level in any of the areas examined, and none of the education providers reached the target level in all of the areas examined. The situation was almost the same in Eastern Finland. By contrast, in Southern Finland more than a fifth of the education providers exceeded the target level.
- There are no significant differences between the education providers related to their ownership structure.





Vocational skills demonstrations support an approach which is oriented to working life

Vocational skills demonstrations have enhanced a working-life oriented approach in education. The demonstrations are organized in collaboration with working life in the form of large scale vocational skills demonstrations at actual workplaces. The integration of demonstrations into on-the-job learning has furthered the achievement of this goal. The strength of the demonstrations lies in the opportunities they provide for the students to show their knowledge and skills in actual working-life situations. This enhances their self-confidence, their motivation to study and their working-life skills.

In addition, vocational skills demonstrations have increased the teachers' knowledge concerning working life. This has a significant impact on reaching the goals set for a working-life orientation in vocational education, and for its quality assurance. Furthermore, this system provides working life with opportunities to impact on education and particularly its working-life orientation. Diverse sectors of working life appreciate vocational skills demonstrations.

Vocational skills demonstrations require that education providers should be in continuous contact with working life, and that teachers should be in constant contact with workplaces. For the education providers, the body responsible for vocational skills demonstrations also provides a connection to working life. According to many informants, the vocational advisory councils have functioned more effectively since the introduction of the vocational skills demonstrations. Some good collaboration models have been created, between the bodies responsible for vocational skills demonstrations and the vocational advisory councils.





Vocational skills demonstrations on their own do not support students' integration into working life

Statistical information on the students' employment was not collected during the evaluation, since such information was seen as insufficient for indicating the impact of vocational skills demonstrations on the employment of the students. The data suggest that vocational skills demonstrations develop the students' vocational skills, but that the demonstrations alone do not improve students' integration into working life. According to the education providers, learning on the job is of greater significance to the students' employment than vocational skills demonstrations. However, vocational skills demonstrations are by no means seen as meaningless. Their positive effects on employment manifest themselves particularly as an increase in a working-life perspective, and a new orientation.

In addition to the overall impact mentioned above, certain other factors are recognized, including the labour market situation and regional factors; these are generally considered to have a greater impact on employment than vocational skills demonstrations.





Vocational skills demonstrations standardize student assessment

Vocational skills demonstrations have standardized the assessment of vocational education students, and decreased the differences between different fields of study and qualifications. This development has been supported by the joint national curriculum, by the assessment criteria, by vocational skills demonstrations data, and by the training of teachers and workplace instructors. The new requirements for qualifications will also standardize student assessment in the future.

There are field-specific differences in student assessment related to vocational skills demonstrations, such that students of different disciplines are not on an equal footing in the assessment. There are differences in the standards of the tasks, the environments required, the assessment criteria, and the evaluators' abilities to assess the students' skills. In addition, there are differences between teachers' participation in the student assessment.

According to the teachers, the assessment carried out in the workplaces is unreliable. Most of the problems concern the differences between workplaces, and the tendency of workplace instructors to rate the students' performance too highly.

The students' grading scale was changed retroactively from a five-point scale to a three-point scale during the evaluation project. According to the students, the grading scale is very unfair. Furthermore, it impairs motivation, since it no longer distinguishes between the skills of different students. According to the evalua-



tion team, the change in the grading scale improves the reliability of student assessment, but it does not distinguish between students or their skills.

The standardization of student assessment is a continuous process. From the point of view of assessment and fairness, it is important that there should be pedagogical development, during which workplace instructors and teachers from different fields look critically at their own practices in guiding and assessing. In developing teaching, learning and assessment practices, different fields and qualifications can learn from each other.





Vocational skills demonstrations improve the quality of education

The quality of education involves many factors, and vocational skills demonstrations carried out as a part of student assessment form one these factors. Vocational skills demonstrations alone are not enough for the quality assurance of education. Vocational skills demonstrations enhance students' working-life orientation, but their greatest strength lies in the collaboration between the workplace instructors and the education providers. This does not merely support students' development, but benefits all parties. The quality of education is decreased when there are significant differences between the students' workplaces, and in guidance and assessment.





Vocational skills demonstrations highlight pedagogical challenges

The introduction of vocational skills demonstrations has developed and continues to develop vocational education and training. However, according to the data, there are signs of exhaustion among education providers and qualifications, in the face of continuous development and change. Particular criticism was directed at the bureaucratic and normative nature of vocational skills demonstrations. Instead of this reform, which was seen as technical in nature, many informants would have welcomed changes on the pedagogical side. What they want is a working-life orientation in teaching and learning, innovative models of action, and a change in the pedagogical and managerial culture.





The reform focuses on norms and resources

The introduction of vocational skills demonstrations puts the spotlight on the technical side of official decisions and their implementation. The education providers have put vocational skills demonstrations into practice in accordance with the norms and the schedule defined by the authorities. There is strong commitment to national goals and official guidelines.

Some of the education providers have been successful in organizing vocational skills demonstrations, and related pedagogical development. Not all the education providers have outlined their pedagogical procedures, choosing simply to incorporate the national principles and guidelines within their own curricula and principles, without modification. Some education providers have not issued any such guidelines, in which case the responsibility has been shifted to individual units and teachers.

The education providers are critical of the reform, seeing it as system- and norm-centred. In their view, the biggest problem is the tedious and bureaucratic implementation of vocational skills demonstrations. Some education providers are tired of continuous development and of changes that come on top of each other.

The lack of guidelines, and the problems in translating guidelines into practice suggest inadequacies in pedagogical management. In addition, the education pro-



viders' subject-based curriculum creates a problem, since it does not support the development of working-life oriented skills and competence.

