Instructional Design Models Comparison

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What is Instructional Design?

Instructional design has various definitions, the first of which describes instructional design as a “systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction”. (Berger, 1996) Berger goes on to say that instructional design “is the entire process of analysis of learning needs and goals and the development of instructional materials and activities; and tryout and evaluation of all instruction and learner activities” (Berger, 1996). Instructional design is also defined as a “systematic process of translating general principles of learning and instruction into plans for instructional materials and learning” (Siemans, 2002). Another definition describes instructional design as “the process by which instruction, computer-based or not, is created. Instructional design provides a framework for the creative process of design, and ensures the learners’ needs are met” (Siemans, 2002).

In short, instructional design is an approach to classroom planning that incorporates the use of all available materials and resources in order to create well-planned activities that will provide students with opportunities to master the desired learning standards. Each of the three learning models that are examined in the pages that follow, include elements of the descriptions of instructional design that have been given thus far. The ADDIE model as well as the Learning by Design model and ASSURE lesson planning will be described and compared. I will also discuss the role that teachers, media specialists, and instructional specialists should have in the process of developing instructional units.
ADDIE Model

The ADDIE model focuses on five elements of implementing an instructional lesson. The first stage of planning is to analyze. During this first step the teacher must identify what is going to be taught which is done by analyzing the standard that is provided. Then, the teacher must consider how to deliver the lesson and any problems that might arise. (Colston, 2008) The second stage is to design; designing includes working with specific learning goals and developing resources that could possibly be used. (Colston, 2008) Next is the development stage in which the designer creates the learning materials that will be used to reach the desired learning goals. The fourth step in the ADDIE model is implementation, in which the learning plan is actually implemented in the classroom. And, the final step is to evaluate, using both formative and summative assessment, to determine the success of the learning plan and to determine any changes that might need to be made. (Colston, 2008)

Understanding by Design

Understanding by Design is “a framework for improving student achievement” (Wiggins, 2007). UbD focuses on the teacher’s role in the learning process by specifically examining four areas. The first emphasis is on student learning and the importance of creating opportunities to enhance student development. Second, is to focus on means to assess student learning and self-assessment for the student. The third idea is to develop learning activities based on the three stage “backward design” concept. (Wiggins, 2007) The final idea expresses the importance of reviewing results and making changes as necessary.
Learning units and activities that are created using the Understanding by Design model consist of three phases. In the first stage, the designer identifies what the desired outcome is to be. This requires determining what the learning goals are; these goals are generated by focusing on the learning standards that have been provided and determining what must be learned in order to master those standards. (Wiggins, 2007) In the second phase, the designer must establish what evidence should be presented in order to assess student progress. And, finally, in the third phase, the plan for how to reach the desired results is presented.

(www.vanderbilt.edu/cft/resources/teaching_resources/theory/design.htm)

ASSURE Model

The ASSURE model was designed based on the Conditions of Learning theory that was developed by Robert Gagne. Gagne’s theory is centered on the principle that humans learn in different ways and therefore require different means of instruction. (www2.unca.edu/educaiton/edtech/techcourse/assure.htm) The ASSURE model consists of six elements. The first element requires the designer to analyze who the audience is going to be. Next, the designer must state what the expected result of the lesson is to be. The third element is to select the proper methods and resources in order to implement the learning plan and to utilize the available resources. The designer must create a learning plan that will require the audience to be involved in the learning process. And finally, evaluate the lessons outcome and be willing to make any necessary revisions.
The ADDIE model, Understanding by Design, and the ASSURE model each offer a step-by-step approach for educators to follow; while the specific wording may vary, the overall guiding principles of each model are very similar. Each model focuses on the students in which the learning activities are intended for. I did find that the ADDIE model and the ASSURE model seemed more focused on specific learning activities or lessons. In comparison, Understanding by Design seems broad reaching and better suited for entire unit design. Not only do each these three design models provide for the extensive analysis of our students and the standards we are teaching, but they each also require the teacher to reflect upon completion of the lesson. The main focus of all three is to adequately analyze the students’ abilities and needs along with the learning goals and create a learning plan that incorporates all of these elements.

When teaching the in-depth standards that teachers work with each day, it is vitally important to take time to reflect on who we are aiming our instruction to and determine the most effective ways to carry out our instruction. Reflection is also a crucial part of the learning process. As teachers we must be able to look back at the lessons we have designed and gauge our successes and failures. If we conclude that the evidence our students present doesn’t reflect mastery of the standards and learning goals, then we must be willing to make the necessary changes to ensure success for our students. Using a design model such as ADDIE, ASSURE, or Understanding by Design ensures that teachers are reflecting on all of the elements of teaching that will ultimately lead to success.
The steps included in each of the three models I have discussed allows for input from other people that are involved in the learning process. There is room for everyone in the school to participate in helping our students be successful. The teacher is responsible for assessing the students that he/she teaches each day. Teachers also have a responsibility to examine our learning standards and establish the goals we must accomplish in order to master the standards for each content area. After establishing what it is our students must learn others can be brought into the planning process. Understanding who we are teaching and knowing what we need to teach, will make determining how we will develop our instruction much easier. Once these things have been identified teachers can work with the media specialist to find resources that can be incorporated into the lesson. Knowing this information will also enable the technology specialist to assist in the process of finding resources that are appropriate for the audience and the desired learning outcomes. I believe that teachers can have much more success in the classroom if they are willing to reach out to others such as the media specialist and technology specialist for assistance in developing instruction.

Upon completion of the Instructional Technology program, I hope to become an active participant in the learning process by offering my assistance to teachers as they develop their learning plans. I know from my classroom experience just how challenging it can be to develop lessons that include input from anyone outside of my grade level and content area. I hope to be able to create an atmosphere that invites teachers to include me when developing their teaching strategies. I would encourage
teachers to establish a schedule of formal meeting times within their grade and content area and make that schedule available so that arrangements can be made to attend those planning sessions. First, and foremost, I want my fellow teachers to know that I am there to provide any assistance necessary to ensure their success and their students’ success in the classroom.
References


