Integrated Course Design to Improve Student Learning

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Faculty Development and Instructional Design Center
Agenda for the Workshop

• Big picture of teaching – place of ‘course design’
• Defining ‘Significant Learning’ experiencing
• Integrated Course Design
  – Situational Factors
  – Learning Goals
  – Feedback and Assessment
  – Teaching/Learning Activities
  – Making your Course Integrated

• Group and Individual Activities (interspersed)

• Wrap-up
Overview
Integrated Course Design (ICD)

Daniel Cabrera
Multimedia Coordinator
1. **Foundation Knowledge.** Understand the basic terms and concepts

2. **Application.** Be able to use the model of Integrated Course Design (ICD)

3. **Integration.** Identify the relationship between what you are doing now as a instructor and the ideas of ICD
4. Human Dimension.
   • SELF: Be more confident that you can do this
   • OTHERS: Work with others to create more powerful designs

5. Caring. Identify the value of course design in teaching

6. Learning How to Learn. Know what else you want to learn about course design – and how to learn that
From: “TEACHING”

To: “LEARNING”

• What is the difference?

• Leads to new questions about our work as instructors.
## Old and New Paradigms for College Teaching

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Old Paradigm</th>
<th>New Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>Transfer from faculty to students</td>
<td>Jointly constructed by students and faculty</td>
</tr>
<tr>
<td>Mode of Learning</td>
<td>Passive Vessel</td>
<td>Active constructor</td>
</tr>
<tr>
<td>Faculty Purpose</td>
<td>Memorizing</td>
<td>Relating</td>
</tr>
<tr>
<td>Student Growth, Goals</td>
<td>Classify and Sort Students</td>
<td>Develop student competencies and talents</td>
</tr>
<tr>
<td>Relationships</td>
<td>Students strive to complete requirements</td>
<td>Students strive to focus on continual lifelong learning</td>
</tr>
<tr>
<td></td>
<td>Impersonal relationship among students and between faculty/students</td>
<td>Personal relationship among students and between faculty / students</td>
</tr>
</tbody>
</table>
# Old and New Paradigms for College Teaching

<table>
<thead>
<tr>
<th>Context</th>
<th>Old Paradigm</th>
<th>New Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>• Competitive, individualistic</td>
<td>• Cooperative learning in classroom, cooperative teams among faculty</td>
</tr>
<tr>
<td>Epistemology</td>
<td>• Faculty holds and exercises power, control</td>
<td>• Students are empowered; shared among students, betwn students / faculty</td>
</tr>
<tr>
<td>Technology Use</td>
<td>• Reductionist; facts and memorization</td>
<td>• Constructivist; inquiry and invention</td>
</tr>
<tr>
<td></td>
<td>• Drill and practice, textbook substitute; chalk-and-talk substitute</td>
<td>• Problem solving, communication, collaboration, information access, expression</td>
</tr>
<tr>
<td>Teaching Assumption</td>
<td>• Any expert can teach</td>
<td>• Teaching is complex requires training</td>
</tr>
</tbody>
</table>
3 FEATURES OF A HIGH QUALITY LEARNING EXPERIENCE

During Course/College:

1. Students are: **Engaged**

2. Students effort results in: **Significant and Lasting Learning**

End of Course

After College

3. The learning: **Adds Value**
Fundamental Tasks of Teaching

- Knowledge of the Subject Matter
- Interacting with Students
- Designing Learning Experiences
- Managing the Course

Beginning of the Course
What is the Place of Course Design?

- Mission and Purpose
- Teaching and Learning Structures
- Learning Theory
- Nature of Roles
Three Common Problems

• **Lack of Interest:** “Students are bored with my class and lose interest quickly.”

• **Poor Preparation:** “Students don’t do the assigned readings before class.”

