



A phenomenographic analysis of the implementation of competence-based education in higher education



Anne-Katrien Koenen^{*}, Filip Dochy, Inneke Berghmans

University of Leuven, Vesaliusstraat 2, 3000 Leuven, Belgium

HIGHLIGHTS

- Investigation of experiences of competence-based education in higher education.
- Using in-depth qualitative method: phenomenographic analysis.
- Majority of institutions use mix of traditional and competence-based teaching methods.
- Incentive for more empirical research of competence-based education.

ARTICLE INFO

Article history:

Received 1 October 2014
Received in revised form
6 April 2015
Accepted 10 April 2015
Available online 29 April 2015

Keywords:

Higher education
Competence-based education
Assessment
Phenomenographic analysis

ABSTRACT

After one decade of Competence-Based Education (CBE), the need arises to investigate the experiences and implementation of CBE in contemporary higher education. A phenomenographic analysis using interviews was conducted with three different groups of stakeholders, namely curriculum coordinator, teachers and students at 26 different educational institutions, providing three different types of educational programmes (ICT and Media, Management, Teacher Education). Results suggest that CBE is emerging and that the majority of the institutions designed their education through a mix of traditional and competence-based teaching and assessment methods. Nevertheless, some obstacles appeared as restrictions to succeeding in the further implementation of CBE.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

1.1. Competence-based education

The idea of competences was introduced in higher education because of the disconnection between what was taught in classes and what was needed in the labour market. There was a need to teach the ability to apply knowledge in practice rather than to teach just so that students would accumulate knowledge (Everwijn, Bomers, & Knubben, 1993; Malone & Supri, 2012; Mulder, 2012). The revival of Competence-Based Education (CBE) is connected with the shift to a knowledge-based society and a constructivist view of learning. The industrial society, which was supply-driven and focused on steering, shifted to a knowledge-based society with a demand-driven attitude in which facilitating the learner

rather than steering is what counted (Reigeluth, 1999). In current society people have to deal with a mass of information, take responsibilities, learn to learn, and make critical analyses (Dochy & Nickmans, 2005; Baert, Dekeyser, & Sterk, 2002). These fundamental changes have important implications for education (Reigeluth, 1999). Consequently, the Bologna declaration in 1999 encouraged education to change from teaching knowledge to teaching competences (Gilis, Clement, Laga, & Pauwels, 2008; Procee, 2001). Later on, Ehlen emphasised in 2010 that colleges and universities should review their position in the international knowledge society.

CBE had expanded nationally and internationally in higher education over the past ten years. All over the world, 'external accreditation bodies are requiring the programmers of higher education to document how they know that graduating students have obtained the necessary competencies that support their respective degrees' (Rivenbark & Jacobson, 2014, p. 181). Struyven and De Meyst (2010, p. 1495) indicated that many educational institutions and educational authorities are aiming to install CBE all

^{*} Corresponding author. Tel.: +32 16 37 95 68.

E-mail address: annekatrien.koenen@ppw.kuleuven.be (A.-K. Koenen).

over the world. The increasing popularity of CBE is attributed to the expectations that it better prepares learners to function more flexibly and adaptively in their future (professional) lives. Furthermore, CBE connects well with today's relevant topics such as 'employability' and 'lifelong learning' (Mulder, Gulikers, & Biemans, 2008). Finally, the development of competences sheds a positive light on the goals of education and training. It is a more positive, progressive goal focussing on the competences (i.e., strengths) of the learner than the 'deficit model' of the behaviouristic approach (Biemans, Nieuwenhuis, Poell, Mulder, & Wesselink, 2004; Struyven & De Meyst, 2010).

In the literature there is little consensus on the concept of 'competence' (Czeglédi, 2013; Korthagen, 2004; McMullan et al., 2003; Mulder, 2001; Wesselink, 2010; Wesselink & Wals, 2011; Whitty & Willmott, 1995). Not only do various definitions of 'competence' pop up, there exists also a lot of confusion around this concept. Moreover, the differences in the underlying views on learning are not readily compatible with one another (Korthagen, 2004; Mulder, 2012). Although the concept 'competence' occurs in the behaviourist, cognitive and constructivist approaches of learning, a constructivist view on learning and competences is advocated and adopted in this research (Simons, 2003), instead of the disintegrative simple stimulus-response of the behaviourism approach (Biemans et al., 2004). The self-regulation of students in the transformation of knowledge into practice becomes more central. Students are given more responsibility in their learning, which prepares them for facing today's turbulent and dynamic (professional) environments, and lifelong learning as such (Everwijn et al., 1993; Simons, 2003; Struyven & De Meyst, 2010).

The authors of this study use a generic definition of competence, constructed from an inventory of different definitions and perspectives in literature:

'A competence is a personal capability that becomes visible through showing successful behaviour in a specific contextual situation. A competence is dynamic over time and developable to some extent. A competence consists of an integrated set of knowledge, skills and attitudes, where also personal characteristics and aspects of the professional functioning influence the development of competences in some way.' (Dochy & Nickmans, 2005, pp. 35–36, own translation)

1.2. Characteristics of CBE

In the following paragraphs a number of features and principles of CBE are highlighted to get a clear view on what CBE entails.

