

# The Improvement Process, Step 2: Identifying Effective Assessment Measures

Mike Gress, Interim Director of  
Institutional Effectiveness

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# VU's Definition of "Assessment"

**Assessment:** The systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning, academic achievement, and institutional effectiveness. (Palomba & Banta, 1999) Types of assessment include university, general, liberal, program, course and classroom.

# Benefits of Assessment

- A powerful tool for improvement and potentially a powerful tool for change—basis for planning, budgeting, curriculum change, student support
- A way to help students achieve your vision for them
- A way to help students take control of their learning
- A way to create a climate of caring, engagement, and creativity

# What Assessment Isn't—Course Grades

- Usually do not give specific detail about what a student knows and doesn't know
- Usually consider other factors than knowledge, skills, and attitudes or values
- Often represent vague or inconsistent vague or inconsistent standards, not systematic
- Usually reflect assignment results, but not full range of student abilities, like critical thinking

# What Assessment Might Not Be— Objective Test Scores

- Objective tests often do not match the higher learning reflected in program learning outcomes--focus on memorization, not problem solving and critical thinking
- Objective tests often stress bit-by-bit learning rather than the skills of analysis and synthesis
- Objective tests are difficult for the untrained individual to write so that the tests ask students to practice higher order thinking

# What Assessment Might Not Be— Objective Test Scores

- Objective tests overly emphasize recall and recognition
- Objective tests focus students' energies on getting the right answers rather than developing their ability to ask the right questions about key knowledge and proper behaviors of the professional
- Objective tests imply single “right” answers rather than challenging students with the complex realities of the profession

# What Good Assessment Should Be

- Valid in that it is built on learner-centered teaching that reflects the program values and “focuses on intended outcomes that represent important knowledge, skills, and abilities that are valued by professionals in their disciplines and by the public at large” (Huba and Freed, Learner-Centered Assessment on College Campuses)
- Embedded in “high stakes and high energy processes” (Walvoord, Assessment Clear and Simple)

# What Good Assessment Should Be

- Authentic or Performance tasks that “ask students to demonstrate their skills rather than relate what they’ve learned through traditional tests” (Suskie, Assessing Student Learning)
- Challenging by including some ill-defined or “messy” tasks that do not have a clear-cut right answers, to assess “real-world” skills
- Systematic in the sense of being intentionally designed, rather than anecdotal, and guided by clearly articulated standards

# What Good Assessment Should Be

- Complex, in that it “calls for identifying or designing multiple methods of assessment” (Maki, [Assessing for Student Learning](#))
- Built upon the usual tasks within the class, but should ask about the quality of those tasks and how they can be enhanced to determine how and when learning is occurring
- Built to give students clear expectations for learning and feedback on their learning; to help faculty know what works and doesn't

# What Assessment Might Assess

- Learning Outcomes: Direct evidence of program learning outcomes, or summative assessments
- Learning Processes: Indirect and/or formative assessments that help us determine how students are learning that help us understand why or why not students are learning. These can be studies of faculty or student behaviors.

# What Assessment Might Assess

- Learning Inputs: Evaluations of the things in place before the learning occurs, such as placement scores or the existence of or lack of equipment in labs
- Learning Context: Evaluations of the environment in which learning takes place, for instance how well the curriculum reflects the needs of employers, students' interests in program, or regional and national trends in a discipline

# Types of Assessment

- **Direct Assessment:** assessment tasks that ask students to demonstrate what they know or can do. It is “tangible, visible, self-explanatory and compelling evidence” of learning (Suskie). VU’s assessment requires a minimum of one direct measure per outcome assessment.
- **Indirect Assessment:** assessments that include self-reporting measures or perceptions of learning from others. Evidence that consists of “proxy signs that students are probably learning” (Suskie)

# Types of Assessment

- Quantitative Assessment: methods that “place interpretive value on numbers” (Maki), for example objective tests that can be scored by the number of correct answers
- Qualitative Assessment: methods that “place interpretive value on the observer” (Maki), such as the observations of faculty, employers, or students themselves

