

2010


Designing and developing online instruction for the adult learner : learning theories, motivational models, and e-tivities

Krystal Grady
University of Northern Iowa

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Recommended Citation

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Designing and developing online instruction for the adult learner : learning theories, motivational models, and e-tivities

Abstract

The purpose of this literature review is to describe how instructors can build interactive online courses that will enhance student learning, enjoyment, motivation, and success in an online distance education course. It is intended to be a resource for instructors to use when planning and preparing to teach an online course. This literature review should help instructors understand who adult learners are and what motivates them to succeed; why using an instructional design model will help save time, money, and increase the success of the course; and how to use the technology available in the online environment to build online activities, or e-tivities, to increase student learning, motivation, and success in the online course. This reviewer has found that motivation is one of the most important elements of learner success when taking an online course and one way to increase motivation and course satisfaction is to incorporate e-tivities into the online learning environment. This reviewer recommends that as institutions build their online course offerings, those building the courses should be offered research based resources and training before planning, designing, and developing an online course.

DESIGNING AND DEVELOPING ONLINE INSTRUCTION
FOR THE ADULT LEARNER:
LEARNING THEORIES, MOTIVATIONAL MODELS, AND E-TIVITIES

A Graduate Review
Submitted to the
Division of Instructional Technology
Department of Curriculum and Instruction
In Partial Fulfillment
Of the Requirements for the Degree
Master of Arts
UNIVERSITY OF NORTHERN IOWA

by

Krystal Grady

September, 2010

This Review by: Krystal Grady

Titled: Designing and developing online instruction for the adult learner: Learning theories, motivational models, and e-tivities.

has been approved as meeting the research requirement for the Degree of Master of Arts.

9/1/10

Date Approved

Leigh Zeitz

Graduate Faculty Reader

9/1/10

Date Approved

Joe Marchesani

Graduate Faculty Reader

9-1-10

Date Approved

Jill Uhlenberg

Head, Department of Curriculum and Instruction

ABSTRACT

The purpose of this literature review is to describe how instructors can build interactive online courses that will enhance student learning, enjoyment, motivation, and success in an online distance education course. It is intended to be a resource for instructors to use when planning and preparing to teach an online course. This literature review should help instructors understand who adult learners are and what motivates them to succeed; why using an instructional design model will help save time, money, and increase the success of the course; and how to use the technology available in the online environment to build online activities, or e-tivities, to increase student learning, motivation, and success in the online course. This reviewer has found that motivation is one of the most important elements of learner success when taking an online course and one way to increase motivation and course satisfaction is to incorporate e-tivities into the online learning environment. This reviewer recommends that as institutions build their online course offerings, those building the courses should be offered research based resources and training before planning, designing, and developing an online course.

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INTRODUCTION

Distance education, specifically online learning, is a booming field and online courses are in high demand. Adult learners and businesses have learned that continued education and life-long learning have many advantages. Businesses realize that continued education and training is essential to stay competitive and individual adult learners know that continuing their education and improving upon their skills will have a positive effect on their social and professional lives (Draves, 2002). Online courses offer adult learners and businesses learning opportunities that are much more flexible and often more cost effective than traditional face-to-face courses (Dempsey & Van Eck, 2002).

Designing and delivering effective online courses that engage, motivate, and enhance learners' knowledge and experiences require instructors to understand common characteristics and learning styles of the adult learner. They must also realize the differences between traditional face-to-face course development and implementation and online course development and implementation to build effective meaningful courses for the adult learner. Shank and Sitze (2004) write that when designing traditional face-to-face instruction or online instruction, it is important to use a systemic approach. They also note that along with using a traditional instructional design model, instructors must take into account the technology and delivery system when planning online instruction. Traditional courses can be taught online but not in the same format they can be taught in the classroom.

Motivation is an essential key for success for adult learners. Understanding and incorporating adult learner motivational strategies in the online course will lead to student satisfaction and increased learning in classes (Wlodkowski, 1999). It will also help

instructors plan effective instruction that is meaningful to the learner. One way to increase motivation is to incorporate activities in the online learning environment.

Online activities, or e-tivities, are one strategy that an instructor can use to incorporate meaningful activities in the online environment when the objective is to enhance the adult learners' motivation to succeed and do well in the online learning environment. Conrad and Donaldson (2004) write that e-tivities are used to build engaged online learning environments and encourage participation.

This review will focus on the topic of adult learners and online courses. It will address the difference between traditional instructional design and designing courses to be conducted in the online environment. This review will also act as a source of support for instructors when planning and preparing online courses for adult learners. It will discuss characteristics of the adult learner and why online courses interest them, online course instructional design, adult motivational strategies, and e-tivities that will help increase motivation and interaction in the online learning environment. The results of the review should be applied to planning and developing online courses for adult learners, specifically student-to-student and student-to-instructor interaction, as well as increased motivation to learn and course satisfaction.

The questions that will be addressed within this review of literature are:

1. What is distance education?
2. What is online learning?
3. Why does online learning interest adult learners?
4. Who is the adult learner?
5. How does the adult learner learn?

6. What are effective motivational strategies for adult learners?

Online learning courses can be designed to increase success, motivation, and course satisfaction of adult learners by incorporating e-tivities into the online learning environment.

METHODOLOGY

The author reviewed multiple databases to find available resources on the topics of distance education, adult learners, adult motivational strategies, and online activities. The databases of online articles used through the University of Northern Iowa Rod Library were ERIC, Education Full Text, and Academic OneFile. The Google.com search engine was also utilized to find resources on the research topics. To search for available books on the research topics the author used the Rod Library online book catalog UNIstar, Hawkeye Community College's online library catalog search, and Amazon.com. Keywords relating to the research topics were used to search the databases.

