

Workplaces as Learning Environments: Assessments by Young People after Transition from School to Work

1 Introduction

The school reforms implemented in Finland during the last ten years have attempted to anticipate trends in the labour market and in the organisation of work. The reforms were responses to views that the knowledge and skills that young people bring to the labour market are in need of qualitative revisions. Changes in the content of work, the introduction of new technologies, current forms of occupational mobility, and the rate of change in itself require employees who are more adaptable and able to acquire, in the future, new and applied skills and knowledge.

There has been a search for the means of improving cooperation between education and working life. Today, networking with local enterprises, formal representation of business and industry in bodies that design curricula and qualifications, and giving educational establishments more latitude in responding to local needs are popular development targets. How vocational education systems react to changes on the labour market depend on whether these changes represent a response to problems internal to vocational education and if they do, in what ways.

The status of vocational education is closely linked with improvements in the quality of education and training provision at the system, programme and curriculum levels. Unless there are qualitative improvements in vocational education, particularly as regards work-based training, it will be impossible to attract high achievers, incorporate work-based qualifications into an integrated education and training system and establish overarching qualifications across educational tracks. Giving vocational and particularly work-based education higher status depends above all on qualitative improvements in educational contents and pedagogy (Lasonen & Manning, 2000). The purpose of this article is to assess what young people had learnt best during the workplace training period of their studies, and what things during their first year in working life.

2 About Learning at Work

In addition to pressures from working life, today's school reforms have stemmed from new conceptions of learning and educating the character and whole personality. It is believed that enriching traditional approaches favoured in education with modern conceptions and alternative forms of learning will produce citizens who adjust flexibly to changes and are independent but cooperative and solve problems. Young employees working in complex work communities need planning skills, resourcefulness, a positive attitude to continuous studying and learning, cooperation and communication skills, and reflective judgment.

The theoretical foundations of learning at work are grounded on constructivist, contextual and experiential learning, collaborative learning and problem-centred learning. These schools differ among other things in their emphasis on either largely epistemological starting points or on the practical problems of organising learning.

According to the constructivist conception of knowledge, knowledge is not an objective reflection of reality transferable as such. Instead, it is always something constructed by an individual and a social community in interaction (Bruner, 1990; Miettinen, 2000). Learning is the active cognitive and social activity of the learner where they engage in the continuous construction of their picture of the world and its phenomena, interpreting new information on the basis of their previous knowledge, conceptions and beliefs. Learning reshapes an individual's conceptions. The constructivist theories emphasize experiences, collaboration, problem solving and the contextual aspect of learning.

The model of experiential learning as put forward by Kolb (1984) is based on constructivism, linked to it through the concepts of experience and reflection. Among his predecessors as developers of experiential learning are John Dewey, Kurt Lewin and Jean Piaget. Kolb's model of learning starts from concrete experience, which links observation with reflection; reflection generates solutions that are then tested in new situations, and the whole process ends with new, possibly altered experience. In Kolb's model each stage represents a distinctive type of adjustment to reality that presupposes distinct abilities and competencies. Learners need at least four kinds of competency: capabilities required for concrete experience, reflective observation, abstract conceptualisation and active experimenting. Learning through experience includes the ways and processes of metacognition and collaboration.

Researchers of learning, such as Schön (1983), Boud (1985) and Mezirow (1996) consider reflection a central element of the learning process. According to them, in the context of learning reflectivity can be defined as an overarching concept covering those intellectual and affective activities where the individual examines their experiences as they seek to reach a new area of understanding. The development of reflection skills presupposes metacognitive knowledge.

Metacognitions are linked with self-regulation, needed in lifelong learning. People can set themselves aims, select appropriate strategies and assess their own learning by possessing metacognitive skills. Metacognitions are knowledge about cognition and regulation of cognition (Flavell, 1987). Metacognitive knowledge involves the individual's conscious conception of themselves as a learner, being aware of one's own schemes, strategies and processes. One aspect of this is a consideration of how the amount and quality of one's knowledge affect one's performance and mastery of a task.

Metacognitions are developed through self-evaluation. Self-evaluation is a part of self-regulated learning where the learners themselves assume responsibilities for consciously setting the goals on which the assessment of their learning will be based. This, again, presupposes mastery of reflective thinking and a functioning inner system of controls. The

conscious and critical examination of one's own thinking and actions is linked with metacognitive and reflective skills. Self-regulated learning is most successful when it is implemented in the work community together with and supported by various facilitators, such as mentors and tutors.

