# NASJE CURRICULUM DESIGN

INSTRUCTIONAL DESIGN: Experienced-Level Content





### **Overcoming Challenges in Instructional Design**

This is a summary of the content included in this curriculum design.

- A. Basic Challenges in Instructional Design
  - a. Using a model
  - b. Working within constraints
- B. Challenges with Educational Needs
  - a. Identifying the desired level of learning
  - b. Going beyond typical needs assessments
  - c. Addressing educational needs that learners do not perceive
- C. Challenges with Course Goals
  - a. Stating the desired level of learning
  - b. Revisiting the previous instructional design
- D. Challenges with Learning Objectives
  - a. Writing comprehensive learning objectives
  - b. Stating desired levels of learning
  - c. Addressing the appropriate learning domains
- E. Challenges with Learning Itself
  - a. Learning takes time
  - b. Learning is an iterative process
  - c. Learning is a progression
  - d. Learning is a complex activity
  - e. Learning is intertwined with memory
- F. Challenges Presented by Learners
  - a. Developing a course for mixed levels of experience
  - b. Developing a course for a multiplicity of roles
- G. Challenges Based on the Nature of Content
  - a. Planning for content that may be difficult to present
  - b. Planning for transformative learning
- H. Challenges Based on Electronic Delivery Mechanisms
  - a. Designing for broadcast delivery
  - b. Designing for online delivery
  - c. Designing for a blended learning approach
- I. Challenges in Instructional Design at the Local Level
  - a. What is the instructional design challenge?
  - b. What has been tried in the past to resolve the challenge?
  - c. What were the results?
  - d. What content from this course may be useful in addressing the challenge?
  - e. What is a logical starting point to address the challenge?
  - f. What does the participant need to address this challenge?
- J. Challenges with Making Meaning in Education
  - a. Key concepts
  - b. Learners
  - c. Courses



# NASJE Curriculum Designs The Numbering System

NASJE Curriculum Designs follow a consistent numbering system to assist in identifying information and navigating within and among various curriculum designs.

# The first number refers to the NASJE Core Competency.

#### For example:

**3** indicates the NASJE <u>competency</u> addressed in this curriculum design is instructional design

The second number refers to entry- or experienced-level content. (Entry indicates that the <u>content</u> is new to the target audience; it is not a reference to the experience level of the participants. Experienced level indicates learners already have some familiarity with the content.)

#### For example:

- 3.1 is the entry-level instructional design curriculum design
- 3.2 is the experienced level

# The third number refers to the section of the design.

# For example:

- 3.2.1 is the <u>content</u> section for experienced-level instructional design
- 3.2.2 is the faculty resources section
- 3.2.3 is the participant activities section
- 3.2.4 is the bibliography and selected readings

#### The final number refers to the order of items in a section.

#### For example:

- 3.2.1.1 is the overview in experienced-level instructional design content
- 3.2.2.7 is the seventh faculty resource
- 3.2.3.3 is the third participant activity



# Overcoming Challenges in Instructional Design Table of Contents

<u>Use of NASJE Curriculum Designs</u>		
Adult Education Principles		
3.2.1.0 Curriculum Design – Competency Area 3 Instructional Design: Experienced-Level Content		
3.2.1.1 <u>Curriculum Design Overview</u>	6	
3.2.1.2 <u>Special Notes for Faculty</u>	6	
3.2.1.3 <u>Participant Learning Objectives</u>	8	
3.2.1.4 Educational Content	9	
3.2.1.5 <u>Resources for Faculty</u>	37	
3.2.1.6 Related Educational Areas	38	
3.2.1.7 <u>Learning Objective, Resource, and Activity Chart</u>	39	
3.2.2.0 Faculty Resources		
3.2.2.1 <u>Recommended Instructional Design Model</u>	43	
3.2.2.2 <u>Levels of Learning – Educational Needs</u>	45	
3.2.2.3 <u>Futures Wheel Examples in Judicial Branch Education</u>	47	
3.2.2.4 <u>Levels of Learning – Course Goals</u>	52	
3.2.2.5 <u>Levels of Learning – Learning Objectives</u>	54	
3.2.2.6 <u>Learning Domains</u>	56	
3.2.2.7 <u>Affective Learning Domain</u>	58	
3.2.2.8 <u>Levels of Learning – Addressing Content</u>	61	
• 3.2.2.9 <u>Schema</u>	63	
3.2.2.10 <u>Stages for Learners</u>	66	
3.2.2.11 Example of Instructional Design for Potentially     Controversial Content	68	
3.2.2.12 Experiential Learning in In-Person and Electronic Delivery	74	
3.2.2.13 <u>Combining Theories – Making Meaning</u>	76	
3.2.3.0 Participant Activities		
3.2.3.1 Fact or Myth  [Learning Objective 1]	83	



3.2.3.2 <u>Futures Wheel for Judicial Branch Educators</u>	87	
[Learning Objective 2]		
<ul> <li>3.2.3.3 Goals and Levels of Learning</li> </ul>	89	
[Learning Objective 3]		
<ul> <li>3.2.3.4 <u>Measuring Affective Learning Objectives</u></li> </ul>	92	
[Learning Objective 4]		
• 3.2.3.5 <u>Schema for Judicial Branch Educators</u>	94	
[Learning Objective 5]		
• 3.2.3.6 <u>Differentiated Instructional Design</u>	96	
[Learning Objective 6]		
<ul> <li>3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u></li> </ul>	98	
[Learning Objective 7]		
• 3.2.3.8 <u>Blended Learning</u>	100	
[Learning Objective 8]		
• 3.2.3.9 <u>Challenges at the Local Level</u>	102	
[Learning Objective 9]		
• 3.2.3.10 Making Meaning	104	
[Learning Objective 10]		
3.2.4.0 <u>Bibliography and Recommended Readings</u>		



# **Use of NASJE Curriculum Designs**

Taken together, the curriculum designs in this series provide an overarching plan for the education of judicial branch educators; this overarching plan constitutes a curriculum. Individually, each curriculum design and associated information provide faculty with resources and guidance for developing courses for judicial branch educators. Content from the curriculum will be used alongside other content as determined by the NASJE Education Committee.

The designs are based on the <u>NASJE Core Competencies</u>. Two curriculum designs are provided for most competency areas, one for entry-level content and the other for experienced-level content. Content level relates to the participants' familiarity with the subject area and not their tenure in judicial branch education.

Each of the curriculum designs, based on the competency areas, may be used either in its entirety or in segments to meet the needs of the individual circumstance or situation, the particular audience, time constraints, etc.

Each curriculum design includes a series of learning objectives and an outline of content to support those learning objectives. Content is annotated with the bracketed number of the learning objective it supports. Learning objectives for each curriculum design are listed in order of importance or in a logical progression. Faculty is encouraged to select content based on the order of the learning objectives. Content is provided in an abbreviated outline format. Faculty may expand on the content based on the needs of the learners.

Associated information for each curriculum design includes: (a) resources for faculty's use (as reference and/or as participant handouts), and (b) a series of recommended participant activities to measure achievement of objectives. Each resource and participant activity has a cover sheet explaining its use. Faculty notes near the beginning of each curriculum design provide important information to assist faculty in effectively preparing to design and deliver a course.

Developing any course from a curriculum design will require that faculty (a) utilize an <u>instructional design model</u> (in the appendix), (b) employ <u>adult education principles</u> (next page), and (c) have an indepth knowledge of the content beyond what is included in the design. A bibliography accompanies each curriculum design and contains additional sources of information. Because there are many sources for each content area that are not in the bibliography, faculty is encouraged to fully explore a variety of available sources when designing a course from a curriculum design.

The NASJE Curriculum Committee welcomes feedback, updates, corrections, and enhancements to these designs so they will remain current and viable.



# **Adult Education Principles**

As learners mature, they change in terms of:

- 1. Self-concept: They evolve from being dependent to self-directed.
- 2. **Experience**: They accumulate a growing reservoir of experience that becomes an increasing resource for learning.
- 3. Readiness to learn: Their readiness to learn becomes oriented increasingly to the developmental tasks of their various roles.
- 4. **Orientation to learning**: Their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly their orientation toward learning shifts from subject-centered to problem-centered.
- 5. **Motivation to learn**: *Their motivation to learn is internal rather than externally generated.* (Knowles, 1984).

Effective learning for adults is dependent on faculty:

- 1. Engaging learners actively in their learning:
  - Adult learners generally prefer to participate, test new learning, and engage in discussion about the relevant content. Faculty needs to actively engage them at least 50% of the time through questions, activities, etc. and enable learners to discover how their new learning will serve them.
- 2. Creating and maintaining an effective, safe learning environment:
  Adult learners will participate readily in an educational situation if the environment is physically and psychologically suitable. Physically suitable includes comfortable, well-lighted, and easily accessible space; psychologically suitable includes feeling welcome to offer opinions and differing views and to ask questions. Faculty needs to alter the physical environment to meet the needs of learners and to state and demonstrate that the learning situation is open and non-threatening.
- 3. Demonstrating respect for differences:
  - Adult learners are independent and self-reliant; they are of varied races, ethnicities, religions, backgrounds, experiences and education. In an educational situation, they need to be respected for their differences, even if their experience and knowledge is different from faculty. Faculty needs to state and demonstrate their willingness to engage different views.
- 4. **Providing learners with information on what to expect:**Adult learners prefer to understand what will happen in their learning and what will be expected of them in the learning environment. Faculty needs to provide an agenda, an overview, learning objectives, etc.
- 5. Basing content on immediately applicable information and skills:

  Adult learners generally prefer to engage in learning that will help them in their daily lives and work. Faculty needs to ensure that theoretical information serves only as a background for practical application of new knowledge and skills.

<u>Instructional Design: The Backbone of Effective Education</u> and <u>Developing Faculty</u> NASJE curriculum designs include additional information on adult education theory and practical application.



# Title: Overcoming Challenges in Instructional Design

#### NOTES:

Part of the materials for NASJE curriculum designs is a glossary, which will be the basis for developing a shared or common professional language for judicial branch educators. The first time a word found in the NASJE Glossary is used in a curriculum design, it is identified with a word border. Subsequent uses of the word do not have a border. In the online format, the definition will pop up when you roll your cursor over the text inside the border. In the hard copy format, you can find the definition in the glossary at the end of the curriculum. Faculty members using the NASJE curriculum designs are encouraged to familiarize themselves with the definitions relevant to the content area by reviewing the glossary terminology.

Words or terms <u>underlined and in blue</u> indicate a link to parts of the curriculum design. In the electronic format, click on the text to view the identified item. In hard copy format, refer to the page number that follows the text.

# **Related to NASJE Competency:**

Competency Area 3 – Instructional Design (available on the NASJE website)
Competency Summary: Effective delivery of content is generally intended to change the behavior of participants. Changing behavior is a complex undertaking and depends heavily on effective instructional design. An understanding of instructional design enables judicial branch educators to ensure that the content and the way the content is delivered will positively impact participants.

Target Audience:	familian with the dea	
pudiciai branch educators	ramiliar with the bas	sics of instructional design.
has with the specific content.	general experience of th For example, a learner v ne entry content level for	ne learner, but the experience the learner with 20 years of experience in judicial r a topic if he or she has not had an

Date Approved: June 18, 2013 Last Updated:



# 3.2.1.0 Curriculum Design

# 3.2.1.1 Curriculum Design Overview:

(This section provides an overview and states the purpose for this educational area. It does not include all the detail shown in the outline, but is intended to provide a synopsis of the content.)

Judicial branch educators routinely encounter a multiplicity of challenges in the instructional design process. Some challenges may be beneath the surface and not easily recognized; others may be recognizable but seem to have no viable resolution; and still others may be recognizable and have clear-cut solutions. Regardless of the characteristics, judicial branch educators need to recognize challenges and address them to maximize the effectiveness of the instructional design process.

This curriculum design addresses a variety of challenges judicial branch educators may detect when using an instructional design model to develop a course, and it offers some strategies to address these challenges. Categories of challenges focus on the source and include those presented by educational needs, course goals, learning objectives, the learning process, learners themselves, the nature of the content, and delivery mechanisms. This design also introduces what may be a new type of challenge in judicial branch education – making meaning of learning. While challenges encountered at the local level will be unique, based on numerous variables, judicial branch educators will benefit from (a) exploring a variety of challenges in instructional design, (b) rethinking some current assumptions they may have about the design process, and (c) applying relevant theories and approaches to resolve the challenges.

# 3.2.1.2 Special Notes for Faculty:

Content in this design contains a broad array of potential challenges in instructional design. While not all types of challenges are included, the content does address those that seem to occur frequently in judicial branch education. Addressing the large number of variables for any particular challenge is beyond the scope of this design; however the theories and approaches included may spur judicial branch educators to think outside-the-box, be creative, and develop their own unique solutions.

Challenges in this curriculum design are based on and organized by their source. Although not all challenges are addressed, those included are:

- A. Basic Challenges in Instructional Design
- B. Challenges with Educational Needs
- C. Challenges with Course Goals
- D. Challenges with Learning Objectives
- E. Challenges with Learning Itself



- F. Challenges Presented by Learners
- G. Challenges Based on the Nature of Content
- H. Challenges Based on Electronic Delivery Mechanisms
- I. Challenges in Instructional Design at the Local Level
- J. Challenges with Making Meaning in Education

Due to the number of challenges included in this curriculum design, the content is multifaceted and not intended to constitute a single course. A more effective approach to using this design would be to combine selected portions. For example, Challenges with Educational Needs [B in the following content outline], Challenges with Course Goals [C], and Challenges with Learning Objectives [D] are interrelated and could constitute a course; Challenges with Learning Itself [E] and Challenges Presented by Learners [F] could be combined in a course; Challenges Based on the Nature of Content [G] could be combined with Challenges with Learning Objectives [D] or Challenges with Learning Itself [E]; and so on. To facilitate use of portions of this design, each section of content has a separate learning objective. Faculty may add learning objectives that complement those provided and are specific to a particular target audience.

Regardless of the specific challenges chosen for a course, faculty is encouraged to incorporate portions of challenges in instructional design [A] and challenges with instructional design at the local level [I]; in addition, if appropriate, content from challenges with learners making meaning of their learning [J] may be adapted for inclusion in many courses based on this curriculum design.

- Content in "Overcoming Challenges in Instructional Design" [A] includes review of the Recommended Instructional Design Model that is introduced in the entry-level design, <u>Instructional Design: the Backbone of Effective Education</u>. Content from this section can serve as an introduction and overview of the various challenges that judicial branch educators may encounter, even though a particular course may not address them all. Faculty may review the realities and the myths included in this section and/or engage learners in an activity to list the realities and myths applicable to the particular challenges that were chosen for a course.
- Content in "Challenges in Instructional Design at the Local Level" [I]
  engages judicial branch educators in assessing challenges in their local
  department and work. Faculty may tailor this content for the specific
  challenges of a particular course.
- Content in "Challenges with Making Meaning in Education" [J] can serve
  as the conclusion of a course and a reminder of the overall purpose of
  instructional design and learning as complex process.



Faculty is encouraged to act as a facilitator in a course based on this design, presenting challenges in instructional design and leading discussion among learners on what they have done or would do when faced with a particular challenge. Each major section of content includes a statement of one or more potential challenges that faculty may edit or change based on the educational needs of a specific group of learners.

NOTE: Each judicial branch educator will have a different set of challenges at the local level that may require approaches that differ from those included in this design. While content highlights some types of challenges and possible approaches to resolving them, judicial branch educators in a course may have implemented other effective approaches that they can share with fellow learners. There are no right or wrong approaches for any challenge and each situation will have local subtleties that are beyond the scope of a course based on this design.

The Curriculum Committee believes that issues of diversity and fairness, ethics, and technology are viable and valuable considerations to be incorporated into courses developed from NASJE curriculum designs. After reviewing the experienced-level curriculum design for instructional design, faculty should address these areas as appropriate for a specific course. In addition to how these issues are already incorporated into this curriculum design, additional content could include:

- Diversity and Fairness: Diversity and fairness as one type of content that may present design challenges (e.g., education on diversity and fairness often presents cognitive dissonance among some learners, it often challenges long-held attitudes or beliefs of some learners, and for education on diversity and fairness to be effective, it may require an extended time and skillful faculty).
- Ethics: Failure to address instructional design challenges, resulting in failure to reap the full benefit of the instructional design process; the obligation of judicial branch educators to overcome obstacles or resistance and to use instructional design effectively.
- Technology: How technology is changing the way judicial branch educators approach the instructional design process for electronic delivery courses; incorporation of new technologies for delivery and how those technologies might affect instructional design.

# 3.2.1.3 Participant Learning Objectives:

(These are statements of what participants can say and/or do to demonstrate learning when participating in a course designed from this content. Learning objectives are directly related to selection of content for this curriculum design. They are listed in order of importance or in a logical progression in both the "in general" and "for the individual situation" sections. Faculty is encouraged to use learning objectives from both areas. Included with this curriculum design are participant activity suggestions for each learning objective.)



As a result of this education, participants will be able to:

#### In General:

- 1. Classify as fact or myth each statement in a list of assumptions about instructional design.
- 2. Construct a futures wheel for use as an assessment of educational needs.
- 3. Design course goal statements for different levels of desired learning.
- 4. Create several evaluation strategies for affective learning objectives.
- 5. Originate a personal schema to assess its role in learning and memory creation.
- 6. Use a differentiated instructional design approach to determine either content presentation or activities to evaluate learning in a course.
- 7. Critique a course design for a potentially controversial content area.
- 8. Analyze benefits and drawbacks of blended learning opportunities, including the use of in-person and electronic delivery mechanisms.

#### For the Individual Situation:

- 9. Strategize how to handle an instructional design challenge at the local level.
- 10. Evaluate local educational approaches with regard to how learners make meaning of their learning.

