Syllabus

Course Overview

This course offers you an introduction to the discipline of instructional design, which concerns the systematic and reflective process of translating learning needs and principles of learning and instruction into learning solutions that include plans for instructional materials, activities, information resources, and evaluation (Smith & Ragan, 2005). The instructional designer creates tailor-made solutions to education and training problems.

This foundation course emphasizes conceptual exploration, analysis, and problem-solving relative to the principles and decision points in instructional design. This course will help you to answer three questions:

- What are the decisions instructional designers make when designing instruction?
- What knowledge is needed to make the decisions?
- How are the decisions related?

Other courses in our curriculum emphasize the process of instructional design and give you an opportunity to design, develop, and evaluate instructional materials.

In this course, you will examine an instructional-design scenario, identifying the decision points that guide instructional designers' choices about the type and scope of instruction needed. You will analyze the instructional designer's decisions and reflect on the relationships that exist among them.

Reference

Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: Wiley.

Developing as a Writer

Your writing skills are critical to your academic and career success. Writing is an iterative process, and the keys to this process are creating drafts, seeking and receiving feedback, and making revisions. In this course you will have various opportunities to move through these steps as you work on your assignments. You will also have built-in support and assessment from a faculty writing expert. You are strongly encouraged to take advantage of the writing resources offered, such as those in the Capella Writing Center, as they are crucial to helping you become a more capable, skilled, and confident writer, both during your academic journey at Capella and beyond. If you feel you need more help than these resources can provide, your instructor can provide a referral for you to meet with a writing consultant.

APA Style and Formatting

Capella uses APA style as the standard for all academic writing. Using a single publication manual ensures a consistent style across degrees, programs, and schools. Because APA is used widely in scholarly works and academic publications, it is a good choice for the Capella community. Remember to use the APA manual from your first course as a resource for the assignments in this course.

Smarthinking

Capella partners with Smarthinking, a Web-based tutoring service, to offer you online tutoring in a variety of subjects and custom critique of your papers. You will receive 168 minutes to use toward tutoring each quarter. The tutors are called *e-structors* and can help you develop successful learning skills in a professional and supportive environment. E-structors are available to help you, but not replace your instructor. Learn how to get started and how to use Smarthinking.

With Smarthinking you can:

- Get live, one-on-one online tutoring help.
- Submit an essay or paper for review.
- Submit questions for a tutor's response.

Capella University Library

You are highly encouraged to explore the Capella University Library. The Capella library is an entirely digital library and one of your most valuable resources for finding the persuasive evidence and scholarly resources you will use in your course assignments.

Textbooks

There are three related courses in your program: ED5802 Principles of Instructional Design, ED5803 Processes of Instructional Design, and ED5807 Design of Instructional Media. The seven textbooks for the three courses were carefully chosen to provide a professional range of in-depth content about instructional design that you will use for the courses and after you graduate. For each course, some of these seven textbooks are required and the others

are optional. Knowing this, we hope that you will use the textbooks throughout your educational program and refer to them as you create your course assignments. After graduation, we hope you will find the textbooks to be useful references for your instructional design projects and that they continue to contribute to your professionalism.

Course Competencies   **(Read Only)**

To successfully complete this course, you will be expected to:

1   Develop professional skills and competencies pertaining to the field of instructional design.

2   Conduct a needs analysis to inform instructional design projects.

3   Design instructional solutions.

4   Apply research and theory to the discipline of instructional design.

5   Communicate effectively in visual, oral, and written form.

Course Prerequisites

In this course, learners develop professional skills and competencies pertaining to instructional design process, theories, and strategies. Learners focus on the decisions that instructional designers make, the principles and concepts that drive those decisions, and the ways the decisions are interrelated. Cannot be fulfilled by transfer or prior learning assessment.

Required

The materials listed below are required to complete the learning activities in this course.

Integrated Materials

Many of your required books are available via the VitalSource Bookshelf link in the courseroom, located in your Course Tools. Registered learners in a Resource Kit program can access these materials using the courseroom link on the Friday before the course start date. Some materials are available only in hard-copy format or by using an access code. For these materials, you will receive an email with further instructions for access. Visit the Course Materials page on Campus for more information.

Book

Dirksen, J. (2016). *Design for how people learn* (2nd ed.). San Francisco, CA: Pearson. ISBN: 9780134211282.

Gagné, R. M., Wager, W. W., Golas, K., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth. ISBN: 9780534582845.

Library

The following required readings are provided in the Capella University Library or linked directly in this course. To find specific readings by journal or book title, use Journal and Book Locator. Refer to the Journal and Book Locator library guide to learn how to use this tool.

- Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association: JMLA*, *103*(3), 152–153.
- Fortney, K. S., & Yamagata-Lynch, L. C. (2013). How instructional designers solve workplace problems. *Performance Improvement Quarterly, 25*(4), 91–109.
- Gray, C. M., & Boling, E. (2016). Inscribing ethics and values in designs for learning: A problematic. *Educational Technology Research and Development*, *64*(5), 969–1001.
- Jonassen, D. H., Tessmer, M., & Hannum, W. H. (1999). *Task analysis methods for instructional design.* Mahwah, NJ: Erlbaum.
- Obizoba, C. (2015). Instructional design models-framework for innovative teaching and learning methodologies. *The Business & Management Review*, *6*(5), 21–31.
- Rothwell, W. J., Benscoter, B., King, M., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Hoboken, NJ: Wiley.
- Simon, J. (2015). PowerPoint and concept maps: A great double act. *Accounting Education*, *24*(2), 146–151.
- Torre, D. M., Durning, S. J., & Daley, B. J. (2017). Concept maps: Definition, structure, and scoring. *Academic Medicine*, *92*(12), 1802.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- IBSTPI Code of ethical standards for instructional designers. (2001). In R. C. Richey, D. C. Fields, & M. Foxon, *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse on Information and Technology.
- Novak, J. D., & Canas, A. J. (2006). The theory underlying concept maps and how to construct and use them. The Institute for Human and Machine Cognition. Retrieved from http://cmap.ihmc.us/docs/theory-of-concept-maps.php
- United States Department of Health & Human Services. (n.d.). Health information privacy (HIPAA). Retrieved from https://www.hhs.gov/hipaa/index.html

Suggested

The following materials are recommended to provide you with a better understanding of the topics in this course. These materials are not required to complete the course, but they are aligned to course activities and assessments and are highly recommended for your use.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- Coggle - Simple Collaborative Mind Maps. (n.d.). Retrieved from http://www.coggle.it/
- IMindMap Mind Mapping. (n.d.). Retrieved from https://imindmap.com/
- Mindjet. (n.d.). Retrieved from https://www.mindjet.com/

Optional

The following optional materials are offered to provide you with a better understanding of the topics in this course. These materials are not required to complete the course.

Integrated Materials

Book

Simonson, M., Smaldino, S., & Zvacek, S. M. (Eds.). (2015). *Teaching and learning at a distance: Foundations of distance education* (6th ed.). Charlotte, NC: Information Age Publishing. ISBN: 9781623967987.

Library

The following optional readings may be available in the Capella University Library. To find specific readings by journal or book title, use Journal and Book Locator. Refer to the Journal and Book Locator library guide to learn how to use this tool. If the full text is not available, you may be able to request a copy through the Interlibrary Loan service.

- Moore, M. G., & Diehl, W. C. (Eds.). (2019). *Handbook of distance education* (4th ed.). New York, NY: Routledge.

External Resource

Please note that URLs change frequently. While the URLs were current when this course was designed, some may no longer be valid. If you cannot access a specific link, contact your instructor for an alternative URL. Permissions for the following links have been either granted or deemed appropriate for educational use at the time of course publication.

- American Institute of Architects. (2020). AIA code of ethics and professional conduct [PDF]. Retrieved from http://content.aia.org/sites/default/files/2019-10/181018_Code_of_Ethics.pdf
- Brown, A., & Green, T. D. (2006). *The essentials of instructional design: Connecting fundamental principles with process and practice.* Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Family Educational Rights and Privacy Act (FERPA). (n.d.). Retrieved from https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html
- Piskurich, G. M. (2015). *Rapid instructional design: Learning ID fast and right* (3rd ed.). Hoboken, NJ: Wiley.
- Reiser, R. A., & Dempsey, J. V. (2018). *Trends and issues in instructional design and technology* (4th ed.). New York, NY: Pearson.
- Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse on Information & Technology.

Projects

Project ❯❯ Principles of Instructional Design

Project Overview

The assignments in this course are building blocks of a course project that concludes with your last assignment in Unit 9, consisting of a final paper and concept map.

To complete your course project and all the assignments that it encompasses, you may use one of the scenarios provided or you may use one from your work experience. *If you decide to create a scenario, you must submit it to the instructor for approval before you complete any course assignment.* You will make this determination in Unit 1; an optional discussion is provided for you to propose an alternate scenario for instructor approval.

The assignments that comprise the course project are:

- Unit 3, Conducting the Needs Analysis.