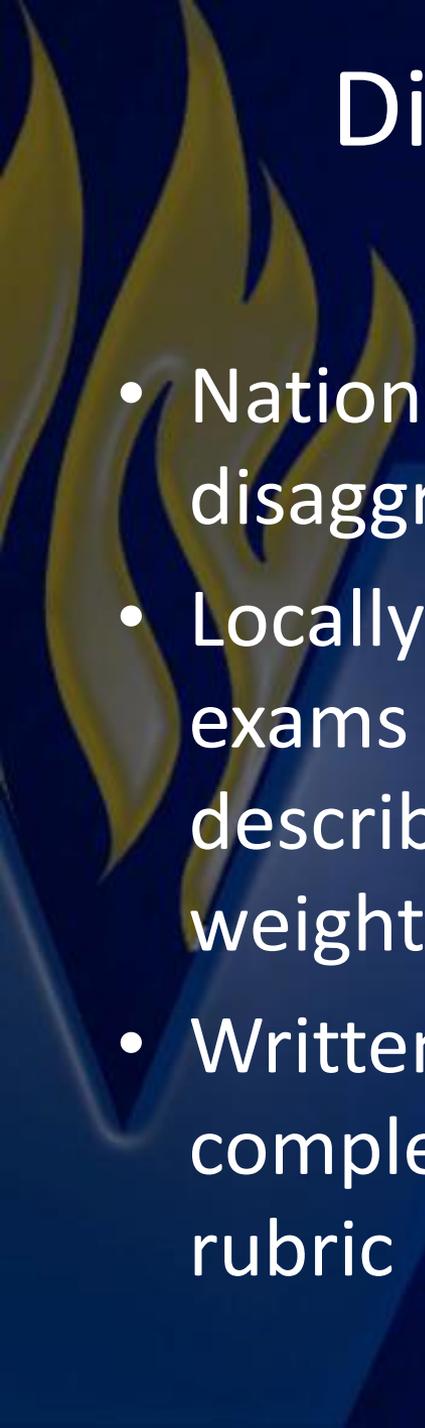
# Types of Assessment

- Quasi-Quantitative Assessment: methods using observations of student performances that can yield numerical data—the rubric (Cotoranu and Stix, “Direct Assessment Methods: A Quantitative and Qualitative Synthesis”)

The rubric allows for reliable, self-explanatory, compelling direct assessment of both student behaviors and tasks or performances that do not have one right answer.

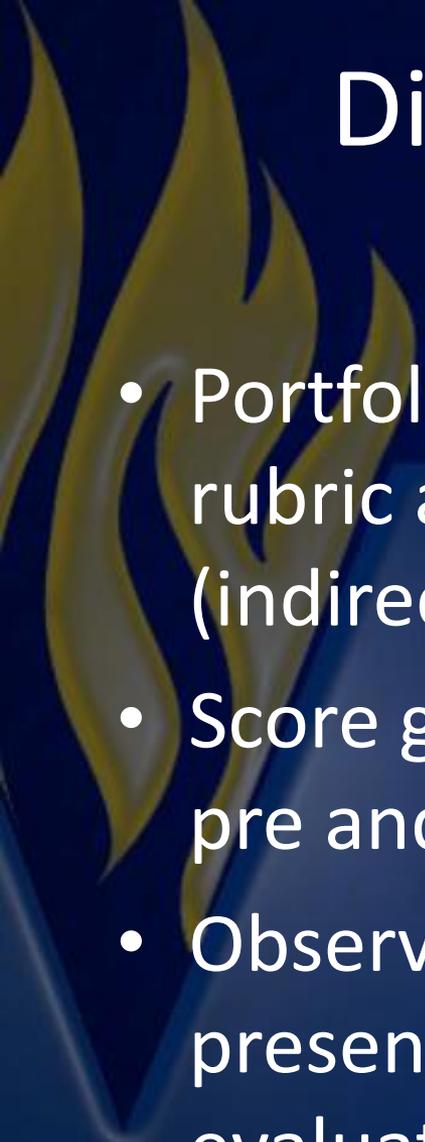
# How Do You Decide Where to Start?

- Think about department faculty complaints about learning that students consistently find difficult
- Consider curiosities about different levels of student learning
- Review employer surveys or advisory committee comments
- Evaluate the meanings of scores on national exams or certifications
- Survey faculty in other departments