#### 3.2.1.4 Educational Content:

(This is an outline of content to be included in courses developed from this curriculum design. Each area of content is annotated with the bracketed number of the learning objective it supports. The information in parentheses after key headings of the outline provides faculty with the overarching question the heading is designed to address.)

- A. Basic Challenges in Instructional Design [1] (as long as we are using an instructional design model, why are there challenges) [see 3.2.2.1 Recommended Instructional Design Model, pg. 43]. The challenge is that often we do not tap the full potential of an instructional design model
  - a. Using a model one challenge in using an instructional design model is that we often use it in a rote, short-cut, and/or perfunctory manner without carefully examining each step as it applies to the situation at hand



- Instructional design models are intended to serve as a guide in effectively developing a course; a model outlines steps, but does not provide a fixed outcome for those steps
- ii. Each step in an instructional design model affords judicial branch educators an opportunity to apply their judgment and discretion with regard to a myriad of variables
- iii. Addressing a step may require revisiting a previous step(s) to ensure the design is effective
- b. Working within constraints another challenge is that in the design process, we often yield easily to external factors that may limit the educational impact of courses
  - i. Judicial branch educators need to work within real-world external constraints and at the same time design and deliver the highest quality education possible
    - 1. Limited time presents a dilemma for judicial branch educators; questions include:
      - a. What is the relevant time limit?
        - i. An overall program limit (e.g., a threeday conference)
        - ii. An agenda limit (e.g., segments of time determined by breaks)
        - iii. A limit based on concern for how long learners will engage in the content
      - b. What is the most educationally effective?
        - To fit the design process and the course, into a predetermined block of time
        - To allow the design to determine the amount of time required to fulfill the educational need
      - c. What is feasible?
        - i. A course fills more than one block of time
        - ii. A course becomes a series of courses, possibly with a multi-media design
        - iii. A course design includes pre- and postcourse self-paced learning
    - 2. Limited money forces judicial branch educators to make difficult design decisions; questions include:
      - a. How much staff and faculty time can we afford to use in the design process?
        - i. Effective education is based on an effective instructional design process



- ii. Staff is capable of doing a considerable amount of the design work, but how much instructional design work can an individual staff member actually do?
- iii. Faculty development courses could include instructional design processes to facilitate faculty and staff teamwork
- b. Who can we afford as faculty?
- c. Are participant evaluations the only affordable type of evaluation?
- d. Is the site we can afford conducive to the learning that needs to take place?
- 3. Political issues are sometimes the most influential constraint; these issues are locally unique, but may include
  - a. Individual and group or committee decisions to use and support an instructional design process for courses (e.g., a committee member balks at using instructional design for regularly offered courses, such as orientation, or a full committee decides not to use instructional design due to the potential of offending longstanding faculty)
  - b. Equal application or use of instructional design for all groups of learners (e.g., because judicial education is considered the primary and most important focus, those courses are developed through instructional design, but those for court personnel are not; or judicial education is considered high-level and judge faculty do not need an instructional design process in order to develop and deliver effective education)
- ii. Judicial branch educators need to take into consideration several aspects of instructional design in order to work within constraints, but at the same time fulfill the potential for instructional design
  - 1. A broad and deep view of assessing educational needs to determine the desirable level of learning
  - 2. Inclusion of multiple learning domains in writing objectives and designing evaluation strategies
  - Factors that facilitate learning given the circumstances of the learners
  - 4. The specific audience, group of learners
  - 5. The specific nature of the content



- 6. Seating arrangement and time needed to achieve the desired level of learning
- 7. The impact of the delivery mechanism on design and implementation
- B. Challenges with Educational Needs [2] (what are some hidden aspects to assessing and stating educational needs) The challenge is that we often state educational needs without carefully assessing all relevant and contributing factors
  - a. Identifying the desired level of learning one challenge with a statement of educational needs is that it often does not accurately reflect the desired level of learning based on the type of problem, the target audience, the anticipated changes, etc.; the statement of educational need will affect all other steps in the instructional design process [see 3.2.2.2 <u>Levels of Learning – Educational</u> <u>Needs</u>, pg. 45]
    - i. Educational need for information educational needs that indicate simply informing, updating, or sharing information with learners; educational needs could include:
      - 1. Learners need to be aware of (content)
      - 2. Learners need to know about (content)
      - 3. Learners need to observe how (content) is applied
    - ii. Educational need for transformation an educational need that goes beyond learners simply needing to know something; this type of need implies that learners need to be able to apply their learning to varying degrees [see G. b. Planning the transformative learning, pg. 28 in the content outline for greater detail on transformation]; educational needs could include:
      - 1. Learners need to be sensitive to (content)
      - 2. Learners need to be able to use (content)
      - 3. Learners need to adapt (content)
  - b. Going beyond typical needs assessments another challenge is that learners sometimes "do not know" what they do not know; this may be due to lack of exposure to certain information, ideas, or concepts, or to learner's newness on the job, or to lack of awareness of learner's own limitations or shortcomings
    - i. Issues such as ethics, access and fairness, and public service often do not appear in formal needs assessment results gathered from a group of learners, particularly assessments based on task analysis
    - ii. Needs assessments may require a broader representation of people, always including learners, but also those who may contribute valuable insight to educational needs [see the entry-level curriculum design for needs assessment, <u>Needs</u>



Assessments: The Basics of Approaches and Models]; justice partners, court users, and others may have insights regarding educational needs not identified by the learners themselves

- c. Addressing educational needs that learners do not perceive another challenge is how to effectively meet needs identified or determined by outside sources (e.g., justice partners, the legislature, the media, research)
  - i. These educational needs should be evaluated critically with regard to who or what the source is, the motivation or selfinterest of the source, the level of importance of the need to learner development, and the potential impact on learners' work and professional development
    - Some may come from a source that is unquestionable in terms of credibility and/or authority, and therefore must be addressed
    - 2. Some may come from a source that is undeniable, such as trends and therefore must be addressed
    - 3. Some may need to be discussed with a sampling of learners in order to determine their viability
  - ii. Using a "futures wheel" to assess needs with learners a futures wheel may be useful to engage learners in exploring a content area that is predetermined as an educational need, identified by a group other than learners, or indicated by new trends, etc. [see 3.2.2.3 Futures Wheel Examples in Judicial Branch Education, pg. 47]. To review instructions for developing a futures wheel, see activity 3.2.3.2 Futures Wheel for Judicial Branch Educators, pg. 87. A futures wheel can be used by a focus group(s) of learners to visually chart or draw discussion points; a futures wheel:
    - 1. Engages learners in considering the consequences of not addressing an educational need, issue, or trend
    - Enables learners to explore an educational need, issue, or trend for themselves, using it as a hub (i.e., a wheel) and identifying subcategories of consequences as spokes
    - 3. Provides a series of consequences from which planners and learners may deduce the relevance, importance, and possible impact of the educational need, issue, or trend
- C. Challenges with Course Goals [3] (because goals are simply an interim step in instructional design and need not be measurable, how do they present challenges) The challenge is that we often state a course goal casually,



without considering its basis or the direct impact it will have on several aspects of planning that follow

- a. Stating the desired level of learning one challenge is determining and accurately stating the desired level of learning in a course goal; because goals guide development of learning objectives, the desired level of learning must be clear [see 3.2.2.4 <u>Levels of</u> <u>Learning – Course Goals</u>, pg. 52]
  - i. Goals for information if the educational need accurately reflects that learning simply involves learners gaining new information, a goal statement may be straightforward
    - 1. This type of course goal is often all that is necessary for creating certain types of learning objectives and choosing supportive content
    - 2. Goals could include:
      - a. Familiarizing learners with (content)
      - b. Sharing (content) with learners
      - c. Providing learners with (content)
      - d. Exploring (content) with learners
    - 3. Complementary learning objectives are often limited to the cognitive learning domain
    - 4. This type of goal may be achieved in a relatively short time frame
  - ii. Goals for transformation if the educational need accurately reflects that transformational learning is necessary, a goal statement may be slightly more complex; it needs to indicate a change from learners simply knowing something to being able to use the knowledge, apply skills, implement or act on new attitudes, perspectives, or feelings [see G, Challenges Based on the Nature of Content, subpart b, Planning for transformative learning, pg. 28 for greater detail on transformation]
    - 1. This type of course goal is often what is needed, but various constraints, such as time and/or money, cause goal statements to:
      - a. Stop short of the desired level of learning, or
      - b. Fail to be supported by learning objectives
    - 2. Goals could include:
      - a. Sensitizing learners to (content)
      - b. Equipping learners to employ (content)
      - c. Enabling learners to apply (content)
    - 3. Complementary learning objectives will address multiple learning domains
    - 4. Addressing transformative learning requires more time for a course or series of courses time is based



on requirements to fully achieve the goal(s) rather than a predetermined block of time into which a course must fit

- b. Revisiting the previous instructional design step another challenge may be that writing the course goal highlights problems with the statement of educational need
  - Although the educational need is the foundational step in instructional design, the course goal, which should be developed from it and be compatible with it, will guide all subsequent steps in the process
  - ii. If the educational need is unclear or inadequate, judicial branch educators may need to reexamine and revise it; if the need came from another source, judicial branch educators may need to ask for clarification or revision
    - 1. An educational need that is <u>unclear</u> as to what education is intended to address (the need is too vague, too generalized, or too broad)
    - An educational need that indicates a level of learning that seems <u>inaccurate</u> or <u>inadequate</u> to address the situation (the problem or issue seems to be greater than the need indicates, the learners involved seem to need a higher or lower level of learning, the expectations of what education can accomplish are too great, etc.)
- D. Challenges with Learning Objectives [4] (as long as they are realistic and measurable, how can learning objectives present challenges) The challenge is that we might take a comfortable and familiar approach to writing learning objectives
  - a. Writing comprehensive learning objectives one challenge is to accurately address the desired level of learning indicated by the course goal and effectively engage the relevant learning domains
    - i. Learners progress from knowing to doing to feeling and their attitude changes over time; therefore usually learning objectives that address attitudes and feelings need to follow objectives that are cognitive and psychomotor or learners need to come into the learning situation with previous exposure to the concepts, ideas, etc.
    - ii. Learning is enhanced by engaging multiple learning domains; each domain often reinforces another; incorporating learning objectives that address all domains facilitates learning
  - b. Stating desired levels of learning another challenge is that learning objectives may not reflect the actual desired level of



learning [see 3.2.2.5 <u>Levels of Learning – Learning Objectives</u>, pg. 54]

- i. Objectives for information could include:
  - 1. Learners will list
  - 2. Learners will state
  - 3. Learners will identify
- ii. Objectives for transformation could include:
  - 1. Learners will demonstrate
  - 2. Learners will apply
  - 3. Learners will create
- Addressing the appropriate learning domains still another challenge is that we often remain with the cognitive domain regardless of the desired level of learning [see 3.2.2.6 <u>Learning</u> <u>Domains</u>, pg. 56]
  - i. Cognitive domain addresses facts, what we know, being able to remember, repeat, and apply knowledge; learning objectives for this domain:
    - 1. Are relatively straightforward for faculty and learners in that they address an intellectual outcome
    - 2. May be achieved in a relatively short time
    - 3. Are relatively easy to write in measurable terms
    - 4. Are relatively easy to evaluate
  - ii. Psychomotor domain addresses physical performance of tasks; this domain is often addressed through training, a subset of the larger field of education; learning objectives for this domain:
    - Are more complex than cognitive objectives in that learners are expected to actually perform or demonstrate learning rather than simply state what they have learned
    - 2. Often require more time to achieve
    - 3. Are relatively easy to write in measurable terms, but are often written with an expectation of quickly learned or imitated action rather than longer-term practice that will lead to proficiency
    - 4. Are relatively easy to evaluate, but some evaluation strategies are difficult to implement due to constraints on faculty's ability to observe each learner's performance and provide feedback (this is often resolved by having learners observe each other, but this does not ensure learner proficiency to the same degree; for some psychomotor skills, this level of learning is sufficient, but for other skills, faculty involvement is more important)



- iii. Affective domain addresses a learner's values, attitudes, feelings, motivation, stereotypes, etc.; learning objectives for this domain:
  - 1. Are somewhat risky in that they may seek to change personal and sometimes long-held perspectives of a learner
  - 2. Generally take considerable time to achieve
  - 3. Are often difficult to write in measurable terms because they involve internal changes in a learner
  - 4. Are often difficult to measure during a course because what is observed may be temporary compliance rather than actual change in beliefs, attitudes, etc. (this may be addressed more fully by evaluating transfer of learning after a predetermined period of time when learners have returned to their work)
  - 5. Varying theories for affective learning
    - a. Behaviorism learning or a change in attitude is the result of positive reinforcement of desirable behavior; instructional design should include demonstration, learner performance, and positive reinforcement
    - b. Cognitive dissonance learning in the affective domain occurs when there is inconsistency between an existing attitude or belief and learner knowledge or behavior (for example, a learner states a belief in human equality but treats those of a certain ethnic group as inferior); instructional design needs to include opportunities for learners to examine their beliefs, examples of individuals in action with the desired attitude or belief under different circumstances, and an opportunity for learners to project themselves into the situation to assess how they would respond or react
    - c. Social learning changes in attitude are learned from observing the attitudes and related behaviors of others and emulating that behavior; instructional design needs to include powerful models for the desired attitude (a film, a book, a testimonial, etc. that involves a well-respected and/or believable figure) and a chance for learners to try to imitate their example



- d. Krathwohl's taxonomy [see 3.2.2.7 Affective Learning Domain, pg. 58] intensity of an attitude is built through successive states of learning; instructional design needs to include time and content that moves learners through several stages
- iv. The interwoven nature of learning domains the challenge is that when addressing any single domain, others are also engaged, but we often do not acknowledge or plan for them
  - 1. What we know (cognitive domain) is affected by our beliefs and values (affective domain)
  - 2. What we can do (psychomotor domain) is affected by what we know (cognitive domain)
  - 3. What we feel or believe (affective domain) is affected by what we know (cognitive domain) and what we can do (psychomotor domain)
- E. Challenges with Learning Itself [5] (beyond use of an instructional design model, what can be done to facilitate learning) The challenge may be that we do not always incorporate learning theory effectively when using an instructional design model
  - a. Learning takes time one challenge is that we generally see and evaluate only the beginning of the learning process; we often overlook learning-as-a-journey, in which specific courses play a role, and serve as a catalyst for further learning to be undertaken by the learner on the job
    - i. Evaluation of learning during a course is only an indicator of learning in an artificial setting
    - ii. Transfer of learning from a course to the daily work represents use of learning but more learning will come from the repeated application of new content, trial and error, social learning, etc.
    - iii. Actual adoption and effective use of new content, the impact of a course, may not appear until long after the course is over because the learning continues
  - b. Learning is an iterative process another challenge is that, because we deal with bright learners, we often do not address learners' needs for reinforcement of new content
    - Providing new information to learners is only one step; designs need to incorporate repetition, reiteration, and reframing the content, all of which contribute to learning in a course
    - ii. Engaging learners in use of multiple senses supports the iterative process
      - 1. Oral presentation by faculty



- 2. Discussion by participants
- 3. Visuals
- 4. Written material
- 5. Learner practice
- c. Learning is a progression still another challenge is that we often overlook learning as a process of building knowledge and thus we do not design courses to accommodate learning stages, which enhance learning and enable learners to progress naturally to a conclusion [see 3.2.2.8 <u>Levels of Learning – Addressing Content</u>, pg. 61]
  - i. Awareness learners take notice of the information, concept, or idea
  - ii. Comparison learners compare the new information, concept, or idea with what they already know
  - iii. Exploration learners "try on" or "try out" the new information, concept, or idea to see if or how it works
  - iv. Application learners are able to use the new information, concept, or idea appropriately and effectively
  - v. Integration or rejection learners either imbed or combine the new information, concept, or idea into preexisting networks or frameworks or they reject it as not useful
  - vi. Creation learners use new insights to create something new from the information, concept, or idea
- d. Learning is a complex activity a challenge is often that we forget or neglect the various aspects of the complexity of learning; learning is most effective if all aspects of learning are addressed (Griffin)
  - i. Rational the intellectual act of learning; this is the most familiar type of learning and is often the parameter of the instructional design: faculty tells, explains, and shows learners new information or skills, and learners try to use what they have seen or heard
  - ii. Emotional positive or negative feelings that impact learning; this is often not considered in planning; some aspects of learner emotion are beyond the scope of instructional design, but some consideration of emotion is vital
    - 1. The psychological learning environment has a significant impact and is often left to faculty to create or maintain (e.g., demonstrating respect for different views, welcoming questions) instructional design could include strategies for a learning environment that is conducive to learning



- a. Providing specific times or places for faculty to "check-in" with learners regarding their attitudes and feelings about what they are learning
- Providing specific information for faculty to share regarding how other learners have reacted to the content or how planners anticipate learners might react
- 2. Content organization is vital to learning
  - a. Content arrangement needs to match content substance
    - i. Simple to complex content allows learners to grasp foundational content first
    - Familiar to unfamiliar content enables learners to use what they already know and build from there
    - iii. Chronological order allows learners to grasp the logic of steps in skill-building for procedures, etc.
  - b. Pace of delivery is vital to learning ensuring content is delivered in manageable chunks so learners are able to follow, comprehend, etc.
- iii. Relational relationships may inhibit or enhance learning; relationships to consider in instructional design are those between faculty and learners and among learners
- iv. Physical bodily states affect learning; the physical learning environment includes considerations such as comfort, seating arrangement, temperature, lighting; physical states that also affect learning include the length of the educational experience (overly long time segments may lead to fatigue, distractions, etc.)
- v. Metaphoric abstractions affect learning; for some learners content is often more clearly understood if presented as a comparison to more familiar concepts or ideas
- vi. Spiritual or connective a deep sense of connection may affect learning; this aspect of learning is often overlooked and may be beyond instructional design, but it has an impact especially on learning involving the affective domain and transformational learning
- e. Learning is intertwined with memory a final challenge with learning is that course design does not support the processes necessary for memory development