Numerous keywords were used to help find articles and other materials to review including: distance learning, online learning, distance education, adult learner, adult motivation, distance learning strategies, adult teaching strategies, adult learning styles, online learning, teaching online, instructional design, online activities, and e-tivities. Variations of keywords were used to narrow the search results as many searches yielded a large number of results.

The author used several procedures to analyze each source. When reviewing books the author read the keywords that displayed on the online book catalog results page, glanced through the table of contents, skimmed potential chapters of interest, and noted the copyright date to see if the information was relevant. Materials relating to online learning, distance education, and online activities needed to have a copyright date of 2000 or newer. Newer items were given more credibility as the Internet and technology is growing rapidly. When reviewing articles the author read the abstract, skimmed through the article, and noted the copyright date to determine if the article could

be of use to answer the research questions. When the author searched Google.com to find resources, the author decided if the website was credible, the article had an author, and when the article was last modified. The author also compared the article to additional articles that had been reviewed to learn if other authors in the field had also written similar material.

ANALYSIS AND DISCUSSION

The analysis and discussion will define distance learning and the adult learner; look at traditional and online instructional design models, and adult learning motivational strategies; and the use of e-tivities to increase interactivity and motivation in the online classroom. This literature review is intended to help instructors build successful online courses where students learn more, interact more with the instructor and other students, and continue to be motivated throughout the learning experience.

Defining Distance Learning

The United States Distance Learning Association (USDLA) defines distance learning as "the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance" (USDLA, 2005, p. 1). USDLA (2005) defines distance education as an "...education program whereby students may complete all or part of an educational program in a geographical location apart from the institution hosting the program..." (p. 1).

Smaldino, Lowther, and Russell (2008) say that "distance education has become the popular term to describe learning via telecommunications...the term telecommunications embraces a variety of technology and media configurations for communicating at a distance" (p. 158). Smaldino et al. (2008) list several elements that are common in many distance education definitions. These similarities include:

1. Physical separation of learners from the teacher
2. Organized instructional program
3. Telecommunications technology
4. Two-way communication. (Smaldino et al., 2008, p. 158)

Online learning is one of many types of distance education. “Online learning is the result of instruction that is delivered electronically using computer-based media” (Smaldino et al., 2008, p. 181). Entire classes can be conducted online. Students can log onto a web site and attend to class discussion, view the syllabus, readings, and resources. “In addition to delivering instruction, [online learning] can monitor learner performance and report learner progress” (p. 181). Students can access additional support resources such as “library resources, academic advising, career placement, and tutoring at a distance” (Schwitzer, Ancis, & Brown, 2001, p. 21). Draves (2002) writes that learners participating in online courses can work at their own pace, when and where it works into their schedule; “there is more interaction among teachers and learners” (p. 5) in an online environment; and students and instructors can be anywhere in the world forming unique learning communities.

Students learning in online environments learn both individually and in social situations. Threlkeld and Brozoska (1994) write that when students are working as individuals their interaction with the course is “between the student and course information in books, computer programs and lab experiments” (p. 46). When students work with one another or with the instructor, they are interacting socially in the course (Threlkeld & Brozoska, 1994). Herring and Smaldino (2005) write that social interaction may be asynchronous or synchronous. Asynchronous interaction is “delayed or occurring before or after the class period” (p. 1). Synchronous interaction is “real-time conversations during the distance education class period” (p. 1) and can be an important component in an online learning environment.

Draves (2002) says “The internet is the biggest technological change in education and learning since the advent of the printed book some 500 years ago” (p. 5). The University of Phoenix is one of many universities that have embraced the opportunity to use the Internet to facilitate learning. According to Altbach and Knight (2007), the University of Phoenix is “the largest private university in the United States” (p. 292). The University of Phoenix now has over 200 campuses and provides online delivery around the world. Learners are able to work towards their associate's, bachelor's, master's, or doctoral degree online and their programs and courses are designed “to make higher education accessible for the working student” (University of Phoenix, 2009, p. 1). The University of Phoenix is just one example of how the Internet is changing education, providing better ways to teach and learn, and offering additional life-long learning opportunities to adult learners.

Reasons Distance Education Interests Adult Learners

Life-long learning is important in adult learners' personal and professional lives. Merriam and Caffarella (1999) write that some researchers “have speculated that half of what most professionals know when they finish their formal training will be outdated in less than 5 years, perhaps months for those technology related careers” (p. 15). Adult learners can see many benefits in online distance education. Race (2005) states three reasons online distance education interests adults. Distance education courses:

1. ...fit in with work commitments;
2. ...accommodate family commitments;
3. ...enable them to work at their own pace, and place, and at times of their choosing. (p. 15)

Online distance education works for adult learners because online courses offer more flexibility than traditional face-to-face courses. Foley (2004) writes, "...DE [distance education] students study at a time and place of their own...The target audience for DE institutions is, typically, adults studying part-time, fitting their studies around work, family and community commitments" (p. 191). Draves (2002), Foley (2004), and Race (2005) write that this flexibility aids in life-long learning.

Businesses also see the importance of continued education for their employees. They realize "...that in order to remain competitive and profitable, [they] will need employees who are learning constantly" (Draves, 2002, p. 13). Businesses are turning to online courses to provide continued training for their employees as they realize the many benefits online training can offer them. One benefit is reduced cost. If an employee receives training online, the company does not need to "transport and house employees for out-of-town training" (Dempsey & Van Eck, 2002, p. 283). Dempsey and Van Eck (2002) also write that employees will not be away from their everyday work responsibilities as long and the cost to replace employees while they are in training is greatly reduced. Another benefit online training offers businesses is that "...employees are able to get training when and where they need it instead of waiting for the next scheduled training session" (Dempsey & Van Eck, 2002, pp. 283-284).