Unit 3, Conducting the Needs Analysis

In the first assignment, you will use the Analyze Need and Learning Context to help you identify gaps in your chosen scenario, set instructional goals for the learners in the scenario, describe significant learner considerations, and determine what information about the learning environment must be gathered to design an effective instructional solution.

Unit 5, Analyzing the Learning Tasks

For the Unit 5 assignment, you will complete the Analyzing Learning Tasks Worksheet, identifying and classifying the learning domains of two learning goals related to your scenario. You will list steps that an expert learner would take to achieve each learning goal and write a performance objective for each step.

Unit 7, Assessing Learning From Instruction

You will complete Assessing Learning From Instruction worksheet for the third component of your course project, determining an appropriate assessment for your scenario and crafting a well-thought-out rationale for its use.

Unit 9, Putting It All Together

Your final assignment will consist of a paper on instructional design principles and a concept map. You will draw from all the activities undertaken throughout the course to complete these elements and will be prompted throughout the course to incorporate peer and instructor feedback on each assignment to enhance your course project.

For details, refer to the individual assignments and their respective scoring guides.

Unit 1 ≫ Definition and Theoretical Foundations of Instructional Design

Introduction

If the discipline of instructional design (ID) is unfamiliar to you, you are not alone. Instructional design is a discipline that few people understand. A frequently asked question is, "What is instructional design and what does it mean to design instruction?"

What Is Instructional Design?

Instructional design is a dynamic discipline. Smith and Ragan (2005) define *instructional design* (ID) as "the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation" (p. 4). Essentially, instructional design is a problem-solving process—partly a science and partly an art form—that involves translating general principles of learning and instruction into plans for instructional materials and learning experiences.

What Does It Mean to Design Instruction?

Ten studies about what instructional designers do, reviewed and cited in Kenny, Zhang, Schwier, and Campbell (2005), note that the most frequently reported instructional design activities include determining instructional strategies, designing goals and objectives, designing the layout and appearance of materials (graphic design), editing, and managing materials-development projects (p. 17). Gagné, Wager, Golas, and Keller (2005) assert that six basic assumptions guide instructional designers' decisions about how to best structure instruction. They are:

1. Instructional design must be aimed at aiding the process of learning rather than the process of teaching.
2. Learning is a complex process affected by many variables, and an effective model of instructional design cannot focus on just one of these variables.
3. Instructional design models can be applied at many levels, but the underlying principles of ID remain the same.
4. Design is an iterative process. Designers do not design perfect instruction; they perfect instructional designs.
5. Instructional design itself is a process consisting of identifiable and related subprocesses. At the simplest level, instructional design aligns desired outcomes, instructional methods, and student assessments. More elaborate models include processes for determining desired outcomes, developing learning activities that involve students in authentic tasks, and designing alternative forms of practice, assessment, and feedback.
6. Different types of learning outcomes call for different types of instruction—there is no best way to teach everything (p. 2–3).

From these six assumptions, we can infer two central ideas about what it means to design instruction: 1) the focus of instructional design is on the process of learning rather than the process of teaching; and 2) in the process of translating general principles of learning and instruction into plans for instructional materials and learning experiences, instructional designers must make choices because different types of learning outcomes require different types of instructional materials and learning experiences. These choices, or *decision points*, are guided by principles. The purpose of this course is to introduce you to the principles of instructional design that guide decisions in the process of designing instruction.

Mental Models

One approach for synthesizing the broad array of theories and practices that comprise the foundation of instructional design is to develop a mental model to aid in remembering the similarities and differences among instructional design theories and concepts. A *mental model* is a cognitive tool, or a meaningful representation of something real, that aids in understanding.

Johnson-Laird and Byrne (2012) attribute the idea that people rely on mental models to Craik's suggestion in 1943 that the mind constructs "small-scale models" of reality that it uses to anticipate events. Craik's suggestion is analogous to building a small-scale house from Popsicle sticks or twigs. The Popsicle replica is the physical equivalent of a mental model. The smaller structure is representative of the larger structure.

Westbrook (2007) suggests that people develop mental models of the systems and processes with which they interact. These models include key components, relationships among those components, and techniques for interacting with the system or process. This unit introduces the foundational components (the essential theories and concepts) of instructional design and the relationships among those components, as well as how these components guide the decisions that instructional designers make during the process of designing instruction.

Drawing from three studies (Jih & Reeves, 1992; Johnson-Laird, 1983; Sifaqui, 1999), Ozcelik and Yildirim (2005) propose that the goal of mental model theory is to help us make sense of objects and phenomena during learning and other activities because we understand the world by constructing working models of it in our minds.

In This Unit

In Unit 1, you will expand your current understanding of instructional design and what it means to translate general principles of learning and instruction into plans for instructional materials and learning experiences. You will examine the literature and gain familiarity of the essential theories and concepts comprising the foundation of instructional design. You will formulate your own mental model to help you make sense of the concepts of instruction, instructional design, learning theory, instructional theory, and instructional design theory.

References

Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Johnson-Laird, P., & Byrne, R. (May 2012). Mental models blog: A gentle introduction. Retrieved from http://mentalmodelsblog.wordpress.com/mental-models-a-gentle-introduction/

Kenny, R., Zhang, Z., Schwier, R., & Campbell, K. (2005). A review of what instructional designers do: Questions answered and questions not asked. *Canadian Journal of Learning and Technology / La Revue Canadienne de L'apprentissage et de la Technologie*, *31*(1), 9–16.

Ozcelik, E. & Yildirim, S. (2005) Factors influencing the use of cognitive tools in web-based learning environments. *Quarterly Review of Distance Education, 6*(4), 295–307.

Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: Wiley.

Westbrook, L. (2007). Mental models: A theoretical overview and preliminary study. *Journal of Information Science, 32*(6), 563–580. Retrieved from EBSCOHost database.

Learning Activities

u01s1 - Studies

Readings

Use your *Principles of Instructional Design* text to read the following:

- Chapter 1, "Introduction to Instructional Design," pages 1–17.
- Chapter 2, "Designing Instructional Systems," pages 18–43.

Use the Capella University Library to access the following:

- Use *Mastering the Instructional Design Process: A Systematic Approach* to read the following:
    - Chapter 1, "An Overview of Instructional Design," pages 3–16.

Use the Capella library and the Internet to complete the following:

The foundational theories that contributed to form the instructional design discipline include systems theory, communication theory, learning theories, and instructional theories. Using the IDOL Library Research Guide or the Capella University Library, select and review two current (within the last five years) scholarly article related to one of the major theories that contribute to instructional design. You will post the articles you read as references on this week's second discussion, so remember to make note of the full APA citations for each.

Optional Multimedia

- Explore the Media Resource Center for Capella-made multimedia examples. These resources may help you in the creation of your own media pieces in this course.

Optional External Resources

As you progress through the course, you are encouraged to explore these optional texts for additional information:

- Moore, M. G., & Diehl, W. C. (Eds.). (2019). *Handbook of distance education*. New York, NY: Routledge.
- Piskurich, G. M. (2015). *Rapid instructional design: Learning ID fast and right* (3rd ed.). Hoboken, NJ: Wiley.
- Reiser, R. A., & Dempsey, J. V. (2018). *Trends and issues in instructional design and technology* (4th ed.). New York, NY: Pearson.
- Simonson, M., Smaldino, S., & Zvacek. S. M. (2015). *Teaching and learning at a distance: Foundations of distance education* (6th ed.). Charlotte, NC: Information Age Publishing.

u01s1 - Learning Components

- Identify problem.
- Define a gap.
- Define learner analysis.
- Distinguish an instructional need from other needs.
- Identify learning context.

u01s2 - Project Preparation

The assignments in this course are building blocks of your course project. Therefore, it is important to become familiar with the guidelines of the course project early. Read the course project description and scoring guide to familiarize yourself with the project assignments and how they form the course project.

To complete your course project and all the assignments that it encompasses, you may use one of the provided Learning Scenarios [DOC] or one from your work experience. The provided scenarios represent contexts in which instructional design occurs, including K–12 education, higher education, business and industry, and military. *If you decide to create a scenario, you must do it this week.* You will use the Optional Customized Scenario for your Principles of Instructional Design Course Project discussion in this unit to submit it for instructor approval. You should base your scenario in the scenarios provided; that is, you must provide a similar level of detail in your scenario.

u01s3 - Your Online ePortfolio

Online ePortfolios serve two key purposes: 1) to support learning and reflection, and 2) to be used as a showcase tool. Your learning journey can be documented, and ePortfolios contribute to lifelong learning and growth through reflection and sharing. Online ePortfolios can also be shared with employers and peers to present artifacts that demonstrate your accomplishments at Capella.

Using ePortfolio to Prepare for Your Capstone

Your program may culminate in a capstone course. At that time you may be required to show evidence of your learning throughout the program by referring to multiple assessments that you have created. You will be telling a story about your learning throughout the program using artifacts you have collected during many of these courses.