• **Poor Retention of Learning:** “Students do well on the test, but on the next test or in the next course, they seem to forget everything they learned earlier.”
Lack of Interest

• Enhance teachers lecturing skills
  – limited effectiveness
  – Faculty want students to achieve higher kinds of learning

• Use more materials from ‘cutting edge’ research

• Re-design the course to replace lecturing with more active learning
Poor Student Preparation

- Assign more severe penalties for not doing the readings beforehand
- Give students a pep talk
- Re-design the course to give students a reason to do the readings
Poor Retention of Learning

- Make the tests better (or tougher)
- Require the students to complete a refresher course
- Re-design the course to give students more experience with using what they have learned
Three ways of designing a course

1. “List of Topics”

2. “List of Activities”

3. Need a way of designing courses that is:
   - Systematic
   - Integrated
   - Learning-Centered
Significant Learning Experiences

- Enhancing individual life
- Enabling to contribute
- Preparation for work
Important Skills

- Conscientiousness, personal responsibility, dependability
- The ability to act in a principled, ethical fashion
- Skills in oral/written communication
- Interpersonal/team skills
- Skills in critical thinking & solving complex problems
- Respect for people different from oneself
Significant Learning Experiences

• **Process**
  - Engaged
  - High energy

• **Outcome**
  - Significant lasting change
  - Value in life
• In your deepest, fondest dreams, what kind of impact would you most like to have on your students?
Integrated Course Design

Model
Criteria of “GOOD” Course Design

Key Components

Learning Goals

Teaching & Learning Activities

Integration

Feedback & Assessment

Situational Factors
Integrated Course Design Process

1. Situational Factors
2. Learning Goals
3. Feedback and Assessment
4. Teaching/Learning Activities
5. Integration

Reflect and Revise
Criteria of “GOOD” Course Design

- Significant Learning
- Learning Goals
- Teaching & Learning Activities
- Feedback & Assessment

Integration

Situational Factors
In-Depth Situational Analysis
Situational Factors

- Collecting information about…
  - **Specific** Context
  - **Expectations** by people outside the course
  - Nature of the **Subject**
  - Nature of **Students**
  - Nature of **Teacher**
Situational Factors

- **Specific Context of the Teaching/Learning Situation**
  - Number of students
  - Level of course
  - Time structure
  - Delivery: Live - Hybrid - Online
  - In-Depth analysis activity

- **Expectations of Others:**
  - What expectations are placed on this course or curriculum by:
    - Society?
    - The University, College and/or the Department?
    - The Profession?
  - In-Depth analysis activity
Situational Factors

• **Nature of the Subject**
  – Primarily theoretical, practical, or some combination?
  – Convergent or divergent?
  – Important changes or controversies occurring?
  – In-Depth analysis activity

• **Characteristics of the Learners**
  – Their life situation (e.g., working, family, professional goals)?
  – Their prior knowledge, experiences, and initial feelings?
  – Their learning goals, expectations, and preferred learning styles?
  – In-Depth analysis activity
Student Learning Assessment at Northern Illinois University

All colleges and universities use multiple approaches to measure student learning. Many of these are specific to particular disciplines, many are coordinated with accrediting agencies, and many are based on outcomes after students have graduated.

Pilot Project to Measure Core Learning Outcomes

Colleges and universities participating in the College Portrait measure the typical improvement in students' abilities to think, reason, and write using one of three tests. This is part of a pilot project to better understand and compare what students learn between their freshman and senior years at different colleges and universities.

This university is in the process of collecting and analyzing learning outcomes test results.
Experiences at Northern Illinois University

Students who are actively involved in their own learning and development are more likely to be successful in college. Colleges and universities offer students a wide variety of opportunities both inside and outside the classroom to become engaged with new ideas, people, and experiences. Institutions measure the effectiveness of these opportunities in a variety of ways to better understand what types of activities and programs students find the most helpful.

Institutions participating in the VSA program measure student involvement on campus using one of four national surveys. Results from the one survey are reported for a common set of questions selected as part of VSA. Following are the selected results from the National Survey of Student Engagement (NSSE). The questions have been grouped together in categories that are known to contribute to student learning and development. The results reported below are based on the responses of seniors who participated in the survey.

- Evaluation of Experiences
- Survey Administration Process
- Survey Information

Group Learning Experiences

- 93% percent of seniors worked with classmates on assignments outside of class.
- 55% of seniors had the opportunity to work with students from a different major.
Situational Factors

• **Characteristics of the Teacher(s)**
  – My beliefs and values about teaching and learning?
  – My attitude toward: the subject, students?
  – My teaching skills?
  – My level of knowledge or familiarity with this subject?
  – In-Depth analysis activity
Situational Factors

• What is the **special pedagogical challenge** of your selected course?

