

INTEGRATED COURSE DESIGN FOR SIGNIFICANT LEARNING

A Workshop Offered by:

DEE FINK & ASSOCIATES 
DESIGNING COURSES FOR SIGNIFICANT LEARNING

University of Tennessee, Martin
August 21, 2013
Facilitator: Peg Weissinger, EdD

Goals for this Workshop

Not only will you be **persuaded** that course design is the single most important component you can learn about college teaching. . .

but that you acquire the knowledge and tools to design your courses *more intentionally* to achieve a high level of **SIGNIFICANT LEARNING** among your students.

Workshop Outcomes

Domain for Significant Learning	Outcome: <i>By the end of this full day workshop, participants will:</i>
FOUNDATION KNOWLEDGE	Internalize the principles of Integrated Course Design and offer rationale for its use.
APPLICATION	Using the principles of Integrated Course Design, design (and begin development or revision of) a course with the goal of achieving a high level of significant learning among adult learners.
INTEGRATION	Identify & critically review suitable tools, appropriate procedures, and sections of current course content that can be adapted for use in a new/redesigned course.

Workshop Outcomes

Domain for Significant Learning	Outcome: <i>By the end of this full day workshop, participants will:</i>
HUMAN DIMENSION	Self: Be more confident that you can do this. Others: Foster relationships with colleagues to create more powerful designs.
CARING	Acknowledge the value of good course design in the teaching/learning process. In role of leader and advocate, explore feasibility of recommended changes (based in theory) for improved course design.
LEARNING HOW TO LEARN	Gain insight into the best practices for course design. Synthesize adult learning theory in a way that promotes personal understanding. Articulate next steps (post workshop) for individual course design project.

Workshop Agenda

- ✓ Welcome, Workshop Goals, & Agenda
- ✓ Introduction to Integrated Course Design
 - *Paradigm Shift: Teaching, Learning, and Course Design*
 - *Adult Learning Theory*
 - *IF-AT Quiz on Integrated Course Design*
- ✓ Taxonomy of Significant Learning
- ✓ Model of Integrated Course Design
 - *Developing Learning Goals/Student Learning Outcomes for Significant Learning*
 - *Alignment: Learning Goals/Student Outcomes, Assessment Strategies, and Activities*
 - *Situational Factors and Andragogical Challenges*
- ✓ Questions & Summary

Introductions

Turn to the People Around you!

- ✓ Name
- ✓ Department/Discipline
- ✓ Years of teaching experience
- ✓ One specific goal for this workshop

Paradigm Shift in College Teaching

- ✓ WHAT students learn
- ✓ HOW students learn
- ✓ ***WHAT should faculty be doing?***





Paradigm Shift in College Teaching

Teaching  Learning

- ✓ What is the difference?
- ✓ Leads to new questions about our work as teachers and as designers of instruction.
- ✓ ***WHAT should we be doing?***

Good Learning Experiences

Think back to a time when you were involved in a really good learning experience

- ✓ Briefly describe the experience.
- ✓ What made it so successful?

Jot notes. Then will share.

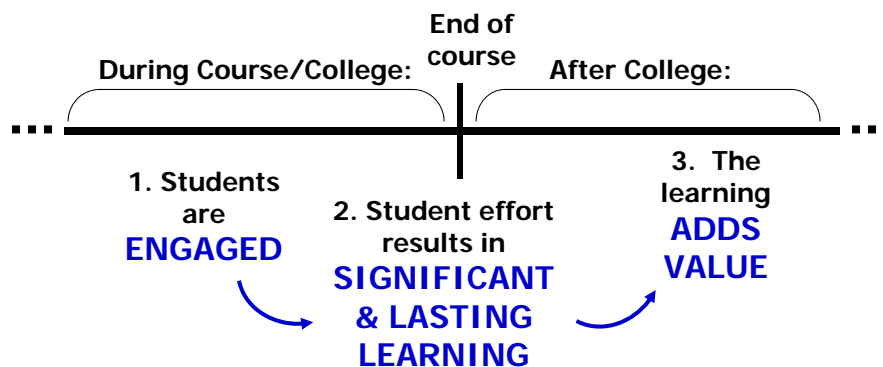
- ✓ Next, list the elements on the chart tablet and post.
- ✓ Verbally share the top 3 elements.

This is your benchmark.

In your design phase, these are the criteria against what you will measure your learning experience.

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Three Features of a High Quality Learning Experience





“Algebra class will be important to you later in life because there’s going to be a test six weeks from now.”

Five Minute University



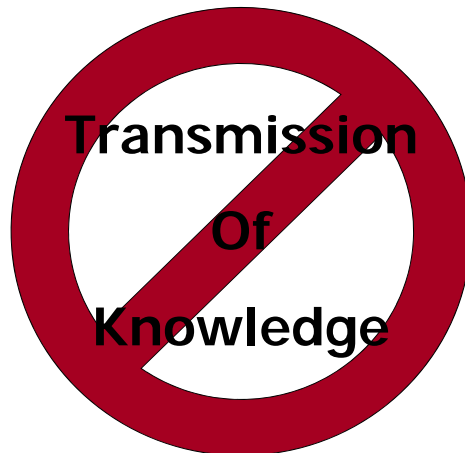
Paradigm Shift in College Teaching

Teaching  Learning

- ✓ What is the difference?
- ✓ Leads to new questions about our work as teachers.
- ✓ ***WHAT should we be doing?***
- ✓ ***HOW do students learn?***

How do People Learn?

- ✓ Content Focus has a “short half-life”



How do People Learn?

- ✓ Transmit knowledge?
- ✓ Constructivism

Constructivist View of Learning

- ✓ We can transmit “INFORMATION.”
- ✓ But people have to take that information and **CONSTRUCT** their own understanding of it, and figure out what they can do with it.

How do People Learn?