Using ePortfolio to Build Your Career

As you are preparing to tell your story in the professional world, leverage your ePortfolio artifacts to demonstrate the knowledge and competencies you have gained through your program in professional conversations, performance reviews, and interviews.

To do that, reflect on the knowledge and skills you have gained from your courses and the elements you have put in your portfolio, along with how you have already applied these things to your professional life or how you might apply them in the future.

Next, create your story or talking points to tell your professional story.

Saving Your Documents to ePortfolio

You will need a place to store your documents in an organized fashion so that you can access them at a later date. Do not rely on the courseroom to store your assignments for you as you will lose access to the courseroom after you have completed the course. Capella uses a cloud-based portfolio platform to facilitate your organization of the artifacts you create throughout your program.

To make an online portfolio useful, it is essential that it is organized clearly and that important files of any format are accessible. Read the Online ePortfolio Guidelines [PDF] to ensure you set up your online portfolio correctly. For more information visit the Campus ePortfolio page.

Privacy Statement

Capella complies with privacy laws designed to protect the privacy of personal information. While you may voluntarily share your own information publicly, you are obligated to protect the personal information of others that may be associated with your academic or professional development.

Before sharing information and material in any ePortfolio that is set up to be shared externally to your program at Capella, please consider privacy obligations in relation to protected populations who may be included or referenced in your academic or clinical work. Refer to the Family Educational Rights and Privacy Act (FERPA) and/or the Health Insurance Portability and Accountability Act (HIPAA) if you have specific questions or concerns about your choices.

u01s4 - Optional Microsoft Tutorials

This course requires you to complete assignments using Microsoft products. Capella University supplies optional tutorials for this software. Go to the Microsoft Tutorials page to access these resources.

u01d1 - Instructional Design Defined

Read the Discussion Participation Scoring Guide to learn how the instructor will evaluate your discussion participation throughout this course.

Using this week's readings as references, create a well-supported post that addresses the following questions:

- What does the term *instructional design* mean?
- What does it mean to create an instructional design?

Then, describe your personal and professional experiences with the field of instructional design. Share your preconceptions, expectations, intriguing aspects, and disagreements. Did your perceptions change after this week's activities?

Response Guidelines

Read the posts of your peers and respond to at least one learner. Consider how their experiences have shaped their preconceptions and expectations about instructional design and compare and contrast them to your own preconceptions and expectations about instructional design. Make your response substantive and reference the assigned readings and/or other professional literature to support your views.

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

How Do I Find Peer-Reviewed Articles?

APA Style and Format

u01d1 - Learning Components

- Identify problem.
- Define learner analysis.
- Identify learners.
- Identify learning context.
- Apply the principles of effective composition.

u01d2 - Your Mental Model of Instructional Design

This week you read about the theories and practices at the foundation of the discipline of instructional design. Using the support of readings and the suggestion from this unit's introduction to form a mental model to help you to remember the similarities and differences among the instructional theories and concepts, explain your instructional design mental model. Compare and contrast your ideas that contributed to form your mental model and the content you read. Make your post substantial and support your ideas using recent scholarly articles cited in current APA style, including the two articles you read in preparation for this discussion.

Response Guidelines

Read the posts of your peers and respond to at least one. How does your ID mental model compare and contrast to the mental model presented by your peer? Do you agree or disagree with his or her analysis? What additional considerations do you have about the proposed ID mental model? Make your responses substantive and reference the assigned readings and/or other professional literature to support your views.

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

How Do I Find Peer-Reviewed Articles?

IDOL Library Research Guide

APA Style and Format

u01d2 - Learning Components

- Identify the steps of a task.
- Identify the task involved in a learning goal.
- Describe how instructional design principles facilitate the design of effective instruction.

u01d3 - Optional Customized Scenario: Principles of Instructional Design Course Project

For the course project and all course assignments, you may use one of the scenarios provided (linked in Resources) or you may use a scenario from your work experience. The provided scenarios represent contexts in which instructional design occurs, including K–12 education, higher education, business and industry, and military. *If you decide to create a scenario based on your professional experience, you must do it this week.* Use this optional discussion to submit it to your instructor for approval. You should base the level of detail you include in your scenario on the scenarios provided to ensure that your scenario meets the requirements for the assignments and project.

Course Resources

Learning Scenarios [DOC]

Unit 2 >> Analyze the Need and Learning Context

Introduction

As we noted in Unit 1, instructional design is an approach to solve problems. Now we must expand this concept by pointing out that ID is not an approach to solve any type of problem but those that may be solved or improved with instruction or training.

In today's competitive, fast-paced, and highly technological world, organizations are constantly looking to diagnose and solve problems. When problems are human-performance related, training or instruction is often the first solution offered. However, training or instruction is not the solution for all performance-related problems. Analyzing the problems, the need of the organization, and context of the situation is one of the first and most important steps in the instructional design process. This step is part of the needs assessment (Rothwell, Benscoter, & King, 2016). It is important to remember that the ID process is *iterative*, meaning that you can revisit and revise every step at any time of the process should the need arise.

In the needs-analysis process, instructional designers examine the problems to be solved to determine the needs of the organization. The need, or *gap*, is defined by the difference between the current state or situation and the desired state or situation. A closer look at the nature of the gap helps IDs determine if instruction is the best solution to the problem. In other words, can instruction help to close the gap? (Gagné, Wager, Golas, & Keller, 2005). After determining that instruction is part of the solution, it is time to analyze the context for the instruction. The learning-context analysis identifies the available resources, the organizational culture and values, and the people who will be involved.

According to Mager and Pipe (1997), people do not perform as desired for many reasons:

- They do not know what is expected.
- They do not have the tools, space, authority.
- They do not get feedback about performance quality.
- They are punished when they do it right.
- They are rewarded when they do it wrong.
- They are ignored whether they do it right or wrong.
- They do not know how to do it (p. 3).

Yet without further analysis of the problem, the instructional designer may waste time and resources designing instruction that is not needed or that will not address the problem.

To determine if the problem is related to a need for learning that can be met with instruction, instructional designers ask questions and use various methods and tools to analyze the answers they receive. Each round of answers to the questions requires the instructional designer to interpret the information and make decisions about the "type and scope of instruction needed for the particular circumstances at hand" (Seels & Glasgow, 1998, p. 8). Like the architect who is guided by the foundational theories and concepts of architecture, physics, and aesthetics, instructional designers apply principles and concepts of human learning, memory, motivation, and communication at each decision point in the instructional design process.

In This Unit

In Unit 2, you will explore and expand your knowledge of the needs and learning-context analysis. The readings and activities of this unit will demonstrate that the learner analysis is a major element of the needs assessment; we will address the learner analysis in Unit 3. Again, the most important aspect to keep in mind is the fact that the ID process, although done in steps, is iterative: nothing is set in stone. Often the need to revisit and revise previous steps arises.

References

Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth.

Mager, R. F., & Pipe, P. (1997). *Analyzing performance problems: Or, you really oughta wanna.* Atlanta, GA: Center for Effective Performance.

Rothwell, W. J., Benscoter, B., King, M., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.) Hoboken, NJ: Wiley.

Seels, B., & Glasgow, Z. (1998). *Making instructional design decisions* (2nd ed.). Columbus, OH: Merrill.

Learning Activities

u02s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

   • Chapter 1, "Where Do We Start?," pages 1–26.

Use your *Principles of Instructional Design* text to read the following section:

   • Chapter 2, "Designing Instructional Systems," pages 18–26.

Using the Capella library to read the following:

   • In your *Mastering the Instructional Design Process: A Systematic Approach* text:
       ◦ Chapter 2, "Conducting the Needs Assessment," pages 19–38.

   • Fortney, K. S., & Yamagata-Lynch, L. C. (2013). How instructional designers solve workplace problems. *Performance Improvement Quarterly, 25*(4), 91–109.

u02s2 - Conducting the Needs Analysis Preparation

Your first assignment, Conducting the Needs Analysis, is due next week.

To prepare for your first assignment, you should:

   • Review the course project guidelines.
       ◦ Make sure you are clear on your tasks. Please remember, you can always ask for clarification by posting questions on the "Ask Your Instructor" forum.
   • Read the assignment instructions and scoring guide to ensure that you understand all requirements.
   • Begin developing your assignment. Allow yourself time to review and improve your work.

u02d1 - The Importance of a Needs Assessment

For this discussion, imagine you are an instructional designer who must write a letter of request to a person in a familiar organization who approves budgets for course development or training programs. This decision maker is not convinced that analyzing the need and learning context that you have identified is necessary and believes that it will only add time and expense to the project.

Describe the nature of the organization (which may be your current workplace, but if so, make sure to avoid using real names or other information that might breach confidentiality) and the decision maker's role in that organization. Then, using the readings and/or other scholarly sources, write and post a convincing letter that explains:

- Why the need and learning context should be analyzed before time and money are spent on the design. Describe how these early costs provide benefits.
- The approach you would use for your needs and learning context analysis. Support your argument with evidence from the readings or other sources from the Capella library. Write the letter in a format that is appropriate for the organization (for example, if it is a business, write the letter using a business format), but cite and reference all sources in current APA style and formatting.

