Chapter 13
Technological Aids to the Efficient Assessment of Prior Learning

Desirée Joosten-ten Brinke
Open University of the Netherlands, The Netherlands

Marcel Van der Klink
Open University of the Netherlands, The Netherlands

Wendy Kicken
Open University of the Netherlands, The Netherlands

Peter B. Sloep
Open University of the Netherlands, The Netherlands

ABSTRACT

It is generally acknowledged that learning and education play a prominent part throughout employees' careers across their entire lifespan. In the era of lifelong learning, Assessment of Prior Learning (APL) is a powerful means for enhancing employees' further professional development and learning, formally and informally. Though there is a growing attention for APL, the procedures, design, development and maintenance of APL remain a quite costly and time-consuming experience. After a description of the background and features of APL, this chapter examines the possibilities for re-using and interoperability by means of e-technologies. The chapter discusses the major components of the APL procedure, including the current possibilities for exchange and operability (e.g. specifications of QTI, IMS). The chapter concludes with a description and validation of an educational model of assessment for APL.

INTRODUCTION

At present, we are witnessing what according to some amounts to a digital revolution. Information and communication technologies intrude ever deeper in our society to the point that they have become inescapable (Sloep et al., in press). Examples abound, ranging from online banking and shopping to the keeping of records of our medical histories or mobile phoning behaviour. This digital

DOI: 10.4018/978-1-61520-983-5.ch013

revolution can only continue to flourish if people possess the skills and knowledge to design, build, operate, maintain and, indeed, use the technologies that sustain this information society. According to De Haan and Van 't Hof (2006, p. 225, translated from the Dutch by the authors), while quoting a European study (EMCC, 2003): 'Technological innovations have brought new opportunities to communicate and collect data within reach of increasing numbers of people. It is to be expected that this trend will only become more intense and ever stronger influence our lives in a variety of ways'. This trend is often referred to as the arrival of the information society. However, in its connection also such terms as post-industrial society (Toffler, 1980), knowledge society (WRR, 2002), and networked society (Castells, 1996) are used.

Setting aside the nuances of the distinctions between them, three different undercurrents to this trend may be discerned. First, there is an increased need for more and deeper knowledge; second, the half-life of existing knowledge decreases; and third, as our society at large changes, we as its participants need to continuously adapt to it. These aspects can be directly translated into an equal number of challenges for society: How can we educate more people better? How can we educate people faster? How can education keep pace with the changing society? Meeting these challenges requires people to be educated not once in their lifetime, but throughout their life; and this applies to almost everyone. This means that educational programmes must be efficiently and effectively developed, tailoring the programme to the competences people already mastered through previous learning experiences. To tailor educational programmes, recognition of such prior experiences, however acquired, is important and the key to successfully meet the three challenges discussed.

In this chapter we will elaborate on this line of reasoning. To that end, we provide insight in the effects of the changing society on the needs of lifelong learners. We will also look into ways to meet these needs, particularly the re-use of educational materials for faster adaptation will be discussed. In this discussion, we include the current possibilities for exchange and operability by means of specifications like IMS ePortfolio and IMS QTI. First, the consequences of the transition towards an information society for learning and training on employees' competence development and, with that, on the importance of the recognition of prior learning are described. Second, we zoom in on procedures for the Assessment of Prior Learning and on the conditions that have to be met for assessment of prior learning to be a viable solution. Finally, as assessment of prior learning tends to be both expensive and time consuming, means are discussed to overcome this.

TRENDS AND CHALLENGES

In this section we describe three trends that seriously impact many aspects of our contemporary society.

A first trend is that the information society needs more knowledgeable people, meaning that more people than ever before should receive more education than ever before. All venues of life, all professions, and ever more countries have increasingly come to rely on the technological artefacts to run society. Many examples are available and here we present two of them. Some 40 years ago, cars were still predominantly mechanical appliances, nowadays they are a mixture of mechanics and electronics. Clearly, this requires a different expertise to design, build and maintain them, and even to drive them. The car mechanic now needs to understand the output of the computerised diagnosis system and the owner needs to be able to interpret the various messages shown by the car's display. Something similar applies to the medical profession. This profession has always been a profession that heavily relied on technology. However, with the advent of computers technology has invaded virtually all walks of a