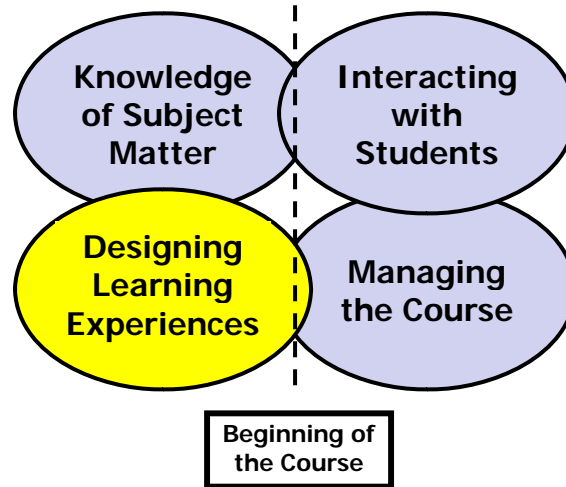
- ✓ Transmit knowledge?
- ✓ Constructivism
- ✓ Social Constructivism



Social Constructivism

- ✓ We *can* construct our understanding of anything by ourselves, but...
- ✓ it usually works much better to **collaborate and dialogue with others**

Fundamental Tasks of Teaching



TASK: Take the Quiz

- ✓ Envelope
- ✓ 10 Question Quiz on Pre-reading
- ✓ Complete as Individual
- ✓ Break

Readiness Assurance Test (RAT)

































www.epsteineducation.com

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF AT®)

Name _____ Test # _____

Subject _____ Total _____

SCRATCH OFF COVERING TO EXPOSE ANSWER

	A	B	C	D	Score
1.					5
2.					5
3.					3
4.					—
5.					—
6.					—
7.					—
8.					—

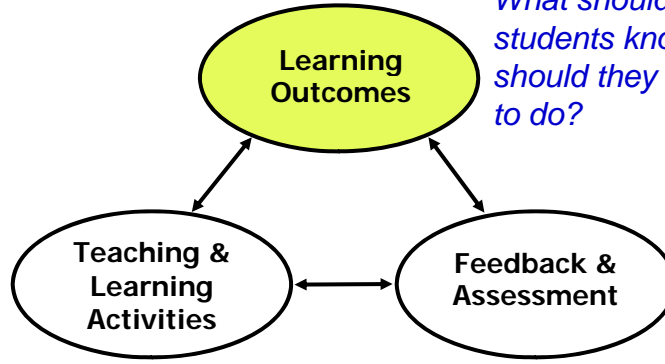
First try = 5 pts.
Second = 3 pts.
Third = 2 pts.
Fourth = 1 pt.
Fifth = 0

Three Ways of Instruction

- ✓ “List of Topics”
- ✓ “List of Activities”
- ✓ Need a way of designing instruction that is:
 1. *Systematic*
 2. *Integrated*
 3. *Learning-Centered*

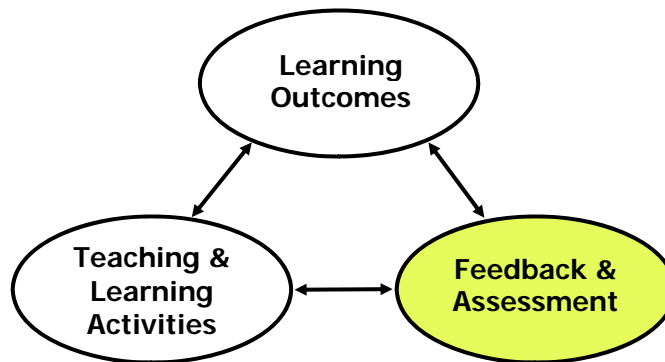
Integrated Course Design

What should my students know? What should they be able to do?



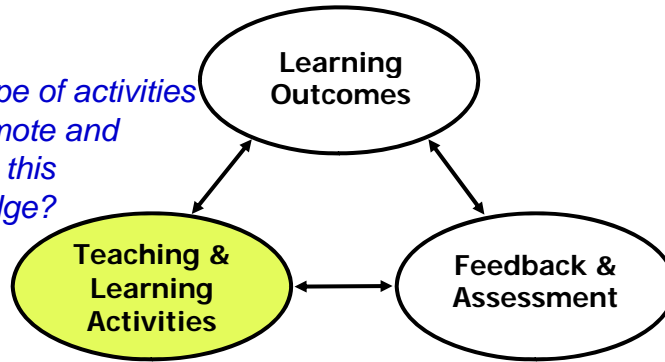
Integrated Course Design

How will I know that they have achieved the outcomes?



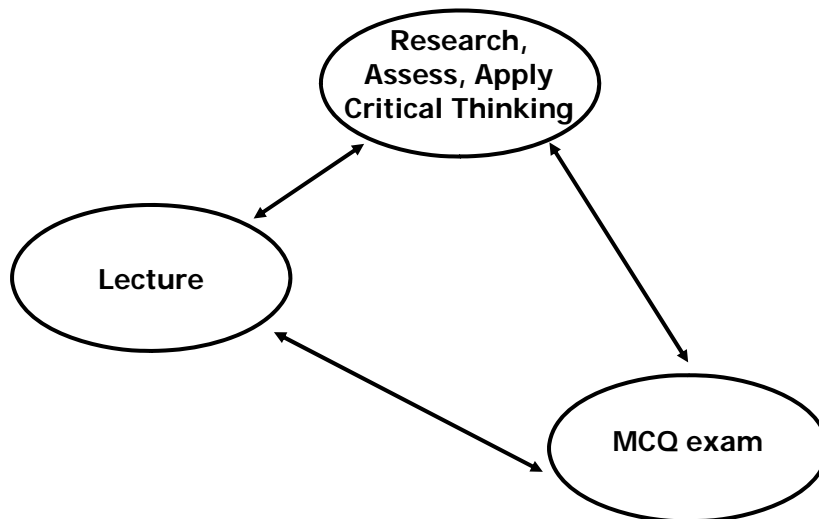
Integrated Course Design

What type of activities will promote and develop this knowledge?



What type of activities can help students achieve the learning outcomes?