Response Guidelines

Read the posts of your peers and respond to at least two. Assume the role of the decision maker to whom the letter is addressed. If you approve the request, the funding will directly affect your budget. Consider the following questions as you prepare your response to the instructional designer:

1. How effectively does this letter present a referenced justification (a justification or argument that is supported by references to the literature) for approving the request?
2. What valuable information is missing?
3. What are the possible implications if you do not approve the request and the instruction is designed without analyzing the need and learning context?
4. What are some situations in which a decision maker might not authorize a needs analysis or learning context analysis?

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

How Do I Find Peer-Reviewed Articles?

APA Style and Format

IDOL Library Research Guide

u02d1 - Learning Components

- Identify problem.
- Define a gap.
- Distinguish an instructional need from other needs.
- Identify learning context.
- Provide a rationale for instruction as a solution.
- Apply the principles of effective composition.

Unit 3 ›› Analyze the Learners

Introduction

With a clearly defined instructional need and learning context in mind, the instructional designer's focus turns to the learner.

Brown and Green (2006) assert that it is pointless to create an instructional intervention that the intended audience cannot or will not use. Therefore, understanding the target audience of learners and determining what they can and will do is an essential element of any instructional plan.

Gagné, Wager, Golas, and Keller (2005) maintain that learners possess certain qualities that inform learning and, by extension, instruction. Just as an architect must understand who will be using the building that she designs, the instructional designer must understand the qualities of those who will receive the instruction or training designed.

Not all learners are alike or learn the same way as the instructor or the instructional designer. Understanding how the qualities related to learning and instruction are similar or different among learners is critical for making the instruction effective and engaging.

User characteristics inform the instructional designer's decisions about the types of instructional strategies that should be planned, how the content should be sequenced, the selection of relevant examples and multimedia components, the length and pacing of the instruction, and other such details.

In This Unit

In Unit 3, you will reflect on the qualities and characteristics related to how people learn within a specific context. You will examine the key concept of *learner-centered instruction*. You will also explore ways in which knowledge of the human characteristics and qualities of learners influences the instructional designer's decisions about the type and scope of instruction needed for the particular circumstances in a selected scenario.

References

Brown, A., & Green, T. D. (2006). *The essentials of instructional design: Connecting fundamental principles with process and practice.* Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Learning Activities

u03s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

- Chapter 2, "Who Are Your Learners?," pages 27–58.

Use the Capella library to access the following:

- Use your <u>Mastering the Instructional Design Process: A Systematic Approach</u> text to read the following:

    ◦ Chapter 4, "Identifying the Target Population and Environmental Characteristics," pages 61–73.

Multimedia

Click **Interview With Julie Dirksen** to listen to the audio of the author of *Design for How People Learn*.

Course Resources

Interview With Julie Dirksen

u03a1 - Conducting the Needs Analysis

Overview

In this first assignment, you will use the scenario you chose from the four options or the instructor-approved scenario you wrote and submitted in the Unit 1 discussion. When completing each assignment, draw first from the content in the scenario. In the absence of relevant content, draw additional information from your experience in similar situations, the course readings, and supplementary resources listed in the syllabus. In other words, to complete certain portions of the assignments, you may have to add content or context to complete the information provided.

Instructions

Complete all fields in the Analyze Need and Learning Context worksheet linked in Resources and submit the completed worksheet. To complete the worksheet, you will use your chosen scenario and support your ideas with the readings and, if necessary, other scholarly sources you may find at the Capella library. After reading the scenario, consider the following:

- The general learner characteristics.
- The learning context.
- Aspects of the learning environment yet to be determined.

To complete the assignment successfully, you will:

- Identify the problems or gaps in the scenario.
- List the instructional goals for learners in the scenario.
    ◦ Remember: *Learning goals should start with an action verb that is directly observable and measurable. Understand, know*, and *learn* are examples of actions that cannot be directly observed or measured.
- Explain why instruction will or will not help learners in the scenario achieve the identified goals.
- Describe the learners' characteristics in the scenario that are important to consider when designing instruction.

- Discuss possible methods to investigate learner characteristics when conducting the needs analysis.
- Describe what must be determined about the learning environment in your scenario to design an instructional solution.
- Support your ideas with properly formatted in-text citations from the readings and/or other scholarly sources you may find at the Capella library.

Additional Requirements

- Write following APA style, including in-text citations and references.
- Write clearly and logically, with correct use of spelling, grammar, and punctuation.

Submit your completed Analyzing Need and Learning Context worksheet as an attachment in the assignment area.

You may wish to include this assignment in your ePortfolio.

Course Resources

ePortfolio

APA Style and Format

Analyzing Need and Learning Context [DOCX]

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u03d1 - Why Do I Need To Know My Learners?

Reflect on this week's readings. Based on what you learned from the readings and any additional research you have done on the importance of the learner analysis, create a well-supported post in which you address the following:

- Explain why learners' prior knowledge of the subject would or would not be important or helpful to know.
- Explain why the educational and ability levels of the learners would or would not be important or helpful to know.
- Explain why the attitudes and motivations of learners would or would not be important or helpful to know.
- Summarize how learner characteristics influence design decisions.
- Identify and describe two methods to obtain information about your learners.

Response Guidelines

Read the posts of your peers and respond to two. For each response, imagine that you and your peer are to brainstorm together to compile a list of reasons in support of learner analysis. What additional suggestions would you propose for the positions he or she took? Provide cited scholarly evidence to substantiate your position.

Course Resources

Graduate Discussion Participation Scoring Guide

IDOL Library Research Guide

Capella University Library

APA Style and Format

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u03d1 - Learning Components

- Define learner analysis.
- Identify learner characteristics.
- Identify learner existing knowledge.
- Define interviews.
- Define surveys.
- Apply the principles of effective composition.
- Identify organizational records.

Introduction

Just as an architect needs exact specifications of a desired structure to design the plans that builders will use to guide their construction, instructional designers must articulate the exact specifications of the desired instruction, expressed in the form of *learning goals*. Learning goals are statements about what learners will be able to do or accomplish by participating in instruction (Brown & Green, 2006).

In instructional design, when learning goals are stated clearly enough that they are achievable, the designer then determines what type of content will comprise the instruction, how content should be organized and sequenced, and the best strategy for helping learners interact with content so that learning occurs. This process in instructional design is called *task analysis*.

Jonassen, Tessmer, and Hannum (1999) suggest that a task analysis helps the instructional designer determine:

- The goals and objectives of learning.
- The operational components of jobs, skills, learning goals or objectives: what task performers do, how they perform a task or apply a skill, and how they think before, during, and after learning.
- What knowledge states (declarative, structural, and procedural knowledge) characterize a job or task.
- Which tasks, skills, or goals should be taught—that is, how to choose appropriate learning outcomes for instructional development.
- Which tasks are most important and have priority for a commitment of training (or instructional) resources.
- The sequence in which tasks are performed and should be learned and taught.
- How to select or design instructional activities, strategies, and techniques to foster learning.
- How to choose appropriate media and learning environments.
- How to construct performance assessments and evaluations (p. 3).

To understand the operational components of jobs, skills, learning goals, or objectives, an instructional designer might observe high-task performers and low-task performers actually performing the tasks. He or she might interview high and low performers to ascertain their thinking patterns before, during, and after performing the task. To determine knowledge states that characterize a job or task, the instructional designer draws from a knowledge of cognitive science and learning theory. A task analysis is not performed in isolation—even when the instructional designer and subject-matter expert is the same person. It is always a good idea to corroborate the findings of a task analysis before making final decisions. Once the learning tasks are clearly determined, the instructional designer must translate the tasks into specific statements that help the learner achieve each learning goal.

In This Unit

In Unit 4, you will explore *task analysis*, which is the process of breaking down a broad topic to be learned into manageable, "digestible" chunks to enable learners to learn without being overwhelmed. You will identify the learning task-analysis decision points in your selected scenario. Finally, you will examine the contribution of a learning task analysis to the effectiveness of the instruction designed.

References

Brown, A., & Green, T. D. (2006). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Jonassen, D. H., Tessmer, M., & Hannum, W. H. (1999). *Task analysis methods for instructional design*. Mahwah, NJ: Erlbaum.

Smith, P. L., & Ragan, T. J. (2005). *Instructional design*. Hoboken, NJ: Wiley.

Learning Activities

u04s1 - Studies

Readings

Use your *Principles of Instructional Design* text to read the following:

- Chapter 8, "Analysis of a Learning Task," pages 151–170.

Use the Capella library to read the following:

- In your *Mastering the Instructional Design Process: A Systematic Approach* text:
    ◦ Chapter 5, "Using Analytical Techniques to Determine Instructional Content," pages 90–97.
- Adams, N. E. (2015). Bloom's Taxonomy of Cognitive Learning Objectives. *Journal of the Medical Library Association: JMLA*, *103*(3), 152–153.

