Welcome to the SDSU ASEE Best Practices in Engineering Education Series

Today's Topic:

Team-Based Learning & Immediate Feedback forms

- Help yourself to pizza / drinks
- 10/15/13

Fall 2013
Faculty Workshop

L. Dee Fink

TEAM-BASED LEARNING

A Transformative Use
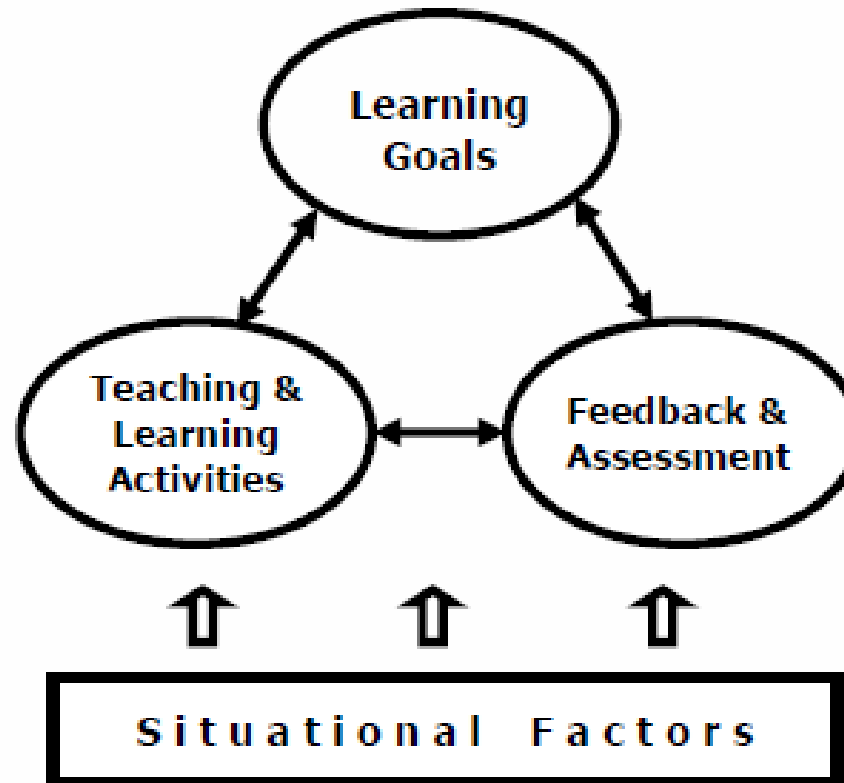of Small Groups
in College Teaching

Edited by

LARRY K. MICHAELSEN,
ARLETTA BAUMAN KNIGHT
AND L. DEE FINK

Team-Based Learning

Portions of Dr. Fink's presentation:

- Model

The Key Components Of INTEGRATED COURSE DESIGN

Team-Based Learning

In time order:

- Analyze the **situational factors**
- Formulate the **learning goals**
- Design the **feedback and assessment** procedures
- Select the **teaching/learning activities**

Team-Based Learning

- Analyze the **situational factors**
  - What is the special pedagogical challenge of this particular course? That is, what is the special challenge of teaching this subject to these students?

  - What is expected of the course by students? By the department, the institution, the profession, society at large?