- Definition memory is a reconstruction of information; it is influenced by attitudes, beliefs, and previous experience; it is often facilitated when a learner is given a retrieval cue
- ii. Types of memory
  - 1. Explicit memory memories in our awareness, what we consciously know
    - a. Semantic memory memory of facts (such as the ingredients of a recipe)
    - b. Episodic memory memory of personal experiences
  - Implicit memories used without conscious awareness
    - a. Procedural memory memory of how to perform certain things without thinking (such as tying shoelaces)
    - b. Priming we are primed by our experiences, which become part of implicit memory, so that we more easily recall what we have done before and believe what we have heard previously, even if it is incorrect ("illusion-oftruth effect")
- iii. Short-term or working memory and long-term memory these two components of memory continuously exchange information; working memory builds associations and sends it to long-term memory for encoding into schemas or networks; long-term memory brings schemas into working memory for access by learners
  - 1. Short-term or working memory is the first step in the learning process
    - a. Generally thought to be able to handle only 4 to 7 bits of new information at a time; this is the cognitive load
    - b. May last only several seconds
    - c. Can be compromised by information overload, which often depends on the learner's experience level with the information
      - i. Too much information either written or oral to be simultaneously taken in
      - ii. Information presented too rapidly pace of information is too fast to be processed and incorporated into longterm memory
      - iii. Ineffective manner in which information is delivered oral instructions rather



- than a checklist for a multi-step procedure
- iv. Extraneous or irrelevant information too much theoretical information or unrelated content distracts from what the working memory can handle and incorporate into long-term memory
- 2. Long-term memory involves encoding information received from the working memory
  - a. Generally thought to have unlimited capacity and may last a lifetime
  - Information is thought to be encoded or stored in mental networks called schemas or schemata by some theorists [see 3.2.2.9
     Schema, pg. 63]
    - A schema assists individuals in organizing and making sense of the world
    - ii. There are schemas for self, for others, for things, for experiences, for stereotypes and prototypes, and more
    - iii. Each schema is composed of interrelated elements
    - iv. Schemas have sub-schemas and/or subordinate schemas
    - v. Schemas are constantly growing in complexity as individuals are exposed to new information, new experiences, new concepts and ideas
    - vi. Schemas are important in the learning process
  - c. Information from working memory is more easily stored in long-term memory schema if:
    - i. Learners can connect the new information to preexisting or related ideas, a preexisting schema; this can be facilitated by careful organization and categorization of new information
    - ii. Learners have ample time and opportunity for distributed practice with the new information over time; this reinforces memory



- iii. Learners can associate information with personal experience, pairing semantic and episodic memories
- d. When a learner does not have a schema within which to place new information, either the learner forgets the new information, or, if the information is significant, the learner, through a process called accommodation, creates a new schema; accommodation generally takes more time than simply referencing a preexisting schema in the process of learning
- F. Challenges Presented by Learners [6] (beyond addressing learning styles, how can instructional design address the differences, the challenges, presented by learners)
  - a. Developing a course for a group for mixed levels of experience [see 3.2.2.10 Stages for Learners, pg. 66] – one challenge is designing for various levels of learner experience within a course; level of experience refers to the learner's experience with the content area, not his or her overall professional experience (e.g., a judge may have more than a dozen years of service on the bench, but be new to family law, thus be less experienced with family law procedures)
    - i. All learners benefit from designs that:
      - 1. Address a variety of learning preferences
      - 2. Include a variety of teaching methods
      - 3. Involve multimedia approaches
      - 4. Involve content that challenges them content that is slightly above their current level of knowledge, skill, and ability
    - ii. Learners with less experience in a specific content area:
      - 1. Have a limited (or no) mental framework or schema of reference for the content area; thus their working or short term memory (which has limited capacity) is heavily engaged and taxed in learning new content
      - 2. Respond more readily to concrete examples and a relatively slow-paced delivery of content
      - 3. Respond well to a limited range of choices
      - 4. Need logical, redundant chunks of new content
      - 5. Often need supportive action or affirmation from faculty
      - 6. Respond well within fixed activity parameters that are substantially limited to or by what has been learned in the course
    - iii. Learners with more experience in a specific content area:





- Have a developed, organized (and sometimes sophisticated) mental framework or schema for the content area and may readily add the new information to what they already know; the framework they already have is automatically engaged, thus their working or short term memory is not heavily involved or taxed in learning the new content
- 2. Respond well to complex situations, abstractions, and problem solving; they may construct viable situations in which to validate, test, or challenge the content
- 3. Respond well to a wide range of choices
- 4. Are able to employ shortcuts and make logical connections, even with abbreviated content
- 5. May not consider faculty to be the expert in the content area, thus do not need a high degree of faculty support or affirmation
- 6. Respond well to exploratory activities, discovery learning, and problem solving, all of which do not rely solely on what has been learned in the course
- iv. Learner groups with mixed levels of experience
  - Differentiated instructional design planning for learners within the same course to have options or choices for learning experiences based on differences in their levels of experience, roles or responsibilities, and/or learning styles
  - 2. Content delivery [based on the Kolb Learning Cycle]
    - a. Direct or concrete experience consider using a recall exercise so each learner can draw on his or her own experience
    - Reflective observation consider sharing and discussing the experiences in small groups with mixed levels of experience so differences are minimized to the small number of people
    - c. Abstract conceptualization
      - i. Provide and clarify general concepts
      - ii. Highlight key or critical elements
      - iii. Provide multiple examples at varying levels of complexity
      - iv. Use multiple forms of the content (visual, auditory, and kinesthetic) to reinforce learning



- v. Employ a variety of teaching methodologies and offer learners options or choices for learning
  - Moderated panel discussion that involves differing views on the content
  - Demonstration that progresses through a series of increasing complexity
  - Self-paced learning that allows learners to review or read and find relevance for the content at their own pace and level
  - 4. Learner options or choices might include watching the panel discussion or reviewing literature on the content; watching the demonstration or participating in a small group discussion about the relevance of the content, etc.
- d. Active experimentation consider flexible grouping such as having learners self-select into groups according to their experience level with the overall content area (e.g., limited experience, moderate experience, and considerable experience)
  - i. Provide each group with an activity suitable for their experience level, or let learners choose the activity they want (e.g., when the learning objective is to apply the rules of procedure, learners may have a choice of joining a group that will use a written hypothetical situation, a group that will use role play, or a group that will critique application of the rules based on their experience)
  - ii. Benefits learners are more comfortable in a group with similar experience levels; a more experienced individual does not dominate a discussion as often happens when we have a more experienced individual lead a discussion of less experienced



- individuals; everyone can learn something from the feedback or sharing
- iii. Drawbacks feedback or sharing with the larger group requires faculty to be very attentive to find and highlight points of learning from each group's input
- b. Developing a course for a multiplicity of roles the challenge is often that, within a group, learners vary widely in their relationship to content
  - i. Designing for each role represented similar to techniques used for learners with mixed levels of experience, consider using diversified instructional design with learners who have different roles (e.g., use teams of faculty representing different roles to deliver portions of the content; provide some content to the large group including all roles and provide some role-specific content to small groups)
  - ii. Designing for cross-role learning consider using diversified instructional design process and flexible grouping for participant activities (e.g., allow learners to choose a group of similar roles or one with different roles represented, or develop activities that address use of the new content as it is applicable for each role; have learners address their own role and then try to apply the new content in the role(s) of others)
- G. Challenges Based on the Nature of Content [7] (how can the content itself present a challenge) [see 3.2.2.11 Example of Instructional Design for Potentially Controversial Content, pg. 68] The challenge may be that for instructional design processes, we treat all content in the same manner
  - a. Planning for content that may be difficult to present one challenge is that we often avoid certain content or limit the depth of the design based on the type of content
    - i. Dealing with complex content the challenge is often ensuring that learners begin with a relatively solid and even basis for the new content
      - 1. Consider pre-course reading materials as part of the course design
      - 2. Consider a short, live tutorial, delivered either face to face or electronically just prior to the course
      - 3. Consider a brief online tutorial or send participants a short DVD
    - ii. Dealing with sensitive or controversial content another challenge is the sensitive, subjective nature of some content,



which highlights differences of opinion and seems to question long-held beliefs of some learners

- 1. Content is considered controversial if it is:
  - a. Highly politicized (e.g., same-sex marriage, reproductive rights)
  - b. Easily personalized (e.g., ethics)
  - c. Prone to extremism (e.g., abortion)
- 2. A lack of diversity or extreme diversity among learners may generate controversy (e.g., ethnic or cultural issues)
- 3. Intellectual awareness, which is often what courses address, does not necessarily bring about changes in individual beliefs or behavior
- 4. Consider possible barriers to learning
  - a. Perspective of learner on the behavior of others may be objective, but the perspective of the learner on his or her own behavior is generally subjective and may involve selfdeception and/or rationalization
  - Long-held beliefs and assumptions have selfimage and emotional components; changing these beliefs or assumptions requires more than providing new information
- 5. Consider establishing some basic ground rules that precede presentation of content and discussion (focus on issues, not on individuals, refrain from interrupting others, practice patience and openness to seeing all facets of an issue, etc.)
- 6. Focus on engaging learners in discussion didactic strategies generally fail with sensitive or controversial content
- 7. Ensure faculty establishes a safe learning environment learners must feel welcome to offer differing perspectives without fear of ridicule or criticism
- 8. If relevant, plan for discussion of all sides of an issue in the content
- 9. Plan content presentation to be incremental moving learners from existing perspectives to new perspectives over time
  - a. Increments as blocks of time within a course
  - b. Increments as blended learning opportunities
  - c. Increments as a series of courses



- 10. Plan for concluding discussions or activities to shift from what may be controversial about the content toward the framework and relevance of the content to the courts, court users, etc.
- b. Planning for transformative learning (based on Mezirow) a
   challenge with this area is that we often do not address this level of
   learning due to constraints of time, money, and the sensitive or
   controversial nature of the content; content such as fairness,
   diversity, and ethics may require this type of learning for true
   change
  - Definition transformative learning is a process of engaging learners in critically examining and transforming their current worldview; includes changes in understanding oneself, in beliefs and assumptions, and in behavior; uses critical reflection as an educational tool
  - ii. Role of planners and faculty
    - 1. Assist learners to:
      - a. Critically assess, in a safe learning environment, the validity of their existing beliefs and assumptions
      - b. Analyze the source, nature, and consequences of their beliefs and assumptions
      - c. Participate in reflective discourse to determine the reasons for existing beliefs and assumptions
      - d. Anticipate consequences of acting on a transformed belief or assumption
      - e. Develop the skills of critical thinking about one's beliefs and assumptions and those of others
    - 2. Design content presentation for subjective reframing:
      - a. Present a disorienting dilemma that offers new insight into a problem or provides learners with cognitive dissonance
      - b. Create an opportunity for learner selfexamination of his or her own fears, anger, guilt, or shame
      - c. Engage learners in critical assessment of their own beliefs and assumptions
      - d. Provide opportunity for mutual assurance that discontent and a process of transformation is shared among learners



- e. Engage learners in exploring options and planning to act on new beliefs and assumptions, roles, and actions
- f. Provide information and skill-building content for applying the new beliefs and assumptions
- g. Engage learners in testing new roles and actions that result from the new beliefs and assumptions
- iii. Strategies to evaluate learning
  - 1. Create initial hypothetical situations with third-party players learners may see the behavior of others more objectively and discuss possible paths of action
  - 2. Create secondary hypothetical situations with thirdparty players and provide learners with choices – learners may be able to see the variations and variables and explain their choices
  - 3. Create role play situations for learners to critique learners may be able to see how someone else uses new knowledge
  - 4. Create role play situations for learner practice learners may now be able to engage themselves personally
- H. Challenges Based on Electronic Delivery Mechanisms [8] (what is unique about different delivery mechanisms and why does it matter) The challenge is often that we assume what has been designed for in-person delivery will suffice or be easily tailored for electronic delivery. NOTE: This section of content addresses only the impact of electronic delivery on the instructional design process; it does not address issues surrounding the actual use of electronic delivery mechanisms. [see the entry-level curriculum design Selecting and Managing Instructional Delivery Mechanisms for more details on use of electronic delivery mechanisms.] In addition, because there are many variables with regard to electronic delivery, (a) there are no absolutes with regard to design, and (b) only a few situations are addressed; the issues highlighted for these situations may be applicable to other electronic delivery circumstances.
  - a. Electronic delivery one challenge is that we often design a course for in-person delivery and use that design for electronic delivery (e.g., broadcast or online), or we add electronic delivery access to a course designed for in-person delivery, without providing for the special needs and circumstances of learners accessing education electronically
    - i. Synchronous electronic delivery learners accessing education electronically (e.g., live broadcast or live-feed



online) have some barriers to learning that are different from those of learners in an in-person course

- 1. Engagement issues learners accessing education electronically may have difficulty maintaining interest in a live broadcast or live-feed online course because they are physically separated from the action in the classroom
  - a. Consider combining a variety of teaching methodologies to frequently change what learners are seeing and hearing
  - b. Plan for short courses or segment courses with frequent, short breaks to prevent learners from losing interest
- 2. Participation issues while in-person courses are designed for a group of learners, synchronous electronic learners may participate as individuals
  - a. Consider designing participant activities that may be performed by individual learners if necessary
  - Plan strategies for faculty to include and involve learners who are accessing education electronically rather than to treat them as "outsiders"
    - i. Broadcast
      - Suggest learners view the broadcast in small groups with a designated local facilitator to serve as an extension of faculty (this will require pre-broadcast planning with those serving as local facilitators)
      - 2. Plan time and strategies for faculty to request feedback from local sites
      - 3. Plan methods for learners at local sites to answer questions, submit questions, provide feedback on participant activities, etc.
      - 4. Consider limiting the number of local sites to enable effective interaction between sites and faculty
      - 5. Ensure course materials are available at local sites; consider



note-taking materials as a way to maintain active learning for the distant sites

#### ii. Online

- 1. Design the course with designated times for faculty interaction with learners accessing education electronically
- 2. Plan strategies for and provide access to software that serves as a communication link between faculty and electronic learners (e.g., for participants to ask or answer questions, provide feedback on participant activities, etc.)
- 3. Plan strategies for and access to software to enable communication and create virtual groups among electronic learners
- 3. Visual issues learners accessing education electronically will have a limited or restricted view of what is occurring in the classroom
  - a. Plan for faculty to treat the camera as a participant, frequently making eye contact with it and moving closer to it to improve visual contact by electronic learners
  - b. Plan to provide PowerPoint® or other visual aids as part of participant materials for learners so they are not dependent on what is shown on a classroom screen
- 4. Auditory issues learners accessing education electronically may have difficulty hearing what is occurring in the classroom
  - a. Plan for faculty to pace vocal delivery appropriately for learners
  - b. Plan for faculty to repeat questions from learners in the classroom (and from distant sites) to ensure all learners hear it
- 5. Materials learners accessing education electronically need complete course materials in case they miss something from the live classroom or their connection to the course is interrupted; materials need to be prepared before the course and disseminated or



- made available for downloading (avoid or limit spontaneous handouts to those in the in-person setting, which further separates learners joining electronically from full engagement in the course)
- ii. Asynchronous electronic delivery a challenge is that we base an electronic delivery course on an in-person design approach or we record an in-person course for DVD distribution or posting as an online course; as with synchronous electronic delivery, asynchronous learners have some barriers to learning that are different from those of learners in an in-person course
  - 1. Engagement issues asynchronous learners will not have immediate access to faculty to pose questions, provide feedback, or engage in discussion
    - a. Plan to use a variety of teaching methodologies and teaching aids to frequently change what learners see and hear; incorporate sound, text, and visuals
    - b. Plan for frequent participant activity to engage learners in reflection and/or action at intervals throughout the course
    - c. Plan for screen shots that move between faculty, PowerPoint® slides, graphs and charts, etc. to maintain learner interest; incorporate both still and action shots whenever possible
    - d. Design courses so learners have an opportunity to submit questions that may be answered by faculty or other source at a later time; provide access to experts for additional information and/or to references for more information
  - 2. Participation issues while in-person courses are designed for a group of learners, asynchronous learners may participate as individuals; they may feel disconnected or alone and thus have a limited attention span; or they may become discouraged or disengaged if the course is not conducive to their learning circumstance
    - a. Keep courses short or segment them with regular, clear, defined stopping points so learners have an opportunity to reflect on what they are learning, to replay or revisit segments, to engage in participant activities, or to deal with unanticipated interruptions



- b. Design activities for self-evaluation and include clear, step-by-step, written instructions; in addition, learners need information to obtain help and/or to access desired or preferred answers to questions or resolutions to activities
- 3. Special considerations for courses designed for asynchronous DVD delivery
  - a. To ensure learners have all relevant information during and after the recorded course, provide as much information as possible as participant materials to complement the DVD
  - b. To ensure learners follow the logic of content organization and may revisit desired content easily, break it into segments, title each segment, and list key points for each segment on the same screen shot; these title shots also serve as logical stopping points if learners need to reflect or revisit previous content
- 4. Special design considerations for courses designed for asynchronous online delivery
  - a. To avoid cognitive overload, limit the amount of information or text per screen
  - b. To ensure learners have access to all relevant information during and after the online course, provide downloadable versions of participant materials
  - c. To avoid technological distractions, synchronize screen elements (audio, text, and visuals)
  - d. To coordinate instructional design activities, choose a model to guide the design process
    - i. Presentation model one-way delivery of content, presented by faculty and/or text, with or without sound; includes demonstration, explanation, simulation, dramatization; this is the least effective model because learners are not engaged
    - ii. Interactive model engages learners in interacting with faculty and/or the material; may range from simply moving through the material to answering questions to self-quided discovery through resources provided





- iii. Collaborative model creates virtual groups or communities through which learners share information, ideas, solve problems, etc.
- b. Designing for a blended learning approach a challenge with blended learning is that we are accustomed to designing for a single delivery mechanism rather than several that need to be complementary; blended learning may offer exciting design options that involve numerous learning opportunities [see 3.2.2.12 Experiential Learning in In-Person and Electronic Delivery, pg. 74]
  - i. Initial steps for instructional design are basically the same assess educational needs, state a course goal(s), state learning objectives; and select content to support the learning objectives
  - ii. Secondary steps are somewhat different
    - 1. Outline the content, including topics and subtopics
    - 2. Assess and annotate for each topic/subtopic when learning would <u>depend</u> on in-person delivery for the desired level of learning (e.g., demonstration of using a series of approaches for a procedure based on live, spontaneous variables)
    - Carefully assess and annotate remaining topics and subtopics that learners can access <u>before</u> the inperson course (e.g., overview of the procedure); these topics and subtopics could be delivered via technology in a synchronous or asynchronous (ondemand) format
    - 4. Carefully assess and annotate remaining topics and subtopics that learners can address after the inperson course (e.g., application of the procedure in certain circumstances); these topics and subtopics could be delivered via technology, a self-directed project, etc.
  - iii. Review and revise learning objectives, if necessary, to enable faculty to evaluate learning through the delivery mechanisms for the relevant or supportive content or in other creative ways
- I. Challenges in Instructional Design at the Local Level [9] (what are some challenges for each individual judicial branch educator, and what are some approaches to resolving them)
  - a. What is the instructional design challenge?
    - i. Is it a process issue?
    - ii. Is it based on the instructional design model in use?
    - iii. Is it based on people?



