Identification of needed competences and skills

Report of Track 8

Demetris Kyriacou[1] and Helmut Zaiser[2]

[1]University of Southampton
[2]Fraunhofer Institute for Industrial Engineering IAO

Presentations:

Enterprise surveys as a tool for identification of skill needs

Speaker**:** Alena Zukersteinova, Cedefop, Greece
Focus: Identifying competences and skill needs by using enterprise surveys as a common European approach.

Identification of competences at company level

Speaker**:** Bernd Dworschak, Fraunhofer IAO, Germany
Focus: What is the difference between competences, competencies and skills? What are the challenges, requirements and methods of identification of individual competences at company level?

CM ProWork - A Software tool for the Identification and Development of Competencies in Production Systems

Speaker: Rainer Uhrmann-Nowak, Technische Akademie Esslingen; Elmar Witzgall, wissen-koennen, Projektforschung und Beratung, Germany
Focus: Identifying and developing competences in production systems using the CM ProWork software tool. Standardized task inventory as a key requirement for the identification and management of competences.

Competence Management and Project-Competence-Studies

Speaker**:** John Erpenbeck, Annette Schulten, Silke Keim, Steinbeis University Berlin, Transfer Institute Business Administration and International Entrepreneurship, Germany
Focus: Competences as capabilities of self organisation: examples of Project-Competence Studies in practice.

Conclusions

1. Challenges

At first, the track presentations and discussions acknowledged a challenge to the identification of competences and skills which becomes particularly evident in an international context: a longstanding confusion around the meaning of the concepts "qualifications" and "competences" along with different meanings given to the concepts "competences", "competencies" and "skills".

Questions on the ability of enterprises to identify and evaluate future skill needs and on the methods which they are using to assess future skill needs were raised. These gave a first impression of the enormous challenges to companies when trying to record their needs, especially with regard to the future. Furthermore, the issue of what are the assessment methods that are used usually refer to (particular occupation, qualification, concrete skill) was pointed out.

Moreover, there are still challenges in identifying which competences individual workers possess at present and which individual competences are going to be needed in the future as an indispensable basis for recording needs at company level. It has been stated that competences cannot be identified directly but can be inferred analytically.

Finally, competence management has been considered as one of the key HR challenges in the future. With regard to competences, there seems to be a special challenge in describing capabilities of self organisation in problem solving and decision making situations.

2. Requirements

Classification of competences and defining competence classes could help categorizing and therefore identifying at least individual competences. As examples, different classifications of competences (specialized, methodological, social and participatory; professional, methodic, social and personal) were presented to conclude that demand defines the internal structure of every competence.

A further requirement regarding the identification of competences is to assess strengths and weaknesses of the methods for identification and assessment of competences in order to select the most appropriate one. Such methods are, e.g., interviews, questionnaires, self and external assessment and observation.

To find a common European approach to enterprise surveys was introduced as a requirement for addressing the challenges of competence identification at company level. Some discussion was conducted in this point where the issue of the process of participating with various countries along with the issue of dealing with several terminologies and definitions as used by every country-participant were brought up. Survey mapping based on common templates seems to be a first instrument to deal with such issues. Questionnaires and already existing surveys should be modified and/or enriched to achieve interoperability across selected volunteering countries. The ultimate objective is to initiate a European-wide enterprise survey.

Furthermore, a standardized task inventory was discussed as a key requirement for the identification and management of individual competences in production systems.

3. Solutions

As instruments to deal with the challenges and requirements of competence and skill identification two different kinds of software tools were presented.

The CM ProWork software tool enables production management and human resources development in industry to identify and develop individual competences of workers. It allows to register and describe competences and to identify learning requirements related to tasks and individuals. Furthermore, it adapts competence development strategies according to companies' plans and optimises task allocation and the corresponding work organisation. Some questions were raised about the tool regarding the workers' and works councils' acceptance of the tool. The presenter replied that although the workers and the unions were a bit suspicious at the beginning, they accepted it once they were introduced to the benefits the tool could offer to the companies and their employees. Since the tool has been already used and standardized to a wide extent, it guarantees comparability of task-related competences beyond department barriers.

The KODE and KODEX software tools were introduced as solutions for identifying, measuring and evaluating basic and advanced competences. Examples from Project-Competence-Studies of the Steinbeis University Berlin were presented where students were evaluated while working in companies and studying at the same period of time. The goal was to identify and develop competences in order to apply them in their work and studies. Some relevant questions were addressed to the speakers regarding the differentiation of meaning of the concepts "talents" and "competences" as it was discussed in the presentation along with the subject of the categories of competences that were used for the evaluation of students and the methods used to derive them. The presenters replied that the categories were carefully selected after interacting with students and institution experts.