Pedagogical management is a key issue

Weaknesses in pedagogical management (i.e. managerial processes) have resulted in vocational skills demonstrations – and teaching in general – becoming the responsibility of individual teachers or qualification-based teams. Thus, the general standard suffers and vocational skills demonstrations differ according to institutions, teachers and teams.

The greatest obstacle to pedagogical changes lies in the teachers' complex and differing collective bargaining agreements. Further obstacles lie in a resource-centred orientation and in field-specific practices.

Vocational skills demonstrations increase the challenges to pedagogical management. The greatest challenges involve the abandonment of school-like practices, the standardization of vocational skills demonstrations and the strengthening of teacherhood. According to the evaluation team, it is important that an emphasis on standardization should not lead to an increase in norms and bureaucracy.

The work of teachers is changing

The evaluation highlighted the enormous changes taking place in the teachers' profession and work. One might even see in this a paradigm shift in the teaching profession. The work of teachers has changed into working-life oriented guidance, and it now focuses on the guidance of pedagogical processes and overall management. Instead of lessons, the work concentrates on planning, on the guidance and training of workplaces and students, and on setting up conditions for all this to take place. Quality assurance, supervision and student assessment also belong to the teacher's role.

The teachers see a problem in the increased amount of (as they see it) bureaucratic "paperwork". A further practical problem arises from the large number of vocational skills demonstrations modules. In some cases the teachers' workload has increased significantly, due to the fact that the teachers have not abandoned their former methods of assessment.



Different ideas on the role of the administrative bodies

The education providers have organized the administrative board for vocational skills demonstrations according to the guidelines provided by the authorities. Nevertheless, there is great variation in the number of these bodies, and in their structure, tasks and ways of working.

The vocational skills demonstrations body has increased the working-life orientation of the demonstrations. It has a significant role in the quality assurance of student assessment, and in communicating the perceptions of different interest groups on how the demonstrations should be developed. Some of the education providers have not known how to make use of this body, regarding it merely as an administrative entity – as an enforcer or formal procedural body which merely adds to paperwork and bureaucracy.

The evaluation showed that vocational skills demonstrations bodies formed in different ways can succeed in their tasks equally well. Some bodies have succeeded in ensuring field-specific expertise by making use of professional advisory committees when dealing with field- and qualification-specific matters.

Particular problems were mentioned concerning inadequate field- and qualifications-based expertise among the vocational skills demonstrations bodies, and the responsibility of chairpersons in signing certificates. In some large units the lack of expertise has resulted in a lack of trust in the body concerned.

Some of the bodies are firmly controlled by educational institutions. In many cases the chairperson of the body is a representative of the education provider, such as the principal. However in some cases the chairperson is a representative of working life.

Planning vocational skills demonstrations is the teacher's responsibility

Teachers, educational leaders and coordinators are responsible for drawing up the vocational skills demonstrations and getting them approved by the vocational skills demonstrations bodies. Teachers are also responsible for planning demonstrations on behalf of individual students. In addition, the student and the workplace frequently participate in the planning of individual demonstrations.

There is some variation in the practices of finding a workplace for vocational skills demonstrations and getting the demonstrations approved, depending on the field of study and the qualification aimed at. In general, teachers check the



workplace and its suitability as a site for demonstrations before the on-the-job learning period begins, and before the workplace has been approved for these demonstrations. In some cases the students' workplaces are located at a considerable distance, and this incurs travelling expenses for the teachers. In practice, teachers often cannot visit remote sites, which means the students do not have the opportunity to receive the teacher's guidance, and the teacher cannot participate in the assessment of demonstrations or in the evaluation discussion.

Guidance counselling is divided between teachers and workplace instructors

Teachers are responsible for student counselling and preparation, and also for the assessment of their qualifications before the vocational skills demonstrations, even if the workplace instructor's responsibility is highlighted during the on-the-job learning period. Preparations for the actual demonstrations are made carefully, with checks made at the same time to ensure that the student has whatever is required to get through the demonstration. All in all, the students are quite satisfied with the guidance and preparation provided for the demonstrations.

Inadequacies in recognizing and giving credit for students' skills

In their curricula, the education providers have defined principles for recognizing previously acquired skills, and giving credit for such skills.

In general, the students complete all the required modules within their formal education. No practices emerged concerning giving credit for students' summer jobs. Although there are no practical obstacles to giving credit for students' skills, the students in question cannot speed up the completion of their studies. Instead, they end up studying according to the same schedule as all the others.

In relation to vocational skills demonstrations, there are inadequacies in recognizing and giving credit for skills – or else there is no recognition at all. In addition, the need to give credit for previously acquired skills did not emerge in the evaluation.

A shift from modules towards wide-ranging vocational skills demonstrations

Vocational skills demonstrations have been organized as both wide-ranging demonstrations and as modules. The number of modules varies greatly according to the field, the qualification studied for, and the education provider. However, there is an ongoing shift from modules to more comprehensive demonstrations.



Vocational skills demonstrations mount up during the third academic year. At this point there is the possibility of organizing demonstrations that would assess the overall development of vocational skills, and wide-ranging knowledge. Vocational skills demonstrations placed at the end of the education can provide students with an opportunity to show their skills, and to combine elements that have been learnt in various contexts. In addition, this can give a picture of the skills and knowledge acquired during the entire period of education.

Generally speaking, it was considered justified to spread vocational skills demonstrations over several academic years, covering the entire period of education. Nevertheless, arguments were also presented in favour of offering extensive vocational skills demonstrations during the final academic year. Vocational skills demonstrations would then bring different aspects of study together, and give a picture of students' overall vocational skill development. According to some informants, the current demonstrations, spread over the whole period of education, produce less reliable information on students' skills than could be obtained via demonstrations organized towards the end of the studies. Such demonstrations would be closer to the final exams that used to be organized at the end of education.

