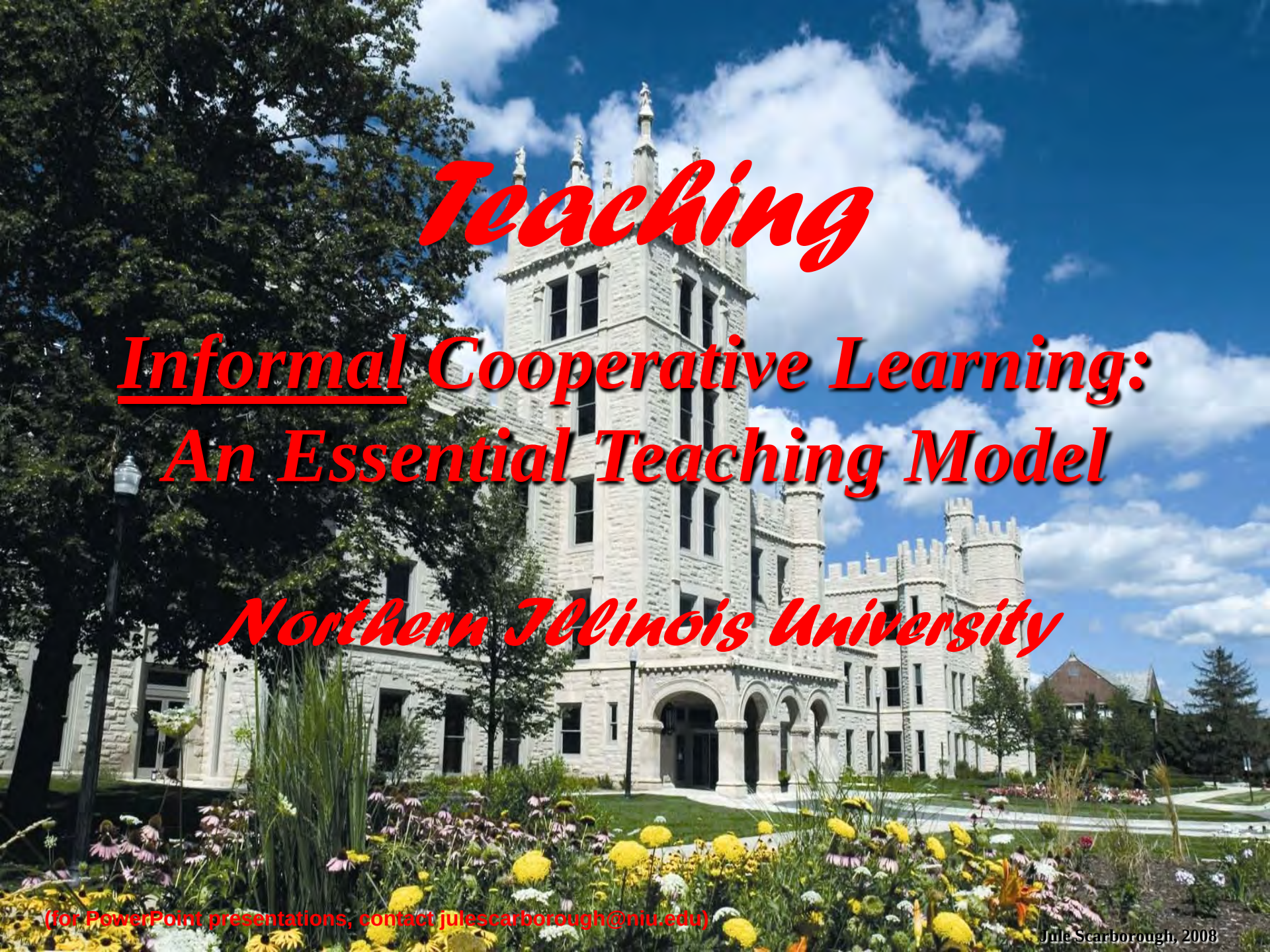
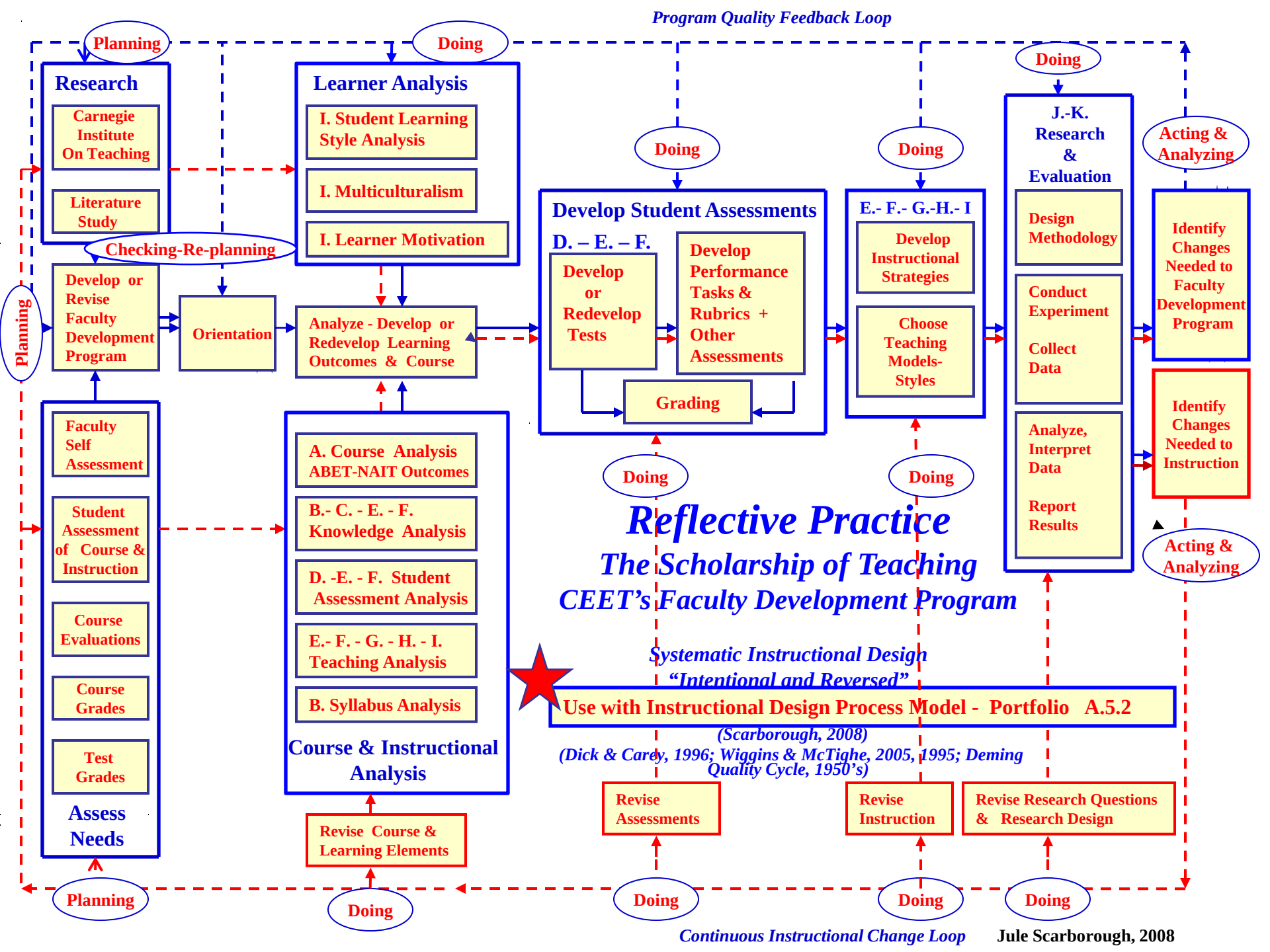