Integrated Course Design

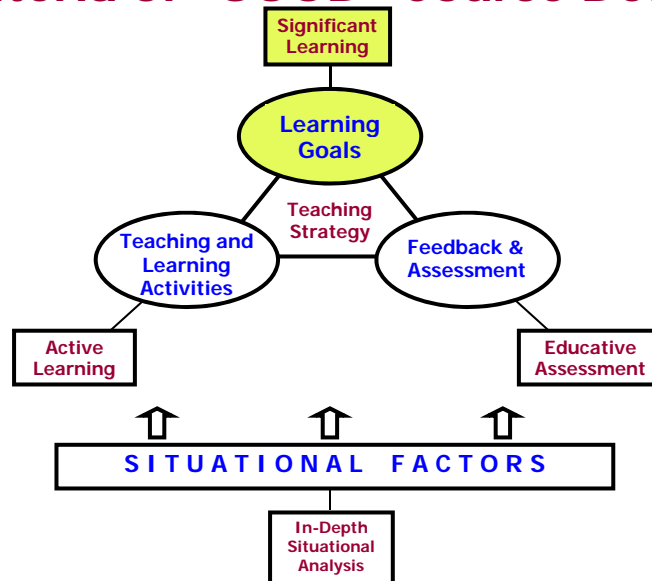


Faculty Dreams

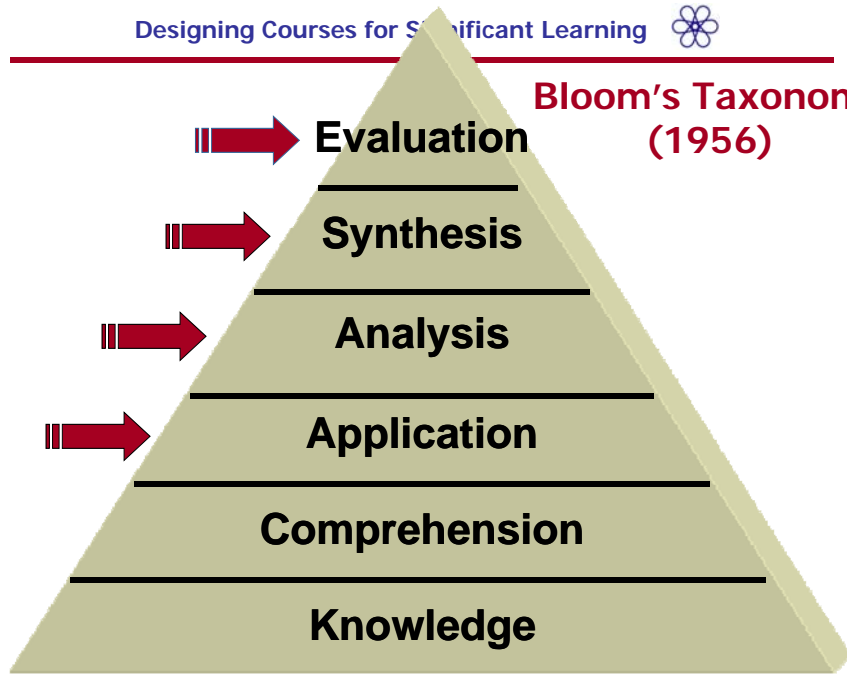
If you had a class that could and would learn anything and everything you wanted them to learn:

Q: What is it that you would really like them to learn? What would you want to know they could do long-term because they were in YOUR course?

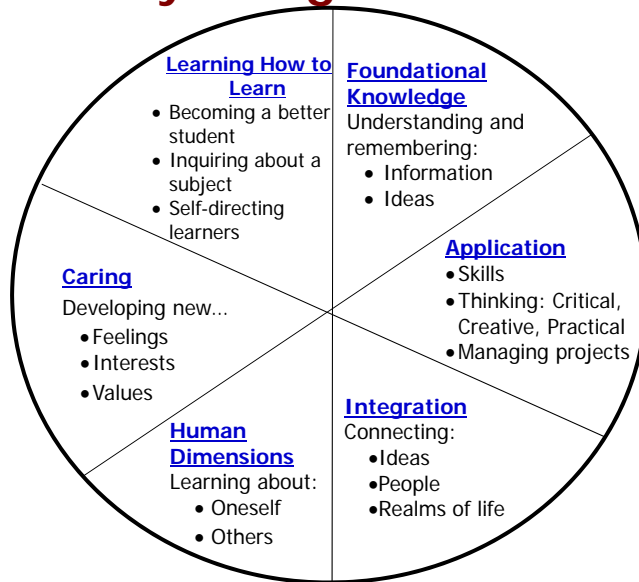
Criteria of "GOOD" Course Design



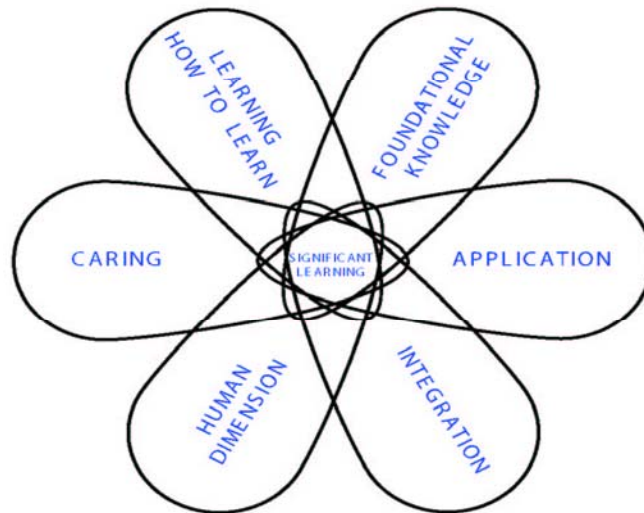
Bloom's Taxonomy (1956)



Taxonomy of Significant Learning



Taxonomy of Significant Learning



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Foundational Knowledge

- ✓ What key **information** (e.g., facts, terms, formulae, concepts, principles, relationships, etc.) is/are important for students to **understand and remember** in the future?
- ✓ What key **ideas** (or perspectives) are important for students to understand in this course?

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Application

- ✓ What kinds of **thinking** are important for students to learn?
- ✓ **Critical thinking**, in which students analyze and evaluate
- ✓ **Creative thinking**, in which students imagine and create
- ✓ **Practical thinking**, in which students solve problems and make decisions
- ✓ What important **skills** do students need to gain?
- ✓ Do students need to learn how to **manage complex projects**?

Integration

- ✓ What **connections** (similarities and interactions) should students recognize and make:
 1. Among ideas **within** this course?
 2. Among the information, ideas, and perspectives in this course and those **in other courses or areas**?
 3. Among material in this course and the **learners' own personal, social, and/or work life**?