Studies of collaborative learning consider the process of constructing knowledge in terms of the solution of concrete problems. Collaborative learning is not seen as merely a tool of individual knowledge construction but as an independent working method in itself. At workplaces it may be manifested in teamwork. Collaborative learning is about constructing shared meanings and shared understanding through collaboration and interaction with other people. Collaborative learning represents a culture of knowledge construction and development where learning means a growing ability to take part in the activities of a community of learners more extensive than a small group (Dillenbourg, 1999; Feuerstein, 2000). Learning situations are collaborative if peers are about at the same level and can perform the same actions, have a common goal, and work together. Collaboration refers to "... a coordinated synchronous activity that is the result of a continued attempt to construct and maintain a shared conception of a problem" (Roschelle & Teasley, 1995, p.70).

Wenger (1998) has described the learning process as appropriate participation that enables the individual to acquire knowledge and skills, and increase their understanding through contact with experienced people. He approaches work-based learning from a socio-cultural perspective. Learning in any form changes our view of who we are through transforming our ability to participate, to belong and to negotiate meaning. Learning occurs in groups and communities through interaction, talk, participation and negotiations. Components of the social theory of learning according to Wenger consist of

- learning as belonging - community
- learning as doing – practice
- learning as becoming – identity
- learning as experience – meaning

Individuals are members and participants of communities and organisations. Joint participation contributes to shared knowledge construction involving norms and values of communities. Each member of a work team shapes the cultural dimensions of professional community and sector.

3 The Study

The framework of workplace learning policy was created in the plans for developing education and research for 1995-2000 and for 1999-2004 by the Finnish Council of State, including reforms of vocational qualifications. The development plan for 2004-2008 of the Ministry of Education stressed monitoring the reform of vocational qualifications, students' transition from education to working life, and the implementation of routes to further and higher education and to skilled work. Learning at the workplace has been established as a

central element of vocational education; to ensure this, there will be continued support to enable cooperation between education providers and labour-market organisations. A permanent system has been also created to train workplace trainers.

The *Bridge From Education to Working Life* pilot project was underway in various parts of Finland in 1998-2001. The education and training provided catered for people under 25 at risk of unemployment who were upgrading their 2- or 2.5-year initial vocational qualifications to a qualification of 3-year upper secondary education (120 credits or study weeks). The 12- or 6-month supplementary education programmes combined school-based and workplace training.

The purpose of the study was to find answers to the following questions:

- (1) Which competences did the students, in their own estimation, learn best during the workplace training period organised by their school, and
- (2) which ones during their first year in working life after graduation?

The students who answered the research survey were representative of the total population. The 1999 data was collected and analysed using the survey method (Lasonen, 2001). The materials were gathered with a structured questionnaire. The 2000 materials included the same students, who had completed their qualifications in 1999. The 2000 materials were gathered with a structured questionnaire complemented by open-ended questions that explored the subject in more depth.

In spring 1999 the response rate among the students was 72.4 per cent (n=426). The students received their vocational qualifications the same spring. The group was sent a second questionnaire in spring 2000, when the response rate was 69.3 per cent (n=295). Men and women were fairly equally represented. The number of people who answered both the 1999 and the 2000 questionnaire was 218. The respondents were mainly young people aged between 18 and 25.

As regards training sectors, most of the subjects represented technology and transport (n=136; 46.1%), followed by tourism and the catering industry (n=58; 19.7%) and social and health services (n=40; 13.6%). There were smaller groups representing business and administration (n=29; 9.8%), natural resources (n=15; 5.1%), culture (n=10; 3.4%) and leisure-time and sports-related activities (n=7; 2.4%). The sizes of these sector-specific groups reflect the size of the training sectors. Of the workplaces where the young people had found themselves a job a fourth had 1-10 employees and a fifth 11-50 employees. As a rule, most Finnish companies are what are known as micro enterprises. As for study fields, most of the students represented technology and transport, with business and administration coming second.

The 2000 research materials on the young people under 25 were analysed using statistical methods, mainly computation of frequency distributions, averages, correlation coefficients

and tests of statistical significance. The quantitative materials have been supplemented through responses to open-ended questions.

4 Results: Learning During Workplace Training Period and on the Job

This section discusses the background data on the students. The students studied in a total of 40 enterprises. They completed 28 different qualifications in their educational establishments.