The benefits of online distance education are numerous for adult learners and businesses (Dempsey & Van Eck, 2002; Draves, 2005; Foley, 2004; Race, 2005). As online courses are being built it is important to understand who the learners are so that the instruction meets their needs and is delivered in the most effective way (Dempsey & Van Eck, 2002; Dick, Carey, & Carey, 2001; Draves, 2005; Shank & Sitze, 2004).

Adult Learners

The adult learner is defined in many ways. Some researchers include age in the definition of an adult. Bash (2003) defines adults as being 25 or older and the National Center for Education Statistics defines adults as being 16 or older. But Corder (2002), Merriam and Caffarella (1999), and Rogers (2002) would disagree, saying that it is too difficult to define an adult by age; as Rogers (2002) points out, adulthood is attained at a different age and time in life in different cultures.

Corder (2002) suggests we stop “trying to find an exact dividing line between childhood and adulthood” (p. 5). Corder (2002) goes on to say that “it may well be that we don’t need a precise definition of ‘adult’ after all, but we do need to have some idea of what are the typical elements of adulthood” (p. 5). Corder (2002) writes many adults have most of the following characteristics:

They are above the age of compulsory education. They have some experience of the world of work. They have family responsibilities. They have financial responsibilities. They have domestic responsibilities. They are reasonably independent. They are able to make their own judgments about the world around them. They have some experience of life. Their tastes are more sophisticated than they were when they were younger. And most importantly: This is not their first learning experience. (p. 5)

Taylor, Marienau, and Fiddler (2000) agree with Corder (2002) saying “the major difference between adults and younger learners is the wealth of their experience. They have seen, been, and done. They have personal history...They have work history...They have social history” (Taylor et al., 2000, p. 7). Additional characteristics researchers

agree adult learners have in common include: adult learners are highly motivated; have a sense of urgency to complete the course, certification, or degree; typically attend part-time and work full-time; and hope that furthering their education will result in a promotion or a raise (Bash, 2003; Taylor et al., 2000).

Knowles, Holton, and Swanson (2005) use a different approach when defining adult learners. Knowles et al. (2005) use four separate definitions to encompass the different ways one can define adults. The four definitions Knowles et al. (2005) use to define adult learners are:

First, the biological definition: Biologically, we become adults when we reach the age at which we can reproduce. Second, the legal definition: Legally, we become adults when we reach the age at which the law says we can vote, get a driver's license, marry without consent, and the like. Third, the social definition: Socially, we become adults when we start performing adult roles, such as the role of full-time worker, spouse, parent, voting citizen, and the like. Finally, the psychological definition: Psychologically, we become adults when we arrive at a self-concept of being responsible for our own lives, of being self-directing. With regard to learning, it is the psychological definition that is most crucial. (Knowles et al., 2005, p. 64)

There are many definitions of adult learners available as adult is difficult to define. The definition of adult varies based on cultures throughout the world. However, researchers do agree that adults have many of the same characteristics and are different than children. This reviewer will use the Corder (2002) and Taylor et al. (2000) definitions of adult learner for the purposes of this research paper.

Adult Learning Theories

This reviewer will document two popular learning models for adult learners, andragogy and Bloom's taxonomy. In 1968 Malcolm Knowles popularized the adult learning model, *andragogy*, a European concept meaning "the art and science of helping adults learn," ...[which] contrasted with pedagogy, the art and science of helping children learn" (Merriam & Caffarella, 1999, p. 272). Knowles' andragogical model is based on several assumptions: the need to know, the learners' self-concept, the role of the learners' experiences, readiness to learn, orientation to learning, and motivation (Knowles et al., 2005). Knowles used these assumptions to draw "numerous implications for the design, implementation, and evaluation of learning activities with adults" (Merriam & Caffarella, 1999, p. 272) and developed a seven-step process for instructors to use when designing instruction for adult learners:

1. Set a cooperative learning climate.
2. Create mechanisms for mutual planning.
3. Arrange for a diagnosis of learner needs and interests.
4. Enable the formulation of learning objectives based on the diagnosed needs and interests.
5. Design sequential activities for achieving the objectives.
6. Execute the design by selecting methods, materials, and resources.
7. Evaluate the quality of the learning experience while rediagnosing needs for further learning. (Carlson, 1989, pp. 5-6)

Knowles' seven-step process can be used to design traditional face-to-face instruction or online instruction for adult learners.

Simonson, Smaldino, Albright, and Zvacek (2003) write that “most do now consider Knowles’ work to be a theory of distance education; it is relevant because most often adults are involved in distance education...” (p. 44). Knowles’ andragogy learning theory suggests the following characteristics are present when designing instruction for adult learners in a distance learning environment:

- The physical environment of a television classroom used by adults should be able to see what is occurring, not just hear it.
- The physiological environment should be one that promotes respect and dignity for the adult learner.
- Adult learners must feel supported, and when criticism is a part of discussions or presentation made by adults, it is important that clear ground rules be established so comments are not directed toward a person, but concentrate on content and ideas.
- A starting point for a course, or module of a course, should be the needs and interest of the adult learner.
- Course plans should include clear course descriptions, learning objectives, resources, and timelines for events.
- General to specific patterns of content presentation work best for adult learners.
- Active participation should be encouraged, such as by the use of work groups, or study teams. (Simonson et al., 2003, p. 45)

Knowles’ assumptions about the adult learner and suggestions of characteristics that should be present in the distance learning environment have been found to be useful

when trying to understand the adult learner while designing online courses for adult learners (Merriam & Caffarella, 1999; Simonson et al., 2003).

