LT 716
Chapter 1 Questions   **Name: Brandi Antonsen**

Write your response to each of the following questions. *Be sure that you **support your response** for each question with **direct citations from the text** or other relevant and related sources. It must be evident that you **connect your response to the text book** and/or other relevant and related sources.*

1. **Summarize what you believe are the key points in this chapter.**

    Chapter one, "Introduction to Instructional Design," discusses many key points of instructional design which include the evolution, the key elements, the five phases, and the collaboration cycle. To begin, an instructional designer works "with clients to translate their needs and desires into the design specifications that will yield a successful product" (Cennamo & Kalk, 2019, p. 2) As the field instructional design has been growing since World War II, the discipline continues to evolve with new theories and practices (Cennamo, et al., 2019, p. 3). Additionally, instructional design has formed around the ADDIE framework which focuses on the key elements of analysis, design, development, and evaluation. These key elements focus on the learner characteristics, desired outcomes, activities, assessments, and evaluation. Additionally, instructional design "resists a tidy, easily replicated solution" and instead requires problem-solving skills (Cennamo, et al., 2019, p. 11). This problem solving is often described with the five phases of instructional design: Define, Design, Demonstrate, Develop, and Deliver.

2. **What do instructional designers do? What is the nature of their day-to-day work? What skills are most beneficial?**

    As I previously stated, an instructional designer works "with clients to translate their needs and desires into the design specifications that will yield a successful product" (Cennamo & Kalk, 2019, p. 2) This quote bringing clarity to my idea of instructional design as an instructional designer aims to understand the needs of the learners, design the product(s) to facilitate learning, and provide effectiveness in doing so. The day-to-day nature of an instructional designer varies widely among many area of instructional design. An instructional designer works on client projects through "learner analysis, collaborative design, prototype design, and experimentation" (Cennamo & Kalk, 2019, p. 5). The most beneficial skills for an instructional designer include the ability to empathize with the user's experience, use the information about the user's experience to define the users' needs, brainstorm multiple ideas for problem solving, select the most effective ideas, and test the solutions (Cennamo & Kalk, 2019, p. 4).

3. Think about the requirements of systematically designed instruction, and then consider the following situations. *Be sure that you **support your response for each situation** with direct citations from the text or other relevant and related sources. It must be **evident that you connect your response** to the text book and/or other relevant and related sources.*

a. **You have been asked to develop a Website and three-day workshop to meet the goal of promoting "girl-friendly" science teaching. You are given a list of topics and asked to organize a series of lectures on those topics for the workshop. The function of the Website is to make the presentations available after the workshop. Would this project be a good candidate for the systematic instructional design process? Why or why not?**

The project of promoting "girl-friendly" science teaching through the use of a workshop with a series of lectures on specific topics does not act as a good candidate for the systematic instructional design process for a couple reasons. First, the topics for the lectures does not have a foundation of designing with the "characteristics and needs of the learners in mind" (Cennamo & Kalk, 2019, p. 20). The topics merely say that they discuss the promotion of "girl-friendly" science, but do not have application with learner needs. Second, the series of lectures in a workshop form does not demonstrate interactive and innovative solutions for instruction (Cennamo, et al., 2019, p. 4). Instructional design aims to provide innovative solutions for learner effectiveness and engagement.

b. **You've been asked to develop a web-based course to promote "girl-friendly" science teaching that will include interactive simulations where the teachers make choices and see the results of their choices. Would this project be a good candidate for the systematic instructional design process? Why or why not?**

This project that promotes "girl-friendly" science teaching through interactive simulations based on teacher choice and evaluation is a good candidate for the systematic instructional design process because it aims to provide opportunities for a large audience of teachers with different classrooms, design with the learner characteristics in mind based on each teacher's needs, reflect the possibility for alignment with the outcomes, activities, and assessments, and continue evaluation through the results of their choices. In further depth, the development of a web-based course that aims to promote "girl-friendly" science teaching focuses on interactive simulations chosen by the teacher. Therefore, this project can be used for many teachers from different classroom and establishes the potential for a large audience (Cennamo, et al., 2019, p. 20). Second, the teacher makes a choice on the interactive simulations based on the needs and characteristics of the learners in his/her classroom. Third, the desired outcomes, activities, and assessments are geared towards the teachers understanding of his/her learner population. Lastly, the wide audience and varying paths of use can be evaluated for further revision.

Read the Chapter 1 Case Analysis (see D2L for link). After carefully reading the case analysis respond to the following questions:

c. **What is the problem? Can it be solved by instruction? Why or why not?**
Within this case analysis, Sam Trevor, the director of a state science museum, wants Jackie, an instructional designer, to create a website with digital images of objects in the museum to increase the webpage presence. The problem in this scenario is that Sam does not have the time, money, or inclination to complete a needs assessment which would help Jackie determine the necessity for the website. This situation can be solved by instruction if Jackie is able to communicate the necessity for each portion of the process in creating a finished product. Jackie needs to be open to communicating the needs of the instructional design process and gain the information for the project as necessary.

d. **Who would you say are the learners?**
The learners in this case study are the users of the website. This includes the audience of students enrolled in school, the public population, university classes, and researches of museum objects

e. **What are the outcomes and goals?**
Jackie worked to consider the desired outcomes and goals of the website. In the beginning, Sam wanted a website to hold hundreds of digital images and increase the museums presence on the web. Through discussions with Sam and research, Jackie found that the desired outcomes of the site were best served if they maintained the goals of demonstrating the steps in the scientific inquiry, demonstrated proper safety precautions when working with plants, and provided an activity to locate plant names and scientific facts. This follows the goal of teaching to conduct scientific inquiry with the use of museum images.

f. **List any activities related to the outcomes and goals.**
The case study does not list specific activities related the outcomes and goals, but it does mention the two sections of materials and resources: "On-line Collection" with high quality images and "More Information" with instructions on scientific inquiry, questions, activity plans, and more.

g. **List the assessment and evaluation activities/strategies discussed in the case.**
Jackie was able to assess the project through asking a series of questions based on the audience's needs and characteristics. She talked with the client, a subject matter expert, and some audience members. Jackie evaluated the project by asking teachers to go through the website and give feedback on if it was effective for their purposes, easy to use, fit to learner characteristics and needs, and accessible to students.

NOTE: Throughout the case analysis, you should be careful not to generalize beyond the data or information provided. Stick close to the facts and information provided when describing the issues, drawing conclusions, and making recommendations. It is possible that you are unable to provide a response because the data or information needed is not provided in the case. In such cases simply note this in your response.