Teaching
Informal Cooperative Learning:
An Essential Teaching Model
Northern Illinois University
(for PowerPoint presentations, contact julescarborough@niu.edu)
Jule Scarborough, 2008


Program Quality Feedback Loop
Planning
Doing
Research
Carnegie Institute On Teaching
Literature Study
Checking-Re-planning
Learner Analysis
I. Student Learning Style Analysis
I. Multiculturalism
I. Learner Motivation
Develop or Revise Faculty Development Program
Orientation
Analyze - Develop or Redevelop Learning Outcomes & Course
Develop Student Assessments
D. – E. – F.
Develop or Redevelop Tests
Develop Performance Tasks & Rubrics + Other Assessments
Grading
E.- F.- G.-H.- I
Develop Instructional Strategies
Choose Teaching Models-Styles
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Design Methodology
Conduct Experiment
Collect Data
Analyze, Interpret Data
Report Results
Acting & Analyzing
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Faculty Self Assessment
Student Assessment of Course & Instruction
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B. Syllabus Analysis
Course & Instructional Analysis
Revise Course & Learning Elements
Reflective Practice
The Scholarship of Teaching
CEET's Faculty Development Program
Systematic Instructional Design
"Intentional and Reversed"
Use with Instructional Design Process Model - Portfolio A.5.2
(Scarborough, 2008)
(Dick & Carey, 1996; Wiggins & McTighe, 2005, 1995; Deming Quality Cycle, 1950's)
Revise Assessments
Revise Instruction
Revise Research Questions & Research Design
Continuous Instructional Change Loop
Jule Scarborough, 2008