• Premise -
  • Every course has a special pedagogical challenge.
  • The teacher needs to do something about that challenge in the first week (maybe the first day) of class.
Situational Factors

• Special pedagogical challenge:
  - World Geography: “This is important only if…”
  - Statistics in Psychology: “Only the gods can do statistics…”
  - Modern German History: “All German history is about…”
  - Ethics (medicine, nursing, allied health, public health) – given a dilemma, ethics can tell me what the ‘right’ answer is
Situational Factors

- **Music Appreciation**
  - Course considered by faculty as punishment
  - Classical music is about old, dead, people
  - None of the students liked classical music
  - Overcoming high lack of interest, preconceived notions
  - These challenges were leading the decisions as the course was re-design to make more meaningful
Situational Factors

• What is the **special pedagogical challenge** of your selected course?
Establish the Context
Activity

• Share your in-depth analysis with members of your table
• Share with the larger group
Learning Goals
Criteria of “GOOD” Course Design

Significant Learning

Learning Goals

Teaching & Learning Activities

Integration

Feedback & Assessment

Educative Assessment

Active Learning

Situational Factors

In-Depth Situational Analysis
Fink’s Taxonomy of Significant Learning
Taxonomy of Significant Learning

Learning How to Learn
- Becoming a better student
- Inquiring about a subject
- Self-directing learners

Foundational Knowledge
Understanding and remembering:
- Information
- Ideas

Application
- Skills
- Thinking: Critical, creative, & practical
- Managing projects

Integration
Connecting:
- Ideas
- People
- Realms of life

Human Dimensions
Learning about:
- Oneself
- Others

Caring
Developing new:
- Feelings
- Interests
- Values
Taxonomy of Significant Learning

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Human Dimensions
Learning about:
- Oneself
- Others

Caring
Developing new:
- Feelings
- Interests
- Values
• What key **information** (facts, terms, formula, concepts, relationships) is important for students to **understand and remember** in the future?

• What key **ideas** or perspectives are important for students to understand in this course?
Taxonomy of Significant Learning

**Learning How to Learn**
- Becoming a better student
- Inquiring about a subject
- Self-directing learners

**Foundational Knowledge**
- Understanding and remembering:
  - Information
  - Ideas

**Application**
- Skills
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**Integration**
- Connecting:
  - Ideas
  - People
  - Realms of life

**Human Dimensions**
- Learning about:
  - Oneself
  - Others

**Caring**
- Developing new:
  - Feelings
  - Interests
  - Values
• What kinds of **thinking** are important for students to learn in this course? Critical thinking? Creative thinking? Practical thinking?

• What important **skills** do students need to learn? (e.g., physical, communication, “people” skills)

• What **complex projects** do students need to learn now to manage?
Taxonomy of Significant Learning

Learning How to Learn
- Becoming a better student
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- Ideas
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- Realms of life

Human Dimensions
Learning about:
- Oneself
- Others

Caring
Developing new:
- Feelings
- Interests
- Values
Integration

• What **connections** (similarities and interactions) should students recognize and make
  -- Among ideas **within** the course?
  -- Between the information, ideas & perspectives in this course and **those in other courses or areas**?
  -- Between material in this course and the students’ own personal, social and work life?
Taxonomy of Significant Learning

Learning How to Learn
• Becoming a better student
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Application
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• Thinking: Critical, creative, & practical
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Integration
Connecting:
• Ideas
• People
• Realms of life

Human Dimension
Learning about:
• Oneself
• Others

Caring
Developing new:
• Feelings
• Interests
• Values
• What can or should students learn about **themselves**?
• What can or should students learn about understanding and interacting with **others**?
Taxonomy of Significant Learning

- Learning How to Learn
  - Becoming a better student
  - Inquiring about a subject
  - Self-directing learners

- Caring
  - Developing new:
    - Feelings
    - Interests
    - Values

- Human Dimensions
  - Learning about:
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    - Others

- Foundational Knowledge
  - Understanding and remembering:
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    - Ideas

- Application
  - Skills
  - Thinking: Critical, creative, & practical
  - Managing projects