Bloom's taxonomy is another adult learning model. "This taxonomy, reflecting six levels of competencies that move hierarchically from simple to complex, demonstrates different sets of skills" (Bash, 2003, p. 106). Blooms' six levels of competency include: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bash, 2003). Table 1.1 illustrates each level of competency and the skills that learners use in each competency (Bash, 2003, p. 107).

Competence	Skills Demonstrated
Knowledge	Observe and recall information Knowledge of dates, events, places Know major ideas Mastery of basic subject matter
Comprehension	Understand information, grasp meaning Translate knowledge to a new context Interpret facts, compare, contrast, order, group, infer causes Predict consequences
Application	Use information, use methods, concepts, theories in new situations Solve problems, use required skills or knowledge
Analysis	See patterns, organize the parts, recognize hidden meanings Identify components
Synthesis	Use old ideas to create new ones Generalize from given facts Relate knowledge from several areas Predict, draw conclusions
Evaluation	Compare/discriminate between ideas Assess value of theories, make choices based on argument Verify value of evidence, recognize subjectivity

The skill sets adult learners will use in each level of competency are hierarchical but not linear. Adult learners can have many life experiences to draw from while learning new concepts and are often in several levels of competency (Bash, 2003). Educators "...who understand that this activity is likely to be taking place as their adult students encounter

new material can create situations in their classroom that will take advantage of this process...” (Bash, 2003, p. 107). Bash (2003) also writes that adult learners prefer to use higher-order thinking skills when they are learning as adult learners feel it improves their learning experience.

Knowles’ andragogy learning theory for adult learners and Bloom’s taxonomy help instructors understand how adult learners learn. The literature states that this understanding is vital to designing and developing online courses and materials to help the adult learner be successful.

Designing Online Courses

Designing and delivering effective online courses that engage, motivate, and enhance learners’ knowledge and experience requires instructors to complete research and long-term planning. Shank and Sitze (2004) say that the best way to design a course is to use a systemic approach, an instructional design model. Willis and Lockee (2003) write “though distance education can be (and typically is) a different educational experience from more traditional classroom instruction, it is, nonetheless, founded in instructional systems design (ISD)” (p. 9). This section will review several instructional design models that can be used when designing an online course.

Systems Approach Model for Designing Instruction

One instructional design model is the systems approach model developed by Dick, Carey, and Carey. The components of Dick et al. (2001) systems approach model are:

- Assess needs to identify goal(s)
- Conduct instructional analysis

- Analyze learners and contexts
- Write performance objectives
- Develop assessment instruments
- Develop instructional strategy
- Develop and select instructional materials
- Design and conduct the formative evaluation of instruction
- Revise instruction
- Design and conduct summative evaluation. (pp. 6-8)

Dick et al. (2001) explain that a system is “a set of interrelated parts, all of which work together toward a defined goal” (p. 3). The goal in this case is learning. Instructional designers using this model understand “the important role of all the components in the process [and that] they must all interact” (p. 4) to achieve the learning goal. Using “input from preceding steps...[and] output for the next steps...” (p. 4), instructional designers are able to design, develop, and implement quality instruction.

Willis and Lockee (2003) write that although “distance education can be (and typically is) a different educational experience from more traditional classroom instruction, it is, nonetheless, founded in instructional systems design” (p. 1). Dick, Carey, and Carey’s Systems Approach model is one model used to design traditional instruction that can also be used when designing online instruction.

The ADDIE Model of Instructional Design

The ADDIE model of instructional design is another instructional design model instructors can use when designing instruction. “ADDIE is an acronym for analysis,

design, development, implementation, and evaluation” (Shank & Sitze, 2004, p. 53).

Gustafson and Branch (2002) give a brief overview of the ADDIE model:

Analysis often includes conducting a needs assessment, identifying a performance problem..., and stating a goal. Design includes writing objectives in measurable terms, classifying learning as to type, specifying learning activities, and specifying media. Development includes preparing student and instructor materials (both print and nonprint) as specified during design. Implementation includes delivering the instruction in the setting(s) for which it was designed.

Evaluation includes both formative and summative evaluation as well as revision.

(p. 19)

These activities do not need to be done in order. Often, when working on an instructional design project, instructional designers will work on several of the activities at a time (Gustafson & Branch, 2002).