- iv. Is it based on lack of staff or resources?
- b. What has been tried in the past to resolve the challenge?
  - i. Has it been recognized in the past?
  - ii. Has something been changed to address it?
- c. What were the results?
  - i. Did the change(s) make a difference?
  - ii. If not, why not?
- d. What content from this course may be useful in addressing the challenge?
- e. What is a logical starting point to address the challenge?
  - i. Would a different process or model be more effective?
  - ii. Are there other people who need to be involved?
- f. What does the judicial branch educator need to address this challenge?
  - i. Buy-in?
  - ii. Funding?
  - iii. Other?
- J. Challenges with Making Meaning in Education [10] (what is "making meaning" and why is it a challenge) [see 3.2.2.13 Combining Theories Making Meaning, pg. 76]. The challenge is often that instructional design focuses solely on meeting the stated educational need, excluding the intrinsic need of each learner, which is to make meaning of his or her learning. NOTE: Making meaning is addressed here only with regard to learning; some theorists equate making meaning with higher-level consciousness or connectivity to humanity, which is not addressed in this content
  - a. Key concepts a key challenge with making meaning through our current use of instructional design, and the resulting education we deliver, is that making meaning is a subjective process, unique to each learner, going beyond gaining new knowledge, skills, abilities, and attitudes
    - Information what we gather and often put into long-term memory; includes all learning domains (cognitive psychomotor, and affective)
    - ii. Knowledge comprehending the information we have gathered, using and applying it, understanding its elements
    - iii. Learning at its highest level, transforming knowledge into meaning
    - iv. Meaning recognizing and valuing the impact of knowledge; answering questions such as:
      - 1. How does this knowledge impact me?
      - 2. How does it impact others?
      - 3. What difference is it going to make in the bigger picture?



- b. Learners another challenge is that we plan for learners as a group and we address a variety of learning styles, but we may miss a step that is unique, i.e., individualized learning; each learner:
  - i. Has a unique set of perspectives and expectations that affect and may filter his or her learning; each learner:
    - 1. Responds differently to the context of learning (who delivers it, where it is received, why it is provided, who else is there, etc.)
    - 2. Has predetermined, previously acquired sets of knowledge that affect acceptance or rejection of new information (long-held and/or strongly held perspectives, beliefs, values, etc.)
  - ii. Experiences a learning process differently; each learner:
    - 1. Begins at his or her current level of learning
    - 2. Moves through the learning process in a series of experiences with content
    - 3. Creates a unique, individual spiral of learning that reaches higher, toward making meaning of their learning, trying to fit the learning into their evolving worldview
- c. Courses still another challenge is that we sometimes stop short of the potential to address, support, and facilitate making meaning for individual learners; we often leave that to chance or the assumption that each learner will do that him or herself after a course concludes
  - Current use of instructional design processes
    - Ensures an effective educational experience for learners to receive new information and gain new knowledge
    - 2. Includes use of models that address a variety of learning styles
    - 3. Targets levels of learning to support individuals in achieving successively higher states of knowledge
    - 4. Incorporates evaluation of learning strategies to measure learner's recall, comprehension, and use of new knowledge
  - ii. Potential use of instructional design to address making meaning
    - 1. Sufficient predetermined time and strategies for faculty to address the "so what" of the learning, at intervals and/or at the conclusion of a course
      - a. Personal revelation by faculty member of the difference his or her initial learning regarding



- the content made to him/her, to others, to the bigger picture of his/her work
- b. Preview of what learners might expect as a result of their learning, what it might impact, why it may make a difference to them, etc.
- c. Hopeful future state as a result of the learning

   what would happen if there was broad
  acceptance or use of the new knowledge
- 2. Activities that enable learners to address key questions about their learning
  - a. What was the situation or circumstance before the current learning? What did the learner think or feel about the previous situation and/or the content?
  - b. What difference will the learning make to him or her as an individual? Does he or she think and feel differently as a result of the new learning?
  - c. What difference will the learning make to others and to the bigger picture of his or her work?
  - d. What may be the next step? What additional learning may be useful or necessary? How could the learning be shared with others?
- Opportunities for learners to discuss making meaning after the course through partners, using part of a meeting(s), creating virtual groups, etc.

#### 3.2.1.5 Resources for Faculty:

(This is a list of documents, reference materials, and other sources of information that faculty may find useful. In addition to the attached materials, links are provided to more detailed resources.)

- 3.2.2.1 Recommended Instructional Design Model, pg. 43
- 3.2.2.2 <u>Levels of Learning Educational Needs</u>, pg. 45
- 3.2.2.3 Futures Wheel Examples in Judicial Branch Education, pg. 47
- 3.2.2.4 Levels of Learning Course Goals, pg. 52
- 3.2.2.5 Levels of Learning Learning Objectives, pg. 54
- 3.2.2.6 Learning Domains, pg. 56
- 3.2.2.7 Affective Learning Domain, pg. 58
- 3.2.2.8 <u>Levels of Learning Addressing Content</u>, pg. 61
- 3.2.2.9 <u>Schema</u>, pg. 63
- 3.2.2.10 Stages for Learners, pg. 66



- 3.2.2.11 Example of Instructional Design for Potentially Controversial Content, pg. 68
- 3.2.2.12 Experiential Learning in In-Person and Electronic Delivery, pg. 74
- 3.2.2.13 Combining Theories Making Meaning, pg. 76

#### 3.2.1.6 Related Educational Areas:

(This is a list of content and/or contextual issues that are relevant to this educational area; faculty should be familiar with these areas and may include or reference some of this material in courses developed from this curriculum design.)

Other relevant NASJE curriculum designs or curriculum-based courses:

Assessing Needs: The Basics of Processes and Models
Instructional Design: The Backbone of Effective Education
Selecting and Managing Instructional Delivery Mechanisms

Other relevant topics or educational areas:

Faculty Development Diversity and Fairness Ethics Technology



#### **Overcoming Challenges in Instructional Design** 3.2.1.7 Learning Objective, Resource, and Activity Chart

This chart shows the relationship among learning objectives, certain faculty resources, and participant activities; there are faculty resources that do not have any relationship to learning objectives and thus are not referenced in this chart.

	Learning Objective	Faculty Resource	Participant Activity
	Classify as fact or myth items/issues in a list of assumptions regarding instructional design.	None	3.2.3.1 <u>Fact or Myth</u> , pg. 83
2.	Construct a futures wheel for use as an assessment of educational needs.	3.2.2.3 <u>Futures Wheel</u> <u>Examples in Judicial</u> <u>Branch Education</u> , pg. 47	3.2.3.2 <u>Futures Wheel</u> <u>for Judicial Branch</u> <u>Educators</u> , pg. 87
3.	Design course goal statements for different levels of desired learning.	3.2.2.2 <u>Levels of Learning</u> <u>- Educational Needs</u> , pg. 45 and 3.2.2.4 <u>Levels of Learning</u> <u>- Course Goals</u> , pg. 52	3.2.3.3 <u>Goals and Levels</u> of Learning, pg. 89
4.	Create several evaluation strategies for affective learning objectives.	3.2.2.5 <u>Levels of Learning</u> <u>- Learning Objectives</u> , pg. 54; 3.2.2.6 <u>Learning Domains</u> , pg. 56; and 3.2.2.7 <u>Affective Learning</u> <u>Domain</u> , pg. 58	3.2.3.4 Measuring Affective Learning Objectives, pg. 92
5.	Originate a personal schema to assess its role in learning and memory creation.	3.2.2.9 <u>Schema</u> , pg. 63	3.2.3.5 <u>Schema for</u> <u>Judicial Branch</u> <u>Educators</u> , pg. 94
6.	Use a differentiated instructional design approach to determine either content presentation or activities to evaluate learning in a course.	3.2.2.10 <u>Stages for</u> <u>Learners</u> , pg. 66	3.2.3.6 <u>Differentiated</u> <u>Instructional Design</u> , pg. 96
7.	Critique a course	3.2.2.2 <u>Levels of Learning</u>	3.2.3.7 <u>Instructional</u>



design for a potentially controversial content area.	<ul> <li>Educational Needs,</li> <li>pg. 45;</li> <li>3.2.2.4 Levels of Learning</li> <li>Course Goals, pg. 52;</li> <li>3.2.2.5 Levels of Learning</li> <li>Learning Objectives,</li> <li>pg. 54;</li> <li>3.2.2.6 Learning Domains,</li> <li>pg. 56;</li> <li>3.2.2.7 Affective Learning</li> <li>Domain, pg. 58;</li> <li>3.2.2.8 Levels of Learning</li> <li>Addressing Content,</li> <li>pg. 61; and</li> <li>3.2.2.11 Example of</li> <li>Instructional Design for</li> <li>Potentially Controversial</li> <li>Content, pg. 68</li> </ul>	Design for Potentially Controversial Content, pg. 98
8. Analyze benefits and drawbacks of blended learning opportunities, including the use of in-person and electronic delivery mechanisms.	3.2.2.12 Experiential Learning in In-Person and Electronic Delivery, pg. 74	3.2.3.8 <u>Blended</u> <u>Learning</u> , pg. 100
9. Strategize how to handle an instructional design challenge at the local level.	None	3.2.3.9 <u>Challenges at</u> the Local Level, pg. 102
10. Evaluate local educational approaches with regard to how learners make meaning of their learning.	3.2.2.13 <u>Combining</u> <u>Theories – Making</u> <u>Meaning</u> , pg. 76	3.2.3.10 Making Meaning, pg. 104

# NASJE CURRICULUM DESIGN

FACULTY RESOURCES





[This page intentionally left blank for duplex printing]



#### **Explanation of Faculty Resource**

#### 3.2.2.1 Recommended Instructional Design Model

#### Purpose of resource/document

This resource is a graphic representation of the instructional design model recommended to judicial branch educators by the NASJE Curriculum Committee. It is explored fully in the entry-level curriculum design for instructional design, <a href="Instructional Design: The Backbone of Effective Education">Instructional Design: The Backbone of Effective Education</a>. It is included here as a reminder and as a basis for several of the challenges included in the content of this design.

#### Use of resource/document

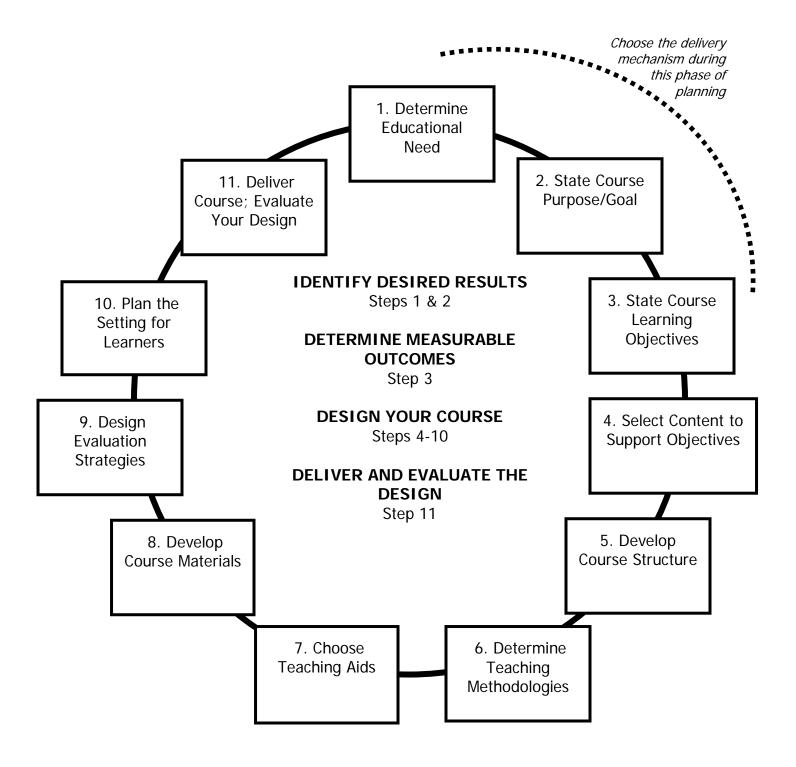
This resource would be effective as part of the introduction to a course based in this curriculum design [see A, <u>Basic Challenges in Instructional Design</u>, pg. 9 in the curriculum design].

#### Related documents or materials

None



#### Overcoming Challenges in Instructional Design Recommended Instructional Design Model





#### **Explanation of Faculty Resource**

#### 3.2.2.2 Levels of Learning – Educational Needs

#### Purpose of resource/document

This resource provides judicial branch educators with a brief overview of the levels of learning indicated by educational needs. It will assist in highlighting the importance of matching the desired level of learning among educational needs, course goals, learning objectives, and addressing content.

#### Use of resource/document

This resource would be effective as part of the discussion about challenges with assessing educational needs [see B, <u>Challenges with Educational Needs</u>, pg. 12 in the curriculum design].

#### Related documents or materials

#### Faculty resources

- 3.2.2.4 <u>Levels of Learning Course Goals</u>, pg. 52
- 3.2.2.5 Levels of Learning Learning Objectives, pg, 54
- 3.2.2.8 Levels of Learning Addressing Content, pg. 61

#### Participant activities

- 3.2.3.3 Goals and Levels of Learning, pg. 89
- 3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98



#### **Levels of Learning – Educational Needs**

**Acquisition** – learner begins to grasp new knowledge, skill, or concept but needs support and direction; learner is not yet able to use the content reliably or with a high level of accuracy.

Needs: Learners need to know about (content)

Learners need to be aware of (content)

**Fluency** – learner responds correctly to questions or basic tasks; learner performs haltingly, often unsure of answer or action

Needs: Learners need to understand (content)

Learners need to be familiar with (content)

**Generalization** – learner is fluent with knowledge, skill, or concept and can use it accurately but may not perform well in unexpected or novel situations

Needs: Learners need to know how (content) is applicable

Learners need to be able use (content)

**Adaptation** – learner can apply the knowledge, skill, or concept fluently and accurately in a variety of settings without prompts

Needs: Learners need to incorporate (content)

Learners need to apply (content)

**Internalization** – learner has incorporated the knowledge, skill, or concept completely; this is often the result of learner practice and success in using the new content in the real world



# Overcoming Challenges in Instructional Design Explanation of Faculty Resource

#### 3.2.2.3 Futures Wheel Examples in Judicial Branch Education

#### Purpose of resource/document

This resource outlines an approach to engage learners in refining educational needs from problems, trends, etc. identified by those outside the learner group. It demonstrates a process that (1) delves into how learners themselves will perceive or experience the problem, trend, or issue, and (2) assists in identifying whether the problem, trend, or issue is important or relevant to the learner group, and (3) determines whether education has a role as a potential remedy.

The resource has two parts: the first is an instruction sheet that outlines the steps in how a futures wheel is developed; the second part has three examples of abbreviated or partial futures wheels — one based on a problem, another based on a trend, and a third based on an educational need, each identified by individuals outside the learner group. Each partial example includes a center "hub" that presents the problem, trend, or need. Near the top, each includes a question that might be posed to the learner group. Each includes some possible answers to the question; these answers represent the spokes of the wheel.

These documents combine to provide judicial branch educators with an approach to engage learners in assessing potential educational needs based on concerns or issues identified from a source outside the learner group.

#### Use of resource/document

This resource would be effective during a discussion about challenges with assessing educational needs [see B, <u>Challenges with Educational Needs</u>, subpart c, <u>Addressing educational needs that learners do not perceive</u>, pg. 13 in the curriculum design]. Faculty may want to have learners briefly discuss what educational implications they can identify from the partial futures wheels provided.

NOTE: The futures wheels are partial and are illustrative only. Learners in a course based on this curriculum design will create a futures wheel as a participant activity.