4.1 The Students and Young Workers Studied

Among the young people who returned the questionnaire in spring 2000 (n=295), girls (58%) predominated slightly over boys (42%). Most respondents were aged 17-19 (34.3%) while 33.1 per cent were between 20 and 21, 24.2 per cent between 22 and 25 years of age and 8.2 per cent were over 26. More than half the students said that they had joined the Bridge experiment to improve their employment prospects. Interest in one's study field came next as the most common reason for taking up supplementary studies.

In 2000 the young people were asked what they had done after their graduations. It was found that immediately after completing their studies 25 per cent had become unemployed. Half a year after gaining their qualifications, 18 per cent of the young people were still out of work. In comparison, the corresponding unemployment rate among adult Finns was 10 per cent. Some two out of ten young people continued their studies while the same proportion either began their military service or were on maternity leave and so on. After graduation, 63.4 per cent of the young found a summer job, and less than half of them had a job after the beginning of autumn. Of those who had a job, 36 per cent had been engaged by the enterprise where their school had found them a training place. A further 21.5 per cent had found employment by contacting employers on their own initiative, 12.7 per cent through the employment office, 6.1 per cent by responding to an employer's job advertisement, while 7.5 per cent found a job in an enterprise they knew before. In their answers, the young people attributed their success in finding a job variously to their training, knowing the employer through their workplace training, earlier employment or their family, field-specific labour shortage or personal qualities.

In 2000, the young people's performance at vocational school was assessed on a scale from satisfactory to excellent; according to their answers, their school performance was as follows: satisfactory 6.2 per cent, good 77 per cent, excellent 14.1 per cent. Their own assessment in 1999 of how they were doing in their studies paralleled the grades they received in their school-leaving certificate.

4.2 Some Prerequisites for Learning at Work

Today employment can be short-term and part-time and one person can have several employers. Experience from more than one workplace during one's vocational studies can train young people to adjust flexibly to being employed by several enterprises. The length of

the workplace learning period is an important issue particularly to the learners and the employers. When they were asked about the suitable length of a learning period spent in the same workplace, 199 students (46.7%) mentioned 1-2 months while 2 out of 10 considered 3-4 months appropriate. Some students (79 in number) would like to stay even longer (5 months or more) at the same workplace.

During their vocational studies, a good quarter (27.2%) of the students thought that one week was enough to become familiar with a workplace while a third (35.2%) considered two weeks a suitable period. According to 105 students (24.6%), learning how things work at the workplace takes 3-4 weeks while 33 students judged that it would take more than a month. In the more service-intensive fields two weeks are mentioned more often than one week as the time required for finding out how things work. After they had entered working life, most (86.2%) young employees said that they had learnt to understand their workplace in one to two months.

Workplace orientation during studies seems to be a particularly important factor because during their workplace training the students became aware what it was that they would later have to learn on their own. During the workplace training period of their studies they were given orientation to the enterprise; later, when they were engaged by an enterprise there was much less orientation. According to what the students said in school, orientation was most often provided by employees and workplace trainers. Of all the answers only 6.1 per cent indicated that no workplace orientation had been given, while after entering working life half the same young people considered that they had received no orientation to the operational principles of the enterprise. After their transition to working life, well over half the young employees reported that they had been given no orientation to the line of business and objectives of the workplace, its strengths and future plans, industrial safety instructions and regulations, the collective agreement regulating the field, confidentiality, rights and responsibilities at the workplace, the planning of assignments or employees' duties towards the employer. As the young people saw it, becoming familiar with a workplace took between one and two months. According to 70.7 per cent of the respondents, their work experience had not helped them much or had helped them somewhat to learn to know the labour market. It seems that after entering working life the young people had forgotten how to use information sources independently.

As a rule 73.5% of the young people were able to select their workplace from several alternatives. In most cases they had looked for a job through the employment office, with the places where they had trained and studied coming second, and people they knew third as sources of employment. Seven out of ten considered that their vocational training was useful or very useful in carrying out their assignments. A majority of the respondents thought that they were working in the field that they had been trained for. Only one respondent in ten judged that difficulties that they had encountered at work were caused by shortcomings in their own competence. In their own opinion, 82.4 per cent of the young workers were able to perform their duties independently.