Human Dimension

- ✓ What could or should students learn about **themselves**?
- ✓ What could or should students learn about **understanding others** and/or **interacting with them**?

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Caring

- ✓ What **changes/values** do you hope students will adopt?
- ✓ Feelings?
- ✓ Interests?
- ✓ Ideas?

Learning How to Learn

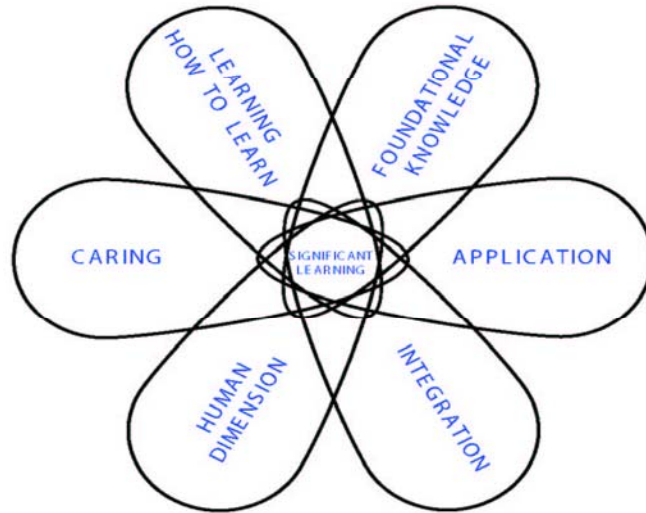
What would you like for students to learn about:

1. How to be good students in a course like this?
2. How to learn about this particular subject?
3. how to become a self-directed learner of this subject, i.e., having a learning agenda of what they need/want to learn, and a plan for learning it?

In a course with **significant learning**, students will:

1. **Understand and remember** the key concepts, terms, relationship, etc.
2. Know how to **use** the content.
3. Be able to **relate** this subject to other subjects.
4. Understand the **personal and social** implications of knowing about this subject.
5. **Value** this subject and further learning about it.
6. Know how to **keep on learning** about this subject, after the course is over.

Taxonomy of Significant Learning



Three Column Table Learning Goals - see handout



Three Column Table Learning Goals - see handout

Learning Goals	Assessment Activities	Learning Activities

Writing Learning Goals

- ✓ Select one course you are designing and write **2 learning goals** using Fink's Taxonomy
 - Write one Foundation or Application level objective
 - Write a second from one of the other four domains
- ✓ Use the following preface:
“By the end of this course, the students will . . .”
- ✓ Pay attention to the verb!
- ✓ Make it concrete and specific.

Sample Verbs

Foundational Knowledge	Application	Integration	Human Dimension	Caring	Learning how to Learn
Remember Identify List	Use Critique Manage Solve Judge Imagine Analyze Calculate Create Coordinate	Connect Identify the interaction between. . . Identify the similarities between. . . Relate Compare Integrate	Come to see themselves as. . . Decide to become. . . Interact with others regarding. . . Work in teams on...	Get excited about. . . Be ready to . . . Be more interested in. Value. . .	Create a plan for future learning about. . . Identify important sources of info. . . Formulate useful questions about. . .

Reference: R. K. Noyd, *A Primer on Writing Effective Learning-Centered Course Goals*

Destination!

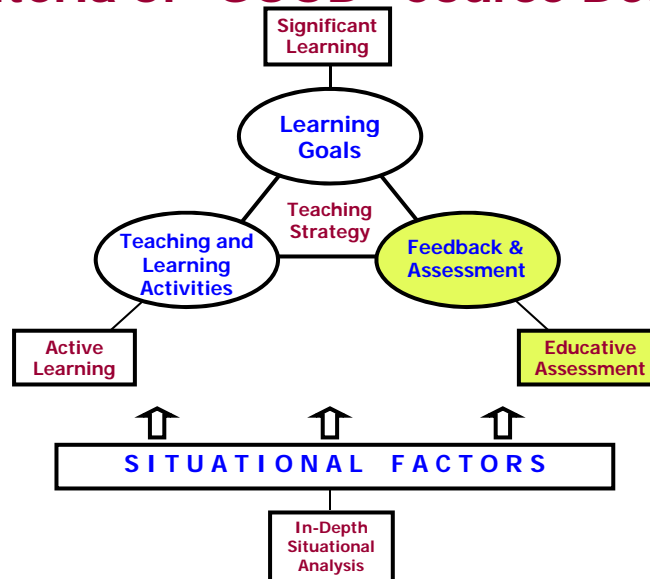


To Summarize: Why Objectives?

Added Benefits

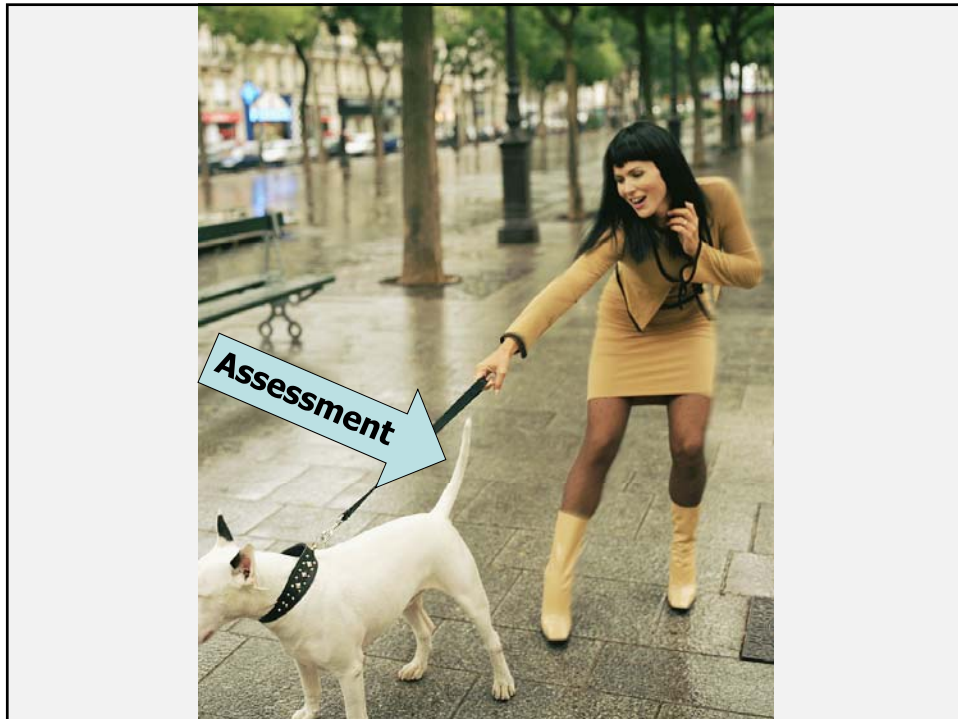
- ✓ Build a foundation for the course
- ✓ Organize central course concepts
- ✓ Eliminate unnecessary content
- ✓ Provide a map for faculty and for students
- ✓ Form the basis for assessment
- ✓ **Well-defined objectives with measurable components are easier to assess and easier to link to competencies.**