#### Related documents or materials

Participant activity

3.2.3.2 Futures Wheel for Judicial Branch Educators, pg. 87



#### **Futures Wheel**

**Use:** To engage learners in refining how a problem, trend, or issue that was identified by an outside source might impact them.

**Benefits:** Provides planners with information on the relevancy of the problem, trend, or issue with regard to the target group of learners; provides a degree of ownership to learners with regard to whether or how education will be used.

**Drawbacks**: Will likely yield many non-education factors; may not yield clear definition of educational need, but will assist planners in identifying where education may be beneficial

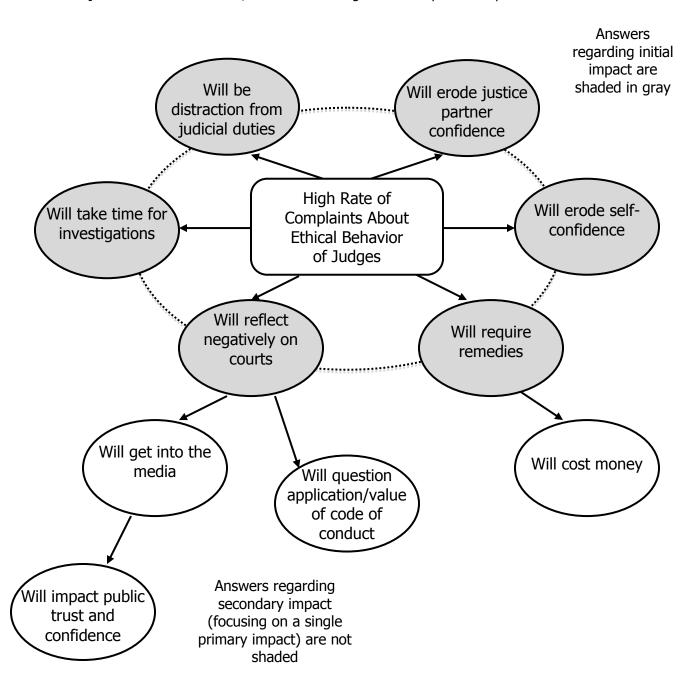
#### Steps:

- 1. State the problem, trend, or issue as succinctly as possible.
- 2. Convene a representative group(s) of learners, provide the problem trend, or issue, and explain the futures wheel process.
- 3. Using an easel and paper, or other means of displaying a progression of additions, write the problem, trend, or issue in the center of the space with a circle or box around it; this will serve as the hub of the wheel.
- 4. Engage learners in brainstorming what would be the initial impact of the central problem or trend if it continues, or if the stated educational need is not addressed; as they brainstorm, place their input around the hub; remember that this is brainstorming, so use the language of the learners and withhold judgment on their ideas.
- 5. Choose one of the learner-provided ideas and focus on it as a temporary central issue; have learners brainstorm secondary issues or impacts; add those to the visual display as a second level of impacts; consider using a different color to signify the secondary nature of these areas.
- 6. Repeat until learners have exhausted their input.
- 7. As a group, analyze the possible educational implications of the activity.



### **EXAMPLE** of a Partially Completed Futures Wheel Based on a Problem From the Judicial Conduct Commission

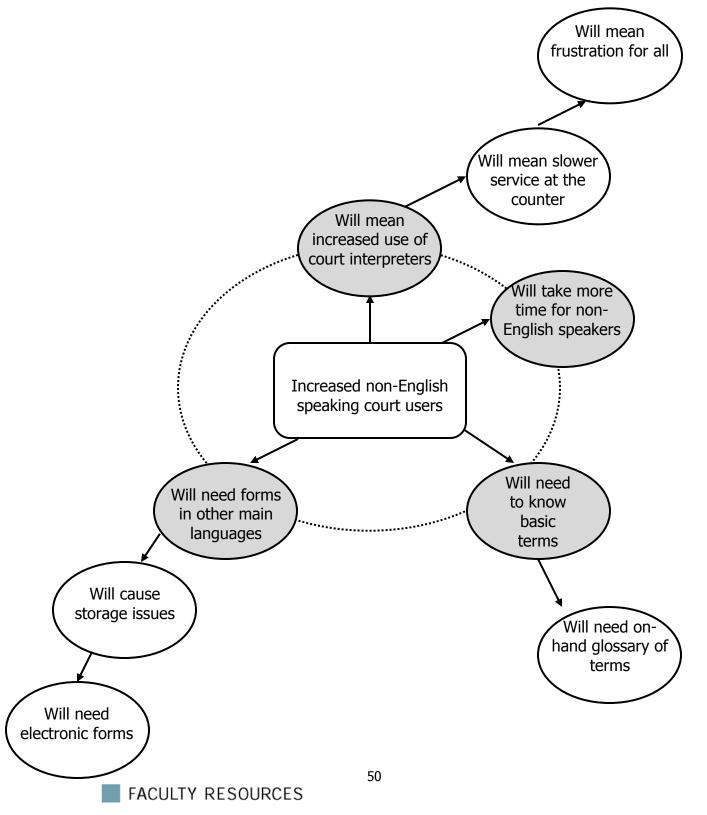
QUESTION FOR LEARNERS/JUDGES: What might be the impact if the problem continues?





# **EXAMPLE** of a Partially Completed Futures Wheel Based on a Trend Provided by County Statistics

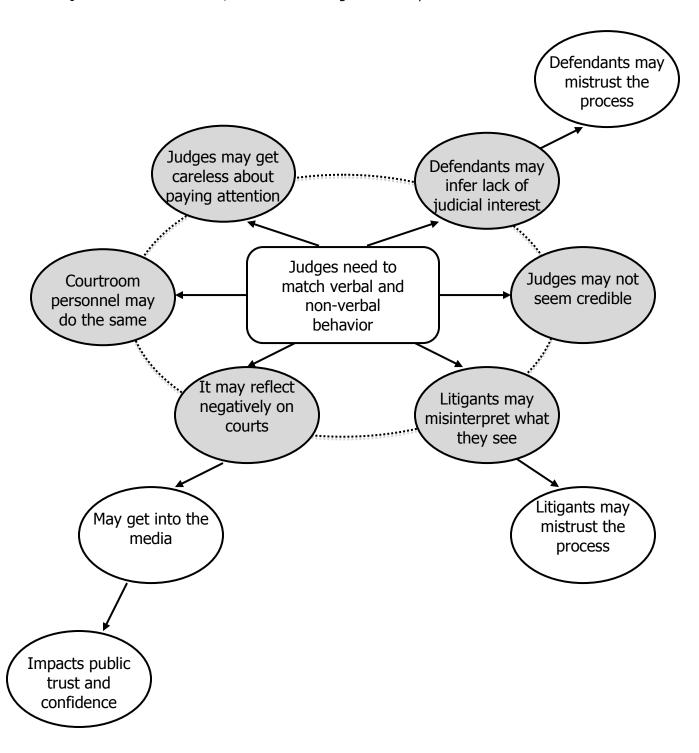
QUESTION FOR LEARNERS/CLERKS - What might be the impact if this trend continues?





# **EXAMPLE** of a Partially Completed Futures Wheel Based on a Need Provided by Attorneys

QUESTION FOR LEARNERS/JUDGES - What might be the impact if this need is not addressed?





#### **Explanation of Faculty Resource**

#### 3.2.2.4 Levels of Learning – Course Goals

#### Purpose of resource/document

This resource provides judicial branch educators with a brief overview accurately stating the level of desired learning when writing course goals. It will also assist in highlighting the importance of matching the desired level of learning among educational needs, course goals, learning objectives, and addressing content.

#### Use of resource/document

This resource would be effective as part of the discussion of challenges with goals [see C, Challenges with Course Goals, pg. 13 in the curriculum design].

NOTE: This is a generalized overview of learning as it relates to setting course goals. A more detailed and specific learning-domain overview is provided in 3.2.2.6 <u>Learning Domains</u>, pg. 56, which addresses stating learning objectives.

#### Related documents or materials

#### Faculty resources

- 3.2.2.2 Levels of Learning Educational Needs, pg. 45
- 3.2.2.5 Levels of Learning Learning Objectives, pg. 54
- 3.2.2.8 Levels of Learning Addressing Content, pg. 61

#### Participant activities

- 3.2.3.3 Goals and Levels of Learning, pg. 89
- 3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98



#### **Levels of Learning – Course Goals**

**Acquisition** – learner is beginning to grasp new knowledge, skill, or concept, but needs support/direction; learner is not yet able to use the content reliably or with a high level of accuracy.

Goals: This course will introduce learners to (content)

This course will provide learners with (content)

**Fluency** – learner responds correctly to questions or basic tasks; learner performs haltingly, often unsure of answer or action

Goals: This course will familiarize learners with (content)

This course will sensitize learners to (content)

**Generalization** – learner is fluent with and has an accurate grasp of the knowledge, skill, or concept but may not perform well in unexpected or novel situations

Goals: This course will engage learners in (content)

This course will involve learners in (content)

**Adaptation** – learner can apply the knowledge/skill/concept fluently/accurately in a variety of settings without prompts

Goals: This course will enable learners to use (content)

This course will equip learners to apply (content)

**Internalization** – learner has incorporated the knowledge/skill/concept completely; this is often the result of learner practice and success in using the new content in the real world.





#### **Explanation of Faculty Resource**

#### 3.2.2.5 Levels of Learning – Learning Objectives

#### Purpose of resource/document

This resource provides judicial branch educators with a brief overview of accurately stating the level of desired learning when writing learning objectives. It will also assist in highlighting the importance of matching the desired level of learning to educational needs, course goals, learning objectives, and content.

#### Use of resource/document

This resource would be effective as part of the discussion of challenges with goals [see D, <u>Challenges with Learning Objectives</u>, subpart b, <u>Stating desired levels of learning</u>, pg. 15 in the curriculum design].

NOTE: This is a generalized overview of learning as it relates to setting course goals. A more detailed and specific learning-domain overview is provided in 3.2.2.6 <u>Learning Domains</u>, pg. 56, which covers stating learning objectives.

#### Related documents or materials

#### Faculty resources

- 3.2.2.2 <u>Levels of Learning Educational Needs</u>, pg. 45
- 3.2.2.4 Levels of Learning Course Goals, pg. 52
- 3.2.2.8 Levels of Learning Addressing Content, pg. 61

#### Participant activities

- 3.2.3.4 Measuring Affective Learning Objectives, pg. 92
- 3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98



#### **Levels of Learning – Course Goals**

**Acquisition** – learner is beginning to grasp new knowledge, skill, or concept, but needs support or direction; learner is not yet able to use the content reliably or with a high level of accuracy.

Goals: Learners will state

Learners will list

**Fluency** – learner responds correctly to questions or basic tasks; learner performs haltingly, often unsure of answer or action

Goals: Learners will show

Learners will explain

**Generalization** – learner is fluent with and has accurate grasp of the knowledge, skill, or concept, but may not perform well in unexpected or novel situations

Goals: Learners will demonstrate

Learners will apply

**Adaptation** – learner can apply the knowledge/skill/concept fluently/accurately in a variety of settings without prompts

Goals: Learners will adapt

Learners will create

**Internalization** – learner has incorporated the knowledge/skill/concept completely; this is often the result of learner practice and success in using the new content in the real world.



#### **Explanation of Faculty Resource**

#### 3.2.2.6 Learning Domains

#### Purpose of resource/document

This resource provides an overview or review of the three learning domains – cognitive, psychomotor, and affective. It includes desired levels of learning associated with each domain, and the progressive steps of learning, a generalized description of the steps, and verbs that might be used in learning objectives for each domain at each step.

#### Use of resource/document

This resource would be effective as part of the discussion regarding challenges with learning objectives [see D, <u>Challenges with Learning Objectives</u>, subpart c, <u>Addressing the appropriate learning domain</u>, pg. 16 in the curriculum design].

NOTE: The levels of learning for each learning domain are depicted in this resource from the highest to the lowest level; this reflects how Bloom's Taxonomy is generally represented.

#### Related documents or materials

#### Participant activities

3.2.3.4 Measuring Affective Learning Objectives, pg. 92

3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98

Information



#### Overcoming Challenges in Instructional Design Learning Domains

Stages of Learning for Each Learning Domain (adapted from Bloom)

Domain	Lowest to Highest	Brief Description	Verbs for Objectives
Cognitive [Knowing]	Knowledge	Being able to recall certain facts	Recall, list, define
	Comprehension	Understanding concepts and their use	Explain, conclude
	Application	Using/applying what is learned/concepts	Choose, use, apply
	Analysis	Identifying relationships in concepts	Categorize, compare
	Synthesis	Recombining pieces in new ways	Modify, formulate
	Evaluation	Comparing or judging concepts in real life use	Assess, justify
Psychomotor [Doing]	Perceive	Using senses to obtain a performance pattern	Detect, distinguish
	Set	Being ready to perform the pattern	Respond, react
	Imitate	Performing the pattern, but with trial and error	Construct, dismantle
	Habitual	Performing the pattern consistently/confidently	Perform routinely
	Automatic	Performing the pattern without hesitation	Perform automatically
	Adapt	Changing the pattern to fit a new situation	Modify, revise
	Originate	Creating a new pattern for an unanticipated need	Devise, create
Affective [Feeling]	Receive	Being willing to receive input on new ideas/values	Perceive
	Respond	Paying attention to new ideas/values voluntarily	Reply, answer
	Value	Attributing worth to the new ideas/values	Support, argue
	Organize	Determining relationships among ideas/values	Select, judge
	Characterize	Internalizing new ideas/values into beliefs	Represent, embody



#### **Explanation of Faculty Resource**

#### 3.2.2.7 Affective Learning Domain

#### Purpose of resource/document

This resource is an expansion of part of the overview provided in the previous resource, learning domains. The focus of this resource is on the affective domain.

#### Use of resource/document

This resource would be effective as part of the discussion of challenges with learning objectives [see D, <u>Challenges with Learning Objectives</u>, subpart c, iii, <u>Affective domain</u>, pg. 17 in the curriculum design].

#### Related documents or materials

Faculty resource 3.2.2.6 <u>Learning Domains</u>, pg. 56

#### Participant activities

3.2.3.4 <u>Measuring Affective Learning Objectives</u>, pg. 92

3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98



# Overcoming Challenges in Instructional Design Affective Domain (based on Krathwohl, et.al.)

Affective Domain	Verbs for Objectives	Skill Cluster	Specific Skills
Receiving Being aware of ideas	Differentiate, Respond,	Exploring self	Noticing one's actions and others' response
and/or material and being willing to	Listen for	Exploring surroundings	Being open, wanting to know more
explore them		Experiencing emotions	Identifying what one is feeling
		Exploring self	Noticing one's actions and others' response
Responding Being slightly	Reply, Comply with,	Emoting	Showing emotion, feelings for others
committed to measure the worth of ideas; voluntary	Follow	Addressing Life's Challenges	Overcoming obstacles, growing from challenges
attentiveness		Leveraging Life's Successes	Acknowledging contributions of others
Valuing Accepting the worth	Debate, Support	Valuing Self	Aligning values and actions
of new or different ideas; the start of personal		Valuing Natural Laws	Appreciating diversity
involvement		Refining Personal Values	Labeling and exploring one's beliefs
Organizing Being able to relate	Discuss, Theorize,	Regulating Self	Addressing what is important
the new ideas to those already held	Formulate, Judge	Managing Performance	Raising self- expectations, practicing
		Managing Emotions	Recognizing emotional contexts
Internalizing, Characterizing Being able to act	Revise, Resolve, Carry out	Synergizing Feelings	Associating, interpreting, and analyzing feelings
consistently within the new ideas and values	,	Facilitating Personal Development	Staying the course
1.000		Challenging Self	Engaging new ways, applying insights



## Affective Domain Competency Levels (based on Krathwohl, et.al.)

Competency Level	Description of Responses	Examples
Level 1 Non-Conscious Use	Uses idea or value when prompted by others and/or uses in unintended ways	Avoids analysis of personal feelings and reactions; procrastinates learning
Level 2 Conscious Use	Uses learned idea or value knowingly, but still needs encouragement by others	Is becoming open to the need to understand own values and emotional reactions in certain areas
Level 3 Consistent Performance	Uses idea or value routinely and effectively in multiple contexts in self-directed manner	Manages values and emotions for completion of tasks
Level 4 Self-Reflective Use	Uses idea or value adaptively in unfamiliar contexts	Takes on new challenges; is aware of the role of values and emotions with regard to motivation; may advocate for change
Level 5 Transformative Use of Affective Domain	Uses idea or value in creative, productive ways in novel contexts and inspires others to replicate use	Serves as a coach or mentor for others who procrastinate; serves as a leader for others



#### **Explanation of Faculty Resource**

#### 3.2.2.8 Levels of Learning – Addressing Content

#### Purpose of resource/document

This resource provides judicial branch educators with a brief overview of accurately addressing the level of desired learning when planning for delivery of content. It will also assist in highlighting the importance of matching the desired level of learning among educational needs, course goals, learning objectives, and content.

#### Use of resource/document

This resource would be effective as part of the discussion of challenges with goals [see E, <u>Challenges with Learning Itself</u>, subpart c, <u>Learning is a progression</u>, pg. 19 in the curriculum design].

#### Related documents or materials

#### Faculty resources

3.2.2.2 <u>Levels of Learning – Educational Needs</u>, pg. 45

3.2.2.4 <u>Levels of Learning – Course Goals</u>, pg. 52

3.2.2.5 Levels of Learning – Learning Objectives, pg. 54

#### Participant activity

3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>, pg. 98



#### Levels of Learning – Addressing Content

**Acquisition** – learner is beginning to grasp new knowledge, skill, or concept, but needs support/direction; learner is not yet able to use the content reliably or with a high level of accuracy.