Demonstrations often take place within the educational institution, not the workplace

Vocational skills demonstrations are organized extensively in working life, and they are integrated with on-the-job learning. However, in some fields and qualifications, it has not been possible for working life to provide demonstrations that would meet the set goals. Instead, education providers have been forced to organize the demonstrations within their educational institutions. The percentage of such demonstrations varies from 0 to 97%, depending on the qualifications aimed at. In some qualifications (aircraft fitting, navigation, sign language) all the demonstrations have been organized within the educational institution In contrast, for example in social fields and health care, almost all the demonstrations have been organized within the workplace.

The extent to which demonstrations are organized in the workplace depends on the field of study and the qualification, the structure of industry in the region, the possibilities for individual workplaces to organize demonstrations, students' personal issues, the stage students have reached in their studies, and the perceptions of the teachers. Many demonstrations in the early stages of education have been organized within the educational institutions. The proportion of demonstrations organized within educational institutions is thought to have increased during the current economic recession.



There is disagreement on the extent to which the vocational skills demonstrations organized within educational institutions meet the requirements of working life. The following views have been expressed:

- vocational skills demonstrations are organized in educational institutions in environments that are similar (or almost similar) to those in actual workplaces;
- demonstrations organized in educational institutions are not equivalent to demonstrations organized in working life;
- the educational institution is often more up-to-date in its equipment and facilities than any workplace.

In organizing demonstrations the focus is shifting toward working life. However, the evaluation team believes that in some cases demonstrations within educational institutions will continue to be justified. In fact, they may enable a more extensive demonstration and assessment of the student's skills and knowledge than any single workplace can offer. Factors such as the time required for doing the demonstration may be taken into account better in the educational institution than in the workplace.

There are nevertheless some problems concerning demonstrations organized in the educational institutions. As an environment, the educational institution may lack some elements typical of a real workplace (for example, customer service and social factors). There is a tendency for some units, fields of study and individual teachers to justify having vocational skills demonstrations within educational institutions, instead of in working life. According to the evaluation team, this runs the risk of demonstrations turning into an institution-centred practice, or else being tied to the culture of the field of study or to the preferences of a single teacher. This is a particular concern in fields of study and qualifications where most of the demonstrations are already organized at the educational institutions. According to the evaluation team, the primary goal in every field of study and qualification should be for demonstrations to be organized at the workplace.

Vocational skills demonstrations as a method of student assessment

Vocational skills demonstrations are a means of student assessment. Some teachers' assessment methods have changed, while some teachers have not given up their old methods of assessment. In the latter case, the demonstrations have meant extra work coming on top of other teaching tasks. This problem has been recognized and teachers have started to question their own practices in this regard.



Taken in conjunction with the foundations laid down in the curriculum, the national vocational skills demonstrations data and the criteria available for demonstrations have created a solid basis for the evaluation of the demonstrations. The national vocational skills demonstrations data and the evaluation criteria have been indispensable at the initial stages. Nevertheless, if applied too rigidly, the guidelines can lead to mechanical execution of the vocational skills demonstrations, and may make it difficult to modify student assessment.

The national vocational skills demonstrations data and evaluation criteria drawn up by the Finnish National Board of Education are widely used and they have been an asset in executing vocational skills demonstrations. However, the national vocational skills demonstrations data and criteria applied to the demonstrations are seen as too demanding, difficult to understand and alien to working life. Furthermore, in some areas the principles drawn up in the curriculum are not considered sufficiently oriented to working life.

There is variation in the extent to which teachers participate in the assessment of the students. In demonstrations organized within the educational institutions the teachers' role is paramount. However, teachers do not always participate in the actual assessment of the demonstrations organized in the workplaces, although they often may participate in prior discussions with the student and the workplace instructor regarding evaluation. In practice this means that the multifaceted nature of evaluation (involving teacher, instructor and student) does not enter into the actual evaluation. It is the nevertheless the teacher who is responsible for the evaluation discussion, for the evaluation summary, and for the grade.

Practical problems weaken the students' legal protection in the evaluation of demonstrations. The teachers have rather limited possibilities for participating in the demonstrations and in the assessment, except when the demonstrations are organized within educational institutions. Conversely, working life experts are not easily available for demonstrations organized within educational institutions. Workplace instructors have limited resources for guiding and assessing students. In practice, it is sometimes difficult to find time for evaluation discussions with all parties present – the student, the teacher and the workplace instructor.

Although the evaluation system is seen as fulfilling its purpose from the students' point of view, the reliability of the assessment has been questioned. Factors that have an impact on the reliability of the evaluation include the assessors' evaluation skills, limitations in the demonstration environment, the standard required in the tasks, and in general, the evaluators' abilities to interpret the evaluation criteria and the student's knowledge. Particular mention was made of the evaluation



ators' weak assessment skills and of their ability to interpret difficult evaluation criteria. Furthermore, unreliability is seen as resulting from instability in the workplace itself, and from teachers' limited resources for participating in the student assessment.

There have been few requests for rectification

The students had made no requests for rectifications, except for individual cases in social fields, health care and sports studies, technical studies, transportation and logistics, hotel and restaurant service, and business and administration. Thus, requests for rectification have not incurred costs, and have had no administrative consequences.

Vocational skills demonstrations with special groups and with students abroad

With immigrants the vocational skills demonstrations are carried out according to the same principles as with students in general. The implementation of vocational skills demonstrations then requires more preparation, more thorough examination of the instructions and tasks, and possibilities for the students to check questions they are uncertain about due to (for example) language problems.

In addition, in the case of students with special needs, demonstrations are mainly organized according to the same principles as for other students. Vocational skills demonstrations for such students are organized in educational institutions in addition to workplaces. Some education providers have channelled vocational skills demonstrations for special-needs students into the educational institutions.