Criteria of "GOOD" Course Design

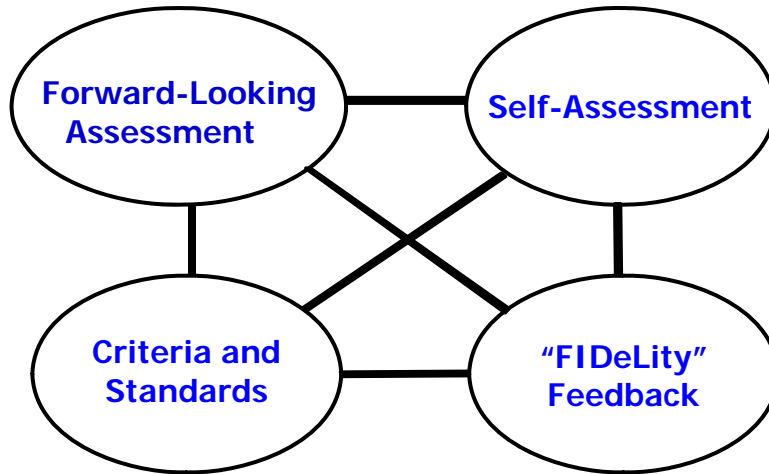


Assessment?

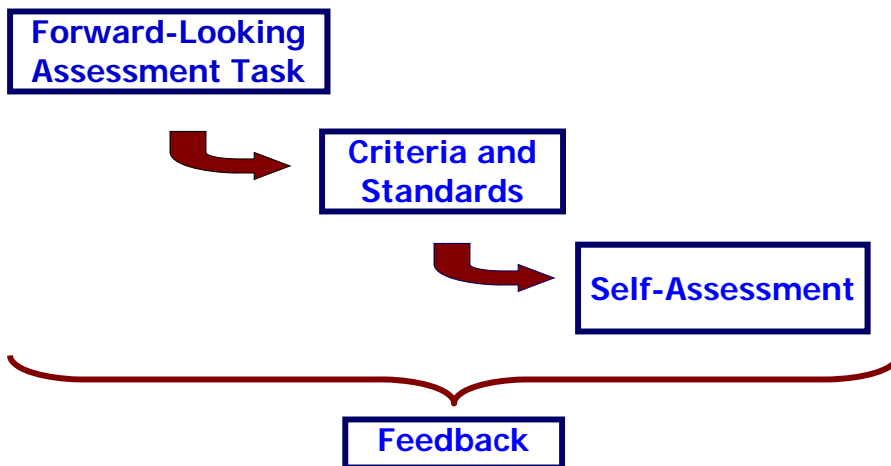
- ✓ What is assessment?
- ✓ Why do we assess?



Feedback and Assessment: "Educative Assessment"



Feedback and Assessment: "Educative Assessment"



Forward Looking Assessment

- ✓ Focus on what learners should be able to **DO** in the future.
- ✓ Learners imagine themselves in a situation where people are actually using this knowledge.
- ✓ Create assignments and tests that require judgment/exploration rather than reciting or restating facts.
- ✓ Focus on real-life context
- ✓ Focus assessment on integrated use of skills

TASK: Develop Forward Looking Assessment

- ✓ Assessment Activity
- ✓ Take a few minutes to analyze the type of assessments you do in your course.
- ✓ Write down a list of forward looking assessments you already use.
- ✓ Think of at least one forward looking assessment you could create for your course.

Feedback and Assessment: “Educative Assessment”

Forward-Looking
Assessment Task



Criteria and
Standards



Self-Assessment



Feedback

Criteria and Standards

- ✓ Clear and appropriate assessment criteria and standards are necessary.
- ✓ Develop **rubrics** when possible and construct a 2-5 point scale with descriptive statements of good and poor versions of traits

What is a Rubric?

- ✓ A rubric is a **protocol for grading** based on:
 - the critical components/criteria
 - and a scale for each.
- ✓ You grade by identifying the level attained with reference to the work.
- ✓ Those distinctions are then translated into scales for scoring performance.

-Emily Hixon, IUPUI (2005)

Why Rubrics are Powerful

- ✓ Focuses assessment on quality of work vs. “points” awarded (e.g. 15/20 points or 75%)
- ✓ Creates a climate of **consistency and fairness**
- ✓ For teachers –
 - Clarifies **criteria/expectations** for student work quality
- ✓ For students –
 - **Communicates** those criteria to students
 - Provide **feedback** on those criteria to students
 - Enables students to **assess their own** work

-Adapted from Ken Duckworth & Diane Billings, IUPUI (2002)

Getting Started with Rubrics

- ✓ What is the assignment?
- ✓ What are the key components/criteria of the assignment?
- ✓ What are the standards of achievement for the assignment?

Steps in developing a holistic rubric

Criteria	Unacceptable/ Does not meet expectations	Satisfactory / Meets expectations	Outstanding/ Exceeds Expectations
Important component of quality of student work	Description of poor work for each criterion	Description of good work for each criterion	Description of excellent work in terms of each criterion





Rubric – Example

Criterion	Unacceptable/ Does not meet expectations	Satisfactory / Meets expectations	Outstanding/ Exceeds Expectations
Voice Quality during online YouTube presentation	Spoke too softly. Spoke too quickly. Did not pause to emphasize points	Spoke loudly and clearly. Occasionally used pauses to emphasize points and/or check understanding.	Spoke loudly and clearly. Consistently used pauses to emphasize points and/or check understanding.