When the students were asked in school about the strengths they used in marketing themselves to an employer, those mentioned most often were sociability, reliability, competence or occupational skills and hard work. Next came initiative and the ability to learn. In 2000, after their entry to working life, the young people mentioned most often reliability, honesty and friendliness, cheerfulness and a positive attitude. The next group comprised initiative, occupational skill, willingness to learn, cooperativeness and customer service.

After gaining work experience and a job the young people expressed their opinion about how they wanted to develop in their work. Their answers foregrounded deepening, diversifying and broadening one's competence. The young people wished to develop into good workers in their field. Below are examples of their answers:

“I want to acquire solid occupational skills based on experience and training in all areas of my work.”

“My aim is to learn new working methods in order to realise that your own working method is not the only way to act and work, increasing your know-how.”

“I want to become a better employee: effortless, active, resourceful.”

A minority of the respondents specified customer service or a particular technique, method or task as the area where they wanted to develop. About one in ten was thinking about continuing their studies or specialisation or advancing to more demanding tasks.

About half the respondents (49.8%) said that they liked their work, and seven out of ten were satisfied with their present job. Happiness and satisfaction were linked with factors such as how much one is able to shape one's own work and occupational environment, how much encouraging feedback one is given on one's work, and how much one's duties develop one's thinking. About half of the young people answered the statements covering these issues in the affirmative (Table 1).

Table 1: Respondents' opinions about the opportunities offered by the occupational environment as relative distributions (%)

Item	Strongly Disagree	Disagree	Do not know	Agree	Strongly Agree
I get satisfaction from my work.	5.3	6.7	31.4	45.1	11.5
I am able to use my abilities and skills.	3.5	7.5	11.1	53.1	24.8
My work includes a variety of assignments.	4.4	12.9	8.9	44.0	29.8
I am able to have a say in decisions about my work and work environment.	7.5	14.1	26.4	38.3	13.7
I am given responsibility.	1.0	4.4	8.8	43.8	42.0
The permanent employees value me.	2.7	4.0	22.7	47.9	22.7

I am given encouraging feedback on my work.	3.2	8.4	25.2	48.2	15.0
My assignments develop my thinking.	4.9	8.4	27.0	46.9	12.8
I feel an equal member of the team.	0.9	6.6	22.6	46.0	23.9

Most of the young workers considered that they were being given responsibility (85.8%), as they had also wished while still studying, were able to use their abilities and skills (77.9%), carried out varying assignments (73.8%), were valued by the older employees (70.7%) and felt equal members of the team (69.9%).

More than half the young people (54%) had never entertained the idea of setting up an enterprise of their own. Two out of ten have sometimes thought about doing so. The same proportion (22.8%) of them had considered a private enterprise as a makeshift solution. A substantial number of the respondents (66.5%) judged that their work experience had done little to improve the skills needed in establishing an enterprise. Three informants (1%) had already worked as entrepreneurs.

The young people were asked about their best and worst experiences from work. Best experiences were reported considerably more often than worst experiences. Human contacts at the workplace, first with one's fellow workers and later succeeding with customers, were mentioned as by far the best experience. One's tasks, learning by performing them, and the opportunities they provided were also perceived as the best experiences. Low salaries in comparison with a demanding job, fixed-term employment, and the atmosphere at the workplace were the three most negative things mentioned by the young people.

The young participants were asked what work means to them. Their answers indicated that work meant above all economic security, but additionally most of their answers included also other factors. Apart from being a means of livelihood, work provided also human relationships and opportunities to develop and realise oneself, gave life a rhythm and helped one to pass time, and brought well-being and joy.

4.3 Learning at Work

In the vocational schools. The goals that the young people set for their workplace training period, during their vocational studies, emphasised factors related to democracy at the workplace and doing one's work and succeeding in it. The students' expectations revealed that they valued working independently and being given responsibility. The areas where their workplace learning period had affected them most were social skills, the growth of their occupational skills, enhanced self-esteem, and self-confidence. The self-evaluation aspect of work-based learning was implemented through learning diaries, portfolios, self-evaluation forms, reflection and discussion with peers, teachers and workplace trainers. The students wished that during their work-based learning period their teachers would provide them with individualised guidance, and that the contact teaching periods at school would be effective and give them opportunities to exchange and analyse their experiences.

Work-based learning period at workplaces taught the students particularly internal entrepreneurship and the technical and social skills linked with the given future occupation; at the same time it also promoted their growth towards adulthood. According to the students, the areas where they had learnt most were practical occupation-specific skills, initiative, cooperation skills, self-confidence, independent thinking, willingness to change and to develop, independent problem-solving skills, and using information sources.