Vocational skills demonstrations organized abroad are extremely rare.

Collaboration poses severe challenges

The organization of vocational skills demonstrations is very discipline- and teacher-centred. There is little collaboration between units, fields of study or qualifications, and not much learning from others.

The problem workplaces face is that the education providers, fields of study, and educational institutions have different practices regarding vocational skills demonstrations. For example, there is no standardization of the forms to be filled in. This is a particular problem in the greater Helsinki area, although work on combining and standardizing different practices has begun. The problem is ag-



gravated by the fact that polytechnics organize their training periods in the same workplaces, and they, too, have different practices.

The evaluation team sees it as important for education providers working in the same field of education to create standardized practices. This challenge applies to the different units of the education providers (the educational institutions), fields of studies and qualifications. From the point of view of working life, this challenge extends also to the polytechnics.

Learning environments enable demonstrations based on the requirements specified

Education providers have been able to meet the challenge of updating learning environments in aspects such as equipment, tools and facilities. The tools, equipment and facilities of the units are considered sufficiently up-to-date for demonstrations to be arranged in educational institutions in ways that meet the requirements of working life. Indeed, in individual cases the educational units' equipment and facilities are even more state-of-the-art than those in working life.

Haphazard allocation of human resources

The staffing required by vocational skills demonstrations is organized according to teaching resources, and the economic resources allocated to teaching. There are great variations in the teaching resources made available for vocational skills demonstrations. The factors entering into the calculation are extremely complex. Some education providers have not allocated extra resources to vocational skills demonstrations.

The demonstrations have to a considerable extent been combined with on-the-job learning. In these cases, demonstrations have been organized by changing the guidance applied to on-the-job learning. In this way it has become possible to make room for the work required by the demonstrations, in such a way that it is the work that has changed – not the resources. Some informants stress that the need for extra staffing is due to the system being in its initial phase. They predict that matters will even out once practices become established.

There are great challenges concerning teachers' working hours and their allocation. According to the qualification groups, demonstrations can succeed only if they are provided with proper resources. According to the evaluation team, simply increasing the available resources is not the answer: the key is to focus current resources differently while the teachers' work is changing. The data



collected indicate that broadly speaking, the demonstrations have not changed teachers' ways of working or their pedagogical practices. Nevertheless, the demonstrations have indeed meant extra work for the teachers.

In addition to changes in the teachers' work, some education providers have hired planners, pedagogical managers and coordinators for the practical organization of vocational skills demonstrations and for the overall development of vocational education. Some have established units to coordinate vocational skills demonstrations, on-the-job learning and collaboration with working life. Education providers have had the resources to develop teachers' and workplace instructors' skills and to invest in basic training for working life. In addition, many education providers have made use of external resources for aspects such as the education of teachers and workplace instructors, and for various developmental projects.

It will be necessary to pay attention to staffing resources in the future. There is an ongoing need for measures such as the orientation and training of workplace instructors, and also for refresher courses for persons who have previously been trained as workplace instructors. The lack of trained workplace instructors is a problem, particularly in smaller workplaces.

Because "none of the old practices have been abandoned" and because vocational skills demonstrations constitute extra work, there has been an increase in the teachers' workload and additional pressure on costs. The evaluation team considers this to be a serious risk, and also a sign of a lack of change in underlying pedagogical structures and cultural factors.

The evaluation team takes the view that the action taken so far can appropriately be described as resource-oriented rather than pedagogy-oriented. According to the evaluation team, this situation is related to the teachers' complex and diverse collective bargaining agreements, and to the multiplicity of practices and techniques used for estimating and calculating resources. In fact, these factors prevent education providers from developing standardized education and pedagogy in different fields. All this means that we cannot change pedagogical culture until teachers' collective bargaining agreements have been developed and standardized. The primary point of departure for changing the teachers' collective bargaining agreements should be the changes and challenges in the teachers' work and working environments.



Cost effects do exist, but the funding is sufficient

Estimating the costs incurred by vocational skills demonstrations is impossible due to the differences in the allocation of resources and inadequacies in the follow-up. According to the education providers, the cost effects are manageable. The cost effects are expected to even out as procedures become established. The cost effects derive mainly from the planning linked to the launching of the system, plus the cost of lessons, administration and development.

Many education providers and qualification groups agree that they have very good economic resources for carrying out vocational skills demonstrations, and that a lack of resources is not an obstacle to carrying out the demonstrations. In spite of this good point of departure, the evaluation highlighted the need to increase the funding of vocational skills demonstrations, and in particular the funding of lessons.

The procedures for planning resources for vocational skills demonstrations and for following up cost effects are disorganized. The goals and means of assessment are lacking, and as a result of this, it is difficult to follow up cost effects and make economic predictions. The allocation of economic resources reflects the managerial and operational culture as a whole.

According to the evaluation team, the problem is not the lack of economic resources, but the management of economic resources. There are significant variations regarding the planning of vocational skills demonstrations, funding teachers' work, following up cost effects and making financial forecasts.

Funding designated for development, distributed through the Finnish National Board of Education, has had a significant impact on the development of vocational skills demonstrations. The Finnish National Board of Education has distributed funding for on-the-job learning and vocational skills demonstrations (1.2 million Euros of discretionary state funding). The problem lies in the allocation of the development funds. Active education providers can be assumed to benefit from this funding, in the sense that the greatest problems related to organizing demonstrations will not surface in the actions of these providers. In addition to the accumulation of designated funding, there is a problem of designated funding which remains unused, and which may even be received and subsequently returned.