Rubric – Example

Criterion	Unacceptable/ Does not meet expectations	Satisfactory / Meets expectations	Outstanding/ Exceeds Expectations
Organization of presentation	Presentation appeared disorganized. No clear introduction Provided no closure at end via a summary statement.	Presentation was organized; included opening introduction and closing summary, but not both	Presentation well-organized; provided both introduction and summary/closure at the end

Feedback and Assessment: “Educative Assessment”

Forward-Looking
Assessment Task



Criteria and
Standards



Self-Assessment



Feedback

Self Assessment

- ✓ Create multiple opportunities for students to engage in self-assessment of their performance.
- ✓ Students need to identify relevant criteria for assessing their work and the work of others.
- ✓ Students need guidance & practice using the criteria for quality on their own work.



Am I on target?



Critical Incident Questionnaire Stephen Brookfield

During last 5 minutes of final class of the week students answer the following questions:

1. Most engaged moment as learner
2. Most distanced moment as learner
3. Most helpful action of professor and/or peer
4. Most puzzling action of professor and/or peer
5. What surprised you most

Teacher summarizes answers at the beginning of the first class of the next week.

FIDeLity Feedback

- ✓ Frequent
- ✓ Immediate
- ✓ Discriminating (based on criteria and standards)
- ✓ Lovingly or supportive approach used

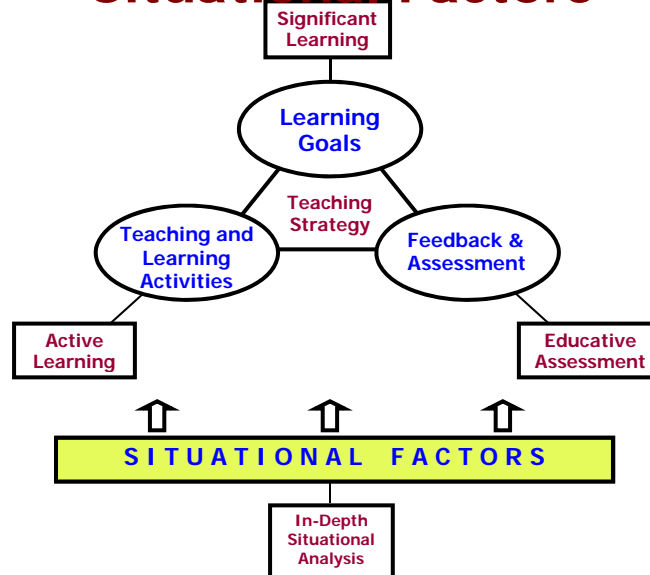
Three Column Table Assessment — see handout



Three Column Table Assessment — see handout

Learning Goals	Assessment Activities	Learning Activities

Situational Factors



Situational Factors

Collecting information about...

- ✓ **Specific Context** of the Teaching/Learning Situation
 - Number of students
 - Level of course
 - Nature of the course (required or elective; for majors or non-majors)
 - Time structure
 - Placement within the program curriculum
 - Delivery

Situational Factors

Collecting information about...

✓ **Expectations** placed on this course or curriculum by:

Internal Influences - Institution

- Mission
- Governance
- Resource availability
- Technical infrastructure
- Opportunities for faculty development

Situational Factors

Collecting information about...

✓ **Expectations** placed on this course or curriculum by:

Internal Influences - Department

- Leadership
- Selection and sequencing of content
- Background of faculty (disciplinary training)
- Student characteristics
- Opportunity for release time to focus on course redesign

Situational Factors

Collecting information about...

- ✓ **Expectations** placed on this course or curriculum by:

External Influences

- Society
- Federal Oversight
- Institutional Accreditation
- State Review

Situational Factors

Collecting information about...

- ✓ **Nature of the Subject**
 - Theoretical, practical, or combination?
 - Convergent or divergent?
 - Important changes or controversies occurring?

Situational Factors

Collecting information about...

- ✓ Characteristics of the **Learners**
 - Life situation (e.g., working, family, professional goals)
 - Prior knowledge, experiences, and initial feelings
 - Personal learning goals, expectations, and learning preferences

Situational Factors

Collecting information about...

- ✓ Characteristics of the **Teacher (Me!)**
 - My attitude toward the subject and the students
 - My values/beliefs about teaching and how students learn
 - My teaching skills
 - My level of knowledge or familiarity with this subject

Situational Factors

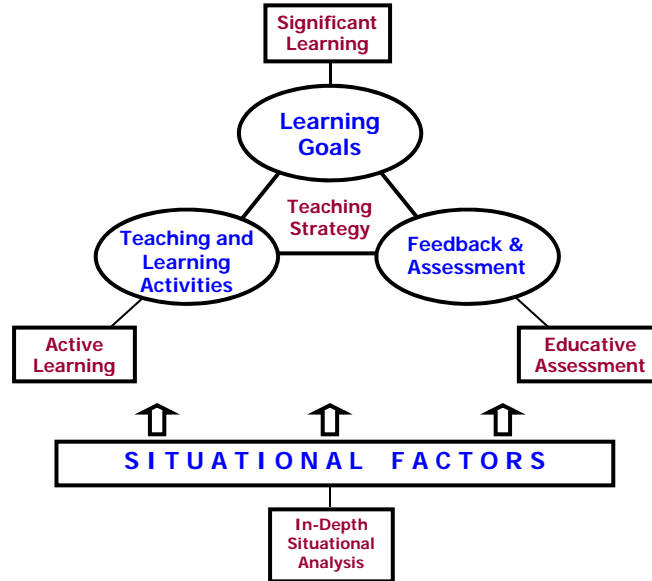
Collecting information about...