- Jonassen, D. H., Tessmer, M., & Hannum, W. H. (1999). *Task analysis methods for instructional design*. Mahwah, NJ: Erlbaum.
  - Chapter 1, "What is Task Analysis?"
  - *Note:* The Capella library has five copies of this text. If it is unavailable, try to access it again later.

u04s1 - Learning Components

- Write learning goals.
- Define learning goals.
- Identify the steps of a task.
- Identify the task involved in a learning goal.
- Classify learning goals by cognitive domain.
- Define a task that leads to a goal.
- Break tasks down into smaller steps.

u04s2 - Analyzing the Learning Task Preparation

Your second assignment, Analyzing the Learning Task, is due next week. To prepare for the assignment, you should:

- Review the course project guidelines.
- Review the feedback received in your first assignment and revise it as indicated in the feedback.
- Read the assignment description and scoring guide to ensure you understand the requirements.
- Start developing your assignment. Allow yourself time to review and improve your work.

u04d1 - Learning Goal Analysis

This discussion will help you complete the next assignment successfully. Complete the following:

Watch the Capella media piece **Learning Goals, Tasks, and Objectives** (linked in Resources). As you view the presentation, consider these questions:

- How are learning goals related to the analysis of the learning need?
- What are learning tasks, and how are they related to learning goals?
- How do types of learning differ, and why is it important to understand these differences?
- What are learning objectives, and what purpose do they serve in instructional design?

Using the readings as references, determine the learning goal or goals related to your scenario and identify which type of learning the goal represents—the *learning domain*. Once you have determined the learning domain, in your discussion post:

- Explain the method you could use to analyze the goal into tasks (steps).
- Identify the major steps an expert learner must perform to demonstrate achievement of the goal.
- Include the task analysis in your post.

Response Guidelines

Read the posts of your peers and respond to two, evaluating their analyses of the learning goals. Use these questions to guide each evaluation:

- Would the major steps identified through the analysis method allow learners to achieve the goal? Why or why not?
- What revisions should be made to the goal or steps?
- What are the possible implications if an instructional designer does not identify the appropriate steps during a task analysis?

Make your response substantive and reference the assigned readings and/or other professional literature to support your views.

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

u04d1 - Learning Components

- Write learning goals.
- Define learning goals.
- Identify the steps of a task.
- Identify the task involved in a learning goal.
- Classify learning goals by cognitive domain.
- Define a task that leads to a goal.
- Break tasks down into smaller steps.

Unit 5 >> Learning Objectives

Introduction

When an architect knows the specifications of a desired structure, he or she can choose the building materials and determine the proportion and scale that will guide the design.

Just as the architect has to be very specific about what is to be constructed so the builder can translate the architect's design into the desired structure, the instructional designer has to create very clear, specific, and measurable descriptions of the desired learning outcomes that result from the instruction. These descriptions are written as *learning objectives*. Learning objectives describe "what we would accept as evidence that the learners have acquired the capabilities suggested by the learning goal" (Smith & Ragan, 2005, p. 77).

Learning objectives are usually written in one sentence stating what the learner will be able to do. The action verbs in the objectives that result from the task analysis should be directly observable and measurable. Each learning objective should also include a criterion to determine when the objective has been achieved (Smith & Ragan, 2005).

In This Unit

In Unit 5, you will practice transforming the tasks identified by the task analysis into learning objectives. You will also examine the contribution of learning objectives to the effectiveness of the instructional design.

Reference

Smith, P. L., & Ragan, T. J. (2005). *Instructional design*. Hoboken, NJ: Wiley.

Learning Activities

u05s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

- Chapter 3, "What's the Goal?," pages 59–79.

Use your *Principles of Instructional Design* text to read the following:

- Chapter 7, "Defining Performance Objectives," pages 132–150.

Use the Capella library to access the following:

- Use your *Mastering the Instructional Design Process: A Systematic Approach* text to read the following:
  - Chapter 8, "Organizing Instructional Programs and/or Products," pages 125–144.

Use the Internet to complete the following:

- Read Bloom's Taxonomy (Revised) [DOCX] for examples of observable and measurable action verbs.

- Define action verbs that are directly observable and measurable.
- Identify the format to be used when writing performance objectives.

u05a1 - Analyzing Learning Tasks

Overview

In this assignment, you will complete the Analyzing Learning Tasks Worksheet (linked in Resources).

Instructions

Use the directions in the worksheet to organize your learning goals and objectives:

- Identify two learning goals related to your scenario and classify the learning domain of each goal.
- List 3–5 steps that would enable an expert learner to achieve each of the learning goals you selected. Remember that:
  - The steps define what learners need to be able to *do*; write each step with an action verb.
  - The action verbs should be directly observable and measurable.
  - Verbs such as *understand*, *know*, and *learn* are *not* directly observable or measurable.
  - The process of breaking down the learning goal into steps is known as a *task analysis*.
  - The steps of the task analysis must be aligned with the learning goals.
  - The steps should be written as short phrases—action verb plus noun—so they can be used as behavior in the objectives.
- Write a performance objective for each of the steps, including:
  - The conditions under which the performance is to be demonstrated.
  - The audience (the learner).
  - An observable behavior (step) in terms of an action verb.
  - The standard or criterion for acceptable performance.
- Reflect on the task-analysis process (breaking down the learning goals into specific steps) and explain how learning objectives influence decisions about how the instruction should be designed. Support your ideas with in-text citations from the readings and/or other scholarly sources you may find at the Capella library.
- Write following APA style for in-text citations and references.
- Write clearly and logically, with correct use of spelling and grammar.

Submit your completed Analyzing Learning Tasks Worksheet as an attachment. You may wish to include this assignment in your ePortfolio.

Course Resources

[APA Style and Format](#)

[ePortfolio](#)

Analyzing Learning Tasks Worksheet [DOCX]

u05d1 - Writing Learning/Performance Objectives

This discussion will help you complete the assignment that is due this week. Choose three steps from the task analysis you have been working on. Using the readings and/or other resources from the Capella library, write performance objectives for each of the three steps. Refer to Bloom's Taxonomy (Revised) linked in Resources for appropriate verb choices. Your objectives should be in the *ABCD* format—that is, they should include:

- The **a**udience (learners).
- The **b**ehavior (directly observable and measurable steps, avoiding verbs like *understand*, *know*, and *learn*).
- The **c**onditions under which the performance is to be demonstrated.
- The **d**egree or criterion to indicate achievement.

To make it easier for your colleagues to provide you feedback, please include your instructional goal and task analysis in your post.

Response Guidelines

Read the posts of your peers and respond to two. Using the readings as references, consider the performance objectives they are proposing. Do all their performance objectives:

- Include *audience*?
- Include *behaviors* that match the step and are directly observable and measurable?
- Include *conditions*?
- Include *degree* (criteria)?

Course Resources

Graduate Discussion Participation Scoring Guide

Bloom's Taxonomy (Revised) [DOCX]

Capella University Library

u05d1 - Learning Components

- Write learning goals.
- Define action verbs that are directly observable and measurable.
- Identify the format to be used when writing performance objectives.

Unit 6 ≫ Assessing Learning From Instruction

Introduction

The measure of the quality of an instructional design is how effectively it fosters learning. An architect can create plans for a structure and builders can construct it according to the plans, but the value of the structure is largely determined by the building inspector. If the building does not pass inspection, it cannot be used. Likewise, an instructional designer can design instruction and the instruction can be implemented as it was designed, but if learners do not achieve the intended learning goals, the human performance problem remains unresolved.

Assessment is the collection of evidence that learning from instruction has occurred. That is why it is important that the evidence collected is valid for the type of learning being measured. If the building inspector used the choice of interior paint color to determine if the structure was built to code, how valid would the inspection report be? Similarly, if learning assessments measure performances that differ from those prescribed in the learning objectives, how valid are the results of the assessments?

Mager (1997) observes:

> The use of inappropriate test items is a widespread phenomenon and is a practice (malpractice?) most urgently in need of jettisoning. When we deceive students by teaching one thing and testing another, we lose and the students lose. Putting it more plainly, when we cheat students, they generally find a way to cheat back. Everyone associated with education and training needs to know how to avoid that (p. 5).

Instructional designers understand the necessity to align the method of measurement with the learning objective for the assessment to be valid and reliable. Ensuring alignment requires decisions that are guided by the purposes and assessment models of learners' achievement. According to Brown and Green (2006), *assessment* refers to "the procedures or techniques used to obtain data about a learner or product," whereas *evaluation* refers to "the process for determining the success level of an individual or a product on the basis of data, then making decisions based on this success level" (pp. 206–207). Once sufficient evidence is collected to verify that learning has resulted from the instruction designed, the instructional designer evaluates the design to determine its efficacy in helping the learner achieve the desired learning goals.