Administrative effects are minimal and manageable

The documentation of the evaluations, vocational skills demonstrations, and other paper work have all increased the administrative burden, which applies not just to teachers, but also to educational managers and secretaries. The administrative repercussions result mainly from student assessment documentation and the actions of the vocational skills demonstrations body. As regards the administrative effects, criticism was directed at the bureaucratic nature of the system, the amount of documentation and the rigidity of the decision making. More specifically, teachers criticized the amount of work caused by student assessment, plus the distant nature and formal role of the vocational skills demonstrations body. In a similar vein, the abundance of vocational skills demonstrations modules has increased the amount of documentation work which teachers are obliged to carry out.

Challenges in the assessment of learning outcomes

On the one hand, the nation-wide follow-up evaluation of learning outcomes is considered a positive issue. Informants expressed a wish to expand this evaluation to all basic studies and qualifications. In addition, people appreciate the opportunity to receive comparative material. On the other hand, the system is considered tedious and too extensive in relation to what the learning outcomes actually tell us about the students' skills and knowledge. Critical comments were expressed during the collection of learning outcomes (i.e. during the first and the second academic years). In addition, some informants questioned the follow-up on learning outcomes and the relevance of the results in relation to the needs of working life.

The evaluation highlighted the need to schedule the assessment of learning outcomes towards the end of the education. According to some informants, the national final exams (which were organized in the past) would provide a better yardstick for learning outcomes than the data provided by the vocational skills demonstrations.

The education providers' and the teachers' perception of good grades is supported by the students' grades for the vocational skills demonstrations, as collected by the education providers and the qualification groups. A similar picture emerged from the follow-up information on learning outcomes obtained by the Finnish National Board of Education. The grades fell mainly between good (3-) and excellent (5).



An additional complication in the assessment of learning outcomes lies in the fact that the rating scale has changed to a three-point scale. The rating scale no longer distinguishes between students, producing instead a highly predictable result (most of the students receive grade 2). This is one reason why the currently tedious follow-up system no longer makes sense. Instead, the assessment of learning outcomes should be developed and carried out as an element in field-and qualification-specific overall evaluation.





National guidance

Education providers are satisfied with the national guidance available and the support received through it, in particular in terms of funding. However, the national guidance is also criticized. The guidelines provided by the authorities are considered too administration-centred and normative. Hence, the execution and development of vocational skills demonstrations is seen as bureaucratic, systemoriented, and restrictive in relation to the education providers' own responsibilities and decision making. For example, the detailed nature of the national core curriculum has in some cases forced the education providers and teachers to increase the amount of competence testing and modules involving vocational skills demonstrations.

The education providers identified a failure on a national level, in terms of combining the reformation of the requirements of qualifications with the development of vocational skills demonstrations and with national evaluations. They saw a specific problem in the scheduling of the vocational skills demonstrations reforms. This was perceived as conflicting with the qualification reforms.

The most critical statements were linked, on the one hand, to the over-hasty introduction of vocational skills demonstrations (in a strictly predetermined form, throughout the whole system), and on the other hand, to the stretching out of the reforms over a long period of time. Some education providers would welcome concrete advice, answers and instructions from the Finnish National Board of Education. In particular, they desire clear criteria and material. Some look for new models of action. In addition, informants highlighted the need for support for evaluation, with yardsticks for assessment, auditing and learning from others.





Other factors, too, have an impact on vocational skills demonstrations

The broader strategy for vocational institutions has affected the implementation of vocational skills demonstrations. Mergers between education providers have focused attention on and drawn resources to structural, administrative and financial issues. At the same time, pedagogical and cultural questions have remained in abeyance. Other organizational changes carried out during recent years loom in the background of many mergers. They have consumed staffing resources, particularly with respect to teachers, and have had an impact on the overall mood.

In spite of many changes in the working environment, many education providers, managers and teachers see possibilities in the structural reforms. The creation of new organizations is still under way in many locations; hence, the standardization of practices and plans concerning the organization of administration and teaching is still incomplete.

In addition, one of the problems mentioned is that vocational skills demonstrations and competence tests have not been conceptually or functionally differentiated in working life.





What did we learn?

Vocational skills demonstrations have brought significant changes to vocational education. The changes involve administration, vocational education providers, educational units, working life, and a variety of professional groups.

Vocational skills demonstrations were introduced into various fields of study and qualifications simultaneously. In this respect the process has been carried through fairly successfully. Education providers carry out vocational skills demonstrations according to national principles. However, a problem exists in the great differences between vocational education providers. This puts students on an unequal footing.

Vocational skills demonstrations have significantly enhanced a working-life orientation. Students benefit from such an orientation, since it builds bridges for collaboration and interaction between educational institutions and working life, and also ensures that teachers remain up-to-date in the relevant professional skills.

Vocational skills demonstrations need to take into account field- and profession-specific features. The system must be simplified.

Constructing the new on top of the old is a pedagogical challenge. It leads to a lack of time and resources. The demonstrations are considered over-bureaucratic. The development of education must be grounded on pedagogical reform. The focus of change must be shifted from technical execution to pedagogical management.





Vocational skills demonstrations: suggestions for further development

1 Education providers should take the following action, in respect of the categories below:

Pedagogical management

- develop together with the teachers a uniform pedagogical culture to achieve standardization and improvement in on-the-job learning and vocational skills demonstrations;
- take responsibility for the teachers' and the workplace instructors' skills regarding student assessment and on-the-job learning; this will require adequate orientation and training.

The work of teachers

- include all teachers in planning curricula and vocational skills demonstrations;
- create conditions for continuous interaction between teachers and workplace instructors;
- create conditions for the reform of the work and profession of teachers, so that the requirements of on-the-job learning and assessment are fulfilled; this will require staff training and support for teachers' voluntary development.



The role of workplace instructors

- create extensive and continuous training for workplace instructors;
- use practical methods to develop the expertise of workplace instructors in giving evaluations;
- organize joint training on vocational skills demonstrations and student assessment, with the inclusion of both teachers and workplace instructors;
- make use of good orientation practices that exist in other fields;
- participate in the evaluation of vocational skills demonstrations organized within educational institutions.

