CHAPTER 1 TEACHING NOTES FOR PROJECT-BASED APPROACH:

Rationale for Using a Systematic Instructional Design Approach

Chapter 1 Learning Outcomes

- 1. In scenarios describing systematic instructional design situations, identify which type of desirable results the activity could help achieve.
- 2. Explain the evolution of instructional design approaches by identifying the order in which key activities came about.
- 3. Identify essential characteristics of any systematic approach to designing instruction.
- 4. Identify some of the criticisms of past systematic design approaches and models.
- 5. Identify characteristics of the instructional design approach used in this textbook.
- 6. Analyze scenarios to identify problems that caused instruction to fail, and to identify features of the instructional design approach used in this textbook that could have prevented them.
- 7. Compare instructional design skills of apprentice designers learning from this textbook to those of experienced designers who have been applying the skills for some time.

Chapter 1 Key Terms

- ADDIE
- Constructivist methods
- Educational technology
- Instructional design and technology
- Instructional design
- Instructional technology
- Instructional design model
- Learning object
- R²D²
- Systematic instructional design

Chapter 1 Important Concepts

- Systematic ID is an old approach with current relevance.
- ADDIE is not a model, but a paradigm, a way of thinking about design.
- Systematic design models have common defining characteristics; non-systematic models lack some or most of these characteristics.
- Systematic ID has a set of steps under three phases that comprise ADDIE: Phase 1-Analysis; Phase II-Design Development, and Implementation; and Phase III-Evaluation.
- The book's Chapter 2-9 is structured around each of eight steps in the design model.

- Each step and chapter requires a product. The products all together comprise the course's instructional design project.
- Each Chapter 2-9 has two sections: (1) background on the step and (2) how to do the step.

Chapter 1 Learning Activities

The following are suggested learning activities to introduce the course and review Chapter 1 concepts:

- Hold a first introductory meeting or online activity. Ask learners to review the Syllabus, point out that the course structure works in parallel with the design steps in the book structure, and go over the required course products at each design step and the grading plans for course activities. Also note that Chapters 2-9 each have two sections: learning about the design step and doing the design step. Answer questions about any of these.
- After class or before they do the next online activity, learners are to review the brief and detailed Tables of Contents, read the Preface and Chapter 1, and complete each of the Chapter 1 CYUs.
- In a second meeting or online activity, have students submit their ideas for an instructional project to develop during the semester. React to these ideas to help them identify a meaningful, but manageable topic.
- Post both page 22 Questions for Thought and Discussion for online discussion. (This is the first of 8 of these to be held during the semester.)
- Remind students to do the Key Terms Exercise on page 22.

B

Chapter 1 Rationale for Using a Systematic Instructional Design Approach Test Bank

Multiple-choice Questions

- 1. Which of the following is a key results indicator that educators look for to confirm that instruction does the job it was designed to accomplish?
 - A. Standards in instruction match federal, state, and/or local standards.
 - B. Instructional materials reflect professionalism and good planning.
 - C. Instructional materials meet state and federal approval processes.
 - D. Standards are addressed and students can pass the required tests.
- 2. In which settings were systematic instructional design processes first used?
 - A. Military, industry, and university training
 - B. Business, industry, and university training
 - C. K12, universities, and military training
 - D. Universities, business, and industry training
- 3. In which time period did references to instructional design first appear?
 - A. 1920s and 1930s
 - B. 1930s and 1940s
 - C. 1940s and 1950s
 - D. 1950s and 1960s
- 4. In the early days of instructional design, what was one of the single most desirable qualities people looked for in instructional materials?
 - A. They were complete training systems.
 - B. They could be used in many settings.
 - C. They could replace in-person trainers.
 - D. They could train the workers quickly.
- 5. What is a key aspect of the classical definition of *educational technology*?
 - A. Media and materials for learning
 - B. A problem-solving approach
 - C. Digital devices such as computers
 - D. An instructional design model
- 6. What is the ordered sequence of five activities that comprise ADDIE?
 - A. Assessment, Design, Development, Implementation, Evaluation
 - B. Assessment, Development, Design, Implementation, Evaluation
 - C. Analysis, Design, Development, Implementation, Evaluation
 - D. Analysis, Development, Design, Implementation, Evaluation

- 7. What is the relationship between ADDIE and instructional design models?
 - A. ADDIE is the most popular of all the instructional design models.
 - B. ADDIE is an umbrella term for a family of instructional design models.
 - C. ADDIE replaces previous, unsystematic instructional design models.
 - D. ADDIE was used before instructional design models came about.
- 8. What is one acknowledged characteristic of constructivist methods?
 - A. Students direct their own learning.
 - B. Students create their own materials.
 - C. Teachers use no actual assessments.
 - D. Teachers direct learning activities.
- 9. What is an essential characteristic of instructional design based on a systems approach?
 - A. Design teams share responsibilities for creating the instruction.
 - B. Objectives, assessments, and instructional strategies are aligned.
 - C. Design work is done primarily by individual content area experts.
 - D. Assessments are always matched to instructional goal statements.
- 10. What is one common criticism leveled at systematic instructional design methods?
 - A. They rarely result in effective instruction.
 - B. They rarely follow actual ADDIE processes.
 - C. The "blueprint" they create is hard to follow.
 - D. They cannot teach "learning-to-learn" skills.
- 11. What is one characteristic of an effective instructional design model?
 - A. It confirms that the instruction works with sample students.
 - B. It follows a cookbook-like set of instructional design activities.
 - C. It can guarantee a high-quality instructional product.
 - D. It saves time over other, less systematic design models.
- 12. In a systematic instructional design model, what is one of the activities under the Analysis stage?
 - A. State objectives and assessment strategies.
 - B. Analyze formative evaluation needs.
 - C. State requirements for instructional design.
 - D. Analyze summative evaluation needs.
- 13. Which step in the systematic instructional design sequence comes just before development of instructional materials and media?
 - A. State objectives and assessment strategies.
 - B. Develop assessment strategies.
 - C. Implement learning environments.
 - D. Design instructional strategies.

- 14. Which step in the instructional design model is considered optional, depending on the needs of the situation?
 - A. Revising instruction
 - B. Formative evaluation
 - C. Summative evaluation
 - D. Revising assessments
- 15. How do instructional design documents compare with lesson plans?
 - A. Lesson plans are more detailed than design documents
 - B. Design documents are more detailed than lesson plans.
 - C. Lesson plans and design documents are very similar.
 - D. Lesson plans show how to do the design documents.

Essay Questions

- 1. Discuss the four key results indicators that educators look for to confirm that instruction does the job it was designed to accomplish, and give the processes in a systematic instructional design model that help make sure each kind of indicator is achieved.
- 2. Describe the four characteristics of instructional design (ID) that have proven to have the most beneficial impact on instructional products and explain what each contributes.
- 3. Discuss four ways lesson plans differ from instructional design documents.