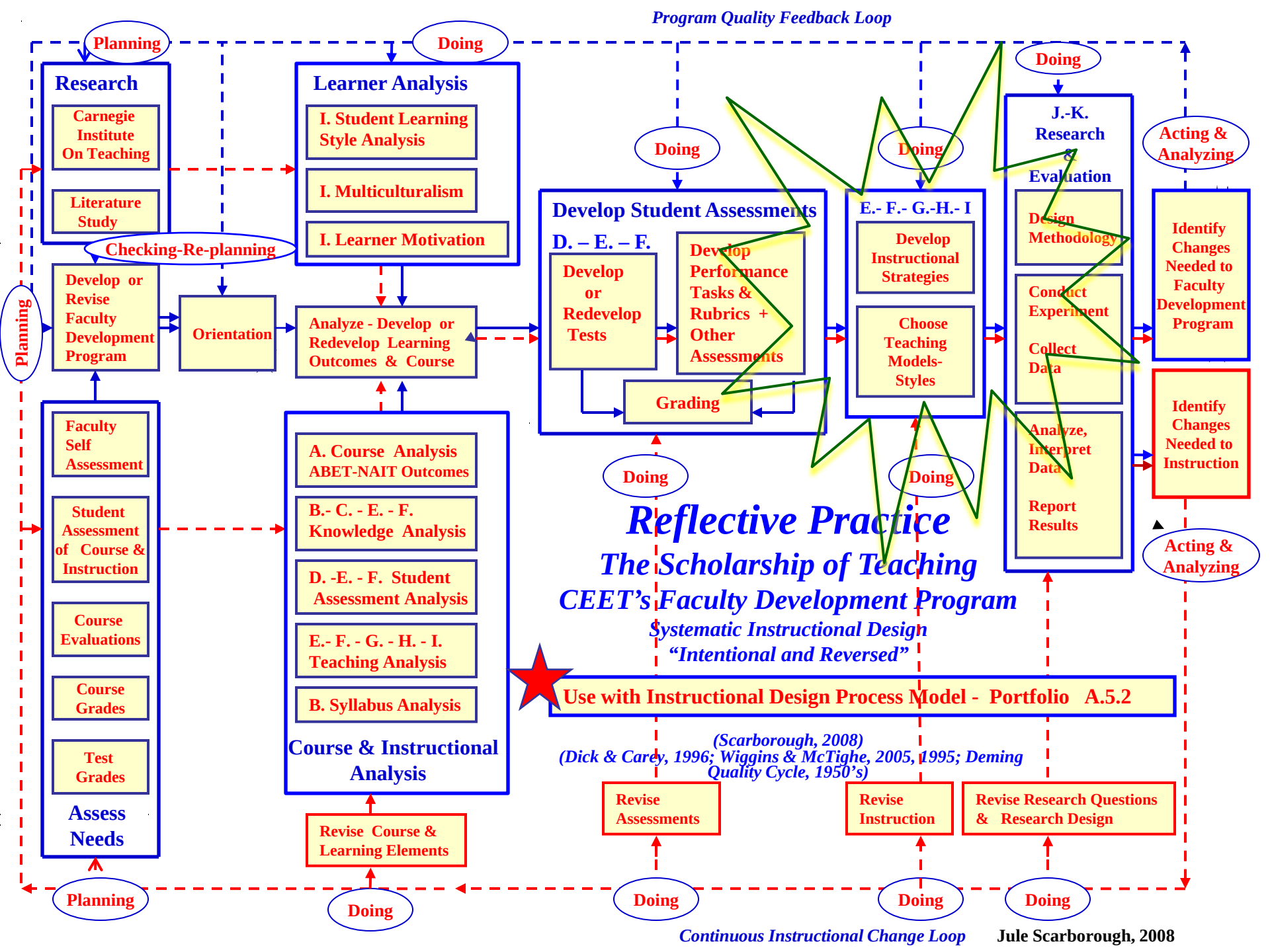
Active Learning

Informal Cooperative Learning Chapter 3

David W. Johnson
Roger T. Johnson
Karl A. Smith

(Interaction Book Company, 1998)
This PowerPoint presentation was taken directly from the text by Johnson, Johnson, and Smith, 1998