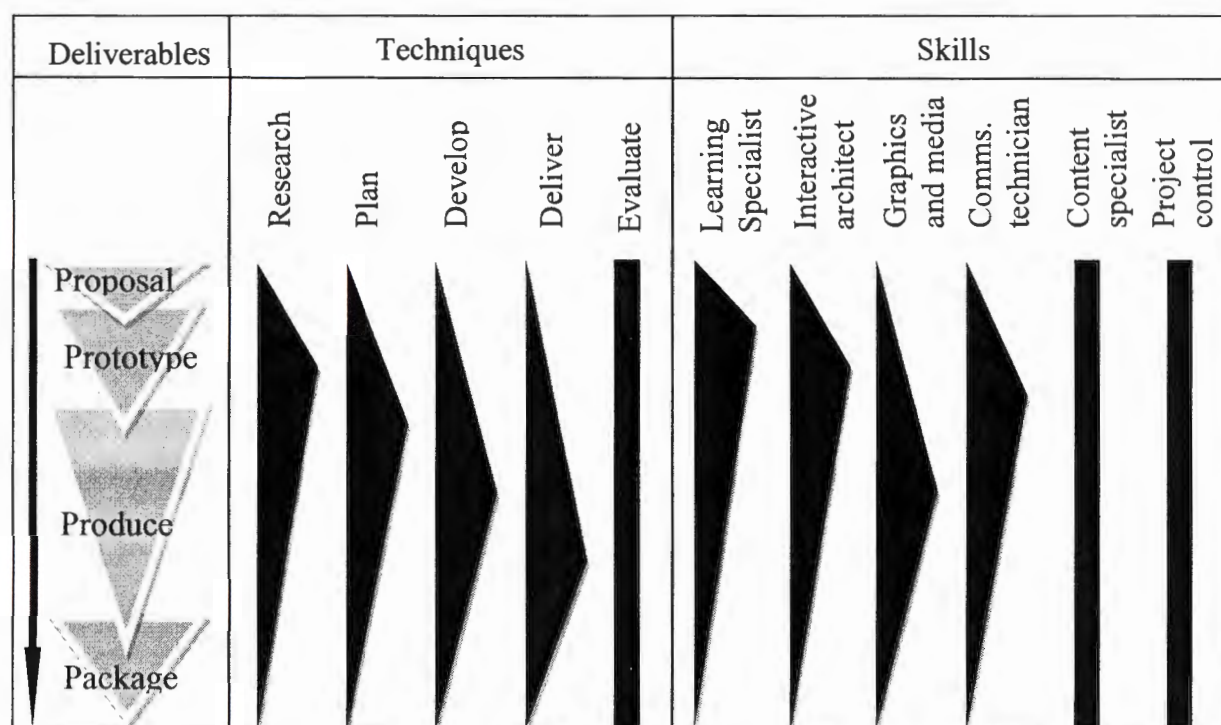
Interactive Instructional Influence Development Model (I3D)

Shank and Sitze (2004) write that when designing traditional face-to-face instruction or online instruction it is important to use a systemic approach and traditional instructional design models provide a systemic approach to designing instruction.

However, “one of the biggest problems with traditional instructional design is that it doesn’t provide guidance on selecting the most appropriate instructional activities” (p. 56). Traditional instructional design models also do not take into consideration the technology needed to deliver the instruction and how the instructor and learners will interact with the technology.

The Interactive Instructional Influence Development Model (I3D) developed by Sims “gives us an alternate way of looking at the design process for technology-based learning” (Shank & Sitze, 2004, p. 56). Shank and Sitze (2004) write, “in this model, activities have varying amounts of influence at different times in the development of technology-based learning. The structure of the I3D model is different from traditional linear instructional design, but it uses most of the same components” (p. 58). Figure 1.1 illustrates the I3D model (Shank & Sitze, 2004, p. 59).

Figure 1.1: Interactive Instructional Influence Development Model (I3D)



The I3D model is made up of three parts: deliverables, techniques, and skills.

Each technique and skill is important throughout the instructional design process, but the technique or skill is most important when the triangle peaks. Techniques and skills represented with a rectangle are important throughout the instructional design (Shank & Sitze, 2004).

The first column of the I3D model represents the deliverables.

“Deliverables...show four steps you go through as you develop technology-based learning. The first is developing a proposal to get the resources you need. Next,...develop a prototype,...move into development. Finally,...package the finished product for delivery to the learner” (p. 59). Column 2 displays the techniques that will be used while designing instruction: research, plan, develop, deliver, and evaluate. The last column is the skills column.

The [skills] column represents the skills you need in order to develop technology-based learning. Instructional design skills have been subdivided into those needed by the learning specialist and the interactive architect. Learning specialists use their knowledge of how people learn and how technology affects learning to select appropriate instructional strategies. Interactive architects select the best media to accomplish the tasks established by the learning specialist. (This may be the same person, but the skill sets are different). (Shank & Sitze, 2004, pp. 59-60)

The I3D model helps instructional designers to “...see what technology allows [them] to do well and design toward that end” (Shank & Sitze, 2004, p. 60). In doing so, instructional designers can build online courses without forcing the ready-made traditional face-to-face course into the technology available in the online environment (Shank & Sitze, 2004).

Draves' Ten Step Model to develop online courses

Draves has developed a “Ten-Step Model or outline for developing [an] online course...[and notes that] there are three major components to a typical online course:

content, interaction, and assessment” (p.71). Following are the ten-steps Draves believes are necessary when designing an online course:

Step 1: Course Goals, Title, and Objectives.

Step 2: Select your Readings.

Step 3: Create Units.

Step 4: Unit Content Development.

Step 5: Unit Audio Presentations.

Step 6: Unit Self-Assessment.

Step 7: Unit Interaction.

Step 8: Unit Projects, Exercises, and Activities.

Step 9: Course Testing and Grades.

Step 10: Course Evaluation. (Draves, 2002, pp. 71-78)

Each of Draves’ ten steps are used to plan instruction before the course begins. Even Step 10: Course Evaluation is completed before the course begins as this step establishes how the instructor will evaluate the course.

Draves and Sims offer two instructional design models for the online environment. Sims’ I3D model is similar to traditional models except it considers technology used to deliver the instruction and the technology the students and instructor will use to interact. Draves’ Ten-Step Instructional Design Model lists the ten steps Draves believes need to be worked through when creating an online class and materials before the class begins. Another important consideration when dealing with adult learners is motivation.

Adult Learner Motivational Strategies

Motivation is an essential key for adult learners. Understanding and incorporating adult learner motivation strategies in the course will lead to student satisfaction and increased learning in the class (Wlodkowski, 1999). This reviewer will discuss two popular motivational theories, Wlodkowski's Motivational Framework for Culturally Responsive Teaching (Wlodkowski, 1999) and Keller's ARCS model (Driscoll, 2000).

Motivational Framework for Culturally Responsive Teaching

Wlodkowski (1999) based his motivational model on four motivational conditions he noticed were common in "numerous social science theories and their related research" (p. 69). Wlodkowski's motivational model states that the four conditions: (1) inclusion, (2) attitude, (3) meaning, and (4) competence, greatly influence adult motivation to learn.