- Integration
  - Connecting:
    - Ideas
    - People
    - Realms of life

- Becoming a better student
- Inquiring about a subject
- Self-directing learners
- Feelings
- Interests
- Values
- Oneself
- Others
- Information
- Ideas
- Skills
- Critical, creative, & practical
- Managing projects
- Ideas
- People
- Realms of life
• What changes would you like to see in what students care about, i.e., feelings, interests, values?
Taxonomy of Significant Learning

Learning How to Learn
• Becoming a better student
• Inquiring about a subject
• Self-directing learners

Foundational Knowledge
Understanding and remembering:
• Information
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Connecting:
• Ideas
• People
• Realms of life

Human Dimensions
Learning about:
• Oneself
• Others

Caring
Developing new:
• Feelings
• Interests
• Values
• What would you like for students to learn about…
  
  – **How to be a good student** in a course like this?
  
  – **How to engage in inquiry and construct knowledge** with this subject matter?
  
  – **How to become a self-directed learner** relative to this subject?
Taxonomy of Significant Learning

- Caring
- Human Dimension
- Integration
- Application
- Foundational Knowledge
- How to Learn
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. Identify 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.
Writing Significant Learning Goals for Your Course

• Write learning goals for 3 categories in the Taxonomy of Significant Learning

• Preface: “By the end of the course, my hope is that students will be able to…”

• Suggestion:
  ✓ Pay close attention to VERBS
Criteria of “GOOD” Course Design

Significant Learning

Learning Goals

Teaching & Learning Activities

Integration

Feedback & Assessment

Educative Assessment

Active Learning

Situational Factors

In-Depth Situational Analysis
Criteria of “GOOD” Course Design

Significant Learning

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Educative Assessment

Situational Factors

In-Depth Situational Analysis
Example

Multiple choice test on previous three weeks’ reading and lectures:

1. When did J.S. Bach die?
   a. 1750   b. 1725   c. 1710   d. 1770

2. Which instrument is most unlike the others?
Educative Assessment

- Forward-Looking Assessment
- Self-Assessment
- Criteria and Standards
- "FI DeLity" Feedback
Alternate View: Educatve Assessment

Forward-Looking Assessment Task

Criteria and Standards

Self-Assessment

Feedback
Educative Assessment

Forward-Looking Assessment

Criteria and Standards

Self-Assessment

“FIDeLity” Feedback
Forward-Looking Assessment

• Utilizes authentic situations

• Assignments and tests that require…
  – Judgment/exploration rather than reciting or restating facts
  – Integrated use of skills
**Example**

**Concerto Grosso in G major, Op. 6, no.1**
George Frideric Handel (1685-1759)

A tempo giusto
Allegro
Adagio
Allegro

**Petite Symphonie in Bb (1851)**
Charles Gounod (1818-1893)

Adagio - Allegretto
Andante Cantabile  Scherzo: Allegro moderato

**Duet - Concertino**
Richard Strauss (1864-1949)

Finale: Allegretto
Allegro moderato
Rondo: Allegro ma non troppo

Michael Rowlett, clarinet       Wade Irvin, bassoon
Exercise

• Think about the type of assessments you do in your courses

• Identify any Forward Looking Assessments you already use (if any)

• Think of at least one NEW Forward Looking Assessment activity you could create for your course

• Share with someone at your table
Educative Assessment

- Forward-Looking Assessment
- Self-Assessment
- Criteria and Standards
- “FI DeLity” Feedback
Criteria and Standards

• Criteria – dimensions of high-quality work
  – Each task should have 2-5 criteria

• Standards – describe levels of quality
  – Start by describing really good and really pork work (= 2 standards)
Exercise

• Write 2 criteria for your Forward-Looking Assessment
• Write 2 standards for each criteria
Educative Assessment

- Forward-Looking Assessment
- Criteria and Standards
- "FIDeLity" Feedback
- Self-Assessment
Benefits of Self-Assessment

- Students internalize criteria for high-quality work
- Establish habits of self-monitoring and self-correcting
- Compare performance to peers

Rationale

• Necessary for effective learning
  – Supports autonomy, independence, and self-regulation

• Essential feature of professional practice

Boud, 1995
Exercise

• Identify 2 areas of your course where students can practice self-assessment
Educative Assessment

