Preface

The Web is shifting from being a medium, in which information is transmitted and consumed, into being a platform, in which content is created, shared, remixed, repurposed, and exchanged. Learners become part of a global human network in which they can harness the collective intelligence of people in the world that could have never been possible previously. With the advent of Web 2.0, e-learning has the potential to become far more personal, social, and flexible. Consequently, e-learning 2.0 can capitalize on many sources of content aggregated together into learning experiences and utilize various tools including online references, courseware, knowledge management, collaboration, and search. *Collective Intelligence and E-Learning 2.0: Implications of Web-Based Communities and Networking* introduces theoretical aspects of e-learning 2.0 as well as disseminates cutting-edge research and first-hand practices regarding game-based simulation, podcasting, Second Life, social bookmarking, social networking, YouTube, Wiki, and so forth, on e-learning. In addition, instructional design models, strategies, and furture trends of e-learning are covered this book.

The book is written for broader audiences including educators, trainers, administrators, and researchers working in the area of e-learning or distance learning in various disciplines (e.g., educational fields, corporate training, instructional technology, computer science, library information science, information technology, and workforce development). The book can be used as a research reference, pedagogical guide, or educational resource in the area of Web 2.0 technologies and related applications applied to e-learning.

ORGANIZATION OF THE BOOK

Collective Intelligence and E-Learning 2.0: Implications of Web-Based Communities and Networking is designed to be used in a flexible manner, and it can adapt easily to suit a variety of educational technology related courses and needs by students, instructors, and administrators. The book includes a selection of chapters addressing current research, case studies, best practices, pedagogical approaches and strategies, related resources and projects related to e-learning 2.0. The book is organized into two sections, From Web 2.0 to E-Learning 2.0 and Beyond (chapters 1-6) and Web 2.0 Technologies in E-Learning (chapters 7-16). The book covers beyond theoretical insights of Web 2.0 and e-learning 2.0. It shares practical aspects of e-learning 2.0 and provides readers with a balance of research, theory, and applications on both innovative Web 2.0 technologies and future e-learning.

Chapter 1: Learning Networks and Connective Knowledge. This chapter introduces theoretical views on factors impacting the future of e-learning. It discusses connectivisim theory, networked learning, connective knowledge, and network semantics that form a new e-learning approach (e-learning 2.0).

Chapter 2: Conceptualizing Codes of Conduct in Social Networking Communities. This chapter reviews the capabilities of social networking tools and links those capabilities to recent legal and ethical controversies involving use of social networking tools such as Facebook and MySpace.

Chapter 3: Fulfilling the Promise: Addressing Institutional Factors that Impede the Implementation of E-Learning 2.0. As online learning continues to expand and evolve, new challenges emerge regarding the implementation of Web 2.0 tools and technologies in online pedagogy. This chapter examines institutional factors that impede implementation of e-learning 2.0. The business model approach to online learning being embraced by many institutions may actually work against faculty who want to utilize Web 2.0 technologies to create e-learning 2.0 experiences for their students.

Chapter 4: Designing Dynamic Learning Environment for Web 2.0 Application. This chapter presents a new instructional design model that specifically addresses the cognitive demands involved in Web 2.0 learning, promotes learning that focuses on metacognitive thinking and self-regulation, facilitates knowledge integration and construction of schemas-of-the-moment for ill-structured learning, and delivers a dynamic learning environment in Web 2.0 application.

Chapter 5: Instructional Strategies for Teaching in Synchronous Online Learning Environments (SOLE). This chapter discusses synchronous online learning environments (SOLEs) and their affordances for teaching and learning.

Chapter 6: University 2.0: Human, Social, and Societal Issues. Higher education is changing in important and profound ways. University 2.0 offers amazing potential to fundamentally change the way higher education functions in the future. This chapter describes many of the potential problems that will accompany university 2.0 and provides a series of recommended actions that university administrators can take to respond to the problems.

Chapter 7: Use of Wikis to Support Collaboration among Online Students. This chapter discusses the merits and challenges of using a Wiki to support the activities of students during group projects.

Chapter 8: Wikibook Transformations and Disruptions: Looking Back Twenty Years to Today. A Wikibook is a transformative and disruptive technology that is finding increasing use in schools and higher education institutions. This chapter describes the adoption of three Wikibooks in cross-institutional higher education settings and discusses collaboration issues, technology issues, knowledge construction and sense of community issues related to the Wikibook technology and the Wikibook design process.

Chapter 9: Web-Based Video for e-Learning: Tapping into the YouTube™ Phenomenon. The recent explosive growth of Web-based video has expanded the repository of free content that can be tapped into for e-learning. This chapter introduces Web-based video as a new form of educational motion picture, delves into technical aspects of Web 2.0 video tools, describes instructional strategies that integrate Web-based video clips in e-learning, and examines barriers that could potentially inhibit its use.

Chapter 10: From Information Literacy to Scholarly Identity: Effective Pedagogical Strategies for Social Bookmarking. This chapter provides best examples for effective pedagogical applications of social bookmarking and offers insights into how these activities change the way students think and learn.

Chapter 11: VISOLE: A Constructivist Pedagogical Approach to Game-Based Learning. VISOLE (Virtual Interactive Student-Oriented Learning Environment) is a constructivist pedagogical approach to empower computer game-based learning. This approach encompasses the creation of a near real-life online interactive world modeled upon a set of multi-disciplinary domains, in which each student plays a role in this "virtual world" and shapes its development. With sophisticated multi-player simulation contexts and teacher facilitation (scaffolding and debriefing), VISOLE provides opportunities for students to acquire both subject-specific knowledge and problem-solving skills through their near real-life gaming experience.

Chapter 12: Second Language E-Learning and Professional Training with Second Life®. *This chapter addresses the application of e-learning in university degree programs based on exploiting the practical, intensive, and holistic aspects of* Second Life®.

Chapter 13: Empirical Evidence and Practical Cases for Using Virtual Worlds in Educational Contexts. This chapter introduces three cases for educational uses of the Second Life® virtual world and provides empirical evidence for effective usage within the educational contexts.

Chapter 14: A Pedagogical Odyssey in Three-Dimensional Virtual Worlds: The Second Life® Model. This chapter discusses the theoretical perspectives, educational possibilities, as well as challenges of using virtual worlds in teaching and learning. In addition, it offers a pedagogical framework to support teaching and learning in virtual worlds - the Second Life® model.

Chapter 15: Podcasting: A Flexible E-Learning Tool. This chapter discusses the uniqueness of podcasting technology in promoting e-learning, examines educational efficacy of podcasting in e-learning, and provides podcasting best practice in e-learning design and delivery.

Chapter 16: Using Social Networking to Enhance Sense of Community in E-Learning Courses. This chapter provides an overview and development of sense of community and social networking, discusses the potential uses of social networking in education, and presents a case study that integrates social networking into e-learning courses for the purpose of building a sense of community, improving communications and interactions, and promoting student-centered collaboration.