In This Unit

In Unit 6, you will contrast the role of assessment to your own experiences as the one being assessed. You will consider the decision points and choices that instructional designers have to make concerning assessment in instructional design. You will determine which model and assessment types would be valid for the types of learning evidenced in your chosen scenario.

References

Brown, A., & Green, T. D. (2006). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Mager, R. F. (1997). Measuring instructional results, or got a match? In R. F. Mager (Series Ed.), *The new Mager six-pack*. Atlanta, GA: The Center for Effective Performance.

Learning Activities

u06s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

- Chapter 12, "Designing Evaluation," pages 271–286.

Use your *Principles of Instructional Design* text to read the following:

- Chapter 13, "Assessing Student Performance," pages 264–288.

Use the Capella library to access the following:

- Use your *Mastering the Instructional Design Process: A Systematic Approach* text to read the following:

  ◦ Chapter 13, "Designing Learning Assessments," pages 215–230.

u06s1 - Learning Components

- Define types of assessment.
- Align assessment with outcomes.
- Describe various forms of assessment.
- Provide a rationale for the assessment strategy.
- Identify assessment placement.
- Apply characteristics of good assessment.
- Describe approaches to determine proficiency.
- Relate assessment type to learning type.

u06s2 - Assessing Learning From Instruction Preparation

The third component of your course project, Assessing Learning From Instruction, is due next week.

To prepare for this assignment, you should:

1. Review the course project guidelines.
2. Review the feedback received in your first and second assignments, and revise them as indicated in the feedback.
3. Read the assignment instructions and scoring guide to understand how you will be evaluated.
4. Begin developing your assignment. Allow yourself time to review and improve your work.

u06d1 - Effective Assessment Instruments

Instructional designers are responsible for designing effective assessment instruments. One of the most important aspects of effective assessment is alignment with lesson objectives and content. Using the readings and other sources from the Capella library, write a post discussing the strategy you would use to choose the type and format of assessment for your selected scenario. If you were designing assessment instruments to measure the learning outcomes in your scenario:

- What strategies would you use to ensure that your assessment are aligned with the objectives?
- What trade-offs might you have to consider in the design of the assessment instruments, and why?

Support your explanation with evidence from the literature using current APA style and formatting.

Response Guidelines

Read the posts of your peers and respond to two. In each reply, defend or refute his or her rationale. Make your response substantive and reference the assigned readings and/or other professional literature to support your views.

u06d1 - Learning Components

- Define types of assessment.
- Align assessment with outcomes.
- Describe various forms of assessment.
- Provide a rationale for the assessment strategy.

Unit 7 ≫ Planning Instruction

Introduction

What does it mean to plan instruction? Just as the architect draws from prescribed procedures for designing the foundational structure based on the specifications of the desired structure, its use, and its users, the instructional designer draws from a set of instructional events that are prescribed for all learning situations (Seels & Glasgow, 1998). In the selection of instructional events, the instructional designer considers: 1) the information needs and characteristics of learners; 2) the intended learning outcomes and the context in which the new knowledge will be applied; and 3) the context of the instruction and the environment in which the learning will take place (Cennamo & Kalk, 2005, p. 69). Then, the designer determines the best strategy for organizing and structuring the content so it engages the learner's attention and facilitates the learner's encoding of information retrieval so he or she can learn effectively. This is what it means to plan instruction.

The instructional designer uses the learning goals and objectives determined in the need, task, and learner analyses to define the scope (the amount of information) and sequence (the order in which the information will be presented) of instruction, and then selects the discrete activities (instructional events) that work best within the scope and sequence (Brown & Green, 2006). Just as the architect's choice of strategies for how a structure is built is guided by physics, engineering, and mathematics, there is a considerable body of evidence including educational psychology, cognitive science, learning theory, and communication theory that supports the instructional designer's prescriptive approach to designing an instructional plan. The selection is not based on the instructional designer's instructional preferences or the teaching style of the person who will implement the instruction that is designed.

In addition to designing the instructional plan that will be used to foster learning and achievement of the learning goals, the instructional designer must determine how the instruction will be delivered. *Delivery*, from an instructional designer's perspective, is how and through what channel the information will be carried from source to receiver and from receiver to source for the purposes of instruction (Seels & Glasgow, 1998). For example, *multimedia* as defined by Vaughan (2003) is "any combination of text, art, sound, animation, and video delivered to you by computer or other electronic or digitally manipulated means" (p. 1). Likewise, just as a video presentation is not the means of delivery, a teacher's lecture and PowerPoint slides are not the means of delivery. Classroom-based instruction is the channel for delivering the in-person lecture and slide presentation. Various factors influence the instructional designer's delivery options, such as learner characteristics, channel characteristics, the learning situation itself, constraints (such as limited bandwidth for Web-based instruction) and resources (such as time, money, and technology) (Seels & Glasgow, 1998). The timing of delivery (synchronous or asynchronous) is also frequently a consideration.

In This Unit

In Unit 7, you will explore the decision points related to your selected scenario's instructional plan and delivery strategies. You will assess the value of designing an instructional plan and determining delivery strategies prior to developing the content for a training or learning experience.

References

Brown, A., & Green, T. D. (2006). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Cennamo, K., & Kalk, D. (2005). *Real world instructional design*. Belmont, CA: Wadsworth/Thomson Learning.

Seels, B., & Glasgow, Z. (1998). *Making instructional design decisions* (2nd ed.). Columbus, OH: Merrill.

Vaughan, T. (2003). *Multimedia: Making it work* (6th ed.). New York: McGraw-Hill.

Learning Activities

u07s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

- Chapter 4, "How Do We Remember?," pages 81–121.
- Chapter 5, "How Do We Get Their Attention?," pages 123–160.
- Chapter 6, "Design for Knowledge," pages 161–194.
- Chapter 7, "Design for Skills," pages 195–214.

Use your *Principles of Instructional Design* text to read the following:

- Chapter 9, "Designing Instructional Sequences," pages 172–191.

Use the Capella library to access the following:

- Use your *Mastering the Instructional Design Process: A Systematic Approach* text to read the following:

  ◦ Chapter 9, "Designing Instructional Interventions," pages 145–170.

Multimedia

Click **Interview With Dr. William Rothwell** to listen to the audio.

- Dr. Rothwell is a professor of education at Penn State and co-author of your *Mastering the Instructional Design Process* text.

Course Resources

Interview With Dr. William Rothwell

u07s1 - Learning Components

- Define effective instruction.
- Describe how instructional design principles facilitate the design of effective instruction.
- Illustrate interrelationships among principles and decision points in instructional design.
- Identify ethical, legal, and political issues related to the practice of instructional design.

u07a1 - Assessing Learning From Instruction

Overview

For this assignment, the third component of your course project, you will complete the Assessing Learning From Instruction Worksheet (linked in Resources), identifying and justifying an appropriate assessment for your scenario.

Instructions

Using the Assessing Learning from Instruction Worksheet:

- Describe the type and format of assessment that would be most appropriate for the type of learning in your scenario.
- Provide a rationale for the assessment type and format you chose.
- Explain where the assessment should be placed in the instruction.
- Explain how the relationship between learning objectives and assessments influences instructional design decisions.

Additional Requirements

- Write following current APA style for in-text citations and references.
- Write clearly and logically, with correct use of spelling and grammar.

Submit your completed Assessing Learning from Instruction Worksheet as an attachment.

You may choose to save this assignment to your ePortfolio.

Course Resources

[ePortfolio](#)

Assessing Learning From Instruction Worksheet [DOCX]

[APA Style and Format](#)

[Capella University Library](#)

u07d1 - Defining the Learning Road Map

Using the readings and your task analysis completed in the Unit 5 assignment, sequence the content of your topic. Normally a topic is not delivered to the learner all at once; instead, we chunk the content into smaller portions or modules that we will call *lessons*. Choose a lesson from your task analysis (a set of steps and their objectives to be taught together). Then, use the Planning the Instruction Worksheet linked in Resources to develop your post. Please remember to remove the instruction portions of the worksheet before posting it. You will receive peer feedback on your post. This worksheet will also be part of your Unit 9 assignment.

Response Guidelines

Read the posts of your peers and respond to two. For each response, imagine that you and your peer are to collaborate on the instruction plan. What suggestions would you offer? Provide cited evidence to show that your suggestions could be effective in planning the instruction.

Course Resources

Graduate Discussion Participation Scoring Guide

[Capella University Library](#)

[APA Style and Format](#)

Planning the Instruction Worksheet [DOCX]

u07d1 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Define effective instruction.
- Describe how instructional design principles facilitate the design of effective instruction.
- Illustrate interrelationships among principles and decision points in instructional design.
- Identify ethical, legal, and political issues related to the practice of instructional design.