The learning opportunities offered by the students' training jobs were most scarce as regards handling things in foreign languages and developing the skills needed to set up an enterprise of one's own and writing skills, which promote occupational mobility. It is to be hoped that competencies in these areas are reinforced during the school-based contact teaching periods. At school it was domain-specific theory and basics and concepts, and the rationale of skilled work that the students considered they learnt best. The students thought that their experiences from the workplace complemented the instruction that they received at school in the sense that their experiences taught them to master the situation specific dimensions of their work, developed their thinking skills and helped them to gain a command of the various broad aspects of their occupation.

On the jobs. Students who had entered working life were asked what the three most important things were that they had learnt on the job. Many answers mentioned particular domain-specific skills. Among things mentioned most often across the whole range of occupations were the following:

- (a) *Cheerful appearance, time management, the harsh world of entrepreneurship.*
- (b) *Patience, the importance of life experience, ability to cooperate.*
- (c) *Initiative, cooperativeness, getting along with one's fellow workers.*
- (d) *Working fast, the many-sided maintenance of equipment and setting it up.*
- (e) *Using language, meeting customers, putting the Internet to use.*
- (f) *Organisation skills, initiative, social relationships.*
- (g) *Good customer contacts, willingness to serve the customers, interaction skills within the work community and cooperation.*
- (h) *"I learned that an employee must be all the time prepared to develop herself / himself, learn new things. You must be flexible and prepared to adjust rapidly to new situations."*

The answers reveal two dimensions: teamwork skills and paying attention to the community on the one hand and individual qualifications and qualities, such as independence and initiative, on the other.

The young people were asked also what skills were needed to cope with the life that they had learnt at their places of work. Their answers can be classified into four types:

- things involving the organisation, the enterprise;

- coping in one’s occupational sector;
- getting along in the community; and
- developing one’s own qualities, and one’s personal responsibility.

Things belonging to the two last categories were mentioned most often. Below are some examples of the young people’s answers:

“How you should apply for a job? What kind of training you need in various jobs? I learned a lot about how different work communities function. I learned to act as a member of a work group.”

“Teamwork, initiative, profit responsibility, learning to see to it that the wheels will keep turning in the longer term too. (Even if some people might not be doing their share), I learned to bring the “idlers” into line by using humour - it worked.”

“You must see that you get what you deserve and learn to respect both your own and other people’s contribution.”

“There are many different people and in a way you must understand everyone and in customer service you must learn to listen.”

The young employees were presented a series of statements about how working had developed their skills and qualities, rated on a scale from very badly (1) to very well (5) (Table 2).

Table 2: Respondents’ opinions about skills and qualities developed by working as relative distributions (%)

Item	Very Badly	Fairly Badly	Some-what	Fairly Well	Very Well
Domain-specific skills	0.5	2.3	19.8	54.9	22.5
Desire to contribute to new ideas	6.5	14.9	43.4	27.1	8.1
Applying one’s knowledge in practice	3.2	5.9	40.2	40.3	10.4
Problem-solving skills	1.4	7.3	34.5	45.4	11.4
A desire to develop one’s occupational skills	1.8	10.0	18.6	42.3	27.3
Familiarity with the labour market conditions	6.0	26.9	37.9	22.4	6.8
Skills needed to set up an enterprise of one’s own	36.2	30.3	21.1	9.2	3.2
Collaboration skills	0.0	1.8	20.4	47.5	30.3
Initiative	0.5	1.4	14.0	41.6	42.5
Self-confidence	0.9	3.6	22.2	40.7	32.6
Presentation and negotiation skills	7.3	19.1	30.5	32.2	10.9
Job orientation skills	6.0	15.5	39.7	27.4	11.4
Independent thinking	0.9	3.2	23.2	48.2	24.5
Using information sources	9.1	17.3	34.1	32.7	6.8
Skills needed to handle things using a foreign language	40.3	28.9	18.8	8.3	3.7

Written communication skills	23.7	32.4	28.3	12.8	2.8
Confidence in one's ability to cope with one's job	1.4	4.5	27.6	44.3	22.2
Desire to engage in further studies	16.4	17.4	31.9	17.4	16.9
Evaluating one's own work	3.7	7.8	36.5	42.0	10.0
Planning skills	6.4	13.6	35.0	33.2	11.8
Desire to change and develop	2.3	5.0	32.3	36.3	24.1
A basis for valuing one's own occupational develop	4.6	10.5	45.7	30.1	9.1
Life management skills	9.7	14.2	39.4	26.6	10.1
Computer skills	39.2	11.7	25.8	14.7	8.6

