Chapter 14
Virtual Collaborative Learning:
Opportunities and Challenges of Web 2.0–Based E-Learning Arrangements for Developing Countries

Wissam Tawileh
Technische Universität Dresden, Germany

Helena Bukvova
Technische Universität Dresden, Germany

Eric Schoop
Technische Universität Dresden, Germany

EXECUTIVE SUMMARY

New technologies are used increasingly to enhance people's lives in many fields, and education is a very important sector that can benefit from technological development. The idea of using technology to facilitate and enhance learning, known as electronic learning, has led to the development of a wide range of applications and implementations worldwide. Electronic learning can offer new opportunities for developing countries by increasing access to education and improving learning outcomes. This chapter presents Virtual Collaborative Learning (VCL) as a modern technology-enhanced team-learning arrangement based on a constructivist learning paradigm.

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By utilizing Web 2.0 tools to empower and enhance classical e-Learning methods, VCL reaches far beyond classical Web-Based Training. Opportunities and challenges of VCL for developing countries will be discussed based on a long European teaching and research experience.

INTRODUCTION

The introduction of Internet has had a considerable impact of many aspects of our society, altering processes and approaches in public, private, and corporate settings. The uses of Internet range from information retrieval to social functions (Long & Baecker, 1997). Besides supporting and enhancing existing approaches, the use of Internet has facilitated new approaches in many different fields, creating 'e-Forms' such as e-Business, e-Commerce, e-Government, or e-Health. In this chapter, we will discuss a technology-enhanced approach from the area of education, known as electronic learning, i.e. e-Learning. Among the alleged benefits of e-Learning—in comparison to traditional learning practices where physical presence of teachers and learners in the same classroom environment is essential (Rumble, 2001)—are an access to a wider audience, an easier access to learning resources, and a time and space independence.

The emergence of Web 2.0 introduced new participation tools and communication channels for Internet users who were thus empowered to become real content creators and developers on the Web (Murugesan, 2007). Internet users can now actively create and share useful content, and easily participate in synchronous and asynchronous discussions and dialogs. In educational setting, modern Web-based participation tools offer teachers the ability to support collaboration in interactive learning environments they always needed (Jonassen, Peck, & Wilson, 1999).

In addition to traditional e-Learning and Web-based teaching practices, Computer-Supported Collaborative Learning (CSCL) further utilizes Information and Communication Technologies (ICT) and recently Web 2.0 features for an effective and efficient delivery of learning content in a modern, attractive, interactive, and learner-centered form. In this chapter, we will introduce and discuss a particular CSCL-arrangement called Virtual Collaborative Learning (VCL). The aim of VCL is to support both individual and collective learning processes and enable learners to develop their own knowledge and share it by interacting with teachers/tutors and other learners using modern communication and collaboration tools. While practicing this, new competencies in social media, teamwork, decision-making, and intercultural awareness can also be gained and developed (Schoop, Bukvova, & Gilge, 2006).