- ✓ Specific Context
- ✓ Expectations by people outside the course
- ✓ Nature of the Subject
- ✓ Characteristics of Learners
- ✓ Nature of Teacher

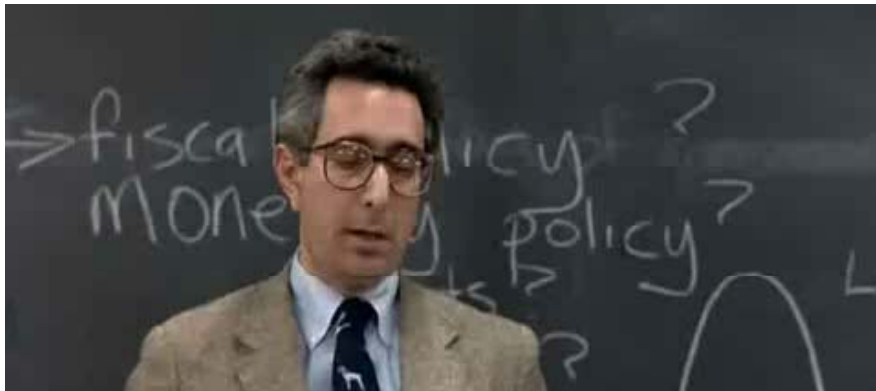
What is YOUR special pedagogical challenge in teaching YOUR course?



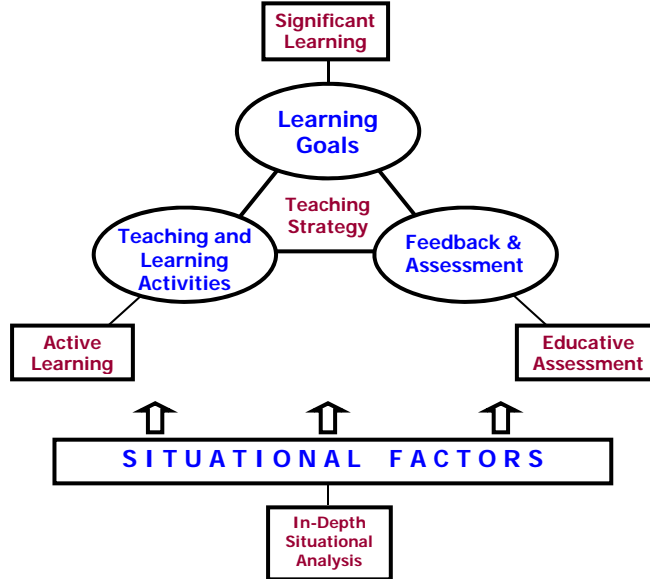
Criteria of "GOOD" Course Design



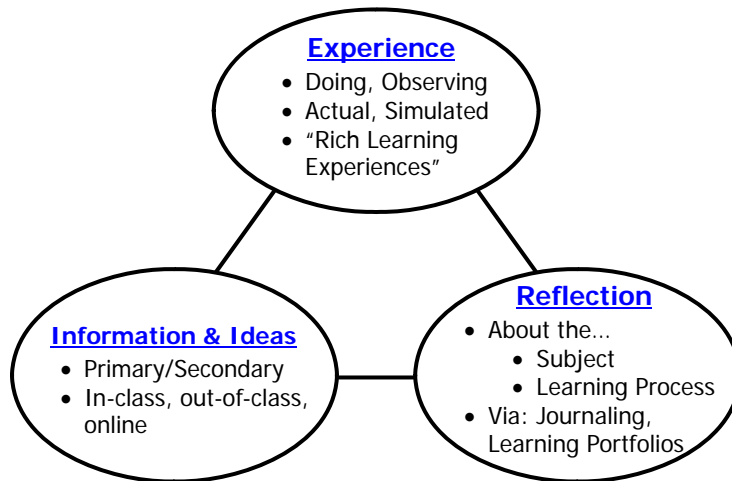
Why Use Active Learning Strategies in the Classroom?



Criteria of "GOOD" Course Design



Holistic Active Learning



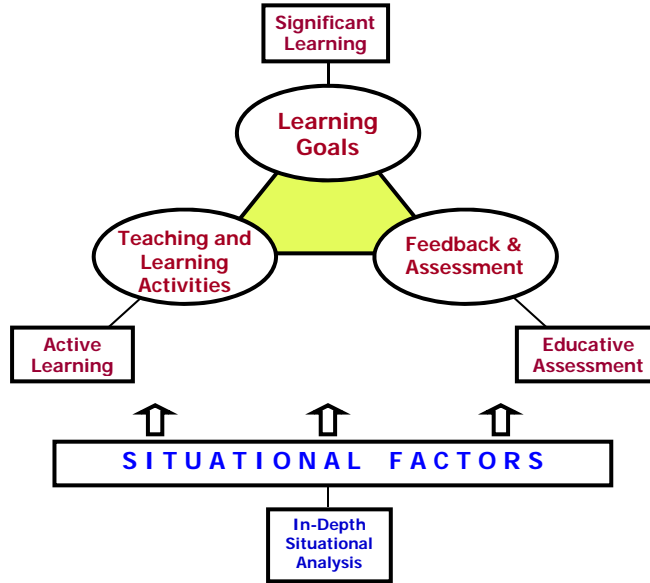
Multiple Activities that Promote ACTIVE LEARNING

	GETTING INFORMATION & IDEAS	EXPERIENCE		REFLECTIVE DIALOGUE, with:	
		"Doing"	"Observing"	Self	Others
DIRECT	<ul style="list-style-type: none"> Original data Original sources 	<ul style="list-style-type: none"> Real Doing, in authentic settings 	<ul style="list-style-type: none"> Direct observation of phenomena 	<ul style="list-style-type: none"> Reflective thinking Journaling 	<ul style="list-style-type: none"> Live dialogue (in or out of class)
INDIRECT, VICARIOUS	<ul style="list-style-type: none"> Secondary data and sources Lectures, textbooks 	<ul style="list-style-type: none"> Case studies Gaming, Simulations Role play 	<ul style="list-style-type: none"> Stories (can be accessed via: film, literature, oral history) 		
ONLINE	<ul style="list-style-type: none"> Course website Internet 	<ul style="list-style-type: none"> Teacher can assign students to "directly experience" ... Students can engage in "indirect" kinds of experience online 		<ul style="list-style-type: none"> Students can reflect, and then engage in various kinds of dialogue online. 	