- Forward-Looking Assessment
- Self-Assessment
- Criteria and Standards
- “FIDeLity” Feedback
FIDeLity Feedback

- Frequent
- Immediate
- Discriminating (based on criteria and standards)
- Lovingly given or supportive approach used
“Classroom Assessment Techniques” by Angelo and Cross

Examples:
1. Muddiest Point—students write down what was least clear to them
2. Minute Paper—helps both students and professor
3. Background Knowledge Probes
7 Principles of Effective Feedback

1. Facilitates the development of self-assessment (reflection) in learning
2. Encourages teacher and peer dialogue around learning
3. Helps clarify what good performance is (goals, criteria, expected standards)
4. Provides opportunities to close the gap between current and desired performance

The Higher Education Academy (2004)
5. Delivers high quality information to students about their learning
6. Encourages positive motivational beliefs and self-esteem
7. Provides information to teachers that can be used to help shape the teaching

The Higher Education Academy (2004)
Exercise

- Identify procedures that will help you provide FIDeLity feedback to your students


Questions?
Lunch
12:00 – 1:00
Blackhawk Cafeteria
Blue lunch card
Teaching & Learning Activities

Janet Giesen and Stephanie Richter
Criteria of “GOOD” Course Design

- Significant Learning
- Learning Goals
- Teaching & Learning Activities
- Feedback & Assessment
- Educative Assessment
- Situational Factors
- In-Depth Situational Analysis
A MODEL OF ACTIVE LEARNING

Passive Learning

- Receiving Information & Ideas

Active Learning

- Experience
  - Doing
  - Observing
- Reflective Dialogue
  - Self
  - Others
Holistic Active Learning

Experience
- Doing, Observing
- Actual, Simulated
- Rich Learning Experiences

Information & Ideas
- Primary/Secondary
- In-class, out-of-class, online

Reflection
- About the...
  - Subject
  - Learning Process
## Activities for Active Learning

<table>
<thead>
<tr>
<th>Getting Information &amp; Ideas</th>
<th>Experience</th>
<th>Reflective Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doing</td>
<td>Observing</td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Primary data</td>
<td>• “Real doing” in authentic settings</td>
<td>• Direct observation</td>
</tr>
<tr>
<td>• Primary sources</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indirect, Vicarious</strong></td>
<td>• Secondary data and sources</td>
<td>• Case studies</td>
</tr>
<tr>
<td>• Lectures, textbooks</td>
<td>• Gaming, simulations</td>
<td>• Role play</td>
</tr>
<tr>
<td><strong>Online</strong></td>
<td>• Course website</td>
<td>• Teacher can assign students to experience</td>
</tr>
<tr>
<td>• Internet</td>
<td>• “indirect” experience online</td>
<td></td>
</tr>
</tbody>
</table>
Course: Leadership for Engineers

Lesson:

- Students **think** about what leadership means to them, individually and then collectively
- Class **reads** about people in leadership positions
- Re-visit the central question “What constitutes leadership?” and **revise** their earlier definition

Sequence is repeated throughout the course:
- students read something
- revisit the central question
- read something new
- revisit the central question
Question #1:
- Which of the three components of holistic active learning does this course include?
  1. Information and Ideas
  2. Experience
  3. Reflection

Question #2:
- How might you strengthen the Experiential component?
Rich Learning Experiences

- Students simultaneously acquire multiple kinds of higher level learning

- Examples

<table>
<thead>
<tr>
<th>In Class</th>
<th>Out of Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debates</td>
<td>Service learning</td>
</tr>
<tr>
<td>Role Play</td>
<td>Situational observations</td>
</tr>
<tr>
<td>Simulations</td>
<td>Authentic projects</td>
</tr>
<tr>
<td>Dramatizations</td>
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</tbody>
</table>
Exercise

• Identify some learning activities to add to your course
  – Emphasize “Doing” and “Observing”
In-Depth Reflective Dialogue

• **With Whom?**
  - Oneself
  - Others

• **About What?**
  - Course Content (Substantive writing)
  - Learning Process (Reflective writing)

• **What** am I learning?

• **What is the value of** what I am learning?

