

## TRENDS AND ISSUES IN INSTRUCTIONAL DESIGN AND TECHNOLOGY

**Robert A. Reiser and John V. Dempsey:  
(Second Edition)Merrill Prentice Hall, Upper Saddle River,  
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**Reviewed by  
Yavuz Akbulut  
Anadolu University, TURKEY**



“Trends and Issues in Instructional Design and Technology” is a reader friendly reference source on instructional design and technology (IDT) helping both professionals in the field and novice practitioners trying to get used to the trends and concepts of the field.

Any reader is likely to have a clearer picture of the nature of the field along with its trends. Prepared by eminent scholars, Robert A. Reiser (Florida State University) and John V. Dempsey (University of South Alabama), who have teaching “Trends and Issues” course at their respective universities for a long time, the book clearly introduces the rapidly developing fields of instructional design, instructional technology and performance technology. Together, the editors have a total of about 50 years of experience teaching this course.

The book is published by Pearson, which provides quality education solutions through its renowned imprints including Addison-Wesley, Allyn & Bacon, Longman, Prentice Hall, and several others.

The book is consisted of 381 pages (+xiv). An appealing preface indicating the strengths and objectives of the new edition along with the differences between the new edition and the previous edition is followed by the introduction addressing the organization of the book. Seven sections sheltering a total of 32 chapters included writings from leading figures in the field such as Kent L. Gustafson, Marcy P. Driscoll, David Jonassen, Michael Hannafin, M. David Merrill, Jeroen J. G. van Merriënboer, John M. Keller, Walter Dick, Daniel W. Surry, David Hawkrigde, Charlie Reigeluth, Don Ely, Rita Richey, Allison Rossett, Gary R. Morrison, Bob Reiser, and Jack Dempsey. Biographies of authors are also provided in the end of the book.

The new edition of the book differed from the first edition through the inclusion of 13 new chapters, assignment of new authors for some of the previously discussed topics, and expansion of 19 chapters that appeared in both the first and second editions. Strengths of the book are summarized as capturing and maintaining reader interest, presentation of information in a way that students have no difficulty understanding, coverage of the latest trends in the field, contribution of many of the leading figures in the field, a thorough description of what IDT professionals do in a variety of work settings, and involvement of practical guidance on getting a job and succeeding at it (p. vii).

Each section begins with an appealing overview in addition to editors' introduction located at the beginning of each chapter. Section, chapter and author names are provided below:

### **I. DEFINING THE FIELD**

1. What Field Did You Say You Were In? Defining and Naming Our Field, Robert A. Reiser.
2. What Is Instructional Design?, Kent L. Gustafson and Robert Maribe Branch.
3. A History of Instructional Design and Technology, Robert A. Reiser.

### **II. THEORIES AND MODELS OF LEARNING AND INSTRUCTION**

4. Psychological Foundations of Instructional Design, Marcy P. Driscoll.
5. Constructivism and Instructional Design: The Emergence of the Learning Sciences and Design Research, David Jonassen, Dan Cernusca, and Gelu Ionas.
6. Epistemology and the Design of Learning Environments, Michael J. Hannafin and Janette R. Hill.
7. First Principles of Instruction: A Synthesis, M. David Merrill.
8. Alternate Models of Instructional Design: Holistic Design Approaches and Complex Learning, Jeroen J.G. van Merriënboer.
9. Motivation and Performance, John M. Keller.

### **III. EVALUATING, IMPLEMENTING, AND MANAGING INSTRUCTIONAL PROGRAMS AND PROJECTS**

10. Evaluation in Instructional Design: The Impact of Kirkpatrick's Four-Level Model, Walter Dick and R. Burke Johnson.
11. Adoption, Diffusion, Implementation, and Institutionalization of Instructional Design and Technology, Daniel W. Surry and Donald P. Ely.
12. Instructional Project Management: Managing Instructional Design Projects on Site and at a Distance, Brenda C. Litchfield.
13. Managing Scarce Resources in Training Projects, James J. Goldsmith and Richard D. Busby.

### **IV. HUMAN PERFORMANCE TECHNOLOGY**

14. The Development and Evolution of Human Performance Improvement, Harold D. Stolovitch.
15. Electronic Performance Support Systems: Visions and Viewpoints, Jan McKay and Walter W. Wager.

16. **Knowledge Management and Learning: Perfect Together**, Marc J. Rosenberg.
17. **Informal Learning**, Allison Rossett and Bob Hoffman.

#### **V. TRENDS AND ISSUES IN VARIOUS SETTINGS**

18. **Instructional Design in Business and Industry**, Rita C. Richey, Gary R. Morrison and Marguerite Foxon.
19. **Instructional Design Opportunities in Military Education and Training Environments**, Mary F. Bratton-Jeffery, Suzanne Q. Hoffman, and Arthur B. Jeffery.
20. **Performance Instruction, and Technology in Health Care Education**, Craig Locatis.
21. **Trends and Issues in P-12 Educational Change**, Charles M. Reigeluth and Francis M. Duffy.
22. **What Do Instructional Designers Do in Higher Education? A Written Symposium**, John V. Dempsey, Peter Albion, Brenda C. Litchfield, Byron Havard, and Jacquie McDonald.
23. **Designing for the World at Large: A Tale of Two Settings**, Jan Visser and Katsuaki Suzuki.