Inclusion

Inclusion is explained as "the awareness of learners that they are part of an environment in which they and their instructor are respected by and connected to one another" (Wlodkowski, 1999, p. 69).

Attitude

Attitude plays a role in how adult students respond to a course. Emotions, preliminary ideas of the class, and perceptions all contribute to the attitude brought to a class. "Attitudes powerfully affect human behavior and learning because they help people make sense of their world and give cues as to what behavior will be most helpful in dealing with the world" (Wlodkowski, 1999, p. 72).

Meaning

When adult learners are able to make meaning of what they are learning, they are more motivated to learn.

When we assist learners in the realization of what is truly important in their world, they access more passionate feelings and can be absorbed in learning. Emotions both give meaning and influence behavior...Meaning embraces facts, procedures, and behaviors that contribute to our awareness of how things relate or operate or are defined but do so in a way that doesn't deeply touch our psyche.

(Wlodkowski, 1999, p. 76)

Including meaning in instruction will increase the adult learners' involvement in the learning activity. "By making [the adult learners] goals, interests, and perspectives the context of learning, we create a system that evokes meaning and involvement in learning" (Wlodkowski, 1999, p. 76).

Competence

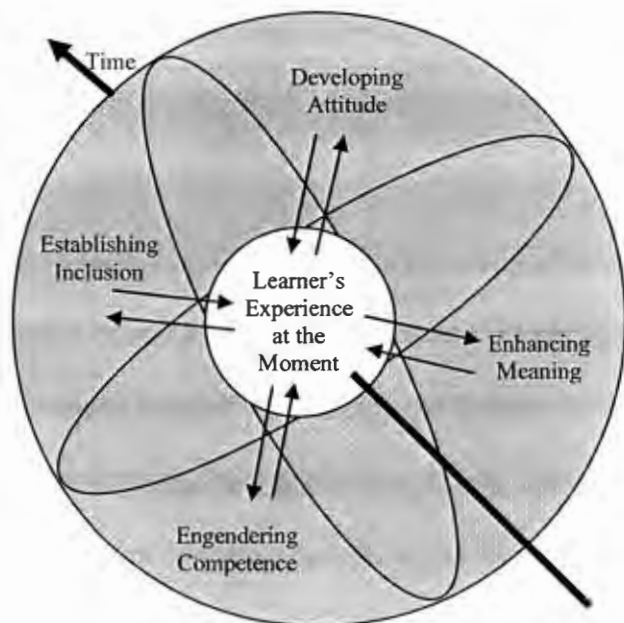
Competence is an important element of adult motivation because individuals strive to do well at what they are doing or learning. Wlodkowski (1999) writes that "adults enter educational programs with a strong need to apply what they have learned to the real world...they are more motivated when the circumstances under which they assess their competence are authentic to their actual lives" (p. 78). From the four motivational conditions that Wlodkowski found to be similar in many motivational theories and that directly relate to adult motivation to learn, he designed the Motivational Framework for Culturally Responsive Teaching.

The Motivational Framework for Culturally Responsive Teaching “dynamically combines the essential motivational conditions that are intrinsically motivating for diverse adults [and] provides a structure for planning and applying a rich array of motivational strategies...It is a holistic and systemic representation of four intersecting motivational conditions” (Wlodkowski, 1999, p. 79-80). The four essential motivation conditions are:

1. Establishing inclusion: instructors and students feel included and respected in the course.
2. Developing attitude: creating course content that is relevant to students. In doing so adult learners can form positive feelings about their learning experience. These positive feelings will contribute to a positive attitude of the course.
3. Enhancing meaning: “creating challenging, thoughtful learning experiences that include learners’ perspectives and values” (p. 81).
4. Engendering competence: creating course content that adult learners will value and deem important in building their skills. In doing so, adult learners will strive to do their best and enhance their learning (Wlodkowski, 1999).

Figure 1.2 provides a graphical representation of the Motivational Framework for Culturally Responsive Teaching (Wlodkowski, 1999, p. 80).

Figure 1.2: The Motivational Framework for Culturally Responsive Teaching



Each condition works together “polyrhythmically – that is, as a simultaneous integration of intersecting realities on both conscious and subconscious levels” (Wlodkowski, 1999, p. 81). Table 1.2 illustrates each motivational condition with a strategy and example learning activity (Wlodkowski, 1999, p. 85).

Motivational Condition and Question	Motivational Strategy	Learning Activity
Establishing Inclusion	Collaborative learning	Randomly form small groups in which learners exchange concerns, experiences, and expectations they have about research. List them.
Developing attitude	Relevant learning goals	Ask learners to choose something they want to research among themselves.
Enhancing meaning	Critical questioning and predicting	Form research teams to devise a set of questions to ask in order to make predictions. Record questions and predictions.

Engendering competence	Self-assessment	After the predictions have been verified, ask learners to create their own statements about what they have learned about research from this process.
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Wlodkowski (1999) writes that it is important for instructors to plan motivation with their instructional planning. “Motivational planning helps [instructors] avoid a serious pitfall common to teaching: blaming the learners for being unresponsive to instruction” (p. 82). Understanding how motivation affects learning will help instructors plan effective instruction that is meaningful to the learner.

