

Chapter 2

Designing Online Pedagogical Techniques for Student Learning Outcomes

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ABSTRACT

The concept of identifying and measuring student learning outcomes has been embraced by a wide range of international policy makers and institutions across the globe, including the European Union through the Bologna Process, the USA, the OECD and other international organisations, while at national level many states have adopted, or are in the process of adopting a new national qualifications framework, based on student learning outcomes. The challenge for educators is to develop ways of enabling students to achieve, and to demonstrate their achievement, of these outcomes. The aim of this chapter is to explore ways in which online pedagogical techniques can be designed to provide solutions to the challenge of clearly demonstrating that students are achieving intended learning outcomes. While the techniques have been developed in the context of distance education programmes, the chapter includes an example of how these methods have been adapted for blended learning for on-campus students. A note of caution is sounded on the need to adopt effective techniques which do not impact unduly on lecturer workload.

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INTRODUCTION

The chapter will discuss the impact of the shift to the learning outcomes paradigm, which is leading to demands on higher education systems to move from traditional ways of designing learning towards more innovative forms of assessment and teaching: approaches which, it is argued, have been pioneered by e-learning and distance learning institutions (see for example the work of the Institute of Educational Technology <http://oro.open.ac.uk/>). The chapter starts by outlining some of the sources of pressure on systems to adopt a learning outcomes approach, before describing some generic learning outcomes schemas which have been proposed. This leads to a review of a number of pedagogical techniques which were initially designed to enable distance education students to achieve generic competences, such as ability to learn, ICT and information management skills, capacity to analyse and synthesise, research and project management competence, and interpersonal skills including team and group work. The objective of this chapter is to demonstrate the potential of online learning, not only to facilitate an outcomes focused curriculum design, but also clearly demonstrate that learning outcomes have been achieved. The type of tasks and structures which are designed into the curriculum to provide students with the opportunity to develop, perform and demonstrate their competence and achievement of specific learning outcomes will be explored through a series of examples and case studies of practice located mainly in a distance learning environment. However, as one of the case studies demonstrates, these techniques can be successfully adapted for delivery in a blended environment for on-campus students. The potential and challenge in ‘blending’ e-learning pedagogies with on-campus provision is discussed.

THE SHIFT TO LEARNING OUTCOMES: IMPLICATIONS FOR INSTRUCTIONAL DESIGN

Learning outcomes can be defined as ‘statements of what a learner is expected to know, understand, and/or be able to do at the end of the learning process’ (CEDEFOP, 2009, p. 17). While sometimes regarded as synonymous with objectives, the key difference is that objectives can also refer to inputs, and what is to be taught, while outcomes specifically refer to what the student can accomplish. Learning outcomes have acquired increasing importance at a political level and are seen as supporting diverse functions including: quality assurance; transparency of qualification systems; transnational mobility; tools to relate practical and theoretical learning; formulation of lifelong learning policies; and crucially, as a catalyst for reform or modernisation (CEC, 2006; Nusche, 2008; OECD, 2007).

Many countries have now adopted national qualifications frameworks, based on learning outcomes: for example, Ireland has adopted a National Framework of Qualifications (NFQ) which identifies ten award levels, with detailed descriptors for learning outcomes for each level (NQAI, 2003). All higher education institutions in Ireland are required by law (Government of Ireland Qualifications [Education and Training] Act 1999 Section 7a) to adapt their curricula and award structures to the new levels, and all programmes and modules are required to adopt learning outcomes (described as ‘standards of knowledge, know-how and skill, and competence’) which match the NQF guidelines (Maguire, Mernagh, & Murray, 2007).

Similar initiatives are taking place in other EU member states and those which have signed up to the Bologna Process (2009), albeit some countries and institutions are adopting at a slower pace than others (CHEPS, 2007). In a comprehensive survey carried out in 32 European countries, CEDEFOP, the European Union Agency for Vocational Educa-

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