Chapter 3 **The Assessment of Interactive Learning**: The Contributions Made by Online Portfolios and Cognitive Mapping

Edméa Santos *Faculty of Education of State of Rio de Janeiro, Brazil*

> **Marco Silva** Estácio de Sá University, Brazil

ABSTRACT

This chapter proposes the use of a communicational approach to rethink conceptual and methodological aspects of learning assessment in the context of interactive online information and communication technologies. The approach makes use of the digital online portfolio interface together with cognitive mapping techniques (mind maps and concept maps) as devices for assessing learning in online education. The examples described in the text are the result of pedagogical practice and research undertaken by the authors.

INTRODUCTION

The assessment of learning in the online classroom requires that a break be made with the traditional model of assessment that has developed over time in the physical classroom. If teachers do not want to underuse the potential of the digital online medium or repeat the same mistakes as those made by teachers using traditional assessment, they will have to discover new attitudes and new engagement strategies for their teaching and learning situations and so re-dimension the way they assess learning and their own performance. The traditional model of learning assessment is characterized by arbitrary procedures linked to the cumulative measurement of the results of specific tests, defined by the teacher, of the student's work and attitudes. The student's performance is measured in the same way as one measures length, quantity and volume, using scales and assigning numerical values to it.

According to Hoffman (2004a, p. 25), "assessment in schools is a laborious process involving the judgment of results." A practice consisting of "the recording of results about the student's performance during a particular period" or "final exams and the assignment of marks to classify the results." For her,

DOI: 10.4018/978-1-59904-992-2.ch003

Copyright © 2010, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

a conscious or subconscious perception became established as part of a distressing collective practice based on historic bureaucratic demands and a deep-rooted authoritarian attitude.

This author became widely known in the academic and educational world for her involvement in the "assessment phenomenon." The conclusions she reaches in her research strongly suggest a preference for "mediatory assessment", her theoretical and practical approach for overcoming the deficiencies of the traditional assessment model from a perspective of "constructivist and liberating assessment." This approach is built on the principles of independence, dialogue, participation and collaboration in order to overcome the deficiencies associated with the arbitrary nature of the assessment-based model, which revolves around exams, grades, reports, repeat exams and failure.

"Giving a grade is assessment, sitting an exam is assessment, the record of the grades is called assessment." This definition suggested by the author shows the reductionist view that is taken of learning assessment in schools and universities. To assess is to judge the result of the learner's work after the learning has taken place. To assess is to issue a final appreciation dissociated from the learning process but intimately linked to the ghosts of control and authoritarianism that have historically marked education (Hoffman, 2004b; 2004c).

This model survives to the present day. It brings the stamp of authoritarianism and arbitrariness, which are incompatible with the emerging dynamics of learning, to the knowledge society and to "cyberculture" (Lemos, 2002a; 2002b).

Henceforth the perspective is one of interactivity supporting learning communities in online networks that value independence, dialogue, participation and collaboration. The old model of assessment will cease to occupy such a dominant position in the new sociotechnical context, allowing new learning and assessment practices more in tune with the dynamics of our time to be developed.

In this context, new pedagogical practices capable of resignifying teaching and learning processes, and hence learning assessment practices, must be developed. In this work we discuss how the theory of interactive assessment combined with cognitive mapping techniques (concept maps and mind maps) and the use of online portfolios can make a useful contribution to the debate.

THE USE OF INTERACTIVE ASSESSMENT IN THE ONLINE CLASSROOM

Teachers and students accustomed to the primacy of transmission in education and the mass media now have to develop alternatives to transmissive teaching and the associated learning assessment model. They have to develop their creative imagination to meet the new sociotechnical demands for independence, a multiplicity of connections, dialogue, collaboration and interactivity.

Teachers and students may fail to make full use of the potential of the digital environment and the Internet in the classroom if they do not understand the complex concept of interactivity. By this is meant the communication mode that is increasingly occupying a position of central importance both in the digital age and in cyberculture. The concept involves consciously making available a more communicational, deliberately complex medium prepared by the sender, giving the receiver the possibility of replying to the system of expression and dialoguing with it. Thus understood, interactivity represents a qualitative leap in relation to the mass communication mode that prevailed until the end of the 20th century and whose univocal logic is now under threat in a context in which it is expected that the restrictions imposed by passive reception will be overcome.

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/assessment-interactive-learning/36289

Related Content

Taxonomy for the Technology Domain

Lawrence A. Tomei (2005). *Taxonomy for the Technology Domain (pp. 89-108).* www.irma-international.org/chapter/taxonomy-technology-domain/30046

Tailoring Multimedia Environments to Learner Cognitive Characteristics

Slava Kalyuga (2009). *Managing Cognitive Load in Adaptive Multimedia Learning (pp. 221-245).* www.irma-international.org/chapter/tailoring-multimedia-environments-learner-cognitive/25739

A Case Study of Lessons Learned for the Web-Based Educator

Kay A. Persichitte (2000). *Instructional and Cognitive Impacts of Web-Based Education (pp. 192-199).* www.irma-international.org/chapter/case-study-lessons-learned-web/23907

Cognitive Load Theory

Slava Kalyuga (2009). *Managing Cognitive Load in Adaptive Multimedia Learning (pp. 34-57).* www.irma-international.org/chapter/cognitive-load-theory/25731

Collective Memory

Luca landoliand Giuseppe Zollo (2007). *Organizational Cognition and Learning: Building Systems for the Learning Organization (pp. 56-69).* www.irma-international.org/chapter/collective-memory/27887