Unit 8 ▸▸ Mapping Instructional Design Concepts

 Introduction

A *concept map* is a graphical tool for organizing and displaying information. The process of concept mapping helps learners structure the information learned and facilitates meaningful learning, permits use of knowledge in new contexts, and aids in longer-term retention of information (Novak & Canas, 2006). Concept maps can be used to explore and explain relationships between problems and solutions, situations and scenarios, and causes and effects. For many of us, the visual aspect of a concept map allows us to see relationships more clearly and make connections more readily than we would with words on a screen or paper alone.

The various principles that influence instructional designers' decisions about the type and scope of instruction needed are related. In Units 3 and 4, you gained insight into how instructional designers determine the solvability of problems with instructional interventions and examine the human characteristics of users of the instruction to be designed. But how are these two analysis activities related? What are the implications of this relationship for the effectiveness of the instructional design?

In This Unit

In Unit 8, you will examine the utility of concept maps as instructional design tools. You will reflect on the relationships that exist between various analysis activities in which instructional designers engage. You will also explore the implications of an instructional need and learning-context analysis as well as a learner analysis for the effectiveness of the planned instruction.

Reference

Novak, J. D., & Canas, A. J. (2006). The theory underlying concept maps and how to construct and use them. Retrieved from http://cmap.ihmc.us/docs/theory-of-concept-maps

Learning Activities

u08s1 - Studies

Readings

Use your *Principles of Instructional Design* to complete the following:

- In Chapter 8, "Analysis of a Learning Task," review "Instructional Curriculum Maps," pages 163–165.

Use the Capella library to read the following:

- Simon, J. (2015). PowerPoint and concept maps: A great double act. *Accounting Education*, *24*(2), 146–151.
- Torre, D. M., Durning, S. J., & Daley, B. J. (2017). Concept maps: Definition, structure, and scoring. *Academic Medicine*, *92*(12), 1802.

Use the Internet to read the following:

- Novak, J. D., & Canas, A. J. (2006). The theory underlying concept maps and how to construct and use them. The Institute for Human and Machine Cognition. Retrieved from http://cmap.ihmc.us/docs/theory-of-concept-maps.php

u08s2 - Concept Map and Paper Preparation

Overview

This activity is another step toward the completion of your final assignment due in Unit 9. Read the assignment overview for the Unit 9 assignment, Putting It All Together.

Instructions

Using one of the concept mapping tools below or a method of your choice, create the first version of your concept map representing the instructional design elements, principles, and issues you have been working on in this course. The concept map should graphically organize the instructional design principles that you discuss in your paper. Illustrate the key decisions the instructional designer in your scenario made or could make related to these principles, and the sequence of these decision points. Use connectors to indicate relationships between the principles. Number the concept map according to the order in which these principles should be addressed in the instructional design process. Note: be sure to save your concept map in a format that can be uploaded to the courseroom, such as PDF, PPT, DOC, or JPEG.

In your brief paper, include the following:

- Explanation of your map.
- Description of how the principles, decisions, and facts illustrated in your concept map contribute to the overall process of instructional design.
- Reflection on your concept mapping experience.

You will post the concept map and paper in the first discussion of this unit for peer review.

Consider the concept mapping tools available on the following websites. Note that you may need to provide personal information to obtain a free trial:

- <u>Coggle - Simple Collaborative Mind Maps</u>. (n.d.). Retrieved from http://www.coggle.it/
- <u>IMindMap Mind Mapping</u>. (n.d.). Retrieved from https://imindmap.com/
- <u>Mindjet</u>. (n.d.). Retrieved from https://www.mindjet.com/

u08s2 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Discuss how concept maps can be used in the field of instructional design.
- Illustrate interrelationships among principles and decision points in instructional design.

u08s3 - Putting It All Together Preparation

Your final assignment, Putting It All Together, is due next week. As the title indicates, it is a culmination of all assignments in this course.

To prepare for this assignment, you should:

- Review the course project guidelines.
- Review the feedback received in your previous assignments and revise them as indicated in the feedback.
- Read the assignment descriptions and scoring guide to understand how you will be evaluated.
- Begin developing your assignment. Allow yourself time to review and improve your work.
- Complete the <u>Instructional Design Principles Worksheet [DOC]</u>.

You will post your Instructional Design Principles Worksheet in the second discussion of this week for peer review.

u08d1 - Concept Map and Paper Peer Review

Post your concept map and brief paper for peer review. Please note: the more complete your draft, the more likely it is that you will get good suggestions to improve your work. In your post, you may wish to call attention to areas of your concept map and paper where you are unsure.

Response Guidelines

Read the posts of your peers and respond to one. For your response, imagine that you and your classmate are to collaborate on the concept map and brief paper. What suggestions would you propose? Provide cited evidence to support your suggestions.

Course Resources

Graduate Discussion Participation Scoring Guide

<u>Capella University Library</u>

<u>APA Style and Format</u>

u08d1 - Learning Components

- Discuss how concept maps can be used in the field of instructional design.
- Illustrate interrelationships among principles and decision points in instructional design.

u08d2 - Putting It All Together Preparation Peer Review

Post your Instructional Design Principles Worksheet for peer review. Remember: the more complete your Instructional Design Principles Worksheet, the better your chance to get good suggestions from your peers. In your post, you may wish to call attention to areas of your Instructional Design Principles Worksheet where you are unsure.

Response Guidelines

Read the posts of your peers and respond to one. For your response, imagine that you and your peer are to collaborate on the Instructional Design Principles Worksheet. What suggestions for improvement would you propose? Provide cited evidence to support your assertions.

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

APA Style and Format

u08d2 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Define effective instruction.
- Describe how instructional design principles facilitate the design of effective instruction.
- Illustrate interrelationships among principles and decision points in instructional design.
- Identify ethical, legal, and political issues related to the practice of instructional design.

Unit 9 ❯❯ Aligning Principles and Process

Introduction

One process that bridges analysis and synthesis is storytelling. Stories are always drawn from life, from both the general qualities we distill from experience and the particular qualities we discern in careful observation, but they get their power from going beyond this basis in fact.

— Patrick Parrish

Each unit in this course has told a portion of the story of what instructional design is and the points in the process at which instructional designers must make choices guided by principles and concepts. This unit is where the segments of the story coalesce into a meaningful whole—where analysis and synthesis are bridged, and principles are aligned with process.

In Unit 8, you practiced creating a concept map to graphically organize the decision points and determine the relationship between a need and learning context analysis, and a learner analysis. Concept maps are excellent tools for coalescing parts into a meaningful whole. They provide visual representations of mental models that enable us to anticipate events. As you complete this course, consider the future of instructional design. What are the issues that will create new decision points for instructional designers?

In times of drastic change, it is the learners who inherit the future. Those who have finished learning find themselves equipped to live in a world that no longer exists. The central task of education is to implant a will and facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents, and children are students together.

— Eric Hoffer

In This Unit

In Unit 9, you will incorporate feedback from your peer review to finalize your concept map reflecting the principles that guided the decision points identified in your selected scenario. As you map the principle-based decision points, let these questions guide your critical reflection:

1. What is the sequence in which decisions relevant to your selected scenario were made, and how did those choices affect subsequent choices?
2. How will your concept map look? Will your map reflect a sequence of decision points that was appropriate for your selected scenario, but might look different under a different set of circumstances? Or is there a universal logic to the sequence of decision points that would apply to any instructional design process?
3. Compare your concept map to existing models of instructional design. Does your map mirror any existing models? Which ones?

References

Hoffer, E. (1973). *Reflections on the human condition*. New York, NY: Harper & Row.

Parrish, P. (2006). Design as storytelling. *Tech Trends, 50*(4), 72–82.

Learning Activities

u09s1 - Studies

Readings

Use your *Design for How People Learn* text to read the following:

- Chapter 10, "Social and Informal Learning," pages 243–255.

Use your *Principles of Instructional Design* text to read the following:

- Chapter 10, "The Events of Instruction," pages 192–207.

Use the Capella library to read the following:

- In your <u>Mastering the Instructional Design Process: A Systematic Approach</u> text:

    - Chapter 7, "Using an Instructional Design Process Appropriate for a Project," pages 119–124.

- Obizoba, C. (2015). <u>Instructional design models-framework for innovative teaching and learning methodologies</u>. *The Business & Management Review*, *6*(5), 21–31.

u09s1 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Define effective instruction.
- Describe how instructional design principles facilitate the design of effective instruction.
- Identify ethical, legal, and political issues related to the practice of instructional design.

u09a1 - Putting It All Together

Overview

This assignment has two parts: a paper applying instructional design principles and a concept map building on the various course activities.

Instructional Design Principles Paper

Key Instructional Design Principles

Discuss the key principles of instructional design related to the following concepts that you applied in each assignment. Use the Instructional Design Principles Worksheet you completed in Unit 8 as a resource. In your paper, explain the purpose of each principle, how the principles are related, and how these interrelationships contribute to the overall process of designing effective instruction. Support your discussion with examples from your selected scenario and use at least five resources from the literature in the field of instructional design. These principles include:

- Instructional needs.
- Learning context.
- Learner characteristics.
- Goals.
- Steps.
- Learning objectives.
- Assessments.
- Instructional plan.
- Delivery strategies.