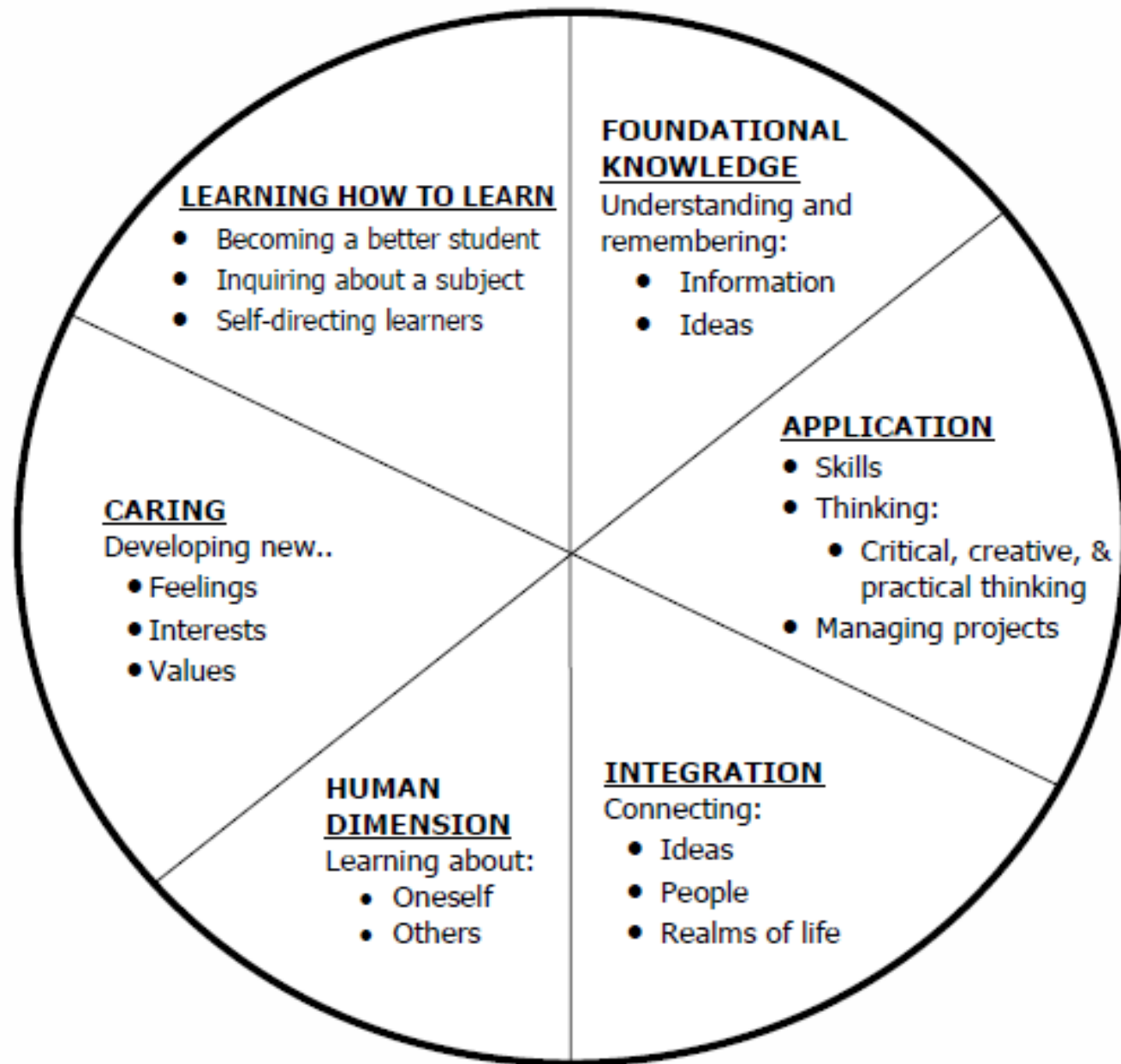 - How does this course fit into the larger curricular context?

Team-Based Learning

- Formulate the **learning goals**
  - Think expansively, beyond "understand and remember" kinds of learning.
  - Suggestion: Use the taxonomy of "Significant Learning" as a framework (next slide)

A TAXONOMY OF SIGNIFICANT LEARNING

Team-Based Learning

- Design the **feedback and assessment** procedures
  - Think about what you can do that will help students *learn*, as well as give you a basis for issuing a course grade.
  - Educative Assessment – forward looking, rather than backward looking
    - Backward looking – just to assign a grade
    - Forward looking – incorporates exercises, questions, and/or problems that create a real-life context for a given issue, problem, or decision to be addressed.

