# Three Instructional Design Models Jill Jezek EDCI 888 Kansas State University Spring 2012

# 1. Newby, Stepich, Lehman, and Russell's PIE Model

## Overview...

PIE stands for *planning, implementing, and evaluating* in a learner-centered classroom environment (Gustafson & Branch, 2002). There is a great emphasis on incorporating technology into the lessons.

## Best Suited For...

The PIE model is best suited for individual classroom teachers designing lesson plans that incorporate technology to effectively teach and motivate students. It would also be suited for a principal designing a professional development activity for their school's teachers.

## Least Suited For...

The PIE model is not suited for district-wide or large group planning. It is focused on the individual students in a particular classroom. It would be difficult to use this model to plan a design for an entire district or even an entire school.

#### Application of Use...

An example of the use of the ADDIE model in an elementary classroom would to be teaching a lesson on multiplication. First, the teacher would identify the lesson's objectives (master the multiplication table of 3s) and what the students already know. Then, she may decide to use iPads to motivate students to learn and practice their multiplication tables through a flashcard app. Finally, she can evaluate who mastered their 3s by checking their iPad app levels and scores.

# 2. Heinich, Molenda, Russell, & Smaldino's ASSURE Model Overview...

The ASSURE model works to <u>a</u>nalyze learners, <u>s</u>tate objectives, <u>s</u>elect media and materials, <u>u</u>tilize media and materials, <u>r</u>equire learner participation, <u>e</u>valuate and revise (Gustafson & Branch, 2002). "ASSURE starts with looking at the learner in detail. Nothing you plan or design is effective unless you have taken the time to look at the learners" (Culatta, 2011).

## Best Suited For...

The ASSURE model would be best suited for teachers to use when designing instructional unit plans. It would also be beneficial for trainers to use when designing instruction to teach a new program to staff members.

## Least Suited For...

This model would not be suited for board members who were proposing a plan to its schools. They would not necessarily analyze learners or require participation, just enact a solution to a problem. The ASSURE model would not be as helpful to use for one lesson since there may not be enough data to evaluate.

## Application of Use...

A classroom teacher may be planning a science unit on rocks. She would first look at her students and determine their learning styles and abilities. Next, she would determine what objectives she wants met by the end of the unit. Then, the teacher would select activities, technology (such as videos over rocks, microscopes, and cameras for pictures of rocks found), and gather materials needed to investigate (like various types and sizes of rocks). While teaching, she would make informal and formal observations of students performing activities and monitor progress. Finally, the teacher would give an assessment and evaluate her unit to decide what could be changed for next time.

# 3. Morrison, Ross, and Kemp Model

#### Overview...

The developer begins with task analysis then identifies subject matter, goals, purposes, and selection of resources needed to achieve the desired outcomes. There is also a great emphasis on formative and summative evaluations throughout (Gustafson & Branch, 2002).

#### Best Suited For...

The Morrison, Ross, and Kemp Model is best suited for curriculum developers. It would also be good for the classroom teacher to use when mapping out the entire year or long-term planning. The focus of this model is on the perspective of the learner, to ensure effectiveness (Gustafson & Branch, 2002).

#### Least Suited For...

The Morrison, Ross, and Kemp Model is not ideal for daily lesson planning. It looks at the whole process or unit, not just one day. This model would not be suited for a school trying to design instruction for all students because it takes into consideration what the student knows and can do already. This will vary by age.

#### Application of Use...

An example would be a curriculum developer using the Morrison, Ross, and Kemp Model to map out the math curriculum for a 4th grade school year. Following the nine elements, the developer would identify goals for the year, examine the characteristics of students at that age level, and identify subject content needing to be taught (following the 4<sup>th</sup> grade state standards for math). They would identify the objectives of each area, sequence content in logical fashion, then plan and design how instruction will be implemented. Finally, evaluations would be created and resources gathered. Then the classroom teachers at that grade level would follow the design for cohesive instruction across the grade level (Gustafson & Branch, 2002).

# References

- Culatta, R. (2011). Instructional Design Models. Retrieved from: http://www.instructionaldesign.org/models/index.html
- Gustafson, K. L., and Branch, R. M. (2002). Survey of instructional development models. Retrieved from Eric. ED477517