#### To meet learner needs to achieve this level, faculty:

- Discusses content
- Provides models
- Engages learners in practice
- Gives feedback and positive reinforcement

**Fluency** – learner responds correctly to questions or basic tasks; learner performs haltingly, often unsure of answer or action

#### To meet learner needs to achieve this level, faculty:

- Provides time for practice in new/different circumstances/situations
- Offers feedback with suggestions for improvement

**Generalization** – learner is fluent with knowledge/skill/concept and accurate, but may not perform well in unexpected or novel situations

#### To meet learner needs to achieve this level, faculty:

 Engages learners in applying knowledge/skill in other substantive areas and in novel, unexpected, or ambiguous situations

**Adaptation** – learner can apply the knowledge/skill/concept fluently/accurately in a variety of settings without prompts

#### To meet learner needs to achieve this level, faculty:

- Solicits learners' big ideas/concepts regarding the new knowledge/skill
- Encourages learners to set their own goals for adapting the knowledge/skill in changing situations

**Internalization** – learner has incorporated the knowledge/skill/concept completely; this is often the result of learner practice and success in using the new content in the real world.



#### **Explanation of Faculty Resource**

3.2.2.9 Schema

#### Purpose of resource/document

This resource has two components. The first provides a graphic representation or model of a schema, a theory of how memories are created and made accessible when learners need to recall something. The second provides a very small representation of schemas/schemata, a number of schema that are necessary for the vast amount of memory in a learner's mind; this part of the resource shows how there are sub-schema and interrelated schema. The overall purpose of the resource is to provide a visual representation of the complexity of learning and memory.

#### Use of resource/document

This resource would be effective as part of the discussion about challenges with content and learning [see E, <u>Challenges with Learning Itself</u>, subpart e, iii, 2, <u>Long-term memory</u>, pg. 22 in the curriculum design].

NOTE: These images and the concept behind them are constructs, i.e., they are not necessarily factual, complete, or visible; they represent mental processes in ways that are useful in discussing learning and memory.

Faculty may enhance this resource by providing examples, such as:
For a single schema – modes of transportation could represent the category; the main elements of that schema might include automobiles, trains, boats, airplanes, bicycles, etc.; sub-elements for automobiles could include car makes or models, driving, streets and highways, sources of power, etc.

For interrelated schemas, the modes of transportation schema may link to schemas that represent work (getting to work), vacations (traveling long distances), fun (using unfamiliar or exciting modes of transportation), etc.

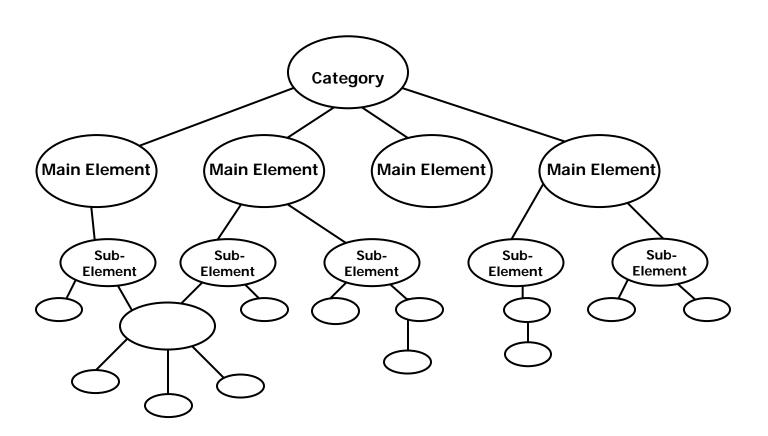
#### Related documents or materials

Participant activity

3.2.3.5 Schema for Judicial Branch Educators, pg. 94

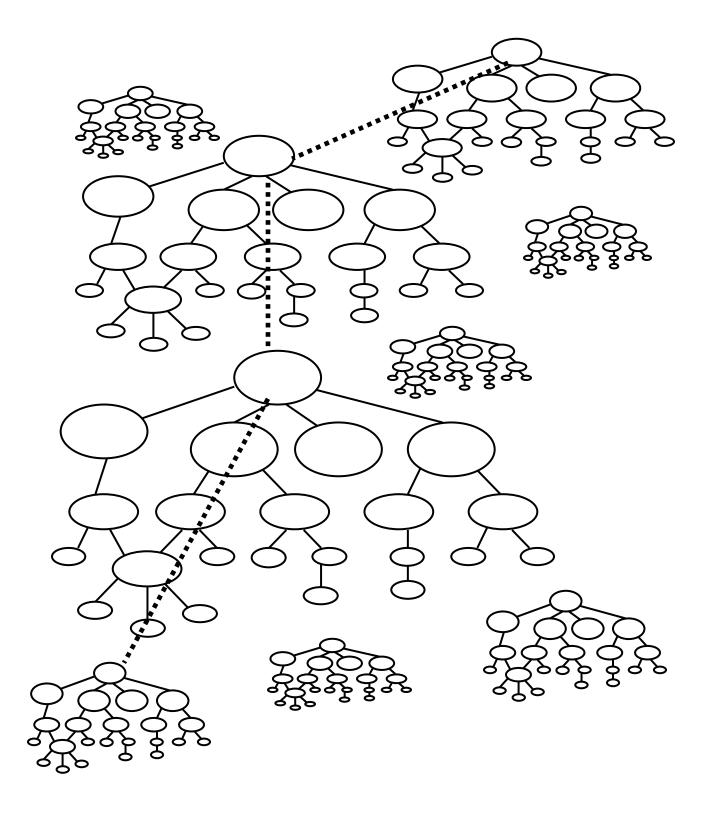


#### A Single Schema





# Overcoming Challenges in Instructional Design Interrelationships Among Schemas/Schemata





#### **Explanation of Faculty Resource**

#### 3.2.2.10 Stages for Learners

#### Purpose of resource/document

This resource expands on previous faculty resources 3.2.2.2 <u>Levels of Learning – Educational Needs</u>, pg. 45, 3.2.2.4 <u>Levels of Learning – Course Goals</u>, pg. 52, 3.2.2.5 <u>Levels of Learning – Learning Objectives</u>, pg. 54, and 3.2.2.8 <u>Levels of Learning – Addressing Content</u>, pg 61, which provide judicial branch educators with an overview of addressing desired levels of learning in the instructional design process.

This resource provides a slightly different view of levels of learning by attempting to describe learners at different stages of learning a particular area of content. The purpose of this resource is to assist judicial branch educators to accommodate those who are at different stages by assessing differences in their knowledge, skill, ability, or attitude.

#### Use of resource/document

This resource would be useful when discussing challenges presented by learners [see F, Challenges Presented by Learners, pg. 23 in the curriculum design].

NOTE: Faculty may want to stress two things: first, reference to levels of learning and stages for learners refer to the learner's relationship to the particular content, not his or her overall experience or knowledge; second, these titles are for internal reference in the design, not for labeling learners.

#### Related documents or materials

#### Faculty resources

3.2.2.2. <u>Levels of Learning – Educational Goals</u>, pg. 45

3.2.2.4 <u>Levels of Learning – Course Goals</u>, pg. 52

3.2.2.5 Levels of Learning - Learning Objectives, pg. 54

3.2.2.8 Levels of Learning – Addressing Content, pg. 61

#### Participant activity

3.2.3.6 <u>Differentiated Instructional Design</u>, pg. 96



#### **Stages for Learners** (based on enTarga)

**Novice** – has an initial awareness of the content, but only on a conceptual level; he or she may be able to apply the learning but only within a set of guidelines and without regard to the situation or context

- Situational assessment needs elements defined clearly and objectively
- Decision-making follows rules without considering variables
- Exercising judgment none
- Skills and tools able to apply with directions

**Advanced Beginner** – has some experience with the content in real-world application; begins to understand the scope of the content; considers the situation or context when applying content

- Situational assessment perceives similarities among examples
- Decision-making matches context to appropriate rules
- Exercising judgment none
- Skills and tools able to apply in structured setting

**Competent** – has a working knowledge of the content; can internalize new content to go beyond rule-directed behavior; can adapt learning to different situations through analyzing the circumstances and selecting among alternatives

- Situational assessment considers alternatives
- Decision-making analyzes situation before choosing appropriate action
- Exercising judgment considers value of each alternative
- Skills and tools able to apply in unstructured settings

**Proficient** – has experience with content in diverse contexts; has internalized concepts and can apply them with minimal effort; has a holistic grasp of the content and does not need to ponder a situation before taking action

- Situational assessment intuitive
- Decision-making focuses on choice that achieves intuitive plan
- Exercising judgment moves quickly based on learning and experience
- Skills and tools applies consciously in all settings

**Expert** – has fully integrated content into normal work processes; does what works; continues to learn but does so through other experts, continued observation, and interaction

- Situational assessment intuitive
- Decision-making acts in unconscious manner
- Exercising judgment unconsciously does what normally works
- Skills and tools applies unconsciously in all settings



#### **Explanation of Faculty Resource**

#### 3.2.2.11 Example of Instructional Design for Potentially Controversial Content

#### Purpose of resource/document

This resource provides judicial branch educators with an overview of how instructional design might be applied to one area of potentially controversial content. The instructional design provided also highlights the need for adequate time for many courses that deal with this type of content.

#### Use of resource/document

This resource would be effective if briefly reviewed during the discussion of challenges based on the nature of content [see G, <u>Challenges Based on the Nature of Content</u>, pg. 26 in the curriculum design]. Learners will review this resource in more detail in the participant activity for learning objective 7.

#### Related documents or materials

Participant activity
3.2.3.7 <u>Instructional Design for Potentially Controversial Content</u>,
pg. 98



# **Example of Instructional Design for Potentially Controversial Content**

# The Basis for Ethics Education A Simulated Instructional Design with Commentary

**Ethics** – well-founded standards of human behavior, based on honoring rights, meeting obligations, demonstrating fairness, providing respect, and striving for benefits for the greater good

- a. Ethics may or may not be evident in traditional needs assessment processes; ethics may fall into the realm of "assumed knowledge" or "it cannot be taught"
- b. Weaving ethics into other courses is advisable due to real-world ethical issues associated with each substantive area; may be incorporated into an activity or a portion of content presentation
- c. Stand alone ethics courses are also advisable to focus learners on ethics as an important factor in professional life; stand-alone courses need to be heavily based on participant discussion in order to ensure that content becomes personalized

#### **Instructional Design Steps for an Ethics Course**

1. Assessing Educational Needs in Ethics – the educational need for a course on ethics may come from sources other than the learners (e.g., from the Commission on Judicial Conduct for judges or from the Court Administrators Association for court personnel) but the details of the ethical issues need to be discussed with a focus group to ensure relevant learning objectives and content

NEED: New judges (or court personnel) need to understand ethics in the court setting and be able to make appropriate ethical decisions based on the code of conduct.

2. Creating Goals for Ethics Courses – goals for this content may differ from those of other substantive areas in that some learner self-examination is included

GOALS: This course will familiarize new judges with the importance of ethical behavior by:



- Engaging learners in exploring the value of ethical parameters in the justice system, especially with regard to public trust and confidence
- 2. Helping learners identify their own ethical values, increasing self-knowledge
- 3. Enabling learners to identify ethical issues, conflicts, and personal responsibility, especially in improving their ethical sensitivity
- 4. Engaging learners in resolving ethical and moral dilemmas
- 5. Encouraging learners to acquire ethical courage to act within the ethical boundaries of the profession
- 3. Identifying Learning Objectives for Ethics Courses *learning* objectives need to include basic substantive areas as well as self-reflection, self-discovery, and self-knowledge

LEARNING OBJECTIVES: As a result of this education, participants will be able to:

- 1. Define ethics
- 2. List reasons for ethical parameters and adherence to them
- 3. Identify their own core ethical values
- 4. Using the code of ethics, identify ethical issues in hypothetical situations
- 5. Choose actions that minimize negative consequences in ethical dilemmas (using an applicable code of ethics)
- 6. Demonstrate relevant ethical behavior in simulated situations
- 4. **Determining Content** the learning objectives and content require an extended period of time to ensure learning
  - Definition of ethics
  - Basic theories on ethics
  - Code of ethics and its implications
  - Strategies to address ethical dilemmas

Four steps shown on the following outline:

- 5. Developing Course Structure
- 6. Choosing Teaching Methodologies
- 7. Choosing Teaching Aids
- 8. Developing Materials



Time	Content	Teaching Methodology	Audiovisual Aids
8:00	Introductions and welcome		
8:15	<u>Concrete experience</u> : Example from literature or film that highlights an ethical dilemma	Brief presentation	Projector and screen
8:30	<u>Reflective observation</u> : Discussion of the dilemma and both the individual and universal value of ethical choices	Large or small group activity	Easels, paper, and markers
8:45	Activity for learning objective 1	Large group discussion	Easel, paper, and markers
9:00	Activity for learning objective 2		
9:15	<ul> <li>Abstract conceptualization: Ethics theory to highlight the difficulty of finding a single foundational basis for ethical decision-making</li> <li>1. Consequentialism – theories of moral behavior that indicate the consequences of actions serve as the basis for action and judgment about that action</li> <li>2. Kant's theory – the "right or wrong" of a decision or action depends on whether it supports our universal, unconditional moral duty or rule</li> <li>3. Virtue ethics – action is based on one's moral character rather than consequences or rules</li> </ul>	Learner may choose to observe a brief faculty presentation — or — review brief literature	Screen and projector for PowerPoint  Brief literature for those choosing to read
10:00	Activity for learning objective 3		
10:15	Break		
11:00	<ul> <li>4. Ethics decision-making steps (based on Velasquez, et. al.) after all facts are gathered and known: <ul> <li>a) What are the benefits and harms that could result from each possible course</li> </ul> </li> </ul>		



	- C +: 2 \\/ - : - -		
	of action? Which alternative offers the most favorable overall outcome b) What are the rights of those affected by the decision and which course of action best respects those rights? c) Which course of action treats everyone equally (unless there is justifiable reason to treat individuals differently) and does not show discrimination or favoritism? d) Which course of action advances the common or greater good? e) Which course of action is morally acceptable?		
12:00	Lunch		
1:00	More concrete experience: Example from literature or film that highlights an ethical dilemma in a court setting	Brief presentation	Projector and screen
1:15	More reflective observation: Discussion of the dilemma and the impact of choices made by individuals (Focus of discussion is on the impact of the choice(s) made in the scenario, including the decision-maker(s), justice partners, the public, etc.)	Small group discussion	Easels, paper, and markers
1:30	Activity for learning objective 4	Hypothetical situations involving choices by others	Written hypothetical situations
1:45	<ul> <li>More abstract conceptualization:</li> <li>Code of Ethics</li> <li>1. Brief overview</li> <li>2. Areas of clarity</li> <li>3. Areas of ambiguity</li> <li>4. Considerations <ul> <li>Everybody-does-it situations</li> </ul> </li> </ul>	Small group discussions, sharing personal experiences, etc.	Code of Ethics for everyone  Screen and projector for PowerPoint



	<ul> <li>Ethics as a choice, a decision, oftentimes subjective</li> <li>Many paths to ethical choices</li> </ul>		
2:30	Break		
2:45	Code of Ethics continued		
3:00	Activity for learning objective 5	Faculty role play; learners critique	
3:30	Active experimentation Activity for learning objective 6	Hypothetical situations involving learners in making choices in role play	Written situations
4:15	Reflections on learning	Individual activity large group discussion	
4:30	Conclusion		

- 9. **Designing Strategies for Evaluation of Learning** *some strategies address personal reflection* 
  - STRATEGIES TO MEASURE LEARNING FOR EACH LEARNING OBJECTIVE
    - 1. <u>Define ethics</u> large group discussion to create a list of terms and phrases
    - 2. <u>List reasons for ethical parameters and adherence to them</u> small group discussion followed by sharing with large group
    - 3. <u>Identify personal core ethical values</u> individual activity and small group discussion at each table
    - 4. <u>Identify ethical issues in hypothetical situations</u> small group activity with hypothetical situations or simulations involving ethical dilemmas and choices made by others to be critiqued by learners
    - 5. Choose actions that minimize negative consequences in ethical dilemmas (using an applicable code of ethics) small group activity with faculty led role play involving choices made by role players then critiqued by learners
    - 6. <u>Demonstrate relevant ethical behavior in simulated situations</u> role play with a group of three learners, one of whom is the observer, involving ethical dilemmas, making choices, and explaining those choices to others in the group
- 10. **Number of Participants and Seating** small number of participants to facilitate discussion, trust, and self-disclosure; should be limited to five or fewer participants to enable small group discussion



# **Explanation of Faculty Resource**

#### 3.2.2.12 Experiential Learning in In-Person and Electronic Delivery

#### Purpose of resource/document

This resource offers judicial branch educators a visual representation of how blended learning, combining in-person and electronic delivery of content, can create a rich learning experience. The graphic also shows a circular pattern to indicate that these learning opportunities are not linear but may be combined in a variety of ways.

#### Use of resource/document

This resource would be beneficial when discussing challenges in instructional design based on delivery mechanisms [see H, <u>Challenges Based on Electronic Delivery Mechanisms</u>, pg. 29 in the curriculum design], specifically blended learning approaches.

#### Related documents or materials

Participant activity 3.2.3.8 Blended Learning, pg. 100



# **Experiential Learning in In-Person and Electronic Delivery** *(based on Cognitive Design Solutions)*

	Faculty and Learners Engaged at Same Time	Faculty and Learners Engaged at Different Times
Faculty and Learners in the Same Place	In-Person Delivery  Face-to-Face Sessions (e.g., Seminars or Workshops) Field Trips One-to-One Instruction	Individual Work  Observations Independent Study (e.g., Directed Reading, Research)
Faculty and Learners in Different Places	Synchronous Electronic Delivery  Webcast Virtual Classroom Chat Room Messaging Online Activities	Asynchronous Electronic Delivery  Web-Based Course Bulletin Boards Threaded Discussion Recordings Job Aids



#### **Explanation of Faculty Resource**

#### 3.2.2.13 Combining Theories – Making Meaning

#### Purpose of resource/document

This resource attempts to bring together and graphically illustrate several theories about learning. It contains three progressive segments to combine theories of learning.