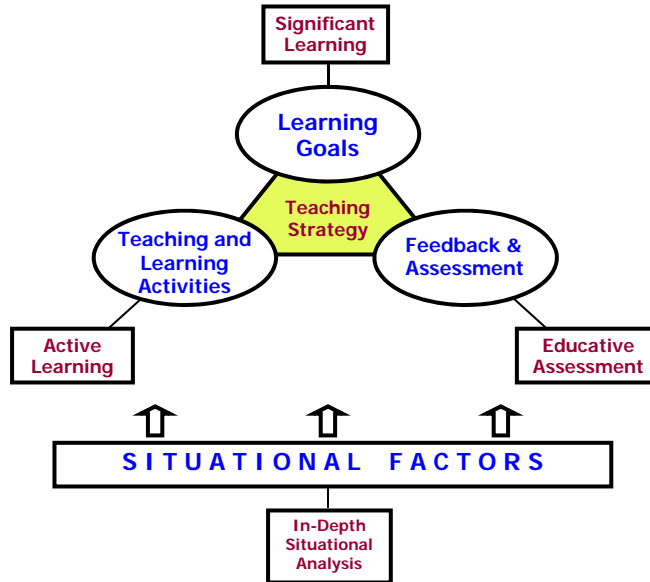
Rich Learning Experiences

- ✓ *What are they?*
- ✓ Learning experiences in which students are able to *simultaneously* acquire *multiple* kinds of higher level learning.

Integration of Components



Criteria of "GOOD" Course Design



Instructional Methods

Components	Instructional Strategies
<i>Pre-instructional activities</i>	Gain learners attention to help motivate them
<i>Information presentation</i>	Provide learners with a way of understanding information
<i>Activation of learning</i>	Activities that allow learners to apply information
<i>Assessment of learning</i>	Have learners demonstrate their understanding of content
<i>Follow-up and remediation</i>	Practice and feedback

Jolliffe, Ritter, & Stevens, 2001

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Jolliffe, Ritter, & Stevens, 2001

Attention

- ✓ Pre-motivational activities
- ✓ What are you doing to stimulate interest?
- ✓ Possibilities include
 - ✓ real life problems
 - ✓ examples
 - ✓ stories
 - ✓ listing learning objectives
 - ✓ asking students about their current understanding

Instructional Methods

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Jolliffe, Ritter, & Stevens, 2001

Some Examples

Whole Class	Outside of Class
<ul style="list-style-type: none"> ✓ Debates ✓ Role playing ✓ Simulations ✓ Dramatizations 	<ul style="list-style-type: none"> ✓ Service learning ✓ Situational observations ✓ Authentic projects

Three Column Table Rich Learning Experiences



Three Column Table Rich Learning Experiences

Learning Goals	Assessment Activities	Learning Activities

TASK: 1-2 Rich Learning Experiences

Integrating the Course

1. Three-Column Table
2. Weekly Schedule
3. Teaching Strategy
4. String of Activities

Integrating Your Course

Make sure the three components reinforce and support each other.

Use a 3-column table to ensure this.

Learning Goals	Feedback & Assessment	Activities
1.		
2.		
3.		



Legal Issues in Accounting Course

Learning How to Learn Goal

- ✓ Students will be able to do research to assess and apply court cases to legal issues.

Feedback & Assessment

- ✓ Student will draft a Team problem that requires research in legal databases

Activities

- ✓ Students interview someone who uses contracts on a daily basis – afterwards students do a double entry journal. Students must do research on legal cases and apply those results to new cases they must decide.

Teaching Strategy

A particular **COMBINATION** of learning activities arranged in a particular **SEQUENCE**.

“CASTLE-TOP” Diagram

A Tool for Identifying Your
TEACHING STRATEGY

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6
Whole-group Activities	?	?				Assessm't & Feedback
Individual Activities:		?	?			

Teaching Strategies

Whole group:	Video Lecture	Case Study	Synchronous Discussion	Exam
Individual Activity		Read text	Homework exercises	Review

QUESTION:

- ✓ This strategy creates a high likelihood that most students will...
1. Be **exposed to** the content.
 2. **Understand** the content.
 3. Be able to **use** the content.
 4. **Value** the content.

Teaching Strategies

Whole Group:	Readiness Assurance Test: • Individual • Group	Application problems (Small Groups)	Exam: • Content • <u>Application</u> Culminating Project
Ind:	Read text	Homework exercises	Review

QUESTION:

- ✓ This strategy creates a high likelihood that most students will...
 1. Be *exposed* to the content.
 2. *Understand* the content.
 3. Be able to *use* the content.
 4. *Value* the content.

Summary

- ✓ Integrated Course Design
 - Paradigm Shift: Issues in teaching and learning related to course design
 - Adult Learning Theory
- ✓ Taxonomy of Significant Learning
- ✓ Model of Integrated Course Design
 - Learning Goals/Outcomes for Significant Learning
 - Feedback and Assessment Strategies
 - Rich Learning Experiences
 - Situational Factors and Andragogical Challenges

Workshop Outcomes

Domain for Significant Learning	Outcome: <i>By the end of this full day workshop, participants will:</i>
FOUNDATION KNOWLEDGE	Investigate and internalize the principles of Integrated Course Design and offer rationale for its use.
APPLICATION	Using the principles of Integrated Course Design, design (and begin development or revision of) a course with the goal of achieving a high level of significant learning among adult learners.
INTEGRATION	Critically review suitable tools, appropriate procedures, and sections of current course content that can be adapted for use in a new/redesigned course.

Workshop Outcomes

Domain for Significant Learning	Outcome: <i>By the end of this full day workshop, participants will:</i>
HUMAN DIMENSION	Self: Be more confident that you can do this. Others: Foster relationships with colleagues to create more powerful designs.
CARING	Acknowledge the value of good course design in the teaching/learning process In role of leader and advocate, explore feasibility of recommended changes (based in theory) for improved course design.
LEARNING HOW TO LEARN	Gain insight into the best practices for course design. Synthesize adult learning theory in a way that promotes personal understanding. Identify what else you want to learn about (after the workshop).

Designing Courses for Significant Learning 

INTEGRATED COURSE DESIGN FOR SIGNIFICANT LEARNING

A Workshop Offered by:

DEE FINK & ASSOCIATES 
DESIGNING COURSES FOR SIGNIFICANT LEARNING

Thank you!