The organization of vocational skills demonstrations in practice

- increase wide-ranging vocational skills demonstrations that meet the requirements of working life;
- organize vocational skills demonstrations during on-the-job learning;
- clarify the principles of vocational skills demonstrations organized within educational institutions, and ensure that these demonstrations meet the requirements of working life;
- clarify the concepts, evaluation instructions and criteria of vocational skills demonstrations so that they are easily understood in the workplaces;
- clarify the documentation of vocational skills demonstrations and develop further electronic methods of evaluation;
- guarantee teachers' participation in student guidance and in the assessment of vocational skills demonstrations in remote workplaces.

Student assessment as a whole

- develop vocational skills demonstrations as an element in working-life oriented evaluation:
- develop vocational skills demonstrations as an element in overall student assessment and on-the-job learning;
- develop complementary modules of vocational skills demonstrations as elements in on-the-job learning and in the evaluation of vocational skills demonstrations;
- standardize the principles of student assessment and practices in different fields, qualifications and units, and clarify the process of student assessment in the workplaces;
- outline the principles of student assessment as an element in pedagogical management.



Interaction with workplaces

- combine the interests of workplaces and education providers with those of the workplaces;
- check in advance the conditions of workplaces as environments for vocational skills demonstrations;
- enhance the stability of workplaces and well-functioning partnerships;
- develop vocational skills demonstrations together with workplaces and, at the same time, promote win-win principles;
- through vocational skills demonstrations in workplaces, utilize the possibilities for positive publicity that can support working-life oriented education;
- increase exchanges between experts and working life.

The actions of bodies responsible for vocational skills demonstrations

- clarify and enhance the tasks and functions of bodies responsible for vocational skills demonstrations; also the guidance, follow-up and administrative processes related to the demonstrations that take place through these bodies;
- define the role and tasks of the bodies in question so that they take on more strategic roles/tasks than those prescribed by law; enhance the role of such bodies in pedagogical management;
- supervise how such bodies prepare, act and distribute information on decisions, in such a way that a positive image is created.

Collaboration with other education providers

• create standardized principles for the joint organization of vocational skills demonstration, collaborating with education providers who use the same workplaces.

Economic resources

- clarify the principles for allocating economic resources for vocational skills demonstrations;
- ensure resources for organizing vocational skills demonstrations and for their further development.

The follow-up, evaluation, improvement and development of vocational skills demonstrations

 develop follow-up, feedback and evaluation techniques for vocational skills demonstrations; also systematically monitor and assess their own actions and results;



- define a vision of development and goals for vocational skills demonstrations for coming years;
- create conditions and practices for interaction between educational institutions, fields and assessment bodies, and for learning from others;
- create networks with other education providers and intensify learning from others;
- create practices for continuous improvement and development.

2 Workplaces should:

- enable the organization of vocational skills demonstrations in the workplaces;
- guarantee workplace instructors resources so that they can participate in and commit themselves to the organization of vocational skills demonstrations, to student assessment and to continuous development;
- enable workplace instructors' participation in training;
- make sure that the vocational skills demonstrations assess the skills and knowledge required in working life;
- ensure that student assessment is conducted equitably;
- create opportunities for workplace instructors to learn from good practices in other fields and workplaces.

3 The Ministry of Education should:

- together with interest groups, assess whether the education providers themselves may be authorized to sign the vocational skills demonstrations certificates, rather than the expert body for vocational skills demonstrations:
- consider the effectiveness of the current follow-up system of learning outcomes in a situation in which the student assessment scale has changed to a three-point rating scale; alternative follow-up and assessment methods should be considered.

4 The Finnish National Board of Education should:

- direct resources allocated to teachers' refresher courses, so that the resources support pedagogical management and changes in teacherhood;
- together with interest groups, ensure that qualifications correspond to the skills and knowledge required in working life;



- simplify the vocational skills demonstrations system so that the demonstrations do not overload working life as they do at present; also in such a way that they can generally be carried out in working life;
- clarify and make less rigid the requirements for qualifications, outlining them in such a way that their contents make sense in working life as well as to educators;
- standardize vocational skills demonstrations and competence tests at the basic level.

5 Parties within the labour market should:

 reform vocational teachers' collective bargaining agreements and the related incomes policy system, in such a way that these meet the changes and challenges in the teaching profession, in teachers' work and in their working environment.

6 The Finnish Education Evaluation Council should:

- launch a peer evaluation pilot scheme for vocational skills demonstrations; this can provide those bodies who have so far been less successful in the evaluation with an opportunity to learn from the action of those education providers who have been more successful;
- provide national evaluation projects with resources so that every education provider is assessed by two evaluation experts, thus bringing about pair comparison;
- develop the feedback system of the national evaluation system so that the education providers can have access to the results that concern them. Numerical evaluation needs to be complemented by verbal feedback;
- develop a national audit model for the process of education; this should enable the collection of evaluation information more rapidly and effectively than the current national evaluation system.

7 Different interest groups should, in collaboration:

• work together to create standardized forms and follow-up indicators, and an information system for the vocational skills demonstrations.

