New Perspectives in Science Education
International Conference
NEW PERSPECTIVES in SCIENCE EDUCATION
5th Edition

Preparing Young People for E-Work

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Abstract
The article focuses on Sectors united for fostering Employability of young adults through E-work Development project (SEED), funded by Erasmus+, the European Union programme for education, training, youth and sport. The project objectives are deeply connected with the European context. Over the past decade e-work and e-learning have become something more than a phenomenon. They are changing the way the two concepts are perceived – labor and education - and all their components: office and learning space, business hours, communication, division between being at work or university or commuting. The article presents the project's objectives, main activities and obstacles as well as the findings of the research carried out in order to identify competencies required for e-workers within small and medium sized enterprises. The project research covers organisations working across five sectors (Consultancy, Telecommunications, e-Commerce, Helpdesks and Software Development) in six countries (Croatia, Hungary, the Netherlands, Portugal, Romania and the UK). Based on this research, training materials to support development for young adults (aged 18-29) in these areas will be further produced.
Key words: e-work, e-learning, e-jobs, competencies and skills

1. European context
Technology has dramatically reshaped the workplace. The old office environment has rapidly changed due to technological advancement. Keeping a workplace up-to-date and profitable requires new technological tools used in an effective way [1]. Business has become global and competition is increasing. Young adults have to compete not only for the better jobs but also for their employability. Introducing e-work gives an answer to these challenge and cast new light on work and employment. Getting familiar with e-work, virtual working methods and acquiring entrepreneurial skills is a way to succeed. However, learning how to work in a "virtual working environment" is not easy and cannot be learned alone. Virtual teams present new challenges to all business leaders, especially young persons. Not only managers of global e-teams but also young e-team workers should possess competencies that are required to actively participate in a virtual team project. They both need access to new tools as the e-environment is based on different "ground rules" and requires new competencies. Training of both young people and educators, teachers, trainers, youth program organizers, HR managers is an urgent need to develop the necessary skills to assist them in becoming successful e-workers and e-tutors.
The SEED project attempts to address these gaps by devising tools measuring virtual competencies of adult learners and their educators, providing virtual training and materials developing young people's and e-tutors' virtual competencies and devising testing methods to measure development.

2. Project objectives and target groups
The project aims to explore and integrate the competencies necessary for e-working organizations at EU level. In addition, it aims at providing young people with valuable support through training for developing their e-work competencies.
The target groups are:
a) adult educators, practitioners, professionals, experts, specialists, training staff active in education and training facilitating young adult learners, assisting trainings in blended format, trainers who wish to widen their skills from in-class teaching to blended methods, counselors, who provide career guidance

who wish to open new ways to communicate and to support their target groups through on-line methods.
b) young adult learners (ages 18-29) –especially early school leavers, young people with fewer opportunities.

3. Project Research Findings

Research was carried out in the project countries with a view to identifying the competencies that are important for young adults to be effective e-workers. 12 competencies required for e-workers in small and medium sized enterprises had already been identified in SEES, an earlier project (e-leadership skills, change management skills, motivation skills, performance appraisal skills, conflict handling skills, e-communication skills, lifelong learning skills, quality awareness, e-team building skills, e-time-management, e-decision making skills, problem solving skills). The SEED project research was expected to identify additional competencies. The questionnaire produced targeted at employers from 5 sectors (SMEs, multinational companies, other employing organizations), who had to define (apart from the already defined 12 competencies) 8 more new skill competencies that e-workers should obtain in order to get an e-work position. The questionnaire had 4 sets of questions (5 questions/set), listing 20 different competencies (from several areas: achieving results, preventing and solving problems, interpersonal working, self-management). The questionnaire asked the participants (400 employers) to rank the competencies and to state the role of e-work in their company and the usefulness of a set of training material to train e-workers/e-managers to develop the necessary competencies to work in an e-working environment. The research covered organisations working across five sectors (Consultancy, Telecommunications, e-Commerce, Helpdesks and Software Development) in six countries (Croatia, Hungary, the Netherlands, Portugal, Romania and the UK). In Romania the results of this survey singled out the following competencies (as seen in Table 1): continuous improvement, planning and organising, results orientation, analytical thinking, client focus, professional confidence, stress management, flexibility/ ICT knowledge. In addition, Romanian managers considered the introduction of the e-work in their company and the necessity of training e-workers/e-managers to develop the necessary competencies to work in an e-working environment as very important (Table 2).

Table 1

Competencies				
	Not important at all	Somewhat important	Important	Very important
Achieving results				
Continuous improvement	0	0	2	48
ICT knowledge	0	1	14	35
Planning and organising	0	0	7	43
Project management	0	2	16	32
Results orientation	0	1	9	40
Preventing and solving problems				
Analytical thinking	0	0	12	38
Awareness of organisational culture	1	4	23	22
Creative thinking	0	2	17	31
Flexibility	0	1	14	35
Initiative/ proactivity	0	2	17	30
Interpersonal working				
Client focus	0	1	11	38
Delegation	0	8	24	18

Negotiation	0	6	21	23
Personal credibility / trustworthiness	0	1	24	25
Valuing diversity	2	5	22	21
Self-management				
Independence	2	6	21	
Organisational skills	1	5	13	31
Professional confidence	0	2	11	37
Stress management	0	2	12	36
Values and ethics	0	2	18	30
Other	1	1	1	14

Table 2

Training			
	yes	no	I don't know
Do you intent to implement e-work in your company	41	4	5

	Not useful	Somewhat useful	Very useful
Do you already have or do you intend to introduce e-work in your company?	0	16	34

