Interactions in online education
(Book Review)

Reviewers:

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Textbook Details:

Online education progresses rapidly with the swift evolution of ICT. Among all these issues related to online education, interaction has been identified as key to successful teaching and learning. How to maintain interactivity draws most attention of educators, instructional designers, developers and researchers because it is proven to prompt knowledge construction and meaningful learning. However, some online educators are facing the challenges of designing, developing and facilitating interactions. "Interactions in online education", which is based on theory and practice, experience-based and reflective teaching techniques, provides guidelines for educators to promote interaction in e-learning environment. This book aims to underscore the magnitude and examine the nature of existing interactions to offer practicable teaching strategies.

This book consists of 13 chapters and covers 4 sections: theoretical and pedagogical perspectives, design and learning environment, practice and professional development. Section 1 proposes frameworks for educators to clarify the structure of interactions and review their functions from pedagogical perspectives. Chapter 1, "Theoretical perspectives on interactivity in e-learning", presents the category of interactivity at 3 levels: interaction with concepts, task and people, which parallel the learning cycle of conceptualization, construction and dialogue. Chapter 2, "Encounter theory: a model to enhance online communication, interaction and engagement", regards interactions as a series of changing encounters and negotiations between stakeholders, like designers, learners, teachers, administrators and technicians. Next, the authors demostrate how to create effective encounters through case study. Chapter 3, "Analysing and designing e-learning interactions", provides 3 levels of planned e-learning interactions, including learner-self, learner-interface, and learner-instruction interactions, to explain how the framework can be used to design, analyse and organize interactions.

Section 2 deals with how to authenticate and contextualize interactions in designing e-learning activities, including the use of games, learning objects and simulations. In Chapter 4, "Designing interaction as a dialogue game", the authors illustrate an example by introducing a social-cognitive tool called InterLoc. Chapter 5, "A model of authentic activities for online learning", highlights the quality of interactivity depends on how authentic the learning task is. Next, the authors provide a model and 10 design principles for developing authentic activities. Chapter 6, "Learning designs, learner interactions and learning objects", develops a model of combining learning designs and reusable learning objects technologies. Chapter 7, "Methods of learning in simulation environments", depicts how to use simulation in e-learning based on problem-solving on a screen, and how interactions and feedbacks in simulations have contributed in enhancing learners' higher order thinking.

Section 3 outlines the previous concepts and addresses how to apply interactions in practice in online learning. Chapter 8, "Interaction in learning and teaching on the Educational Semantic Web", classifies the interactions in ESW and presents a model designed for learner-paced study. Chapter 9, "Interactions in online discussions", discusses synchronous and asynchronous interaction forms. Chapter 10, "Interactions in online peer learning", shows the potential of peer learning mode with the support of pedagogy and technology. Chapter 11, "Interactions in

teaching by videoconferencing", analyses how videoconferencing and face-to-face interaction can be blended to enable interactive learning.

Section 4 offers teaching guides for faculty to acquire professional development. Chapter 12, "Professional development of online facilitators in enhancing interactions and engagement", focuses on the importance of reflection in professional learning and practice. Chapter 13, "Developing competencies for online and distance education", analyzes the role of distance educators in changing times and examines the competencies required in distance and online education.

This book explores how to conceptualize and analyse interactivity in theory and how interactions foster learning and reflection in practice. The first section recognises interaction as an essential part to deeper learning by extending a vast network of previous knowledge. The following sections detail that interactions can be shaped by well-designed and well-developed instruction and are beneficial to the co-construction knowledge process. Section 4 concludes guides at the end of the book which clearly illustrate the practice of core concepts. By reviewing learning theory and teaching experience, these authors examine the forms and functions of interactions by providing pedagogical framework and application.

Overall, this book is conceptually comprehensive and offering accessible resource. Not only all the examples in this book mirror the possible potential of existing interactions in e-learning today, but also the case studies detail how interactions can be designed and developed effectively to facilitate online learning while classifying and defining online interactions. However, not all interactions are highly designable as well as meaningful to students. One of my reflections is to take the social and cultural dimensions of interactions into account because in constructivist learning theory, learning is the process of social interaction and co-construction. Moreover, while interpreting online interactions, the engagement of students and the characteristics of media need to be further explored because the media per se covers messages, which include the interrelation hidden among the instructors, designers, and students. Despite these limitations, I would highly recommend this book as a remarkable reference for instructors and researchers and as a handbook for designers and administrators because it gives many useful background knowledge on how interactions work in reality and instructors can easily select topics related to their interest in a variety of contexts.