BUBLICATIONS OF THE FINNISH EDUCATION EVALUATION COUNCIL

- 1:2004 **Koulutuksen arvioinnin uusi suunta.** Arviointiohjelma 2004–2007. 55 s. 10 e. Myös verkkoversio.
- 2:2004 **Utbildningsutvärderingens nya inriktning.** Utvärderingsprogram för perioden 2004–2007. 57 s. 10 e. Myös verkkoversio.
- 3:2005 **New Directions in Educational Evaluation.** Evaluation Programme 2004–2007. 64 s. 10 e. Myös verkkoversio.
- 4:2005 Ståhle, B.: **Toisen asteen koulu Pohjoismaissa.** Toisen asteen koulujen pohjoismainen vertailu "Pohjoismainen ISUSS-raportti". 143 s. 20 e. Myös verkkoversio.
- 5:2005 Räisänen, A.: **EFQM-arviointimalli ammatillisen koulutuksen järjestäjien arvioinnin tukena.** 72 s. 20 e.
- 6:2005 Lyytinen, H.K. & Räisänen, A. (toim.): Kehittämissuuntaa arvioinnista. 246 s. 25 e.
- 7:2005 Rönnholm, H. & Räisänen, A. (toim.): **Arviointi tukee kehittymistä miten arvioinnin kehittymistä tuetaan?** Koulutuksen järjestäjien tukeminen arviointiin liittyvissä asioissa. 37 s. 15 e. Myös verkkoversio.
- 8:2005 Korkeakoski, E. (toim.): **Koulutuksen perusturva ja oppimisen tuki perusopetuksessa.**Osaraportti 1: Arviointiraportti. 61 s. 12 e. Myös verkkoversio.
- 9:2005 Korkeakoski, E.: **Koulutuksen perusturva ja oppimisen tuki perusopetuksessa.** Osaraportti 2: Tausta ja tulokset. 156 s. 21 e. Myös verkkoversio.
- 10:2005 Korkeakoski, E. (toim.): **Koulutuksen perusturva ja oppimisen tuki perusopetuksessa**. Osaraportti 3: Syventävät artikkelit. 131 s. 20 e. Myös verkkoversio.
- 11:2005 Mehtäläinen, J.: Erityisopetuksen tarve lukiokoulutuksessa. 100 s. 17 e. Myös verkkoversio.
- 12:2005 Knubb-Manninen, G. (red.): **Grundtryggheten och behovet av stöd i skolan.** 60 s. 12 e. Myös verkkoversio.
- 13:2005 Rönnholm, H. & Räisänen, A. (red.): **Utvärdering stödjer utvecklingen hur kan utvärderingens utveckling stödjas?** Stöd till utbildningsanordnarna i frågor som gäller utvärdering. 42 s. 15 e. Myös verkkoversio.
- 14:2006 Räisänen, A. & Rönnholm, H.: **Itsearviointi kouluyhteisöä kehittäväksi.** EFQM-arviointimalli yleissivistävässä koulutuksessa. 79 s. 20 e.
- 15:2006 Raivola, R., Heikkinen, A., Kauppi, A., Nuotio, P., Oulasvirta, L., Rinne, R., Kamppi, P. & Silvennoinen, H.: **Aikuisten opiskelumahdollisuudet ja järjestäjäverkko toisen asteen ammatillisessa koulutuksessa.** 219 s. 24 e. Myös verkkoversio.
- 16:2006 Vaherva, T., Malinen, A., Moisio, A., Raivola, R., Salo, P., Kantasalmi, K., Kamppi, P. & Silvennoinen, H.: **Vapaan sivistystyön oppilaitosrakenne ja palvelukyky.** 207 s. 24 e. Myös verkkoversio.
- 17:2006 Knubb-Manninen, G. (red.): **Vuxenutbildningsfältet**. Utvärdering av fritt bildningsarbete och yrkesinriktad vuxenutbildning. 79 s. 16 e. Myös verkkoversio.
- 18:2006 Silvennoinen, H. (toim.): **Koulutuksen arviointi verkostoituu**. 86 s. 16 e. Myös verkkoversio
- 19:2006 Räisänen, A. & Silvennoinen, H.: **Virtaa vertaisten verkosta.** Ammatillisten erikoisoppilaitosten laadunhallinta. 59 s. 12 e.
- 20:2006 Tynjälä, P., Räisänen, A., Määttä, V., Pesonen, K., Kauppi, A., Lempinen, P., Ede, R., Altonen, M. & Hietala, R.: **Työpaikalla tapahtuva oppiminen ammatillisessa peruskoulutuksessa.** Arviointiraportti. 254 s. 30 e. Myös verkkoversio.
- 21:2006 Räisänen, A. (toim.): **Työpaikalla tapahtuva oppiminen ammatillisessa peruskoulutuksessa.** Tiivistelmä. 39 s. 15 e. Myös verkkoversio.
- 22:2006 Räisänen, A. (red.): **Inlärning på arbetsplatsen inom grundläggande yrkesutbildning.** Sammandrag. 37 s. 15 e. Myös verkkoversio.
- 23:2007 Mäensivu, K., Mäenpää, H., Määttä, M., Volanen, M.V., Knubb-Manninen, G. & Mehtäläinen, J. & Räisänen, A.: Lukiokoulutuksen ja ammatillisen koulutuksen yhteistyö opetuksen järjestämisessä. 156 s. 25 e. Myös verkkoversio.
- 24:2007 Räisänen, A. & Hietala, R. (toim.): **ESR-rahoitus ja työssäoppimisen järjestämine**n. Arviointiraportti. 109 s. 20 e. Myös verkkoversio.
- 25:2007 Vaherva, T., Malinen, A., Moisio, A., Raivola, R., Salo, P., Kuusipalo, P., Silvennoinen, H. & Vaahtera, K.: **Vapaan sivistystyön vaikuttavuus ja suuntaviivaopinnot.** 189 s. 23 e. Myös verkkoversio.
- 26:2007 Raivola, R., Heikkinen, A., Kauppi, A., Nuotio, P., Oulasvirta, L., Rinne, R., Knubb-Manninen, G., Silvennoinen, H. & Vaahtera, K.: **Aikuisten näyttötutkintojärjestelmän toimivuus.** 323 s. 30 e. Myös verkkoversio.

