# **Preface**

This book explains why we need Multiculture and Diversity. Looking to nature, we have many arguments why diversity in the intellectual sense is beneficial: solutions to tough problems benefit from multiperspectiveness; the meeting between a given problem and humans' minds needs flexibility and contextual diversity in order to cope with peculiar properties of the situation. This book is rich in examples: for instance the "Value Cycle" using Web 2.0. Forming a professional learning community and religious perseverance seem to be irreconcilable. However, if we simply look to the roots of religions like Zionism, Christianity, and Islam, it becomes clear why we need diversity. First of all, a religious dogma needs an antithesis in order to become "strong." More important is that any paradigm has a limited bandwidth; for instance, the combination of existentialism and altruism make a powerful combination. Chapter 3 brings us the power of intercultural collaborative learning, constructivist cross-teaching approach; what do we expect from students as they become immersed in problem- rather than evidence-based scenarios? Will they start improvising or immediately surrender and ask the teacher to hint at a solution? At best, the student exhibits a mix of earlier reflexes and curiosity rather than fear and is willing to explore the new problem as a unique challenge. We hope that you exhibit this attitude and dive into the coming chapters and distill your own, unique solutions. Have fun!

#### **SECTION 1**

Chapter 1, "A Model to Build an Intercultural Professional Learning Community in a Latin American Higher Education Network: The 'Value Cycle' Using Web 2.0," by Ellerani, presents an action-research project performed in a confederation of Institutions of Higher Education in seven Latin American countries. This project describes a notion of the quality of teaching, presents a study based on and supported by tools, which allows teachers to evaluate themselves as well as the possibility to examine the quality of universities and to further develop methods for permanent improvements by structuring a community of learning.

Chapter 2, "Intercultural Collaborative Learning Scenarios in E-Business Education: Media Competencies for Virtual Workplaces," by Katzlinger and Herzog explores a learning scenario that has been created for acquiring e-business skills in a variety of organizations. The results presented in this chapter is derived from a constructivist cross-teaching-approach as well as an empirical research resulting from a virtually interregional cooperation between a German and an Austrian university regarding business sciences from winter term 2010/11 and summer terms 2012 and 2013.

Chapter 3, with the title "Social Science Universals," by Hansson deals with the analysis of two distinct but connected cases, formation of learning objectives, and religious persuasion. Generally, we utilize universals without considering what they imply, thus these two cases show the explanatory influence of universals (i.e. social science concepts). Accordingly, the author of this study legitimizes an ambition to separate between good and bad research by choice and inclusion of a large but poorly defined number of universals in education research.

Chapter 4, titled "Student Mobility in Higher Education Explained by Cultural and Technological Awareness in Taiwan" and authored by Chang, provides an overview regarding the aspects that might affect the intention to study abroad and has the objective to establish which factors can be used to draw attention of international students. A case study was performed with the purpose of establishing what students consider crucial regarding the intention of studying abroad by examining their program preferences and using fuzzy statistics to assess student willingness for overseas study.

In Chapter 5, "A Sociocultural Approach to Developing Online Drill and Practice TOEIC Preparation Materials for EFL Programs," Farouck presents how a group of faculty members were able as a community of practice to produce internal TOEIC (Test of English for International Communication) preparation materials that also included the students' essential background expertise.

# **SECTION 2**

Chapter 6, titled "A Virtual Learning Process Environment and Comparison with Conventional E-Learning Systems," by Adesina and Molloy, presents a Virtual Learning Process Environment (VLPE) that is based on the Business Process Management (BPM) technology conceptual framework. It discusses the position of existing e-learning technologies in supporting learning and teaching in higher education. It also presents the advantages and disadvantages of some e-learning systems (such as CMS, LCMS, LMS, VLEs) and the manners in which the systems can help to create educational value.

Chapter 7, "E-Learning Math Course Design Process," by Rudak, discusses the procedures of designing a math e-course. The author divides the process of developing the e-learning course into three steps: the first step is to determine the general outline of the course in terms of organization, communication, and methods of access to the course materials; at the second step, it is important to define the domain and the range of the content to be taught; in the last step, the course designer has to complete the template by structuring the content units provided at the second step.

Chapter 8, titled "E-Learning Tools Applied in Teaching English at the University Level," by Medárová, focuses on a review of current literature on e-learning purposes and the theoretical background of design of e-learning courses. This chapter offers a comprehensive overview regarding the theoretical history of online language learning. It portrays e-learning and computer-assisted language learning and also covers suggestions for an online course design and names some concerns that need special attention regarding the development of the e-learning course (in this case, online language course).