ARCS Motivational Model

Another motivational model is the ARCS motivational model developed by John M. Keller. ARCS is an acronym that stands for Attention, Relevance, Confidence, and Satisfaction. Keller believed these to be the “four conditions for motivation that must be met to have a motivated learner” (Driscoll, 2000, p. 325). The ARCS model is a sequential process of motivation. First instructors need to “gain the attention of learners and engage them in the learning activity” (Driscoll, 2000, p. 326). The learners will then question why the activity is important to them. Instructors must help the learners realize why the learning activity is relevant to their learning and success in the course. The third condition is confidence. As the learning activity goes on, some learners may lose confidence and begin to worry that they are not learning the material as they should. As learners lose confidence, they lose motivation as well. Satisfaction is the fourth and last condition of Keller’s ARCS motivational model. Driscoll (2000) writes that “learning must result in a sense of satisfaction for students to have a continuing desire to learn” (p.

326). When learners are satisfied they feel they are getting what they need from the instruction; that there is a purpose to what they are learning.

From the ARCS motivational model, Keller designed a process of motivational design. The first step is to analyze the audience. “Before you can decide how to go about motivating learners, you must have some idea as to what motivational problems you are likely to face” (Driscoll, 2000, p. 332). Keller suggests creating profiles of the prospective learners. Although this analysis may rely on the instructor’s best guess, creating a learner profile will help the instructor know when and where to add motivational strategies to the course (Driscoll, 2000). The second step is to define motivational objectives. “From the audience profile, a teacher or instructional designer can determine what motivational needs exist and therefore what motivational objectives should be set” (Driscoll, 2000, p. 335). Step three is designing a motivational strategy. Instructors select the motivational strategies they’d like to incorporate in their instruction. Trying out and revising the motivational strategies as needed is the fourth and final step:

What is important about this step is that motivation should be thought about separately from other aspects of instruction. The instructor should attempt to be sensitive to what effects the motivational strategies are having, whether desired or undesired. Then, if the strategies are failing to produce intended results, they can be revised or replaced. (Driscoll, 2000, p. 336)

Keller believed that when instructors and learners proceed through these four conditions of the ARCS motivational model students will continue to be motivated throughout their learning experience while completing the course.

Instructors designing online courses can use Wlodkowski's Motivational Framework for Culturally Responsive Teaching or Keller's ARCS model to help students continue to be motivated throughout the course. Another way to increase motivation is to incorporate activities in the online learning environment.

Creating Online Interactivity Using E-tivities

Some researchers believe e-tivities are a means to incorporate meaningful activities in the online environment when the objective is to enhance the adult learners' motivation to succeed and do well in the online learning environment. Watkins (2005) writes that "e-learning activities use online technologies, such as chat rooms, discussion boards, or email, to facilitate participation of e-learners in meaningful exercises related to the course and its learning objectives" (p. 2). E-tivities are used to build engaged online learning environments where "learning is focused on the learner" (Conrad & Donaldson, 2004, p. 5). Learners in an online learning environment cannot sit back and just absorb the information. They must participate and share the learning responsibilities with the instructor and be actively engaged in their learning (Conrad & Donaldson, 2004).

Instructors can use e-tivities to:

- help students become more comfortable in the online environment learning to use the different tools they will be required to use to complete the course
- break the ice and help students meet their online classmates
- let students practice the skills they will need to work together on group projects and collaborate with one another
- encourage students to reflect on what they have learned

- simulate real life scenarios (Conrad & Donaldson, 2004; Iverson, 2005; Palloff & Pratt, 2005; Watkins, 2005).

Conrad and Donaldson (2004), Palloff and Pratt (2005) and Watkins (2005) provide many examples of e-tivities that can be used in the online environment.

Type of e-tivity	e-tivity
Learning to Use Online Tools	Scavenger Hunt: “Skills activity to help students learn to navigate on the Internet” (Conrad & Donaldson, 2004, p. 45).
e-Learning Skills	e-Learning Expectations: “The preconceived expectations and assumptions that learners have about e-learning can often define their participation and their success in an online course. As an alternative to these often-uninformed expectations, you can use the e-Learning Expectations activity to clarify and correct any misconceptions learners may have regarding the current online course” (Watkins, 2005, p. 99).
Introductions and Ice Breakers	Find Someone Who ... : “To engage learners and build community in any online course, you can use this online variation of the familiar training or classroom activity for motivating learners to actively seek out and meet other learners in the course” (Watkins, 2005, p. 53).

Collaboration Activities	Role Playing or Simulations: “Learners are asked to look at what might be a real-life situation and apply concepts and skills learned in class to that situation” (Palloff & Pratt, 2005, p. 60).
Reflective Activities	Bumper Sticker: The instructor asks the students, “if you had to sum up your thoughts on the experience or the knowledge you have gained, how would they be stated on a bumper sticker?” (Conrad & Donaldson, 2004, p. 75).
Increasing Interactivity	In the Hot Seat: “During the activity, groups of learners will prepare resources and review course materials in order to answer questions submitted by their peers on the day that their group is In the Hot Seat” (Watkins, 2005, p. 277).
Games and Simulations	Virtual Field Trips: Simulation visits to actual locations (Conrad & Donaldson, 2004, p. 104).

Regardless of the type of activity, many e-tivities have the same features. They are:

- motivating, engaging and purposeful;
- based on interaction between learners/students/participants, mainly through written message contributions;
- designed and lead by an e-moderator;

- asynchronous (they take place over time);
- cheap and easy to run – usually through online bulletin boards, forums or conferences. (Salmon, 2002, p. 1)

Salmon (2002) writes that e-tivities “enhance active and participative online learning by individuals and groups” (p. 3). One particular type of e-tivity that increases interaction and group and individual learning in an online environment are collaboration activities.

Collaboration activities are “interactive and engaging online experiences [that] are often created when instructors incorporate small group activities or team projects into their courses” (Watkins, 2005, p. 123). Collaboration activities are especially important in an online learning environment (Conrad & Donaldson, 2004; Palloff & Pratt, 2005; Watkins, 2005).