- 27:2007 Räisänen, A. & Hietala, R. (toim.): **Yhteisiin pöytiin.** Ammatillisen koulutuksen aluekehitysvaikutukset. Arviointiraportti. 319 s. 30 e. Myös verkkoversio.
- 28:2007 Räisänen, A. (toim.): **Yhteisiin pöytiin**. Ammatillisen koulutuksen aluekehitysvaikutukset. Tiivistelmä. 36 s. 15 e. Myös verkkoversio.
- 29:2007 Räisänen, A. (red.): **Till gemensamma bord.** Yrkesutbildningens regioneffekter. Sammandrag. 36 s. 15 e. Myös verkkoversio.
- 30:2008 Atjonen, P., Halinen, I., Hämäläinen, S., Korkeakoski, E., Knubb-Manninen, G., Kupari, P., Mehtäläinen, J., Risku A-M., Salonen, M. & Wikman, T.: **Tavoitteista vuorovaikutukseen.** Perusopetuksen pedagogiikan arviointi. 288 s. 30 e. Myös verkkoversio.
- 31:2008 Korkeakoski, E. & Silvennoinen, H. (toim.): **Avaimia koulutuksen arvioinnin kehittämiseen.** 229 s. 28 e.
- 32:2008 Korkeakoski, E. **Tavoitteista vuorovaikutukseen.** Perusopetuksen pedagogiikan arvioinnin tulosten tiivistelmä ja kehittämisehdotukset. 67 s. 19 e. Myös verkkoversio.
- 33:2008 Knubb-Manninen, G. (red.) **Från mål till interaktion.** Skolpedagogiken i Svenskfinland och övriga Finland. 62 s. 17 e. Myös verkkoversio.
- 34:2008 Räisänen, A. **Koulutuksen järjestäjän opas.** Koulutuksen järjestäjä ja kansallinen arviointi. 28 s. 18 e. Myös verkkoversio.
- 35:2009 Mahlamäki-Kultanen, S., Byholm, K, Kärppä, J., Orelma, A., Vaso, J., Kamppi, P., Knubb-Manninen, G. & Silvennoinen, H. **Työelämän kehittämis- ja palvelutehtävän toimivuus ja** vaikuttavuus
- 36:2009 Knubb-Manninen, G. **Den nationella utvärderingens metodik.** 47 s. 19 e. Myös verkkoversio
- 37:2009 Räisänen, A. & Hietala, R. (toim.) **Sovitellen.** Sosiaaliset ja viestinnälliset valmiudet ammatillisessa peruskoulutuksessa. 303 s. 30 e. Myös verkkoversio.
- 38:2009 Räisänen, A. **Sovitellen**. Sosiaaliset ja viestinnälliset valmiudet ammatillisessa peruskoulutuksessa. Tiivistelmä. 55 s. 19 e. Myös verkkoversio.
- 39:2009 Räisänen, A. Sociala och kommunikativa färdigheter i den grundläggande yrkesutbildningen. Sammandrag. 60 s. 19 e. Myös verkkoversio.
- 40:2009 Välijärvi, J., Huotari, N., Iivonen, P., Kulp, M., Lehtonen, T., Rönnholm, H. Knubb-Manninen, G., Mehtäläinen, J. & Ohranen, S. **Lukiopedagogiikka**. 125 s. 24 e. Myös verkkoversio.
- 41:2009 Välijärvi, J., Huotari, N., Iivonen, P., Kulp, M., Lehtonen, T., Rönnholm, H. Knubb-Manninen, G., Mehtäläinen, J. & Ohranen, S. **Pedagogiken i gymnasiet.** 39 s. 17 e. Myös verkkoversio.
- 42:2009 Poikela, E., Granö, M., Keurulainen, H., Kuusipalo, P., Silvennoinen, P., Jokinen, J., Knubb-Manninen, G. & Silvennoinen, H. **Vapaan sivistystyön opetushenkilöstön kelpoisuus, osaaminen ja työolot**. 146 s. 25 e. Myös verkkoversio.
- 43:2009 Poikela, E., Granö, M., Keurulainen, H., Kuusipalo, P., Silvennoinen, P., Knubb-Manninen, G. & Silvennoinen, H. **Kompetens och arbetsförhållanden inom fria bildningen i Svenskfinland och övriga Finland.** 44 s. 18 e. Även nätversion.
- 44:2010 Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. **Työssäoppimisen arvioinnin seuranta**. 63 s. 20 e. Myös verkkoversio
- 45:2010 Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. **Näyttöä on!** Ammattiosaamisen näyttöjen toteutuminen käytännössä. 180 s. 27 e. Myös verkkoversio.
- 46:2010 Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. **Näyttöä on!** Ammattiosaamisen näyttöjen toteutuminen käytännössä. Tiivistelmä. 37 s. 18 e. Myös verkkoversio.
- 47:2010 Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. **Dokumenterat om yrkesprov.** Gemomförande av yrkesprov i praktiken. Sammandrag. 37 s. 18 e. Även nätversion.
- 48:2010 Anttila, P., Kukkonen, P., Lempinen, P., Nordman-Byskata, C., Pesonen, K., Tuomainen, S., Hietala, R. & Räisänen, A. **We have evidence!** How vocational skills demonstrations have been implemented in practice. Summary. 40 s. 18 e. Available also on the Internet.

Orders and inquiries:

Education Evaluation Secretariat, P.O. Box 35, FIN-40014 University of Jyväskylä phone +358 14 260 3220, fax +358 14 260 3241 ier-customerservices@jyu.fi, www.edev.fi



This report is the summary of an evaluation of vocational skills demonstrations in Finland. It contains the main results, a breakdown of the results for each evaluation category, and suggestions for further development. The evaluation is based on assessments conducted by the education providers themselves.

Publications of the Finnish Education Evaluation Council 48 ISBN 978-951-39-3904-5 ISSN 1795-0163 2010