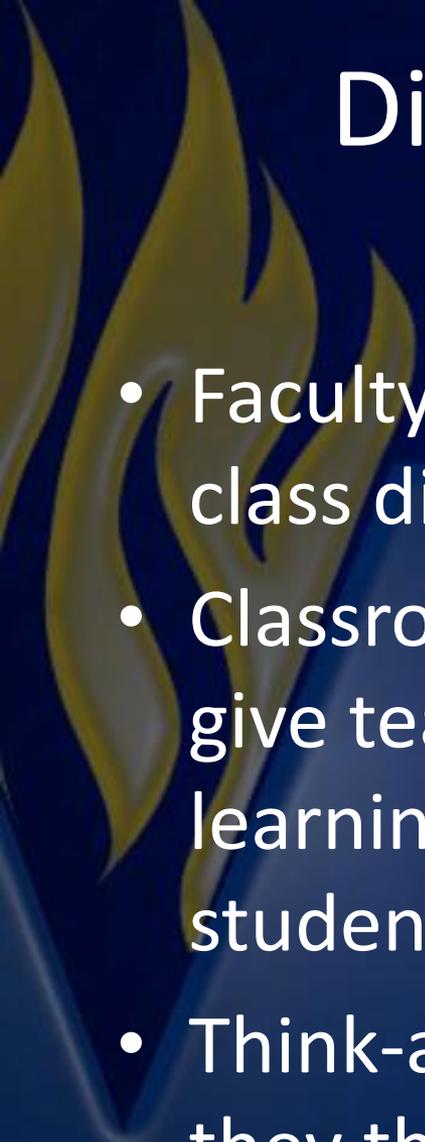
# Direct Evidence of Student Learning--Suskie

- National exams or certifications that clearly disaggregate into desired outcomes
- Locally designed multiple choice or essay exams accompanied by test blueprints describing what outcomes are assessed and weights assigned
- Written work or performances, especially complex, constructive tasks, scored with a rubric



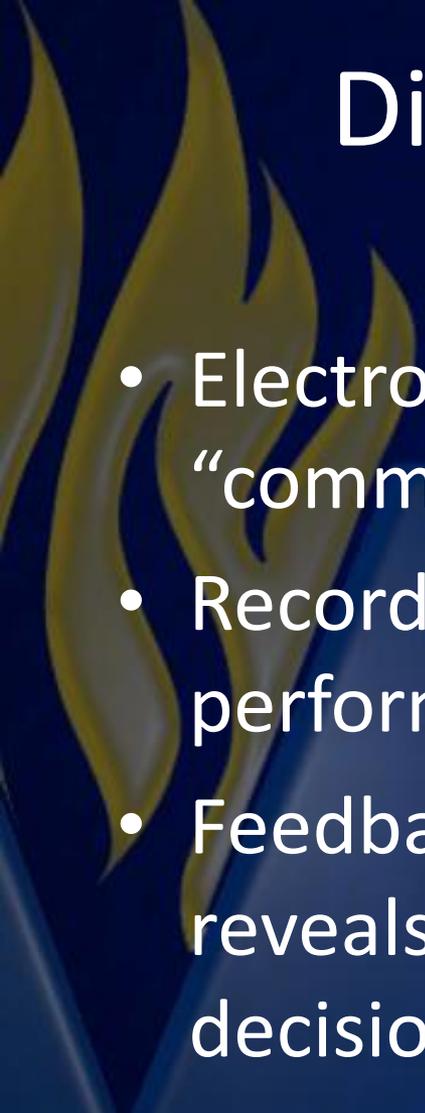
# Direct Evidence of Student Learning--Suskie

- Portfolios of student work evaluated by a rubric and including student reflections (indirect evidence)
- Score gains or “value added” assessments—pre and post-tests
- Observations of student behaviors, such as presentations, lab work, group discussions, evaluated systematically using rubrics and/or notes



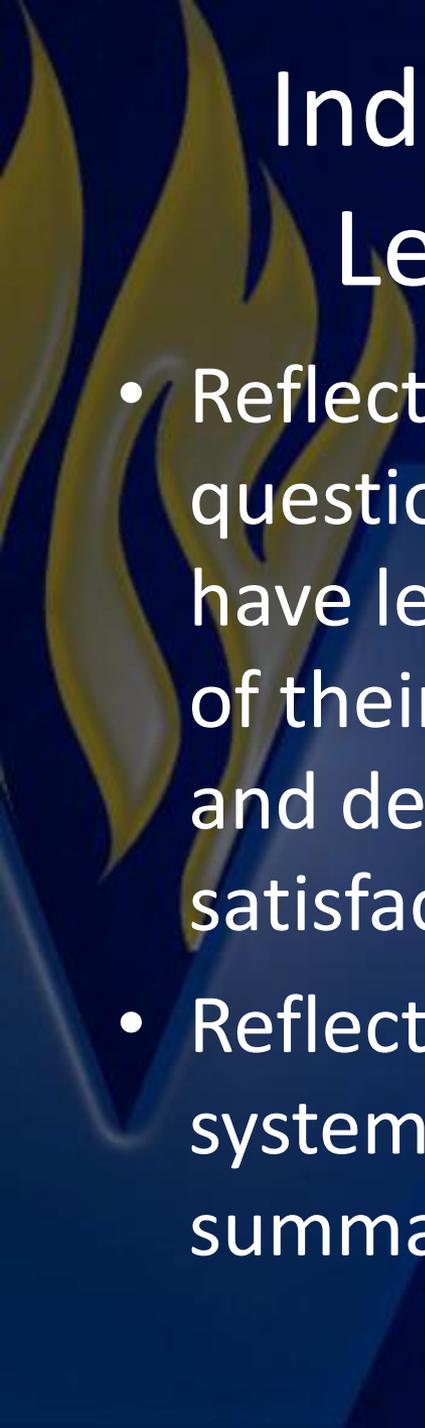
# Direct Evidence of Student Learning--Suskie

