AECT 2006 Presentation Proposal

Title

From Design *Theory* to Development *Practice*: Developing a Stronger Understanding of Our Field.

Presenters

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Description *(75 words or less)*

How does one develop deep knowledge of our field? Inherent in this quest is a complex field with multiple definitions and research perspectives on our practices. This session will showcase an approach that engages students in generative activities to prompt critical thinking about design and development theory and practices. Resulting instructional design theory databases collaboratively created by classmates and instructional development models with accompanying detailed work plans created by individuals will be showcased and discussed.

Abstract *(750-1000 words max)*

To become competent practitioners, those new to the instructional design and development (IDD) community must acquire advanced knowledge and skill competencies to develop and research new theories and continually enhance the state of our profession. Lave and Wenger (1991) suggest that newcomers are acculturated through processes beginning with legitimate peripheral participation, or participating on the side line through a process of observational learning and limited participation that eventually leads into in-depth engagement with our core practices. Through processes of production (e.g., training, feedback, involvement, leadership, etc.) newcomers eventually move into a role of full participation as they become recognized members of a community.

During this session we will describe and showcase two activities and the resulting deliverables designed to engage IDD doctoral students in generative activities (Wittrock, 1990) to expand depth of knowledge of instructional design theory and development practices. As newcomers it is important that each individual be able to discern for him/herself what our field is about, how the community members have defined, practiced, and researched our field, and how each individual will in turn contribute to our profession. Instructional activities facilitating newcomers in building understanding and communicating new knowledge are important to growth in the community.

What is Instructional Design and Development?

What should newcomers ‘know’ about IDD practices? Members of a community share definitions and ideals about how they will practice (Lave& Wenger, 1991). Practitioners have developed multiple paradigms and approaches for designing, developing, implementing, and evaluating instruction, each based on different understandings of learning and instruction, and arguably, each having its advantages and challenges. This complexity of theories and practices can be challenging for newcomers. How ‘instructional design’ and ‘instructional development’ are defined impacts our actual practice. It is essential to characterize similarities and differences among the multitude of IDD paradigms and unpack the complexity of each to perform well within the community and help to enhance practices.

Reigeluth (1999) suggests that instructional design theories have four basic characteristics. Design theories (i) prescribe how instruction should be organized, (ii) include instructional methods and situations where there use is acceptable, (iii) have methods that can be broken down in to more detail, and (iv) increase the probability that instructional outcomes will be achieved. Instructional design theories thus provide a framework from which instruction is organized and delivered to prompt learning.

Instructional development is often described as a systematic process for producing instruction. Gustafson and Branch (1997) have described several instructional development models accounting for a variety of perspectives. These models possess common steps yet have professed linear, iterative, or rapid prototyping approaches; objective-based or open-ended outcomes; specific adaptations for teachers, business practitioners, or evaluators; tasks focused on specific delivery mediums such as classroom, self-study, computer-based, or distributed learning environments. Instructional development models thus provide a framework to identify, organize, produce, deliver, and evaluate instruction.

There exists contradictory usage of the terms instructional design and instructional development within the literature. Recently Gustafson’s and Branch’s (1997) work on development models was published under the title of “Instructional Development,” yet some of Branch’s earlier work describes the same ideas using the term “Instructional *Design* Models” (Edmonds, Branch, & Mukherjee, 1994). This contradictory usage of the terms can be challenging.

Educating our community members to advance our practices

The complexity and discrepancies within the field form important foundations from which practices have emerged and roots upon which our thinking about how our field should grow and change in the future. In this doctoral seminar learners are prompted to think critically about, explore, and then describe the themes among our IDD practice literature. A generative and social learning perspective was chosen to engage learners in this thinking and working so that each member of the class contributed his or her own knowledge into a shared understanding.

Wittrock (1990) suggests that learning requires active participation of the mind. Comprehension occurs by formulating connections between perceived information, prior knowledge and other memory components. Learners build deeper knowledge by physically and mentally manipulating models and information while actively seeking to organize and integrate informational relationships between what is seen, heard, felt, read, and mentally processed. Further, engaging in activities collaboratively exposes learners to other member's interpretations to help each better understand the meaning of ideas and concepts within the varied IDD field.

Major Course Projects:

The two major activities accompanied by readings and discussions within the course include: social-generative class project and generative practice individual project.

Social-Generative Class Project: Jonassen, Carr, and Yueh (1998) have described databases as mind tools that help breakdown information into smaller categories while allowing for interpretation of information. Learners in this seminar contribute to the creation of an online database of design theories. Learners defined instructional design theories and create viable categories for comparison among the theories. Secondly, learners identified and read about multiple theories to decide if they 'fit' within the group's established definitions and if so, populated the database with pertinent, agreed upon information.

Generative Practice Project: Learners create their own development models and associated work plans. Each included a visual representation, brief description of how the model works, and detailed work plan including a schedule of all tasks. The model had to be robust so that any type of instruction could be developed using it.

Each deliverable will be showcased with explanations of its formation, how the literature informs ideas, and strengths and weaknesses. The audience will be prompted to provide critique, ask questions, share personal experiences, and contribute to the discussion. The following questions will provide a beginning framework for the discussion:

1. How do we understand the terms instructional design and instructional development?

2. How does developing a database of instructional design theories help us develop depth of knowledge? What challenges did we encounter? How would we change the database now?

3. How does creating an instructional development model and accompanying work plan help us develop depth of knowledge? What challenges did we encounter? How would we change the activity now?

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