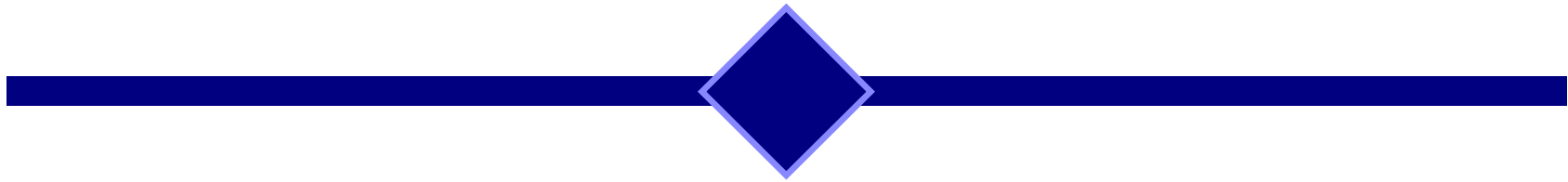


Learning Outcomes



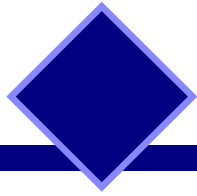
Karen Paulson

National Center for Higher Education Management Systems (NCHEMS)

Fund for the Improvement of Postsecondary Education (FIPSE) Annual Conference

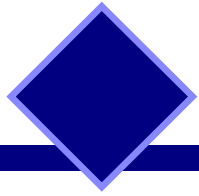
Washington, D.C.

November, 2002



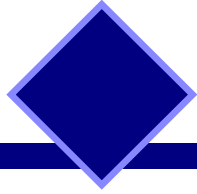
Three Types of Evaluation Questions

- ◆ **Implementation:** “Did the Project Work the Way You Thought It Would?”
- ◆ **Impact:** “Did the Project Achieve the Outcomes It Was Supposed to Achieve?”
- ◆ **Institutionalization:** “How Will Activities and Processes from This Project Be Supported After the Grant Is Over?”



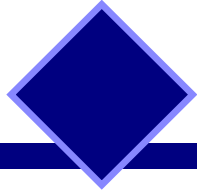
Impact Questions

- ◆ Equivalent or Better Cognitive Learning Outcomes?
- ◆ Improved Course-Completion Rates?
- ◆ Improved Course 1 to Course 2 Sequence Completion Rates?
- ◆ Improved Performance Later in the Curriculum?
- ◆ Improved Graduation Rates?
- ◆ Enhanced Self-Confidence and Willingness to Pursue the Subject?



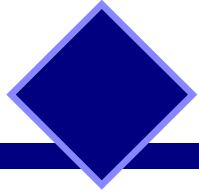
Leads to Additional Questions

- ◆ What Do You Mean by Learning?
- ◆ What Works for Whom?
- ◆ What Gets in the Way of Learning?



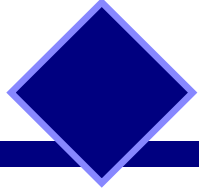
What Do You Mean By Learning?

- ◆ Knowledge, Skills, Attitudes/Dispositions
- ◆ Broad/General/Messy
 - ▶ Critical Thinking
 - ▶ Quantitative Literacy
 - ▶ Aesthetics
 - ▶ Communications
- ◆ Specific to Discipline or Profession



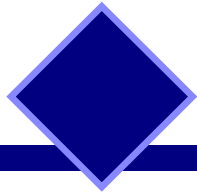
What Works for Who?

- ◆ Types of Materials and Pedagogies Used
- ◆ Learning Styles
- ◆ Demographic Subpopulations



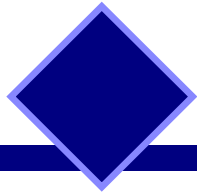
What Gets in the Way of Learning?