- Faculty summaries and assessments electronic class discussion threads, wikis, blogs
- Classroom response systems or “clickers” that give teachers immediate feedback on student learning—formative assessments of how students are learning
- Think-alouds—observations of students as they think through an assignment, describing the steps required to complete a process, evaluated by notes and/or a rubric



# Direct Evidence of Student Learning--Suskie

- Electronic versions of Think-alouds—using the “comments” feature in Word
- Recorded lab or class individual or team performances of key skills or key processes
- Feedback from computer-simulated tasks that reveals information on patterns of action, decisions, and branches
- Student reflection on values, attitudes, and beliefs, if outcomes specify the goal of developing these

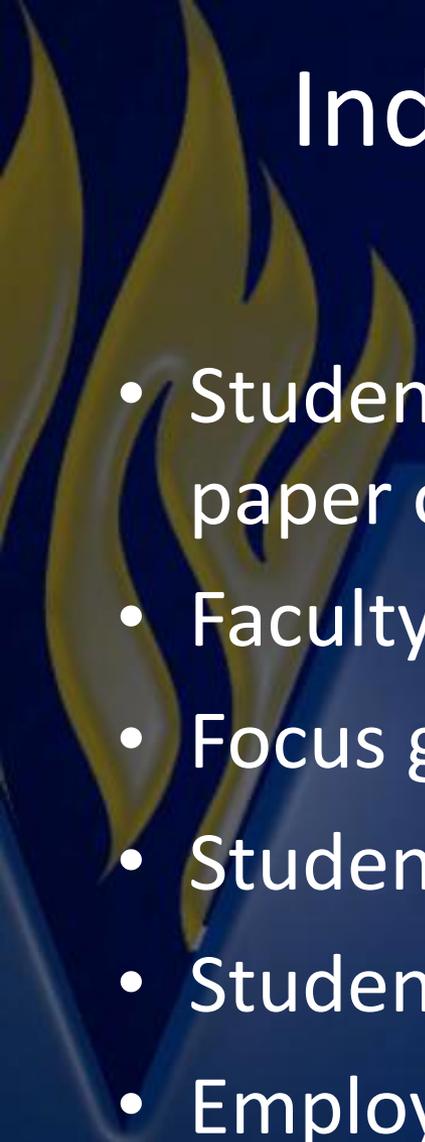


# Indirect Measures of Student Learning—Adding Breadth

- Reflective writings—student response to questions about what, how, and why they have learned, or reflections on the significance of their learning, who they are, their growth and development, their experiences, or their satisfaction
- Reflection activities must be structured, systematic, and consistent so they can be summarized in a significantly meaningful way

# Indirect Evidence of Student Learning—Benefits of Reflection

- Helps students learn by encouraging meta-cognition and synthesis
- Balances quantitative and direct assessments with qualitative, indirect—provide fresh insights, allow for exploration of how learning occurs that quantitative data doesn't allow for
- Yields useful information quickly and easily that can be used as formative data for next class—one minute paper, email minute, muddiest point,



# Indirect Evidence of Student Learning—Suskie

- Student surveys, done in-class or out, on paper or via internet
- Faculty surveys
- Focus groups of students
- Student interviews
- Student ratings of instruction
- Employer surveys
- Advisory committee discussions
- Alumni Surveys



# Indirect Evidence of Student Learning--Suskie

- Course or assignment grades
- Retention and graduation rates
- Admission of students into programs for advanced learning
- Quality and reputation of schools students are admitted to or of positions of employment
- Placement rates and salaries of graduates
- Honors, awards, and scholarships earned by graduates

# Session Assessment & Discussion

- One Minute Paper:
  1. What is the most important thing you learned during this session?
  2. What important question remains unanswered?
- What current activities in your classes might be used for assessment purposes? How does the activity reflect program outcomes? What supplements will be needed to make it “fit” the requirements for at least two pieces of evidence?