Jule Scarborough, 2006 **(for PowerPoint presentations, contact julescarborough@niu.edu)**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The Lure of Lecturing

- The extended presentation in which the instructor presents factual information in an organized and logically sequential way

The Lure of Lecturing

- **Reasons for use:**
  - Efficient
  - Flexible
  - Simple to implement
  - Makes instructor center of communication and attention

Table 3.1 Lecturing

Advantages	Appropriate Use	Problems	Enemies
Efficiency	Disseminate Information	Decreasing Student Attention	Preoccupation With Past Or Future
Flexibility	Present Information Not Available Elsewhere	Requires Intelligent, Motivated Auditory Learner	Emotional Moods Such As Anger, Frustration
Simplicity	Present Information Integrated From Many Sources	Promotes Lower-Level Learning Of Factual Information	Student Lack Of Interest In Material Presented
Ego-Gratifying	Guide Students In Understanding Complex Information	Gives Students Same Information, Presented Orally, Impersonally, At Same Pace, No Dialogue	Failure To Understand Material Being Presented
	Arouse Students' Interest In Topic	Students Tend Not To Like It	Feelings Of Alienation From Class & School
	Model Strategies And Procedures Students Need To Use In Independent Practice Help Students Understand Different Perspectives Teach Auditory Learners	Assumes All Students Learn Auditorially, Have High Working Memory, Possess Required Prior Knowledge, Are Good Note-Takers, Have Good Information Processing Strategies And Skills	Entertaining, Clear Presentations That Misrepresent Complexity Of Material

Lure of Lecture

- **Appropriate use of Lecturing**
  - Disseminate information
  - Present Material that is **not available** elsewhere
  - Expose students in a brief time **to content integrated from a variety of sources**
  - Expose students in a brief time to **content too complex for students to understand and learn on their own**

Lure of Lecture

- Demonstrate/model strategies and procedures students are to use in future assignments
- Expose students in a brief time to several different points of view
- Arouse students' interest in the subject
- Teach students who are primarily auditory learners

Lure of Lecture

- **Parts of a Lecture**
  - **Introduction**
    - Arouse interest
    - Motivational cues
    - Make objectives clear
    - Prompt awareness of relative knowledge
    - Use advance organizers
      - Concepts given to the student prior to the material actually to be learned that provide a stable cognitive structure in which the new knowledge can be subsumed

Lure or Lecture

- Parts of a Lecture
  - **Body**
    - Cover content while providing a logical organization for the material being presented
  - **Conclude**
    - Summarize major points, recall ideas, give examples, and answer questions

Lure of Lecturing

- **Problems With Lecture**
  - **Attention** to what the instructor is saying **decreases** as the lecture proceeds
  - Lecture takes an educated, intelligent person orientated toward auditory learning to benefit
  - Tends to only promote lower level learning

Lure of Lecture

- **Problems With Lecture cont..**
  - Limited by assumption that all students need oral information at the same time and pace without dialogue
  - Students tend not to like it
  - Based on assumptions about students cognitive ability