The first illustration indicates that each learner comes into an educational experience at a different level or stage of learning for any content area (concept, idea, theory, skill, etc.), and each will progress upward, toward higher levels/stages from that point.

The second illustration uses the Kolb Model of Experiential Learning as a basis, with the added idea that learners do not simply go "around the circle" that we use as a basis for course structure; they experience learning as a spiral, moving higher and higher, refining their learning.

The final illustration combines the first two and adds a background/backdrop of the learner's own existing schema, the learning environment in which the content is encountered, and the nature of the content. This illustration of learning shows that factors from various theories can be combined to depict how each learner advances toward making meaning, which is defined in this content as recognizing the value/impact of their learning.

#### Use of resource/document

This resource would be effective if used at the conclusion of a course based on this curriculum design [see J, <u>Challenges with Making Meaning in Education</u>, pg. 35 in the curriculum design].

#### Related documents or materials

Participant activity 3.2.3.10 <u>Making Meaning</u>, pg. 104



#### **Combining Theories – Making Meaning of Learning**

Although we must design courses for groups of people, we must remain aware of differences between individual learners.

Learner A may enter an educational experience at the novice stage, the acquisition level of learning with the content. Based on many individual variables, he/she may progress to an advanced beginner level during a course, becoming fluent in use of the content.

Learner B may enter the same educational experience at the advanced beginner stage, being well acquainted with the content. Based on many individual variables, he/she may progress to the proficient stage during a course, able to adapt the content to new/unusual circumstances.

In either situation, making meaning of their learning is important to both learners regardless of the level/stage they achieve. Making meaning may be different for each learner, based on their level or stage of learning and individual variables.

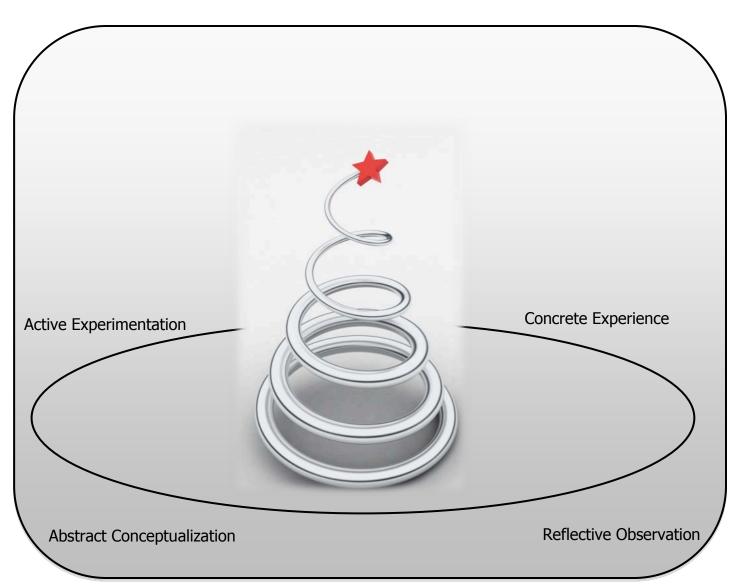
		Progressive Levels of Learning	Progressive Stages of a Learner	
		Internalization •	Expert	_
		Adaptation	Proficient	Learner
		Generalization	Competent	B B
Learner A		Fluency	Advanced Beginner	_
_	•	Acquisition	Novice	



#### **Combining Theories – Making Meaning of Learning**

Although we may use a model, such as the Kolb Learning Model, to design and deliver courses, we must remember that learners do not simply go around the circle again and again in the same manner. Individual learners create their own learning spiral, beginning at their entry level or stage and progressing higher, continually refining their learning.

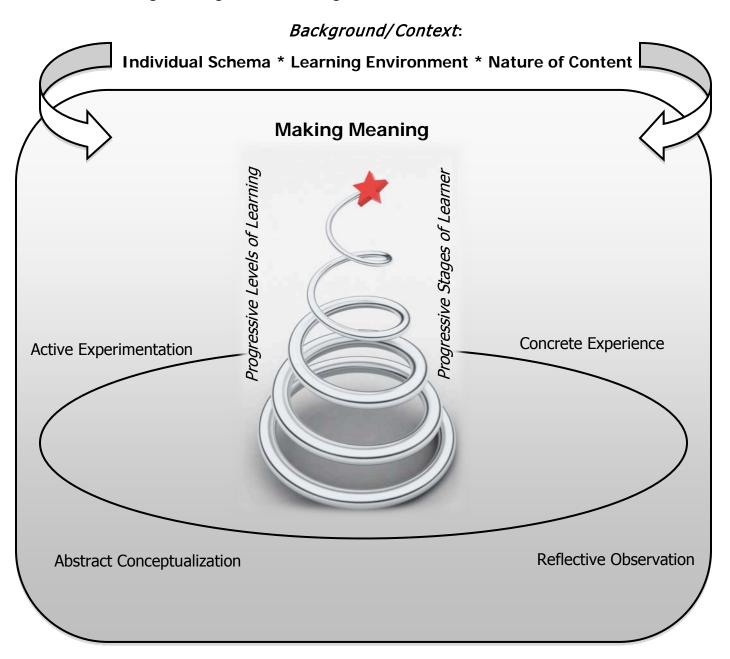
Regardless of where learners are in their learning spiral, making meaning is important to each learner.





#### **Combining Theories – Making Meaning of Learning**

With a background/context of each learner's individual schema, the learning environment, and the nature of the content, each learner progresses through levels/stages of learning, creates a spiral of individual learning, and moves closer to making meaning of their learning.

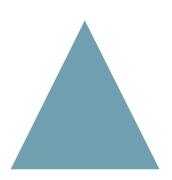




[This page intentionally left blank for duplex printing]

# NASJE CURRICULUM DESIGN

A PARTICIPANT ACTIVITIES





[This page intentionally left blank for duplex printing]



#### **Explanation of Participant Activity**

#### 3.2.3.1 Fact or Myth

#### Purpose of activity

This activity engages judicial branch educators in examining some of their assumptions regarding certain aspects of instructional design. These assumptions are classified as myths in this activity, but they are actually challenges that are addressed or mentioned in the content of this curriculum design.

This activity has a chart for learner use and an answer sheet for faculty reference. Although, faculty may have additional ideas about each item or issue listed, the answer sheet provides a short explanation of why each item or issue is actually a fact and a potential challenge, rather than a myth

#### Use of activity

This would be an effective opening activity for a course based on this curriculum design [see A, <u>Basic Challenges in Instructional Design</u>, pg. 9 in the curriculum design]. It could be used before or after discussing the constraints in judicial branch education.

NOTE: Faculty may choose to change the issues in this activity to those relevant in the specific location or to the challenges selected for a course. Or, faculty may have learners brainstorm assumptions regarding instructional design and then qualify them as myth or fact.

NOTE: All of the items/issues may be considered myth, but faculty is encouraged to listen to reasons some learners may have regarding why an item/issue is myth. The activity is not about labeling items or issues as right or wrong; it is instead about getting learners to consider the assumptions they may have about instructional design.

#### **Relevant Learning Objective**

1. Classify as fact or myth each statement in a list of assumptions regarding instructional design.



Fact or Myth

Review each statement and classify it in the space provided as fact or myth; add a comment under each item/issue to support your classification

Fact	Myth	Statement
		Assessing educational needs involves only the target group of learners.
		COMMENT:
		Setting a course goal(s) is an unnecessary design step.
		COMMENT:
		Affective learning objectives are not relevant because they cannot be measured.
		COMMENT:
		Learning is really up to the learner rather than being dependent on the instructional design.
		COMMENT:
		In groups with mixed levels of experience, we need to design for the middle ground.
		COMMENT:
		Teaching methodologies are to be used sequentially by faculty in a course.
		COMMENT:
		Instructional design does not address the nature of content (whether it is controversial or complex).
		COMMENT:
		The delivery mechanism for a course has only minimal impact on instructional design.
		COMMENT:



#### Fact or Myth – Some Potential Answers

The challenge is often that we have preconceived ideas about what is not possible and we allow those ideas to limit how we address the design process.

- 1. Myth: Assessing educational needs involves only the target group of learners. Fact: Viable educational needs can often be identified by others (e.g., justice partners, court users), but it takes time and careful planning; in addition to gathering the information, learners also need to be involved in determining how the proposed content relates to their work.
- 2. Myth: Setting a course goal(s) is an unnecessary design step. Fact: Goals actually (intentionally or unintentionally) set forth the level of learning that guides and influences learning objectives, content, etc.; goals need to be set and evaluated to make sure they accurately incorporate the intended/needed level of learning; if the goal understates or overstates the level of learning, it should be changed.
- 3. Myth: Affective learning objectives are not relevant because they cannot be measured.
  - Fact: Some degree of affective learning is present even in cognitive and psychomotor objectives; affective learning objectives are measurable, although supporting learner achievement generally takes longer in content presentation, learner discovery, and faculty evaluation of learning.
- 4. Myth: Learning is up to the learner rather than being dependent on instructional design.
  - Fact: Learning is about the learner, but instructional design definitely has an impact on whether learning takes place; the many variables include the learning objectives, the nature of the content, the teaching methodologies used, the time allowed for a course, etc.
- 5. Myth: In groups with mixed levels of experience, we need to design for the middle ground.
  - Fact: Designing for each level of experience is not only possible, it is desirable if learners come into a course with varying levels of knowledge, skills, abilities, and attitudes; the design needs to address all levels of experience.
- 6. Myth: Teaching methodologies are to be used sequentially by faculty in a course.
  - Fact: Giving learners choices about how to access, receive, and address content is a viable consideration that may involve employing various teaching



methodologies simultaneously; this approach may be useful in addressing learning styles and in working with learners who have varying levels of experience.

- 7. Myth: The nature of the content (whether it is complex or controversial) does not affect instructional design.
  - Fact: The nature of the content definitely impacts the instructional design of a course; variables include the types of learning objectives, the pace of content presentation, the amount of discussion among learners, the amount of time needed, etc.
- 8. Myth: The delivery mechanism for a course has only minimal impact on instructional design.
  - Fact: Although the process of instructional design remains constant, the resulting design of a course for in-person delivery may be very different from one for electronic delivery; some differences include statement of learning objectives, selection of teaching methodologies, activities designed for evaluating learning, and more.



#### **Explanation of Participant Activity**

#### 3.2.3.2 Futures Wheel for Judicial Branch Educators

#### Purpose of activity

This activity engages judicial branch educators in assessing their own potential educational needs based on hypothetical input from state court administrators. The activity demonstrates how input on educational needs from an outside source might have value.

#### Use of activity

This activity would be effective after discussing use of a futures wheel [see B, <u>Challenges with Educational Needs</u>, subpart c, <u>Addressing educational needs that learners do not perceive</u>, pg. 13 in the curriculum design]. There are no right or wrong answers for this activity.

A worksheet is provided for judicial branch educators to use individually, but use of an easel and chart paper for each small group is recommended so everyone sees how the wheel is created. For the individual worksheets, learners may not need to use all of the circles provided or they may add circles as necessary.

Faculty may want to identify a different educational need, problem, trend, etc. from the one provided.

This is a small group activity, but faculty may want to give each individual a few minutes to think about first-order impacts before engaging in small group activity.

After groups have brainstormed their ideas on possible impacts if the educational need is not addressed, they should analyze the futures wheel to identify educational opportunities.

#### **Relevant Learning Objective**

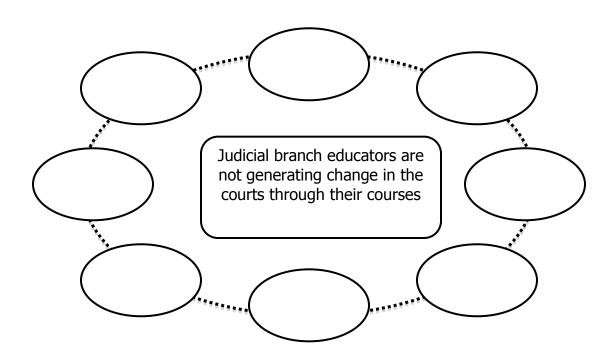
2. Construct a futures wheel for use as an assessment of educational needs.



#### **Futures Wheel for Judicial Branch Educators**

Based on a hypothetical problem identified by state court administrators

When prompted by a facilitator or faculty, brainstorm and document your ideas of impact if the educational need is **not** addressed. Initial circles are for first order impact; draw circles outside the first order impact ring for secondary, tertiary, etc., impacts.



88



#### **Explanation of Participant Activity**

#### 3.2.3.3 Goals and Levels of Learning

#### Purpose of activity

This activity engages judicial branch educators in matching the level of learning indicated in educational need statements with goal statements.

#### Use of activity

This activity would be effectively used in discussing challenges with course goals [see C, Challenges with Course Goals, pg. 13 in the curriculum design]. For purposes of this activity, use of the continuum of "information – transformation" is sufficient, unless faculty chooses to use the more detailed levels of "acquisition, fluency, generalization, and adaptation."

For Educational Needs 1, 2, 5, 8, and 9 on the following page, the goals should state: "This course will introduce, provide, familiarize, or sensitize learners to or with the content." These goals would address acquisition and a degree fluency.

For Educational Needs 3, 4, 6, 7, and 10 the goals should state: "This course will engage, involve, enable, or equip learners to use or apply the content. These goals would address a higher degree of fluency, generalization, and adaptation.

This is an individual activity.

#### **Relevant Learning Objective**

3. Design course goal statements for different levels of desired learning.





# **Overcoming Challenges in Instructional Design Goals and Levels of Learning**

Write course goals for the following statements of educational need.

1. EDCUCATION	ONAL NEED: Judges need to know the rules of procedure.
COURSE GOAL	:
2. EDUCATIO	NAL NEED: Court personnel need to be able to identify security
COURSE GOAL	· ·
3. EDUCATIO	NAL NEED: Judges need to apply the Code of Judicial Conduct.
COURSE GOAL	:
4. EDUCATION system.	NAL NEED: Court personnel need to use the new computer
COURSE GOAL	:
5. EDUCATION interpreters	NAL NEED: Judges need to understand how to use court s.
COURSE GOAL	:



# Overcoming Challenges in Instructional Design Levels of Learning and Course Goals (continued)

6. EDUCATIONAL NEED: Court personnel need to show respect for court users.
COURSE GOAL:
7. EDUCATIONAL NEED: Court administrators need to work with the media.
COURSE GOAL:
8. EDUCATIONAL NEED: Judges need to know the appropriate diversion programs.
COURSE GOAL:
<ol><li>EDUCATIONAL NEED: Court personnel need to know about the code of conduct.</li></ol>
COURSE GOAL:
10. EDUCATIONAL NEED: Judges need to demonstrate fairness.
COURSE GOAL:



#### **Explanation of Participant Activity**

#### 3.2.3.4 Measuring Affective Learning Objectives

#### Purpose of activity

This activity involves judicial branch educators in designing more than one strategy for a series of affective learning objectives. Because this learning domain presents challenges with learning objectives and evaluation of learning, the activity is intended to encourage learners to think creatively.

#### Use of activity

This activity would be effective after discussing learning domains, especially the affective domain [see D, <u>Challenges with Learning Objectives</u>, subpart b, <u>Stating desired levels of learning</u> and subpart c, <u>Addressing the appropriate learning domains</u>, pg. 16 in the curriculum design]. While there are no specifically right or wrong evaluation strategies for measuring affective learning, faculty needs to provide feedback if strategies seem to be inadequate.

This is an individual activity.

#### **Relevant Learning Objective**

4. Create several evaluation strategies for affective learning objectives.



# **Measuring Affective Learning Objectives**

	For each affective learning objective, create two strategies for measuring learning.
As	a result of this course, learners will:
1.	Classify the reactions of a victim of domestic violence when confronted with police questioning.
	Strategy A:
	Strategy B:
2.	Adopt/demonstrate an approach suggested by a fellow learner to convince a juvenile offender of his/her worth.
	Strategy A:
	Strategy B:
3.	Share personal feelings about an incident of discrimination.
	Strategy A:
	Strategy B:
4.	Create a philosophy or professional value to implement in the local court regarding respectful treatment of self-represented litigants.
	Strategy A:
	Strategy B:
5.	Analyze fears or attitudes about using empathy as a means of calming an angry or anxious court user.
	Strategy A:
	Strategy B:



#### **Explanation of Participant Activity**

#### 3.2.3.5 Schema for Judicial Branch Educators

#### Purpose of activity

This activity demonstrates to judicial branch educators the ease of incorporating familiar elements into a preexisting schema and the difficulty of incorporating an unfamiliar element. The purpose is to assist judicial branch educators in assessing learning processes for judges and court personnel.

#### Use of activity

NOTE: Faculty needs to explain that this is an artificial exercise and that any actual schema regarding the topic would be much more complex than one created in this activity.

Faculty needs to engage judicial branch educators in developing a schema regarding a familiar educational setting – e.g., a course in a hotel meeting room. Show learners the resource, 3.2.2.9 Schema, pg. 63, so they have an idea of what they are creating. The activity worksheet includes some basic starting points. After giving learners time to document everything they associate with the course and room, faculty should give them additional items that will easily fit into the schema they have created, e.g., a smoke detector, coffee, hotel staff, and ask that they find a place to logically add these elements to their schema. Then, faculty needs to give them things that will not easily or logically fit into their schema, such as a shock therapy device, Medusa, or a knowledge-transfer booth. Faculty will likely see hesitation or get arguments that these things do not fit into the schema. This exercise demonstrates the difficulty of integrating an unfamiliar concept into an existing schema.