The use of *realistic tasks* is one of the most important features in CBE. Study tasks and assignments should have a demonstrable connection with a professional practice and its competences (Ritzen & Kösters, 2002). Learning activities must take place in authentic settings where learning can be clearly linked to the more theoretical subject matter (Jaspers & Heijmen-Versteegen, 2004; Wesselink, de Jong, & Biemans, 2010). Because this learning is more practically oriented and enhances students' practical experiences, it significantly increases their motivation (Mulder, 2012; Schmidt, van der Molen, Te Winkel, & Wijnen, 2009). 'Problem Based Learning' (PBL) is a well-known way to work with authentic and realistic situations in education. Students learn how to solve problems that will occur in their future professional lives (Biggs, 1999). Positive results of this teaching method are found, i.e. development of more profound skills (e.g., interpersonal skills, problem solving skills, self-regulation, efficiency in work), a longer retention of the acquired knowledge and more progress and satisfaction in students in contrast to more traditional methods

(Dochy, Segers, Van den Bossche, & Gijbels, 2003; Schmidt, Rotgans, & Yew, 2011; Schmidt et al., 2009; Strobel & van Barneveld, 2009; Uys, Gwele, McInerney, Van Rhyn, & Tanga, 2004). Additionally, education should take as a starting point the situations and problems of the professional practice in shaping the curriculum and, as a result automatically keep up with the developments and challenges of the current labour market (Mulder, 2012).

A flexible curriculum needs a shift from supply-driven education with a fixed curriculum to *demand-driven education* that includes a more facilitative attitude by the institutions, i.e. the students receive more responsibility in their own learning process, while the teacher stimulates and coaches them to develop their own learning route (Ritzen & Kösters, 2002). In CBE, each student formulates his own personal learning needs based on his current development: the development of the competences of the *student is central* (Jaspers & Heijmen-Versteegen, 2004; Ritzen & Kösters, 2002). *Mentoring and coaching* refer to the idea that teachers encourage students to formulate their learning needs so they can own their learning process based on thorough *self-regulation* and reflection (Mulder, 2012; Wesselink et al., 2010). Consequently, in CBE the student takes responsibility for his own learning process and reflects on this. The autonomy of the student increases during their training programme: the student becomes the 'manager' of his own learning (Cnossen, 2009; Mulder, 2012; Ritzen & Kösters, 2002). Additionally, the *reflection* by the student, which is important in constructing the inverse association of practice with theory (Korthagen & Vasalos, 2005; Procee, 2001; Wesselink et al., 2010) should be stimulated and assisted by the teacher (Hatton & Smith, 1995). Hensel (2006) indicates that the task of higher education is to create a constructivist learning environment in which students have their say in the design, progress and evaluation of the learning process. As a result, students' self-reflection and self-regulation are stimulated. To motivate students to enhance their self-regulation and to stimulate active and meaningful learning, it is recommended to allow students to make their own choices regarding what they want to learn, and ask them to articulate why they want to learn these things (Kuijpers, Meijers, & Gundy, 2010; Pedrosa-de-Jesus & Moreira, 2009; Wesselink et al., 2010). The teacher has an important role in facilitating the student's reflective process. With critical questions, the teacher can stimulate the student to make the meaning of their professional (internship) experiences more explicit (Kuijpers et al., 2010; Winters, Meijers, Kuijpers, & Baert, 2009).

Students adapt their learning behaviour to the assessment method that is used or to what is being tested (Broekkamp & Van Hout-Wolters, 2007; Cilliers, Schuwirth, Herman, Adendorff, & van der Vleuten, 2012; Clement & Laga, 2005; Ritzen & Bruggen, 2010; Sambell, McDowell, & Montgomery, 2013). Assessment, instruction and guidance should therefore be congruent to achieve the desired learning behaviour of the learner ('principle of alignment') (Biggs, 1999; Gilis et al., 2008; Ritzen & Bruggen, 2010). When education wants to deliver competent actors and stimulate deep learning, students should be evaluated on the basis of how they use their competences to solve real-life problems rather than to confront them with more traditional ways of testing (Segers, Dierick, & Dochy, 2001; Fook & Sidhu, 2010; Kuijpers et al., 2010; Sloep & Jochems, 2007; Wilkens, 2008). The *new competence-based assessment methods* encourage students to continue their involvement in the learning process. The learners are evaluated based on what they produce and integrate, and not (only) on what they can memorise or reproduce (Birenbaum & Dochy, 1996). In CBE, there is a focus on 'Assessment for Learning' (AFL) instead of 'Assessment of Learning' (AOF). In AOF, the test focuses on the product of the learning process, while in AFL the evaluation of the learning process is more important to adapt the learning

Download English Version:

<https://daneshyari.com/en/article/373871>

Download Persian Version:

<https://daneshyari.com/article/373871>

[Daneshyari.com](https://daneshyari.com)