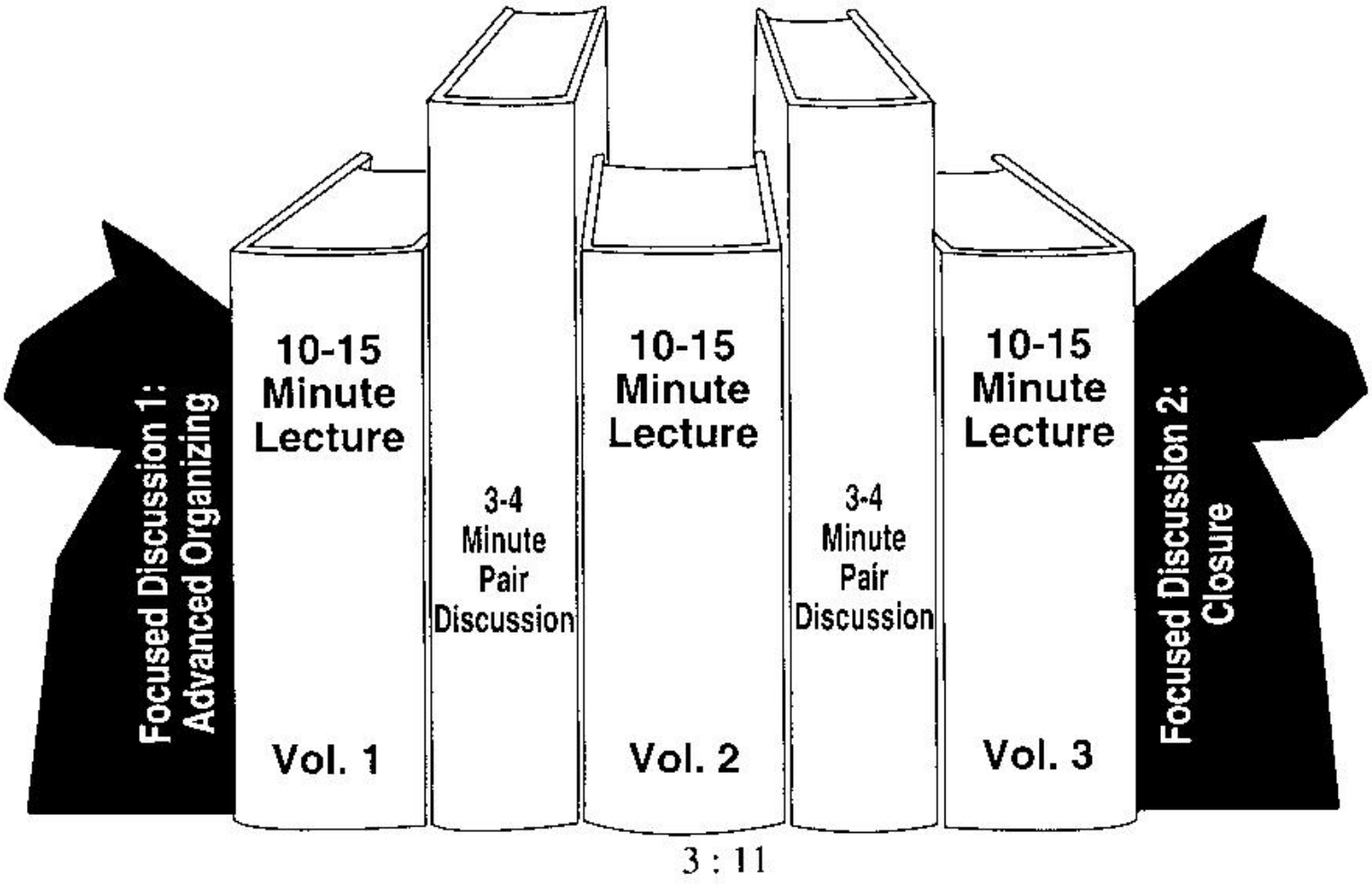
Lure of Lecture

- **Enemies of the lecture**
  - Preoccupation
  - Emotional moods
  - Disinterest
  - Failure to understand
  - Feeling of isolation and alienation
  - Entertaining lecture that misrepresent importance of material

Informal Cooperative Learning Groups

- **Purpose**
  - To focus student attention on the material to be learned
  - Set a mood conductive to learning
  - Help organize in advance the material being taught
  - Provide closure to an instructional session

FIGURE 3.1 INFORMAL COOPERATIVE LEARNING



Jule Scarborough, 2006

Lecturing With Informal Cooperative Learning Groups

- **Introductory Focused Discussion**
  - Promote advance organization
  - Establishing expectations of lecture

Lecturing With Informal Cooperative Learning Groups

- **Intermittent Focused Discussions**
  - **Lecture Segment One**
    - 10 to 15 minute lecture
  - **Pair discussion 1**
    - Each student formulates answer
    - Students share answer with partner
    - Students listen to partner's answer
    - Pairs create new answer

Lecturing With Informal Cooperative Learning Groups

- **Intermittent Focused Discussions**
  - Repeat steps for additional segments and pair discussions until lecture is completed
- **Closure Focused Discussion**
  - Students complete an ending discussion task

Step One: Introductory Focused Discussion

- **Introductory Focused Discussion Pairs**
  - **Task:** Answer questions
  - **Cooperative:**
    - Formulate
    - Share
    - Listen
    - Create

Step One:
Introductory Focused Discussion

- **Introductory Focused Discussion Pairs**
  - **Expected Criteria For Success:** Each student able to explain answers
  - **Individual Accountability:** Random quizzing of individual students
  - **Expected Behaviors:** Explaining, Listening, synthesizing by all members
  - **Intergroup Cooperation:** Compare with another group