This activity would be useful when explaining schema and their role in learning and memory [see E, <u>Challenges with Learning Itself</u>, subpart e, iii, 2, <u>Long-term memory</u>, pg. 22 in the curriculum design]. The activity could be used as an introduction to discussing schema or after having discussed the concept.

This is an individual activity.

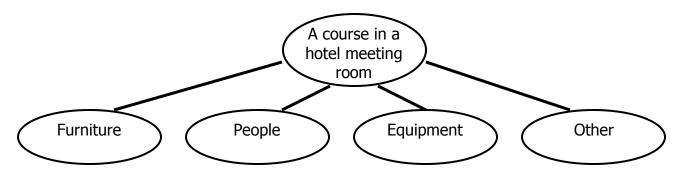
#### **Relevant Learning Objective**

5. Originate a personal schema to assess its role in learning and memory creation.



#### **Schema for Judicial Branch Educators**

Using the beginning elements provided, expand this schema with other elements you associate with a course in a hotel meeting room.





#### **Explanation of Participant Activity**

#### 3.2.3.6 Differentiated Instructional Design

#### Purpose of activity

This activity challenges judicial branch educators to be creative in designing a course that will be attended by learners with mixed levels of experience. The activity will require that judicial branch educators determine simultaneous content delivery options for judges or simultaneous but different evaluation strategies for learning objectives.

#### Use of activity

This activity would be effective after discussing differentiated instructional design approaches [see F, <u>Challenges Presented by Learners</u>, subpart a, iv, <u>Learner</u> groups with mixed levels of experience, pg. 24 in the curriculum design].

NOTE: Faculty may choose to ask some individuals or small groups to use differentiated instructional design approaches to determine content presentation and other individuals or groups to determine evaluation strategies.

NOTE: There are no right or wrong responses to this activity. The overall purpose is simply to encourage judicial branch educators to be creative in addressing the varying levels of experience, rather than designing so that all judges have the exact same experience in the course.

This may be an individual or a small group activity.

#### **Relevant Learning Objective**

6. Use a differentiated instructional design approach to determine either content presentation or activities to evaluate learning in a course.



#### **Differentiated Instructional Design**

Using the hypothetical situation, determine either how to present content or how to evaluate learning using a differentiated instructional design approach.

You are responsible for designing a local court course for judges that addresses the topic of self-represented litigants. The presiding judge has made the course mandatory for approximately 30 civil court judges. You may offer the course only once, so participating judges will have varying levels of experience with self-represented litigants.

**EDUCATIONAL NEED** (based on a very negative newspaper article): Civil court judges need to treat self-represented litigants with respect and patience.

**COURSE GOAL:** This course will equip judges with an understanding of self-represented users and with strategies for effective interaction.

**LEARNING OBJECTIVES:** As a result of this course, judges will be able to:

- 1. Identify reasons that some court users are self-represented.
- 2. Compare and contrast various strategies for interacting effectively with self-represented litigants.
- 3. Demonstrate use of selected strategies for effective interaction.
- 4. Critique an incident of judicial interaction with a self-represented litigant.
- 5. Create a personal philosophy or value statement about working with self-represented litigants.

Your design for content presentation(s) or strategy(ies) for evaluating learning:	



# Overcoming Challenges in Instructional Design Explanation of Participant Activity

#### 3.2.3.7 Instructional Design for Potentially Controversial Content

#### Purpose of activity

This activity engages judicial branch educators in critiquing a hypothetical instructional design for a course on ethics. The critique challenges learners to improve the design based on course discussions regarding potentially controversial content.

NOTE: In addition, several faculty resources from this curriculum design may be helpful to judicial branch educators as they review the hypothetical design. These resources: (a) may be briefly discussed if they have not been included in the course prior to this activity, (b) the resources may simply be provided for learners to review on their own, or (c) faculty may choose not to use the resources.

#### Use of activity

This activity would be effective after fully discussing instructional design challenges presented by potentially controversial content [see G, <u>Challenges</u> Based on the Nature of Content, pg. 26 in the curriculum design].

#### **Relevant Learning Objective**

7. Critique a course design for a potentially controversial content area.



# Instructional Design for Potentially Controversial Content Worksheet

Using the instructional design handout for an ethics course, answer the following questions as a basis for a critique of the design.

1.	What is the level of desired learning indicated by the statement of educational need? [see Levels of Learning – Educational Needs handout]
2.	Do the learning objectives support the level of desired learning? Why or why not?
3.	Which learning domains are represented in the learning objectives? [see Learning Domains handout]
4.	Does the content outline support the issues represented by controversial content? Why or why not?
5.	Do participant activities support the level of desired learning provided in the course goal?
6.	What changes or improvements would you make to the design?
	00



#### **Explanation of Participant Activity**

#### 3.2.3.8 Blended Learning

#### Purpose of activity

This activity first engages judicial branch educators in assessing benefits and drawbacks of in-person, electronic, and blended learning delivery from their perspective as a planner; then it engages them in providing an overall analysis of all three from the learner's perspective. The purpose is to highlight the benefits of blended learning to the learner, even though it may require more time and effort from planners and faculty.

#### Use of activity

This activity would be useful after discussing challenges with electronic delivery, including blended learning [see H, <u>Challenges Based on Electronic Delivery Mechanisms</u>, pg. 29 in the curriculum design].

#### **Relevant Learning Objective**

8. Analyze benefits and drawbacks of blended learning opportunities, including the use of in-person and electronic delivery mechanisms.



#### **Blended Learning**

Document the benefits and drawbacks for each type of delivery from the perspective of a judicial branch educator, planner, or faculty; then provide an overall analysis of the delivery mechanism from the <u>perspective of the learner</u>.

Delivery	Benefits Perspective of Planner/Faculty	Drawbacks Perspective of Planner/Faculty	Overall Analysis Perspective of Learner
In-Person			
Electronic			
Blended			



#### **Explanation of Participant Activity**

#### 3.2.3.9 Challenges at the Local Level

#### Purpose of activity

This activity involves judicial branch educators in determining strategies to resolve an instructional design challenge at the local level.

#### Use of activity

This activity would be useful near the conclusion of a course based on this curriculum design [see I, <u>Challenges in Instructional Design at the Local Level</u>, pg. 34 in the curriculum design] after faculty has led discussions regarding many general challenges.

This is an individual activity.

#### **Relevant Learning Objective**

9. Strategize how to handle an instructional design challenge at the local level.



# **Challenges at the Local Level**

1.	What is the instructional design challenge?
2.	What has been tried in the past to resolve the challenge?
3.	What were the results?
4.	What content from this course may be useful in addressing the challenge?
5.	Where is a logical starting point to address the challenge?
6.	What do you need to address this challenge?



#### **Explanation of Participant Activity**

#### 3.2.3.10 Making Meaning

#### Purpose of activity

This activity has two parts. First, it involves judicial branch educators in a process to facilitate making meaning; then it involves them in evaluating the concept for inclusion in their local instructional design process.

#### Use of activity

This activity may be most useful as a concluding activity for a course based on this curriculum design [see J, Challenges with Making Meaning in Education, pg. 35 in the curriculum design].

#### Faculty is encouraged to:

- Introduce the first part of the activity;
- Provide learners time to answer the questions;
- Answer them yourself (from the perspective of your <u>initial</u> learning about challenges in instructional design);
- Share your answers then ask learners to share theirs (in small groups or the large group);
- Introduce the second part of the activity;
- Provide learners time to answer the questions; and
- Have learners share their responses (in small groups or the large group).

NOTE: The activity sheet is designed for a course on generalized challenges in instructional design. Faculty may need to modify the guestions to use in courses based on specific challenges.

NOTE: The initial part of this activity may seem to be an evaluation of the course, but that is not the intent/purpose. The intent is for each learner to reflect on his or her own learning with regard to what it means in their lives.

This is an individual activity.

#### **Relevant Learning Objective**

10. Evaluate the concept of learners making meaning as a viable component of the local instructional design process.



# Making Meaning - Part I

With regard to your knowledge about challenges in instructional design:

1.	What was the relevance of challenges in instructional design in your work prior to this course?
2.	How did you feel about or use instructional design as an educational tool?
3.	How will your new knowledge of challenges in instructional design impact you?
4.	How will your new knowledge impact others?
5.	What difference will your new knowledge make in the bigger picture of instructional design, your role or responsibilities, and your work?

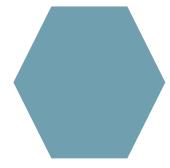


# Making Meaning - Part II

	With regard to this activity:
1.	What was the value of the activity for you? What did you discover?
2.	What was the value of faculty responses to the activity questions?
3.	What was the value of sharing responses?
4.	What relevance did the activity have regarding future use of your new knowledge?
5.	What might be the value of this type of approach in your local instructional design process?

# NASJE CURRICULUM DESIGN

BIBLIOGRAPHY





[This page intentionally left blank for duplex printing]



#### **Bibliography and Recommended Readings**

Behavioral verbs for writing objectives in the cognitive, affective and psychomotor domains. Retrieved January 31, 2012 from <a href="http://www.whcenter.org/documents/CME/tab3\_cme/Behavioral\_Verbs.pdf">http://www.whcenter.org/documents/CME/tab3\_cme/Behavioral\_Verbs.pdf</a>.

Bloom's taxonomy of learning domains. (2010) Retrieved January 27, 2012 from <a href="http://www.nwlink.com/~donclark/hrd/bloom.html">http://www.nwlink.com/~donclark/hrd/bloom.html</a>.

Bowden, P. & Smythe, V. (2008) *Theories on teaching and training in ethics*. Retrieved February 2, 2012 from <a href="http://ejbo.jvu.fi/pdf/ejbo\_vol13">http://ejbo.jvu.fi/pdf/ejbo\_vol13</a> no2 pages 19-26.pdf.

Burkstrand-Reid, B., et. al. (2011) *Teaching controversial topics*. Retrieved February 10, 2012 from <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1744-1617.2011.01404.x/full">http://onlinelibrary.wiley.com/doi/10.1111/j.1744-1617.2011.01404.x/full</a>.

Casto, M. L. (2011) *The 6 stages of learning*. Retrieved January 31, 2012 from <a href="http://www.learning3pointzero.com/2011/11/07/the-6-stages-of-learning/">http://www.learning3pointzero.com/2011/11/07/the-6-stages-of-learning/</a>.

Chipperfield, B (2004) *Cognitive load theory and instructional design*. Retrieved February 6, 2012 from <a href="http://www.usask.ca/education/coursework/802papers/chipperfield/index.htm">http://www.usask.ca/education/coursework/802papers/chipperfield/index.htm</a>.

псерт тити азавител са асатоги состоем от сероно стиррот погар и асхитети

Cooper, G. (1998) *Cognitive load theory and instructional design at UNSW*. Retrieved February 6, 2012 from <a href="http://dwb4.unl.edu/Diss/Cooper/UNSW.htm">http://dwb4.unl.edu/Diss/Cooper/UNSW.htm</a>.

Cooper, S. (n.d.) *Jack Mezirow – transformational learning*. Retrieved February 6, 2012 from <a href="http://www.lifecircles-inc.com/Learningtheories/humanist/mezirow.html">http://www.lifecircles-inc.com/Learningtheories/humanist/mezirow.html</a>.

Core principles of transformative learning theory – Mezirow and others (n.d.) Retrieved February 12, 2012 from http://transformativelearningtheory.com/corePrinciples.html.

Duncan-Hewitt, W., et. al. (n.d.) *2.3.6 Affective domain*. Retrieved February 6, 2012 from <a href="http://cetl.matcmadison.edu/efgb/2/2">http://cetl.matcmadison.edu/efgb/2/2</a> 3 6.htm.

Fitch, G. (n.d.) *Ethics and values clarification*. Retrieved February 2, 2012 from <a href="http://frank.mtsu.edu/~u101irm/ethicslp.html">http://frank.mtsu.edu/~u101irm/ethicslp.html</a>.



Five stages of learning. (n.d.) from enTarga. Retrieved January 27, 2012 from <a href="http://www.entarga.com/km/learning.htm">http://www.entarga.com/km/learning.htm</a>.

Garland, W. J. (1999) *Learning 101: a student guide to effective learning*. Retrieved February 6, 2012 from <a href="http://www.nuceng.ca/teach/learn101.PDF">http://www.nuceng.ca/teach/learn101.PDF</a>.

Hall, T. et. al. (n.d.) *Differentiated instruction and implications for UDL implementation*. Retrieved February 10, 2012 from <a href="http://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">http://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">http://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">http://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">http://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-</a> <a href="https://www.k8accesscenter.org/training-resources/udl/DifferentiatedInstructionH-">https://www.k8accesscenter.org/training-resources/ud

Harwood, A. M. & Hann, C. L (1990) *Controversial issues in the classroom*. Retrieved February 2, 2012 from <a href="http://www.ericdigests.org/pre-9218/issues.htm">http://www.ericdigests.org/pre-9218/issues.htm</a>.

Huffaker, D. (2003). *The e-learning design challenge: technology, models and design principles*. Retrieved February 12, 2012 from <a href="http://www.astd.org/NR/rdonlyres/10F38AF1-3F8F-44F7-A49D-2FFC59FB7320/0/HuffakerELearningDesignChallenges.pdf">http://www.astd.org/NR/rdonlyres/10F38AF1-3F8F-44F7-A49D-2FFC59FB7320/0/HuffakerELearningDesignChallenges.pdf</a>.

Imel, S. (1998) *Transformative learning in adulthood*. Retrieved February 2, 2012 from http://www.ericdigests.org/1999-2/adulthood.htm.

Instructional design - blended learning (n.d.) from Cognitive Design Solutions. Retrieved February 10, 2012 from http://www.cognitivedesignsolutions.com/Instruction/BlendedLearning.htm.

Instructional hierarchy: linking stages of learning to effective instructional techniques. (n.d.) from Intervention Central. Retrieved January 27, 2012 from <a href="http://www.interventioncentral.org/academic-interventions/general-academic/instructional-hierarchy-linking-stages-learning-effective-in.">http://www.interventioncentral.org/academic-interventions/general-academic/instructional-hierarchy-linking-stages-learning-effective-in.</a>

Leise, C. (2009) *Paper dialogue: life enrichment domain: learning skills*. Retrieved February 6, 2012 from <a href="http://www.processeducation.org/peconf09proceedings-paper-leise.pdf">http://www.processeducation.org/peconf09proceedings-paper-leise.pdf</a>.

Malamed, C. (n.d.) *Long term memory: a users guide*. Retrieved February 6, 2012 from <a href="http://theelearningcoach.com/learning/long-term-memory-and-learning/">http://theelearningcoach.com/learning/long-term-memory-and-learning/</a>.

Malamed, C. (n.d.) What is cognitive load? Retrieved February 12, 2012 from <a href="http://theelearningcoach.com/learning/what-is-cognitive-load/">http://theelearningcoach.com/learning/what-is-cognitive-load/</a>.





Mezirow, J. (1991) *Transformative dimensions of adult learning*. San Francisco, John Wiley & Sons.

Mezirow, J. (2003) *Epistemology of transformative learning*. Retrieved February 2, 2012 from

http://www.transformativelearning.org/index/Mezirow\_EpistemologyTLC.pdf.

Miller, M. (n.d.) *Teaching and learning in affective domain*. Retrieved January 27, 2012 from

http://projects.coe.uga.edu/epltt/index.php?title=Teaching and Learning in Aff ective Domain.

MindTools (n.d.) *The futures wheel.* Retrieved February 2, 2012 from <a href="http://www.mindtools.com/pages/article/futures-wheel.htm">http://www.mindtools.com/pages/article/futures-wheel.htm</a>.

Sasikumar, M. (n.d.) *Instruction design and e-learning: issues and challenges*. Retrieved February 12, 2012 from <a href="http://thelittlesasi.wikidot.com/inst-design-hvd">http://thelittlesasi.wikidot.com/inst-design-hvd</a>.

Schema theory (drawn from D'Andrade 1995) Retrieved February 2, 2012 from <a href="http://www.analytictech.com/mb870/schema.htm">http://www.analytictech.com/mb870/schema.htm</a>.

Schema theory of learning (1998) Retrieved February 2, 2012 from <a href="http://www.sil.org/lingualinks/literacy/implementaliteracyprogram/schematheory">http://www.sil.org/lingualinks/literacy/implementaliteracyprogram/schematheory</a> oflearning.htm.

Siemans, G. (2005) Connectivism: meaning making, learning, subjectivity (n.d.) Retrieved February 12, 2012 from <a href="http://www.connectivism.ca/?p=47">http://www.connectivism.ca/?p=47</a>.

Troha, F. J. (2002). *Bulletproof instructional design: a model for blended learning*. Retrieved January 27, 2012 from <a href="http://www.usdla.org/html/journal/MAY02">http://www.usdla.org/html/journal/MAY02</a> Issue/article03.html.

Velasquez, M., et. al. (1996) *Thinking ethically: a framework for moral decision making*. Retrieved January 31, 2012 from <a href="http://www.scu.edu/ethics/practicing/decision/thinking.html">http://www.scu.edu/ethics/practicing/decision/thinking.html</a>.

Watkins, R., et. al. (2012) *A guide to assessing needs*. Retrieved February 2, 2012 from <a href="http://www.scribd.com/WorldBankPublications/d/78498430-A-Guide-to-Assessing-Needs">http://www.scribd.com/WorldBankPublications/d/78498430-A-Guide-to-Assessing-Needs</a>.