• **How** do I learn? (best, most comfortably, with difficulty)

• **What else** do I need or want to learn?
In-Depth Reflective Dialogue

• Examples
  - One-minute papers
  - Weekly journal writing
  - Learning portfolios
    (end-of-course, end-of-program)
Exercise

• What types of Reflective Dialogue can you incorporate into your course?
  – Self
  – Others
• Traditional methods:
  - Textbooks
  - Lectures

• Problem:
  - Students do not read
  - Lectures take too much class time
Reading Assignments

• Double feedback loop of reading
  – Students don’t do the reading, so we cover material in class
  – Since material duplicates reading, students don’t do the reading

• Solution: Hold students accountable for reading material, but do not duplicate
Motivation: Primary Sources

• Textbooks are secondary sources, requiring explanation
• Using primary sources motivates reading
• Examples:
  – Photographs (on the web)
  – Original documents (letters, journals, original translations, original language)
Exercise

• How can students gain initial exposure to the subject matter and ideas?
• Can any of these strategies be used outside of class?
15 Minute Break
Integration
Criteria of “GOOD” Course Design

- Significant Learning
- Learning Goals
- Teaching & Learning Activities
- Feedback & Assessment
- Active Learning
- Educative Assessment

Situational Factors
- In-Depth Situational Analysis
Integrating the Course

- Three column table
- Teaching Strategy
- Weekly Schedule
Integrating the Course

• Three column Table
• Teaching Strategy
• Weekly Schedule
3-Column Worksheet

Course Title ________________________________________________________________

<table>
<thead>
<tr>
<th>Learning Goals</th>
<th>Assessment Activities</th>
<th>Learning Activities</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>Foundational Knowledge</strong></td>
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<td></td>
<td><strong>Application</strong></td>
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<td></td>
<td><strong>Integration</strong></td>
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</tbody>
</table>
Integrating the Course

• Three column Table
• **Teaching Strategy**
• Weekly Schedule
• Teaching Strategy
  – A particular combination of learning activities
  – Arranged in a particular sequence

• Three Examples
  – Lecture-based learning
  – Problem-based learning
  – Team-based learning
For each new topic, students need an introduction to the topic (white box) and then opportunities to apply and use the concepts and ideas in assignments (shaded parts of the columns).

**Course Assignments**
As each new topic is introduced and studied, assignments and projects can become more complex, dealing with more interactions among topics.

A Structured Sequence for the Content of a Course

Week: 1 5 10 15
Teaching Strategies

“CASTLE-TOP” DIAGRAM:
A Tool for Identifying Your

TEACHING STRATEGY

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Wed</th>
<th>Fri</th>
<th>Mon</th>
<th>Wed</th>
<th>Fri</th>
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<tbody>
<tr>
<td>In-Class Activities:</td>
<td>?</td>
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<tr>
<td>Out-of-Class Activities:</td>
<td></td>
<td></td>
<td></td>
<td>Assessm’t &amp; Feedback</td>
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</tr>
</tbody>
</table>
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 Strategy

### Team-based

<table>
<thead>
<tr>
<th>In-class:</th>
<th>Quiz with individual or groups</th>
<th>Application problems (Small Groups)</th>
<th>Exam:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out-of-class:</td>
<td>Read text</td>
<td>Homework exercises</td>
<td>Review</td>
</tr>
</tbody>
</table>

**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.
<table>
<thead>
<tr>
<th>In-class:</th>
<th>Out-of-class:</th>
<th>Groups: See if Information Gathered Solves/Answers Problem</th>
<th>Groups: Share Their Solutions with Other Groups</th>
</tr>
</thead>
</table>
| • BIG Problem Assigned to Groups  
• Groups: Identify “Learning Issues” | Individuals find information on specific “Learning Issues” | | |

Teaching Strategy
Problem-based
Integrating the Course

- Three column Table
- Teaching Strategy
- **Weekly Schedule**
# Sequence of Learning Activities

## Sessions per Week

<table>
<thead>
<tr>
<th>Week</th>
<th>Class</th>
<th>Between</th>
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<th>Between</th>
<th>Class</th>
<th>Between</th>
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</tbody>
</table>
Criteria of “GOOD” Course Design

Learning Goals

Teaching & Learning Activities

Significant Learning

Feedback & Assessment

Integration

Active Learning

Educative Assessment

In-Depth Situational Analysis

Situational Factors