#### **VI. GETTING AN IDT POSITION AND SUCCEEDING AT IT**

24. **Getting an Instructional Design Position: Lessons from a Personal History**, Robert A. Reiser.
25. **Getting a Job in Business and Industry**, Donna M. Gabrielle and Robert K. Branson.
26. **Professional Organizations and Publications in Instructional Design and Technology**, James D. Klein and Nick Rushby
27. **Competencies for Instructional Design and Technology Professionals**, Gayle V. Davidson-Shivers and Karen L. Rasmussen.

#### **VII. NEW DIRECTIONS IN INSTRUCTIONAL DESIGN AND TECHNOLOGY**

28. **Distributed Learning and the Field of Instructional Design**, John V. Dempsey and Richard N. Van Eck.
29. **Reusability and Reusable Design**, Robby Robson.
30. **Using Rich Media Wisely**, Ruth Colvin Clark and Richard E. Mayer.
31. **Emerging Instructional Technologies: The Near Future**, John W. Jacobs and John V. Dempsey.
32. **The Future of Instructional Design (Point / Counterpoint)**, M. David Merrill and Brent Wilson.

While reading the book, coming up with heuristics might be quite helpful. Here are samples I generated from randomly selected chapters. Readers should bear in mind that these heuristics are personal interpretations rather than definitive summaries!

- The work of instructional design and technology professionals is not limited to the design, development and use of media. Their responsibilities also include analyzing learning and performance problems, designing, developing, implementing and evaluating both instructional and non-instructional processes/resources/solutions to improve learning and performance in either educational settings or the workplace.

- **New media could bring about changes in instructional practices; however, those changes can be slower than most people expect. Professionals benefiting from both the history of the media and the history of the instructional design are likely to create more positive influences on future developments of the instructional media than others.**
- **Even though learning theories seem to compete with one another in terms of their psychological perspectives on learning, all have invaluable implications for instructional design. They all suggest that instruction will bring about learning. They all have the same aim but use somewhat different paths. Thus, one might like to favor an eclectic learning approach to instructional design so that they could benefit from the advantages of all theories to apply in their specific learning contexts.**
- **No matter how different the epistemological perspectives and design frameworks are, instructional designers need to employ systems approaches where determining the learning goals and objectives have utmost importance.**
- **Instructional designers should justify their applications with principles and assumptions supported by an established human learning theory. This requires them to have a thorough knowledge of the human learning theories and their implications for instructional design.**
- **Motivation can be influenced by external events. Thus, systematic designs could be used to influence motivation. While preparing these designs, it is important to bear in mind that the goal of a motivational design is to engage individuals in learning or working, but not only entertain them.**
- **• Since the field of instructional design is moving from the perspective of instructional design to human performance technology, one needs to understand all the factors influencing human performance, so that they could apply them properly to improve the performance. Therefore, one needs to know about the motivation to learn, motivation to work and self-motivation. As implied in several sections, justifying the instructional design with principles of a grounded theory is very important. Knowing about the motivation is one of the subcomponents of having a grounded theory.**
- **When the goal of instruction is consistent with the strategies applied to realize that goal, the learning process could be optimized regardless of the participants' individual learning styles. That is, strategies based on the instructional goal are primary and strategies based on the learning styles are secondary.**
- **To integrate problem solving into instructional design better and to be able to select the most appropriate ingredients to burn into the design, one needs to be aware of the types of problems and the ways in which they vary. This involves knowing about the problems, the level of their complexity, structuredness and abstractness, and the cognitive processes required to solve those problems.**
- **Training can be ineffective for most of the performance problems organizations face today. It could be too slow or expensive to meet performance needs. Moreover, it is quite likely that most workers do forget what they learnt during training programs. Thus, providing**

organization members with precise information when they really need it could be more effective than creating training sections for the whole company. Thus, implementing EPSS could reduce the time and resources spent for training.

- Evaluation is not something that is realized at the end of an instructional design project. Rather, it is a process that continues from the very beginning to the end of the project.
- Management does not have prescribed rules for specific situations. Since individuals are unpredictable, management requires being both a leader and a manager who could diagnose and solve problems efficiently without being insensitive or unfair to members of the team.
- The primary responsibility of instructional designer is to make sure that the on-line learning component achieves the learning goals that are determined based on grounded taxonomies of learning outcomes along with proper needs assessment. More specifically, our responsibility is to create order in learning environments to achieve learning outcomes.
- While using the web in an educational system, one needs to be aware of the characteristics of the educational system to achieve the learning goals. That requires designers to have the skills to examine problems both in a holistic and analytical way so that they could understand the system as a whole along with the individual components affecting each other.
- Among classes of multimedia use, it is not advisable to favor a specific type of multimedia use (e.g. learning environments), and disfavor another type (e.g. presentation tools). Each could be really beneficial in different contexts. In this respect, while implementing WBI, one needs to keep the goal and the characteristics of the target audience in mind to apply the best multimedia instruction method in accordance with the learning context.

The book might urge the professionals in the field to consider the global definition of the IDT. Particularly in some developing countries, the field of instructional design and technology is somewhat limited to the computer education departments, which somewhat perceivably or unintentionally equips pre-service teachers with computer skills and pedagogy in a vacuum, but relatively less with instructional design in different disciplines, in various settings and with appropriate ID models. The broad definition addressed in the source can help curriculum developers of such countries to increase the focus on the global definition of instructional design and technology in those departments.

In brief, the book is a contributive resource for professionals and particularly for graduate students in the field to determine or freshen up their research track with grounded theories. In this regard, *Handbook of Research on Educational Communications and Technology (Third Edition)* can also be helpful to provide IDT people with summaries and syntheses of recent research related to the educational uses of information and communication technologies. Together, the two resources are quite likely to help IDT professionals have a sound grasp of IDT theory and research.