

Kilpeläinen, P., Jalolahti, J. & Stylman, 2018. Vocational competence in Vocational Qualification in the Processing Industry. Helsinki: Finnish Education Evaluation Centre.

The evaluation focuses on vocational competence in the upper secondary level Vocational Qualification in the Processing Industry. The evaluation data was obtained from vocational skills demonstrations and supplementary data describing the arrangement of such demonstrations. The results describe grades awarded for vocational skills demonstrations and activities relating to the arrangement of skills demonstrations. The evaluation focused on all students who had started studying towards a Vocational Qualification in the Process Industry in vocational upper secondary education and training (VET) in autumn 2013 and on all units providing such VET programmes. The evaluation material was collected over the entire duration of the programmes until the end of spring term 2016. Information on grades and quantitative data on arrangement of vocational skills demonstrations were supplemented with the self-assessments of VET providers and audit visits. In addition, the evaluation involved analysing the plans for carrying out and assessing the vocational skills demonstrations and the descriptions of demonstration contents approved by the institutional bodies responsible for the demonstrations. In the analysis of the data and results, the evaluation team drew on the expertise of teachers working in the field and audit visits.

The evaluation of learning outcomes was based on vocational skills demonstrations, thus focusing on vocational competence. The evaluation was based on the vocational skills requirements and the assessment criteria specified for the programme in the Qualification Requirements. In the demonstrations, the assessment of learning focuses on mastering the work process, working methods, tools and materials as well as the underpinning knowledge of the work and key competences for lifelong learning. In other words, the Qualification Requirements functioned as a key starting point for assessment.

Evaluation of learning outcomes in vocational education and training is development-oriented by nature, and the implementation of the evaluation emphasises VET providers' active involvement and the interactive nature of evaluation. The data was collected directly in vocational skills demonstrations organised by VET providers. This development-oriented nature is also reflected in the self-assessments conducted by the VET providers and the feedback reports submitted to them, which providers can use to compare their own results with national results. In addition, the VET providers who were visited received a feedback report on the audit visit.

The evaluation material was collected from all training providers (15). The data covered 156 students and 578 skills demonstrations. The evaluation also focused on special needs students. The data covered 104 skills demonstrations performed by special needs students. It included skills

demonstration plans from 11 VET providers and a total of 648 descriptions of skills demonstrations. Self-assessment data was submitted by 12 providers. Two audit visits were made.

Approximately one half of the students (49%) received the final grade “excellent” for the demonstration, 44% the grade “good”, and 8% the grade “satisfactory”. The greatest number of “excellent” grades (57%) was awarded for key competences for lifelong learning and mastering the work process (50%). The greatest share of “satisfactory” grades was awarded for mastering the underpinning knowledge of the work (17%). The averages for the assessed VET providers varied from 2.12 to 2.49 on a scale from 1 to 3. The average of final grades awarded for the demonstrations was 2.41. There were no major grade differences between the genders. On the other hand, differences in the grades awarded were observed between VET providers and regions.

Special needs students had fewer “excellent” and more “good” grades than other students. The most common grade awarded to special needs students was “good” for all competence areas, and all special needs students managed the demonstrations without using individually adjusted objectives.

The education and training programmes leading to a Vocational Qualification in the Process Industry show a reasonably good level of working life relevance. The majority (66%) of the demonstrations were performed in the workplace. Most of the demonstrations given by special needs students were also completed in the workplace. According to education providers, the availability of workplaces matching the qualification objectives where competence could be acquired was good. The availability of workplaces matching the objectives in which demonstrations could be organised was evaluated as relatively good.

The grades awarded in demonstrations depend on the assessors. The students reached the highest grades when a working life representative participated in the assessment, and the clearly better grades were awarded to students performing their demonstrations in the workplace than at educational institutions. The evaluation thus highlighted development needs related to workplace instructors’ assessment skills and teachers’ working life competence. Development needs related to the integration of vocational subjects and common qualification units as well as the collection and use of monitoring and feedback information collected by education providers were also observed.