Team-Based Learning

- Select the **teaching/learning activities**
  - What would have to happen during the course for students to do well on the Feedback & Assessment activities?
  - Suggestion: Use "Active Learning" activities, especially those related to:
    - "Rich Learning Experiences" experiences in which students achieve several kinds of significant learning simultaneously
    - "In-depth Reflective Dialogue" opportunities for students to think and reflect on what they are learning, how they are learning, and the significance of what they are learning.
    - Suggestion: Assemble these activities into an effective instructional strategy, i.e., an interdependent sequence of learning activities, and a coherent course structure.
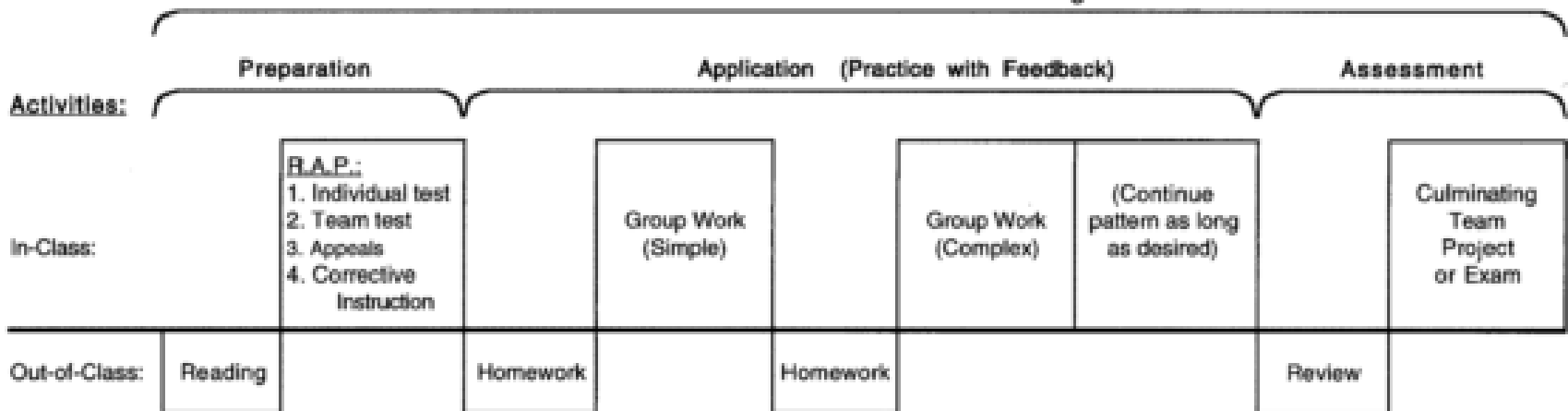
Team-Based Learning

- Instructional Strategy

The Sequence of Learning Activities in Team-Based Learning

- Covering a 2-3 Week Block of Time
- Covering One Major Topic Within the Course

Three Phases of Team-Based Learning:

Activities:	Preparation		Application (Practice with Feedback)			Assessment
In-Class:	R.A.P.: 1. Individual test 2. Team test 3. Appeals 4. Corrective Instruction		Group Work (Simple)	Group Work (Complex)	(Continue pattern as long as desired)	Culminating Team Project or Exam
Out-of-Class:	Reading	Homework	Homework			Review

Approximate Level of Content Understanding at Each Phase:

40%) 50%) 60%) 70%) 80%) 90-100%)

Team-Based Learning

- Immediate Feedback Assessment Technique
  - Multiple choice questions
  - Answer all these questions yourself first, with no discussion with others. Circle what you think is the correct answer on your paper. This is something that can be handed in and assessed for class points.
  - Then as a group decide on a common answer to the first question. The group selects one person to raise the color-coded answer card. All groups raise their card at the same time.
  - Discussion between and among groups about the possible correct answers.
  - Then someone in the group can scratch off the group's answer. A correct answer is indicated by a *.

Next Best Practices session: Tuesday, Nov. 19

Topic: ?

From the survey you filled out on 9/17, the top 4 choices were:

- Research-based classroom practices

- Active Learning

- Rubrics

- Critical Thinking.

Volunteers on these or other topics?