Implications

Select three of these principles**.** Identify possible implications of ethical, legal, and political issues associated with your selected instructional design principles and decision points. Identify the steps an instructional designer might take to resolve these issues, referencing relevant examples from your selected scenario and instructional design literature.

Concept Map

Construct a concept map that represents the instructional design elements, principles, and issues you have been working on in this course. The concept map should graphically organize the instructional design principles discussed in your paper. Illustrate the key decisions the instructional designer in your scenario made or could make related to these principles, and the sequence of these decision points. Use connectors to indicate relationships between the principles. Number the concept map according to the order in which these principles should be addressed in the process of designing instruction.

Requirements

Make sure you cover the following in your paper and concept map:

1. Construct a concept map related to the selected scenario that graphically displays a mental model of the applied instructional design principles, their interrelationships, and sequence of key decision points you made during your project.
2. Explain how the instructional design principles are related and how the interrelationships contribute to the overall process of designing effective instruction.
3. Discuss key instructional design principles and their purposes related to the concepts applied in each assignment.
4. Identify possible implications of ethical, legal, and political issues associated with the key instructional design principles and decision points, and the steps an instructional designer might take to resolve the issues.

Additional Requirements

- **Written communication:** Paper is free of errors that detract from the overall message and demonstrates effective written communication skills.
- **APA formatting:** Resources and citations are formatted according to current APA style and formatting.
- **Number of resources:** Cite and reference a minimum of five resources.
- **Length of paper:** 6–8 pages, including the concept map and references. This does not include title page or any appendices.

Refer to the helpful links in Resources as you complete your assignment.

Note: Your instructor may also use the Writing Feedback Tool to provide feedback on your writing. In the tool, click on the linked resources for helpful writing information.

Course Resources

Writing Feedback Tool

Capella University Library

Capella University Library: Journal and Book Locator

ePortfolio

Planning the Instruction Worksheet [DOCX]

APA Style and Format

IBSTPI Code of Ethical Standards for Instructional Designers [HTML]

u09d1 - Objective, Instruction, and Evaluation Congruence

Smith and Ragan (2005) propose that congruence among objectives, instruction, and evaluation is one of the fundamental principles underlying instructional design. Construct an argument to support this premise from the perspectives of the stakeholders (students, instructors, instructional

designers, parents, employers, and administrators) that would relate to your selected scenario. Cite from the readings and literature in current APA style to support your argument.

Response Guidelines

Read the posts of your peers and respond to at least two, refuting their arguments from the perspectives of the above-mentioned stakeholders identified in their responses. Cite from the literature in correct APA style to support your rebuttal.

Reference

Smith, P. L., & Ragan, T. J. (2005). *Instructional design*. Hoboken, NJ: Wiley.

Course Resources

Graduate Discussion Participation Scoring Guide

Capella University Library

APA Style and Format

u09d1 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Describe how instructional design principles facilitate the design of effective instruction.
- Identify ethical, legal, and political issues related to the practice of instructional design.

Unit 10 >> Examining Ethical, Legal, and Political Considerations

Introduction

Many architects in the United States rely on the principles of the American Institute of Architects (AIA) Code of Ethics and Professional Conduct to guide their decisions as they develop plans for building structures. Their general obligations are similar to those that govern the conduct and practices of professional instructional designers. AIA members are expected to maintain and advance their knowledge of the art and science of architecture, respect the body of architectural accomplishment, contribute to its growth, thoughtfully consider the social and environmental impact of their professional activities, and exercise learned and uncompromised professional judgment (American Institute of Architects, 2020).

The IBSTPI Code of Ethical Standards for Instructional Designers lists four sets of guiding standards for the ethical conduct of instructional design professionals: 1) Responsibilities to Others; 2) Social Mandates; 3) Respecting the Rights of Others; and 4) Professional Practice. General obligations range from providing efficient, effective, workable, and cost-effective solutions to client problems; considering the impact of planned interventions upon individuals, organizations, and the society as a whole; adhering to intellectual property regulations; committing time and effort to the development of the profession; to withdrawing from clients who do not act ethically or when there is a conflict of interest (Richey, Fields, & Foxon, 2001, pp. 201–202).

Familiarity with these guidelines for ethical behavior and activities is often gained through practice and experience with ethical challenges such as the appropriateness of assessments, designing for a multicultural and ethnically diverse target audience, and using Internet resources that may vary greatly in content and value (Is the information true? Is the information scholarly? Have images been altered?).

Along with ethical codes of conduct that govern professional behavior and activities, architects, like instructional designers, are bound by "rules or commands imposed by the government that are enforced through ex post sanctions." These rules or commands are what Lessig (1999) (as cited in Spinello, 2003, p. 3) calls *laws*. Instructional designers must be able to clearly distinguish among ethical, legal, and political considerations. Examples of legal issues that instructional designers encounter include the use of copyrighted content—especially Internet materials; compliance with ADA Section 508; and intellectual-property ownership of developed instruction or training materials. Examples of political issues include workplace dynamics, adherence to the organization's hierarchy of command, decision compromises, and management controversies.

In This Unit

In Unit 10, you will experience decision points that instructional designers must consider when faced with ethical, legal, and political challenges. You will broaden your understanding of the implications of these choices in the field of instructional design. You will apply the IBSTPI Code of Ethical Standards for Instructional Designers to an analysis of your selected scenario.

References

American Institute of Architects. (2020). AIA code of ethics and professional conduct [PDF]. Retrieved from http://content.aia.org/sites/default/files/2019-10/181018_Code_of_Ethics.pdf

Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse on Information & Technology.

Spinello, R. A. (2003). *Cyberethics: Morality and law in cyberspace* (2nd ed.). Boston, MA: Jones and Bartlett.

Learning Activities

u10s1 - Studies

Readings

Use the Capella library to read the following:

- Gray, C. M., & Boling, E. (2016). Inscribing ethics and values in designs for learning: A problematic. *Educational Technology Research and Development*, *64*(5), 969–1001.

u10s1 - Learning Components

- Describe how instructional design principles support the decision-making process of instructional designers.
- Define effective instruction.
- Identify ethical, legal, and political issues related to the practice of instructional design.

u10s2 - Ethical and Legal Issues: Practice Scenarios

The Practice Scenarios represent the kinds of ethical, legal, and political situations that might arise during the process of designing instruction. After viewing each scenario, you will decide what resources or information you would need to address each issue from an informed position. For each scenario, you are provided:

- Resources that you may consult before making your decision.
- Alternatives for each decision.
- Feedback on your decisions.
- A summary of the scenario.

Click **Practice Scenarios** to read and evaluate a situation, then choose an answer. When a second follow-up question appears, evaluate and choose a second answer. You can see the result of your actions by clicking "Get Feedback on My Response." You can get tips through the "Give Me Advice" button and documentation links in the pertinent information box.

Do the scenarios as many times as you need to reach a satisfactory conclusion. It is a good idea to repeat the scenarios to gain a better understanding of the ethical and legal issues that instructional designers encounter.

Course Resources

Practice Scenarios

u10d1 - Code of Ethical Standards

Review IBSTPI's Code of Ethical Standards for Instructional Designers (linked in Resources). Discuss three ethical standards that you consider most pertinent to the scenario you selected for your project. Why are these ethical standards relevant? What are the possible ethical, legal, and political implications if these standards are not applied? How can you counter arguments from others who tell you that you should not be concerned about adhering to standards?

Response Guidelines

Read the posts of your peers and respond to one. State your views of the potential implications discussed in a referenced reply to each learner, citing and referencing all sources in current APA style. Let these questions guide your response:

- Do you agree or disagree with the ethical, legal, and political implications identified? Why?
- What other possible ethical, legal, and political implications should be considered?

Course Resources

Graduate Discussion Participation Scoring Guide

IBSTPI Code of Ethical Standards for Instructional Designers [DOCX]

Capella University Library

APA Style and Format

u10d2 - Executive Summary

If, after completing this course, you were asked to summarize what instructional design is and what purpose it serves, what would you write? Create and post a one-page, double-spaced executive summary of 300–350 words to define instructional design and explain its purpose to someone outside of the instructional design field. Provide statements that show the distinctions among instructional design, curriculum, lesson planning, teaching, and so on.

Post your executive summary as a Word document and, as part of your post, include your Instructional Design Defined discussion post from Unit 1 as a courtesy to your peers who will be responding to your executive summary.

Response Guidelines

Read the post of one learner and contrast the executive summary to his or her original response to the Unit 1 Instructional Design Defined discussion. Address the following in your reply:

- What changes in perspective of instructional design are reflected in his or her executive summary?
- After reading the executive summary, what conclusions can you draw about the definition and purpose of instructional design?
- What information could have been included that would have made his or her summary more convincing and compelling?

Course Resources

Graduate Discussion Participation Scoring Guide