Distance learners need more than just web pages and online exams. They need social interaction with their peers and professors. Not only does interaction allow students the satisfaction of expressing themselves, it also gives them a chance to improve their learning and make new friends. (About Inc., 2006, p. 1)

Palloff and Pratt (2005) write that online learners and instructors may feel isolated when learning or teaching in an online environment, but adding collaborative activities can increase student and instructor satisfaction and enhance student learning. Conrad and Donaldson (2004) write that “the involvement of the learner in the course...is critical if an online course is to be more than a lecture-oriented course in which interaction is primarily between the learner and the content or the learner and the instructor” (p. 6). Iverson (2005) adds collaboration e-tivities contribute to a student’s success in an e-learning course and recommends that instructors design their online environments so that

students can work together and support each other. Collaboration activities help increase student interactivity in a course as students must interact with each other and or the instructor (Watkins, 2005, p. 123).

Collaboration activities are just one type of e-tivity instructors can use when planning their online courses. Watkins (2005) suggests using a variety of e-tivities throughout the course and that doing so may "...improve retention rates, increase learner participation, achieve your learning objectives, develop online learning communities, and ensure that your online courses engage learners, regardless of the course topic" (p. 3-4). However, Watkins (2005) warns against using e-tivities just for the sake of having an e-tivity. E-tivities must meet specific learning objectives already outlined for the course. "...only when the objectives have been defined, prioritized, and included in the instructional sequence is it time to consider the number, placement, and length of the e-learning activities that will be utilized to achieve the goals of the course" (p. 6).

Once instructors have outlined the goals and objectives for the course following an adult learning instructional design model and they are ready to start planning e-tivities to use, there are many resources available to find e-tivities others have used in an online learning environment. Instructors can also build their own unique e-tivities. Salmon (2002) explains how to create effective e-learning activities.

1. Define the purpose.
2. Match the e-tivity with assessment.
3. Write instructions for learners on how to complete the e-tivity.
4. Build in reflection.
5. Invite learners to participate in the e-tivity.

6. Note how much time the e-tivity will take. When building the e-tivity, the instructor should not only note how long the activity will take in calendar days but how much time will be expected of “active contribution” (p. 94).
7. Decide on the number of participants within each group working together on the e-tivity.
8. Design the e-tivity so that it can be used again in other courses and it can reduce the amount of instructor time moderating the course. This will help reduce costs.
9. Give the students a starting point. “...what information will be provided as a starting point – the e-moderator presents an issue: a dilemma, problem, challenge or model” (p. 100).
10. Determine what technology will be used. Salmon (2002) suggests that “the e-tivity should, if possible, take place within the system itself” (p. 100). In other words, if you are using Course Management System to deliver the online class, all components of the e-tivity should be available within that environment.

The correct placement of an e-tivity in the course and the e-tivity chosen can help increase motivation, collaboration, and learning in online courses. Through e-tivities students are able to learn more about their classmates by participating in quick and fun activities. Learners are able to get familiar with the course tools before being tested on them, collaborate with their classmates, reflect on what they are learning, and work through real-life simulations. Many resources are available for instructors to review for e-

tivity ideas that other instructors have used with success in their online learning environments or to learn how they can build their own e-tivities.

When an instructor chooses an e-tivity to build into an online course, the e-tivity must be meaningful to enhance the adult learners' motivation to learn. The e-tivities must also require each student to participate either individually or in small groups.

Collaboration activities help students work together, support each other, and develop a sense of belonging in the online course.

CONCLUSIONS AND RECOMMENDATIONS

This literature review has found that not only adult learners are looking to online learning to improve their skills and advance their careers, but businesses are looking to online learning to stay competitive while reducing training costs associated with travel and time away from work. Both adult learners and businesses realize life-long learning is beneficial. Enrolling in online courses seems to help reduce the many challenges adult learners and businesses encounter when seeking to improve upon their skills and knowledge base as learners can work on their coursework anytime and anyplace.

To meet the needs of the online course consumer and create an effective course and learning environment, it is important for educators to understand how adult learners learn; realize the difference between online and traditional instructional design; know what motivates adult learners; and incorporate purposeful activities within their online courses. While elements of traditional instructional design models can be used when planning and building an online course, instructors need to take into consideration the differences between a traditional classroom course and an online course. Using elements from traditional instructional design models and suggestions from online course design experts, instructors can modify their instructional design model to fit the online environment. Incorporating the suggested instructional design elements necessary for online classes, students will have more success in the online classroom.

This reviewer has found that motivation is one of the most important elements of learner success when taking an online course. Understanding the adult learner and why they are interested in the online learning environment, why they want to do well in the course and to squeeze coursework in what little free time they may have, is important

background knowledge when designing online course instruction. This reviewer has found that one way to increase motivation and course satisfaction is to incorporate e-tivities into the online learning environment. The e-tivities should not be part of the course just for fun, rather, they need to serve a purpose such as building community, helping learners gain knowledge of the tools and resources within the online learning environment, or to complete a group project or course objective.

This reviewer recommends that as institutions build their online course offerings, those building the courses should be offered research based resources and training before planning, designing, and developing an online course. This training should not be a one-time offering as online technology continues to evolve and becomes more and more dynamic. This reviewer believes it is very important that educators who are building online courses understand the adult learner, especially since the instructor and student may never meet face-to-face. The instructor should understand how online course design and implementation is different than traditional course design and implementation and have a plethora of activities to choose from to increase interaction and motivation. This reviewer also believes that supporting instructors designing online courses and teaching online is essential for instructor and student success and enjoyment in the online classroom. The strategies discussed in this review will help instructors build successful online courses.

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