Chapter 9, "Evaluating a Learning Management System to Support Classroom Teaching," by Lima and Passos, explores the notion that innovative pedagogical approaches are essential to prepare future professionals. This chapter presents the authors' experience in selecting and assessing a Learning Management System (LMS) to support the teachers at the Exact and Applied Sciences of the Federal University of Ouro Preto (IEAS/UFOP). Here, it is presented how the use of a LMS may improve teaching, considering the following aspects: accessibility of didactic resources, class preparation and following up, communication between teacher and student, checking the academic performance of students during the course, and collaboration between students.

The last chapter in this section, chapter 10, dedicated to Learning Cultures and Multiculturalism, written by Teräs, Leppisaari, Teräs, and Herrington with the title "Learning Cultures and Multiculturalism: Authentic E-Learning Designs," addresses the experiences of two cases from multicultural and multidisciplinary online programs for teacher education and professional development. With this study, the authors have the intention to discover how learners with diverse cultural environments experience the authentic e-learning process, and also to receive insights concerning what impact the authentic e-learning model might have on the progress of the learning culture.

In chapter 11, "Blended Learning at Ajman University of Science and Technology: A Case Study," Ankit, Nachouki, and Naaj examine student and instructor satisfaction concerning blended learning at AUST (Ajman University of Science and Technology). The authors reach the conclusion with their study that most of the students and teachers have positive views regarding blended learning but are still connected to the traditional face-to-face learning. In addition, the study presents that the level of contentment may rely on individual experience as well as on the subject studied. The authors believe that in a near future blended learning will become progressively more widespread within institutions of higher education.

## **SECTION 3**

Chapter 12, "Comparing Learning Styles and Technology Acceptance of Two Culturally Different Groups of Students," by Saeed and Sinnappan, explores a study that analyzes the learning styles and technology acceptance of two culturally distinct groups of students studying at Swinburne University of Technology in Australia and at Southern Polytechnic State University in the Unites States of America. The study maintains and develops research involving the utilization of Twitter in a higher education context and consequently offers a helpful insight into the learning styles of diverse groups of students in a higher education environment.

Chapter 13 explores an intelligent Web-based interactive system that aims at helping students in learning to convert First Order Logic (FOL) sentences into their Clause Form (CF) and provides feedback based on the student's actions. This chapter, entitled "An Intelligent System for Learning First Order Logic to Clause Form Conversion," is authored by Grivokostopoulou, Hatzilygeroudis, and Perikos and presents a general idea of the FOLtoCF system (a Web-based interactive system in the context of teaching logic for knowledge representation and reasoning). This system has the purpose to help the teachers in teaching and students in learning how logic is used for knowledge representation and reasoning.

## **SECTION 4**

Chapter 14, titled "Applying a Technological Pedagogical Content Knowledge Framework in Ethiopian English Language Teacher Education," by Abera, explores the existing literature on Technological Pedagogical Content Knowledge (TPACK) framework and addresses a general idea of teacher education in Ethiopia in general and English language teacher education in particular. The main purpose of this chapter is to emphasize the application of TPACK in Ethiopian English language teacher education program by examining the existing literature and by assessing the English teachers' knowledge and application of TPACK framework in their courses.

The study presented in chapter 15, "Computer Skills and Prior Experience with E-Learning Courses as Factors that Affect Development of Intellectual Thinking Dispositions in Online Learning," by Bouhnik and Carmi, evaluates the consequence of three initial factors among students who partake in e-learning courses, such as previous knowledge and experience with computers, Internet skills, and previous experience with online courses. The study, performed with the help of 285 bachelor and masters students from Bar Ilan University, who participated in asynchronous and synchronous courses, shows that widespread computer knowledge and experience and also a high level of Internet familiarity have a positive effect on the students participating in e-learning courses.

Chapter 16 on "Envisioning Mobile Learning as the Future of Teaching and Learning via Technology: A Literature Review of Mobile Learning" by Imtinan, Chang, and Issa presents a literature review on the current mobile learning theories, models, and frameworks by taking into consideration mobile learning features and challenges presented by mobile learning researchers across the world with the fundamental purpose of showing mobile learning as a future of education (i.e. learning and teaching).

Chapter 17, "Interactive Multimedia: Increasing the Study in Primary Education," written by Mussoi, Amaral, Tarouco, and Lima, focuses on how multimedia's interactivity can influence the performance of 5th graders in a controlled environment by using Portuguese questions from a Brazilian test (known as Prova Brasil) as inputs. The study was carried out with two different groups of students: one group had access to interactive contents and resources and the second group carried out the same activity in a context, without any multimedia resources. This chapter compares the performance of each group and shows how different levels of interactivity can affect the number of correct answers in the activities.

Stockport's chapter 18, titled "Massive Open Online Courses: Imposter or Saviour?" presents the state-of-play regarding Free Massive Open Online Courseware (MOOC). It examines if the initial findings (May 2013) point out whether MOOCs will be confirmed as a "game changer" in higher education. This chapter explores a number of theoretical models and frameworks to facilitate the evaluation of the potential impact of MOOCs as well as to help in future contexts.

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