Step One:
Introductory Focused Discussion

- **Question-And-Answer Pairs**
  - **Task:** Answer questions on homework
  - **Cooperative:**
    - Students prepare for discussion
    - Students randomly assigned to pairs
    - Q&A session between pairs
    - Instructor provides feedback

Step One:
Introductory Focused Discussion

- **Question-And-Answer Pairs**
  - **Expected Criteria For Success:** Each student writes a paper and edits group members papers
  - **Individual Accountability:** Each student formulates question on assignment, partner answers questions
  - **Expected Behaviors:** Exchange questions, giving good explanations

Step One:

Introductory Focused Discussion

- **Advanced Preparation Papers**
  - **Task:** Write short paper
    - Choose topic relating to assigned reading
      - Major theory
      - Concept
      - Research study
    - Write analysis summarizing material and adding material from another source

Step One:
Introductory Focused Discussion

- **Advanced Preparation Papers**
  - **Cooperative:** Students will check each others papers in learning pairs, checking for:
    - Paper structure
    - Summary of theory
    - Clear conceptual definition of concepts and terms
    - New information beyond the text

Step One:

Introductory Focused Discussion

- **Advanced Preparation Papers**
  - Expected Criteria for success
    - Each student writes a paper and edits group mates' papers
  - Individual Accountability
    - Each student writes a paper
    - Each student edits and signs another paper
    - Have students explain paper to another group

Step One:
Introductory Focused Discussion

- **Advanced Preparation Papers**
  - Expected behaviors: critically evaluating the papers of group mates
  - Intergroup Cooperation: Check editing procedures and strategies with another group.

Progress Checks

- Progress Check: Consists of questions testing students' knowledge of the assigned reading
  - **Students:**
    - Individually complete the progress check
    - Retake the progress check and compare answers with group
    - Retake with the whole base group to broaden discussion

Step Two:
Intermittent Discussion Pairs

- **Intermittent Discussion Pairs**
  - Students form pairs and are given a short discussion task to be completed in 3 to 4 minutes to ensure that students actively cognitively process the information presented
    - Answer a question posed by the instructor
    - Give a reaction to the theory, concepts, or information being presented
    - Elaborate on the material being presented

Step Two: Intermittent Discussion Pairs

- Using intermittent discussion pairs can solve a number of problems inherent to lecturing…
  - Ensures that all students are actively involved in learning the material being presented in class

Step Two: Intermittent Discussion Pairs

- Active involvement solves three problems with class discussions:
  - Lack of response by most students
  - Domination by a few students
  - Refusal to ask question

Step Two: Intermittent Discussion Pairs

- The use of intermittent discussion pairs facilitates the understanding and retention of material being learned
- Memory interference
  - Retroactive interference
    - Information at end of lecture interferes with information from beginning
  - Proactive interference
    - Information at beginning of lecture interferes with information from end.

Step Two: Intermittent Discussion Pairs

- The use of intermittent discussion pairs provides students with the opportunity to receive from classmates frequent and immediate feedback

  – Learning tools
    - Turn to your neighbor summaries
    - Cooperative note-taking pairs
    - Read and explain pairs

Step Three: Closure Focused Discussions

- **Closure focused discussions:**
  - Assign students to pairs or triads
  - Give them an ending discussion task lasting 4 to 5 minutes
    - Learning tools
      - Closure note-taking pairs
      - Closure focused discussion pairs
      - Closure cooperative writing pairs
      - Closure review pairs
      - Etc.

Other Informal Cooperative Learning Groups

- **Peer Feedback Groups**
  - Students tend to like courses that offer frequent opportunities to revise and improve their work.
  - Student learn best when they:
    - Have a chance to submit earlier version of their work
    - Get detailed feedback and criticism

Other Informal Cooperative Learning Groups

- **Peer Feedback Groups**
  - Walberg (1984) identified feedback as the most powerful predictor of learning
  - Students need continuous feedback about the adequacy of their performances which may be best provided by classmates

Other Informal Cooperative Learning Groups

- **Cooperative Study Groups**
  - The Harvard Assessment Seminars (Light, 1990) compared the grades of students who studied alone with those of students who studied in groups of four to six.
  - **Student in small groups performed better than students who worked alone**
  - Small groups:
    - **Spoke more often**
    - **Asked more questions**
    - **More engaged than larger groups**