
Book Reviews □ Linda Lohr, Editor

The Systematic Design of Instruction (6th Edition). Walter Dick, Lou Carey, and James O. Carey. (2004). Allyn & Bacon. 400 pp. \$99.80 (soft cover). ISBN: 0205412742

Reviewed by Shujen L. Chang

□ The sixth edition of *The Systematic Design of Instruction* describes the Dick and Carey systems approach model. This model encapsulates the fundamentals of instructional design using concepts and procedures for analyzing, designing, developing, and evaluating instruction. Numerous examples illustrate the application of the instructional design process and ready-to-use materials for Web-based instruction. The textbook is particularly suitable for graduate-level instructional design courses focused on the design of face-to-face and Web-based learning environments.

The overall quality of this book has been widely recognized. An earlier edition of *The Systematic Design of Instruction* (Dick & Carey, 1996) was praised as one of the two most appropriate textbooks for instructional design in the 2000 ITFORUM poll (Bond-Hu & Spector, 2002) along with *Designing Effective Instruction* (Morrison, Ross, & Kemp, 2001). The recently revised 6th edition inherits notable features of previous editions and also adds prominent features for effective instructional design and Web-based instruction. Significant features, including the systems approach, multiple theoretical foundations, book organization, graphic organizers, real-world examples and practice, and features new to the sixth edition are described below.

The Systems Approach

The Dick and Carey model uses the systems approach for designing effective instruction. This approach emphasizes thorough analysis of interrelated instructional components, integral evaluation of instructional materials, and refinement of the instruction throughout the creative process for supporting successful learning. Components such as the instructor, learners, materials, instructional activities, delivery systems, and learning performance environments are analyzed and designed to work together toward supporting student

learning. With the systems approach, the Dick and Carey model is appropriate for a variety of instructional delivery systems, ranging from print instruction to complex digital multimedia for distance delivery over the Web. This model can be used for both individualized and group-based instruction and for both instructors and instructional designers.

Multiple Theoretical Foundations

The Dick and Carey model is based on multiple learning perspectives: behaviorism, cognition, and constructivism. For instance, the instructional strategy component of the model uses Gagné's conditions of learning (behaviorism) and cognitive information processing theory (cognitive theory) for formulating instructional material presentation (p. 189–190). The context analysis component uses constructive methods (constructivism) to assist learners in creating optimal conceptual frameworks for learning, remembering, and performing (p. 103–104). This model also promotes problem solving from multiple learning perspectives by providing real-world examples throughout the book. The authors explicitly point out that there is no single model for all instruction. They encourage instructors, instructional designers, and learners to create their own instructional design processes as unique solutions to the particular problems in their practical situations.

Book Organization

The Systematic Design of Instruction presents the Dick and Carey model in the traditional sequence, presenting chapters on analysis (Conducting Front-End Analysis to Identify Instructional Goals, Conducting a Goal Analysis, Identifying Subordinate Skills and Entry Behaviors, Analyzing Learners and Contexts), design (Writing Performance Objectives), development (Developing Assessment Instruments, Developing an Instructional Strategy, and Developing Instructional Materials), and evaluation (Designing And Conducting Formative Evaluations, Revising Instructional Materials, and Designing and Conducting Summative Evaluations). Such a straightforward chapter sequence is easy for both novice and expert instructional designers to use.

Graphic Organizers

Various graphic organizers throughout the book provide scaffolding for applying abstract concepts into practical instructional design. These graphic organizers include flow charts, listing of chapter objectives, figures, and tables. The flow chart at the beginning of each chapter shows the specific component discussed in the chapter and its respective position to other components

within the model. The listing of objectives in each chapter explicitly communicates with students about the expectations of learning outcomes. Figures and tables transform the abstract concepts into concrete notions. For instance, on page 17, Figure 2.1 illustrates front-end analysis for complex training and curriculum development contexts. On page 110, Table 5.2 displays methods for analyzing performance context.

Real-World Examples and Practice

Various authentic examples and practice throughout the book help learners connect conceptual theory to their own real-life applications. Each chapter provides examples to facilitate the construction of new knowledge that can reduce learners' cognitive load (Sweller & Chandler, 1994; Sweller, Merriënboer, & Paas, 1998; Ward & Sweller, 1990). For instance, on pages 27–30, a customer service example in a banking context helps readers formulate or evaluate their own instructional goals. On pages 30–33, the case study on group leadership training help readers integrate instructional design processes. In addition to real-world examples, each chapter provides practice and feedback. For instance, on pages 34–36, four application-level questions are provided, along with specific feedback.

New Features in the Sixth Edition

Two notable features of this new edition include a stronger emphasis on front-end analysis and ready-to-use instructional materials for Web-based learning environment. First, front-end analysis focuses on the essential logic and process of needs assessment, including gathering, analyzing, and synthesizing descriptions of the existing and desired job performance to perform gap analysis. Second, ready-to-use instructional materials for Blackboard and CourseCampus learning environments are available on the textbook Website. Suggestions for course syllabi, goals and objectives illustrations, goal analysis step evaluation rubrics, an additional case study, a quiz bank, and an annotated listing of related Web resources are also provided. □

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