- ◆ Implementation Problems
- ◆ Learning Atrophy, Things Go Away Over Time, Forget Without Practice
- ◆ Context Shift



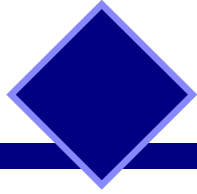
Course Re-Design as a “Quasi-Experiment”

- ◆ Re-Designed Course vs. Traditional Course Comparisons
- ◆ Simultaneous and “Before-After” Comparisons
- ◆ Keep in Mind: You Need to Recognize (and Account for) Any Differences in Student Characteristics



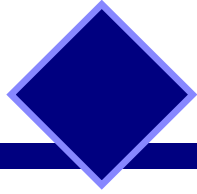
Methods for Evaluating Impact

- ◆ Matched Examinations and Assignments
- ◆ Grade Performance [Making Grading Process More Explicit - B. Walvoord]
- ◆ Tracking Student Performance After Course Completion
- ◆ Survey Items on Self-Confidence and Self-Reported Gains



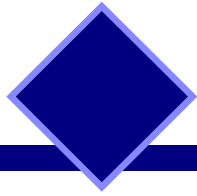
Approaches Based on Exams and Assignments

- ◆ Common Final (and Mid-Term) Examinations
- ◆ Matched Items or Common Questions Embedded in Otherwise Different Examinations
- ◆ Shared Reading/Grading of Assessments by Course Instructors Across Sections
- ◆ Third-Party Reading of Similar Student Work Products
- ◆ Common Grading Rubric



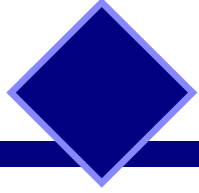
Approaches Based on Grade Performance

- ◆ “DWF” Rates
- ◆ Withdraws and Incompletes
- ◆ Frequencies of Different Kinds of Errors (“Dimensional Grading”)
- ◆ Achieving Better Alignment Across Course Grades (e.g., “Primary Trait Scoring”)



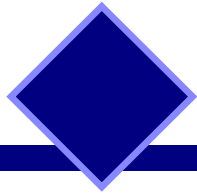
Approaches Based on Student Tracking

- ◆ Course Completion Rates
- ◆ Overall Persistence and Program Completion Rates
- ◆ Subsequent Grade Performance in Related Courses
- ◆ Testimony of Faculty in “Client” Courses and Disciplines



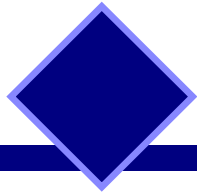
Approaches Based on Self-Reports

- ◆ End-of-Course Questionnaires
- ◆ “Minute Papers” and Very Short In-Class Questionnaires
- ◆ Focus Groups and Interviews



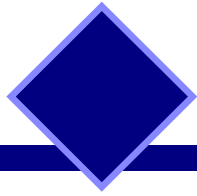
A Simple Planning Tool

| Goals “What Are We Trying to Accomplish?” | Outcomes “What Would ‘Success’ Actually Look Like?” | Methods “Where Might We Turn for Evidence?” |
|---|---|---|
| | | |



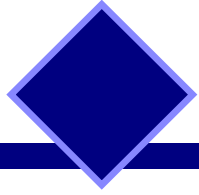
A Common Format to Display Plans

| Questions About Impact | Assessment Methods | Schedule and Population Covered |
|------------------------|--------------------|---------------------------------|
| | | |



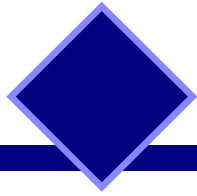
Sample Assessment “Map”

| Learning Outcomes | Does this learning outcome reflect a larger institutional value? (Y/N) | If so, which value is reflected? | Courses “covering” this outcome are: | Course-level student learning outcomes related to this are: | List ways you would recognize the achievement of this outcome if you saw it. | Where might you look for evidence of student success in this outcome? |
|-------------------|--|----------------------------------|--------------------------------------|---|--|---|
| | | | | | | |
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Summary Thoughts

- ◆ Focus on **Learning** [What They Learned and What You Learned]
- ◆ Focus on “Comparative Advantage” of Re-Designed Course with Traditional Course
- ◆ Keep it Simple!



Thank You!

- ◆ Questions or Comments
- ◆ Send a note to
 - ▶ Karen@nchems.org
- ◆ Or telephone
 - ▶ 303.497.0354