	Not useful	Somewhat useful	Very useful
How do you assess the usefulness of a set of training material to train E-workers/E-managers to develop the necessary competencies to work in an e-working environment?	0	16	34

The top eight competencies identified in the six project countries are as follows: continuous improvement, planning and organising work, results orientation, flexibility, initiative/ proactivity, client focus, personal credibility/ trustworthiness, professional confidence. The research report developed at the end of the research stage consists of 5 chapters: background of e-working environments, advantages of implementing e-work policies and employing youth e-workers, HR aspects of new e-working methods, cultural changes brought about by e-work, guidelines for creating e-workplaces in the 5 sectors. The guidelines give valuable insights into how to create e-work places for young adults and thus, prepare the organization for implementing e-work practices. Although each organization is unique and has unique requirements, the guidelines have defined common steps in developing a good accessible technology plan [1]. The five general steps for creating e-workplaces in the five target sectors (software development; e-commerce; consultancy; telecommunications; helpdesk services) are:

1. Identification of the accessible technology strategy.
2. Identification of requirements. In this step, a comprehensive set of requirements is described by highlighting the scope of the accessibility needs of the organization and evaluating the current technology being used.
3. Design, development and purchase technology. This next step involves the design and development of technology based on the requirements outlined in Step 2.

4. Implementation and training. After technology has been developed, purchased, and updated the organization has to provide training.
5. Role of technology and continuous learning. The last step focuses on awareness-raising of the accessible technology vision in the organization, support of employees in their use of technology, and evaluation of success and opportunities for improvement [1]. The partnership has also identified specific guidelines for creating e-workplaces in each of the five target sectors [2], [3], [4].

4. Project main activities and future developments

4.1 The creation of the competency e-toolkit

The competency e-toolkit is an on-line tool for adult educators, trainers and youth workers, which measures the young adult learners' current competencies and identifies which areas need to be developed. With the help of the tool-kit, a self-assessment can be conducted and a personal development plan can be created, specifying the training needs of the individual. The toolkit consists of the competency dictionary (comprising the profiles of the e-competencies required, thus helping those interested in the understanding of the specific competencies) and a set of questionnaires developed to measure the current competency level of the participant, identifying gaps and making recommendations on the necessary training modules.

4.2 The creation of the e-tutor e-learning module

The e-tutor's e-learning module is specially designed for youth workers, e-tutors, trainers, who are responsible for leading non-formal training and mentoring young adult learners during the blended learning process related to their e-competency development. The e-tutor module gives an overview of the tasks and roles of future e-tutors in youth development programs. The e-tutors learn how to moderate on-line classes, webinars, video conferences and how to tutor target groups though e-channels. The learning module, designed in a blended learning format, is 30 hours long with embedded quizzes and tests for evaluation purposes. A national certification for participants is issued at the end of the course.

4.3 The adaptation of the SEES e- learning modules

The previously produced SEES material consists of 12 modules designed for e-workers of SMEs. The modules developed the following 12 competencies: leadership skills, change management skills, motivation skills ,performance appraisal skills, conflict handling skills, communication skills, lifelong learning skills, quality awareness, team building skills, time-management, decision making skills, problem solving skills. The SEED training material now has two target groups: e-managers and e-employees. The modules have to be tailored for young adult groups (changes in case studies, explanatory sections, quizzes, role-model characters).

4.4 The pilot simulation process

The goal of the simulation is to pilot test the competencies of the e-team members after learning the e-content developed (12 modules for young adult learners+ the newly developed e-tutor module). The simulation should measure how well the target groups (youth workers and young adult learners) use the skills in practice that they have obtained from the training material. Using real-life cases, the participants will be put in different situations, where they must decide, collaborate and solve problems by using only online communication tools. The simulation is an on-line role-play (broadcast live) of volunteer participants (e-tutors and young learners), located in different countries, who are employees of an imaginary company called "Virtual Motion". As e-workers, they have received a task form the CEO that they must complete by the deadline. At the beginning of the simulation, the participants receive this information and their roles and positions in the project. The members of the e-team (one e-manager and 4 e-workers) are assigned to complete a small project (including several tasks) together. The e-manager gets the instructions from the director of the company. The main goal of the simulation is to real live test if the participants have obtained the learning content of the modules and if they can use these newly gained skills in real life situations. The e-tutors are asked to evaluate their young learners throughout the process in order to be able to give feedback at the end of the simulation. The e-tutor module is designed as a blended learning course, which means, that after learning the e-content, youth workers also attend a face-to face, practice-oriented training course. All participants will receive a certificate and a Europass after completing the training.

5. Conclusions

The project enables adult educators/trainers/youth workers/teachers/facilitators to obtain more knowledge shared across sectors, provides valuable e-tutor training material meant to help them develop practical new skills for everyday e-work and get familiar with new innovative testing methods.
In addition, young adult learners have access to self-assessment tools which enable them to measure their e-work skills and identify future learning paths; they are also provided with labour market relevant training that helps them develop practical virtual and entrepreneurial skills; this will definitely enhance their chance of employability.
The project supports the idea that learning is a lifelong endeavour which young people should pursue at regular intervals during their lives, and particularly during periods of unemployment or career transition. The project encourages the development of effective lifelong guidance systems, as well as integrated systems for the validation of non-formal and informal learning. It also fosters greater awareness among employers that adult learning contributes to promoting productivity, competitiveness, creativity, innovation and entrepreneurship, and it is an important factor in enhancing the employability and labour market mobility of their employees

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