

## **The new competence concept in higher education: error or enrichment?**

Currently, there is much attention for the concept of competence in the EU, as well as in vocational-technical as in higher education. For higher education, a process of harmonisation is going on, which led to the implementation of the Bachelor-Master structure in all higher education. To support this, the Dublin descriptors were developed which indicate the qualifications needed at Bachelor, Master and PhD level, as well as the competence levels of these qualifications. For vocational education, the European Qualification Framework is being developed, in which knowledge, skills and competences will be defined for all sectors and levels. Various EU member states have their national competence frameworks already, developed at national (like Ireland, France and the Netherlands) or state level (like the UK, Germany, and Belgium). Like in the US, there is also much attention for competence development for employee management in public and private organisations in the EU (Mulder & Collins, 2006).

The objectives of the study are twofold:

1. to make an overview of the development of the competence movement in the US and Europe and; this will be done based on an earlier study for the AERA (Mulder, 2000);
2. to evaluate the question as to whether the new concept of competence is fruitful for higher education; this will be based on an in-depth case study in higher education in the Netherlands.

### **Perspectives and theoretical framework**

In this study competence is being conceived of as integrated abilities, consisting of clusters of knowledge, skills, and attitudes, necessarily conditional for task performance and problem solving, and for being able to function effectively in a certain profession, organisation, job, role and situation. For example, the competence of adequately making a DNA-profile in crime scene investigations requires disciplinary knowledge, skills in working with artefacts, and an attitude of accuracy, coping with pressure and integrity.

This study is based on theories regarding the limitations of traditional testing in education, and the problems this causes in selection and placement of professionals (McClelland, 1973), competence for performance improvement (Gilbert, 1978), identifying top performing managers to define their competencies and to use these in the education of others (Boyatzis, 1982), implementing competence-based training and development (Zemke, 1982), using competence profiles for self assessment and development (McLagan, 1983), core competence of organizations (Prahalad & Hamel, 1990), and competency frameworks (Quinn et al, 1996). Furthermore, based on various theories of education and empirical research eight principles of competence-based vocational education were developed for the empowerment of local education teams to facilitate interactive processes of curriculum deliberation (Wesselink, Mulder & Biemans, 2007).

Furthermore, the study takes full account of the many criticisms regarding the old competency-based initiatives, and the more recent competence-based developments (Biemans et al, 2004; Mulder, Weigel & Collins, 2007; Weigel, Mulder & Collins, 2007). In the paper the criticisms will be reviewed and commented.

## **Methods, techniques, or modes of inquiry**

The review of the literature on competency-based and competence-oriented education and training initiatives is based on an ongoing research programme on competence development and life long learning, which started during the end of the nineties of the last century. During this period of literature study various techniques were used, such as literature searches in the various digital libraries and databases, the snowball method, and expert consultations within and without the field of education and educational research. This led to a rather comprehensive overview of the field, although we do not claim completeness.

The case study conducted for this study is based in a Dutch University and Research Centre, which comprises both academic and professional education programs, and various other universities. The distinction between the two is based on the Dutch binary system of higher education, which consists of academic and professional programs. Until recently both types of programmes were offered by different systems of higher education, universities and so-called higher vocational education. During the last couple of years the higher vocational education institutes refer to themselves as professional universities.

The mode of inquiry is a qualitative case study, using various stakeholders to evaluate the appropriateness of the concept of competence-based education in higher education. Since the use of principles of competence in professional education seems to be obvious, most attention was given to academic education. Academic education in the Netherlands however also can prepare students for professions in fields like of medicine, law or engineering.

## **Data sources**

The data regarding the literature review come from the international journal databases and policy reports of national and international institutes (such as USDE, the Commission of the EU, OECD, UNESCO, CEDEFOP), conference papers and the internet. Careful attention has been paid to select the scientific and formal policy sources as well as academic research papers.

Various data collection techniques were used, such as over thirty in-depth structured interviews of program directors, ongoing participatory processes (of six meetings) with the administration of the university, and two interactive focus groups with student organisations. The data sources of the case study are eight universities in the Netherlands and over twenty five full professors of these universities, from the chairman of the board of this university, the rector magnificus (dean), the director of education and research, the director of the educational institute, program directors, and fifteen representatives of student organisations. They all provided in-depth views about competence development and preparation for the labour market of students in academic education.

## **Results and Conclusions**

The results of the study are a review of the literature on competence development and views on competence development within university programs.

The literature review showed that much of the competency theory comes from the US, although there are also various authors in Europe who have contributed to the development and dissemination of this concept, such as in the UK (around the New Vocational Qualifications and Accreditation of Prior Learning; Eraut, 2003), France (around the 'bilan the competence'; Colardyn, 1996) and Germany (around the notion of 'Kompetenz'; Rauner & Bremer, 2004).

The literature also revealed a host of criticism around the concept, regarding its use in the curriculum, designing instruction, facilitating learning, and conducting assessment. The criticism can be summarized as follows. The implementation of competence-based education is too bureaucratic, it relies too much on standardization, it does not fulfil the promise of linking education and the labour market, it is too much assessment oriented, goes against the notion of liberal education, and masks the quality differences of the various colleges and universities.

The empirical part of the study however showed that: 1. academic higher education can make effective use of the concept of competence, knowledge is the largest part of the professional competence of an academic, and therefore knowledge construction remains the largest part of the curriculum; 2. course-competence matrices can help to identify the competence-oriented learning trajectories; 3. the perceptions and preferences of full professors regarding the use of competence development in academic education vary from critical ('... it is more bureaucracy and does not lead to better academic education') to supportive ('... it is essential for academic programs to pay attention to competence development, also when the program prepares for research; researchers are also working in teams and need to share and communicate'); others point to the mere fact that the programs must comply with the needs of society (which should be made transparent in accreditation processes).

Based on this study we conclude that, if implemented correctly, competence development is no error at all, but can help making higher education more relevant for the needs of society as well as for fulfilling the educational needs of students.

We recommend conducting further research to show differential relationships between the level of integration of the competence concept in higher education and the societal effects of the respective programs.