As a conclusion, more than 70 per cent of them answered that they had developed fairly well (4) or very well (5) as regards the following skills and qualities:

- initiative (84.1%)
- collaboration skills (77.8%)
- domain-specific practices (77.5%)
- self-confidence (73.3%)
- independent thinking (72.7%)

A further comparison with the positive pole of the scale revealed that working had had less effect on the following skills:

- problem-solving skills (56.9%)
- evaluating one's own work (52%)
- applying one's knowledge to practice (50.7%)
- planning skills (45%)
- presentation and negotiation skills (43.2%)
- using information sources (39.5%)
- job orientation skills (38.8%)
- life management skills (36.7%)
- computer skills (23.3%)
- written communication skills (15.5%)
- handling things using a foreign language (12%)

Work experience had given most of the young confidence that they would be able to cope with their job. Only 6 per cent thought the opposite.

Four out of ten young respondents (40.3%) had clear future plans concerning further studies. Some 60 per cent of them were uncertain about the matter or had not decided anything yet. Three out of ten were either unwilling to engage in any further studies or willing to consider minor additional studies after finding a job. By contrast, seven out of ten young employees

(69.6%) wanted to develop their occupational skills through work, while six out of ten (60.5%) were ready for changes and development.

5 Conclusions

Irrespective of the given national context, lifelong learning is universally considered an important educational policy goal. Young citizen's perception of their occupational assignments and environments after they have made the transition from education to working life remains a problem: do young people still see the workplace and their tasks as learning situations and contexts. As regards work-based learning, it is useful to distinguish between its organisation and the learning process itself. It may be said that the basic unit of the process of organising work-based learning is the young employee's action context where the purpose, idea and implementation of work-based learning come together and where the young person works for a shorter or a longer period on a specific task to produce a concrete outcome. Work gives learning its meaning and vice versa. Working intended to generate innovative, contextual, collaborative and problem-based learning that requires the young employee to be self-regulating, committed, reflective, and prepared to address new tasks and situations is ideal.

The article took a look at educational reform where the aim is improving the quality of instruction and curricula from the perspective of learning at work. Conscious learning at work involves the nature of the goals that the young employees set for the development of their competence, what they think they have learned and how they assess their ability to reflect on it. Self-regulated reflective learning within a community and with the help and support of its members presupposes continuous development. The research attempted to operationalise a part of this process by asking young employees how they thought they had learned at work such key competencies and cooperation skills, independent thinking, communication skills, technical skills, problem-solving skills, initiative, self-evaluation, using information sources and planning skills.

Most of the young employers were between 20 and 24 years of age. The study covers all vocational training programmes offered in Finland. After completing their vocational education, 63.4 per cent of the young found employment of varying length, 36 per cent of them in the workplaces where the educational establishments had arranged their students workplace training placements. The young people saw work above all as a way to ensure one's financial security and provide for one's basic needs, but also as a means of self-realisation and self-development and as a social network.

The young people seemed to consider a job simply as a job, no longer a place where they consciously thought about or pursued purposeful learning. Most of them failed to search for information sources on their own or recognise as a challenge the development of versatile communication skills, such as training themselves to use foreign languages, or of negotiation skills, competencies that promote occupational mobility. Starting at a new workplace seemed to represent a particularly critical stage because it is possible that the young people were

expected to orient themselves independently to their work environment. However, most of the young wanted to develop their occupational skills and displayed a positive attitude towards addressing change. They perceived human relationships at work and succeeding in customer service as the best experiences they had gained through work. Working had developed their initiative, cooperation skills, familiarity with domain-specific practices, self-confidence and independent thinking considerably more than their problem-solving skills, skills to evaluate one's own work, and planning skills. In the young people's opinion, the skills belonging to the latter group had developed less after their transition to working life than during the supervised work-based learning period included in their studies.

The context where learning takes place at the workplace is the work community as a whole, which can include learning networks and a learning organisation. During their vocational studies the young employees had taken part in networks among workplaces and educational establishments that have cooperated to ensure the success of the students' work-based learning. The degree of the young people's participation in learning networks has depended on the nature of the networking strategy implemented by the training providers and workplaces.

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