

Assessing Learning in the Classroom

The Case for Using Assessment as a New Teacher: Saving Time, Aiding Learning



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WARNER
SCHOOL OF EDUCATION
UNIVERSITY OF ROCHESTER

What do you think about assessment?

- What thoughts come to your mind when the term “assessment” is brought up?
- How have you experienced assessment as a student or teacher?
- Why are you here today?
What do you hope to gain?



Learning Goals

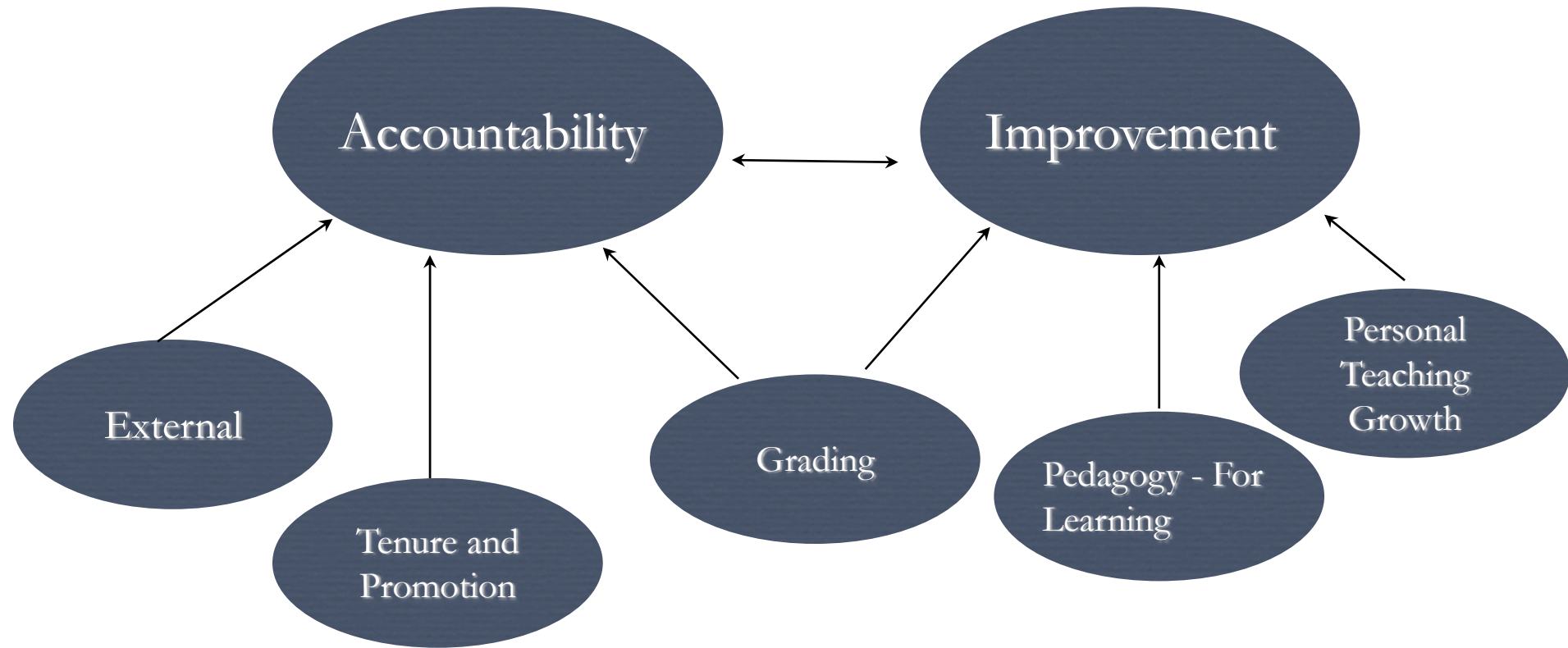
- Create an awareness that assessment can help you as a new teacher in three ways:



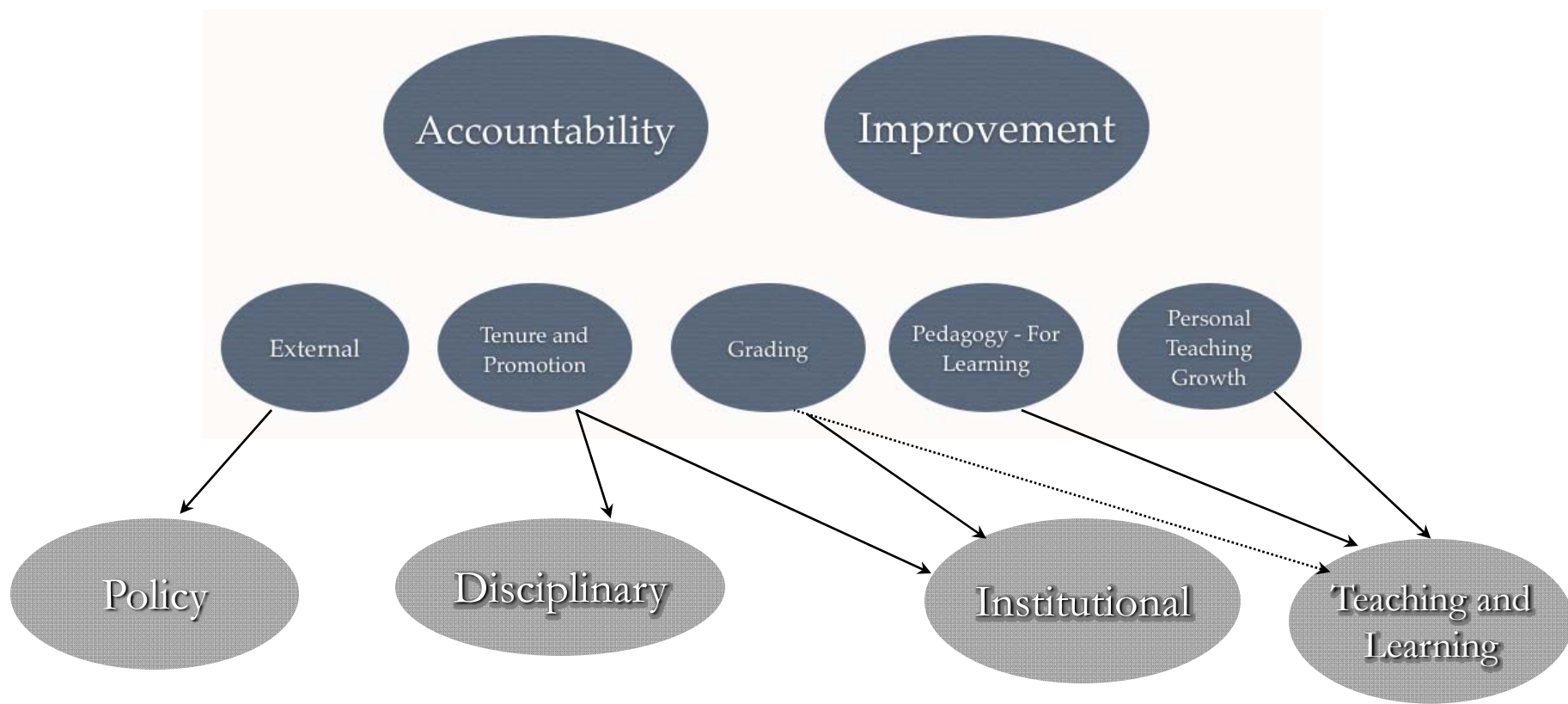
- 1) As a practical tool to aid learning;
 - 2) To aid your efficiency of completing teaching responsibilities; and
 - 3) To meet your teaching performance goals.
- Connect assessment to research on student learning.



Purposes of Assessment



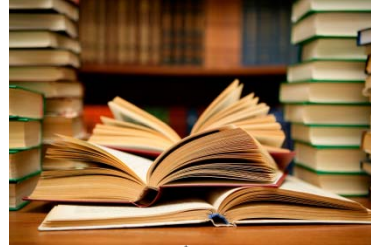
Disconnected Discussions



Things Really Are Interrelated

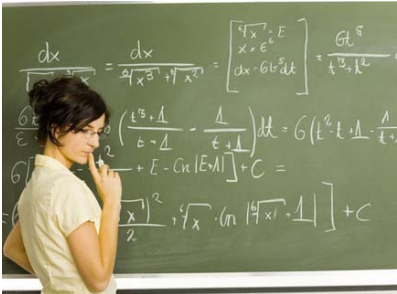


New Scholar Social Reality

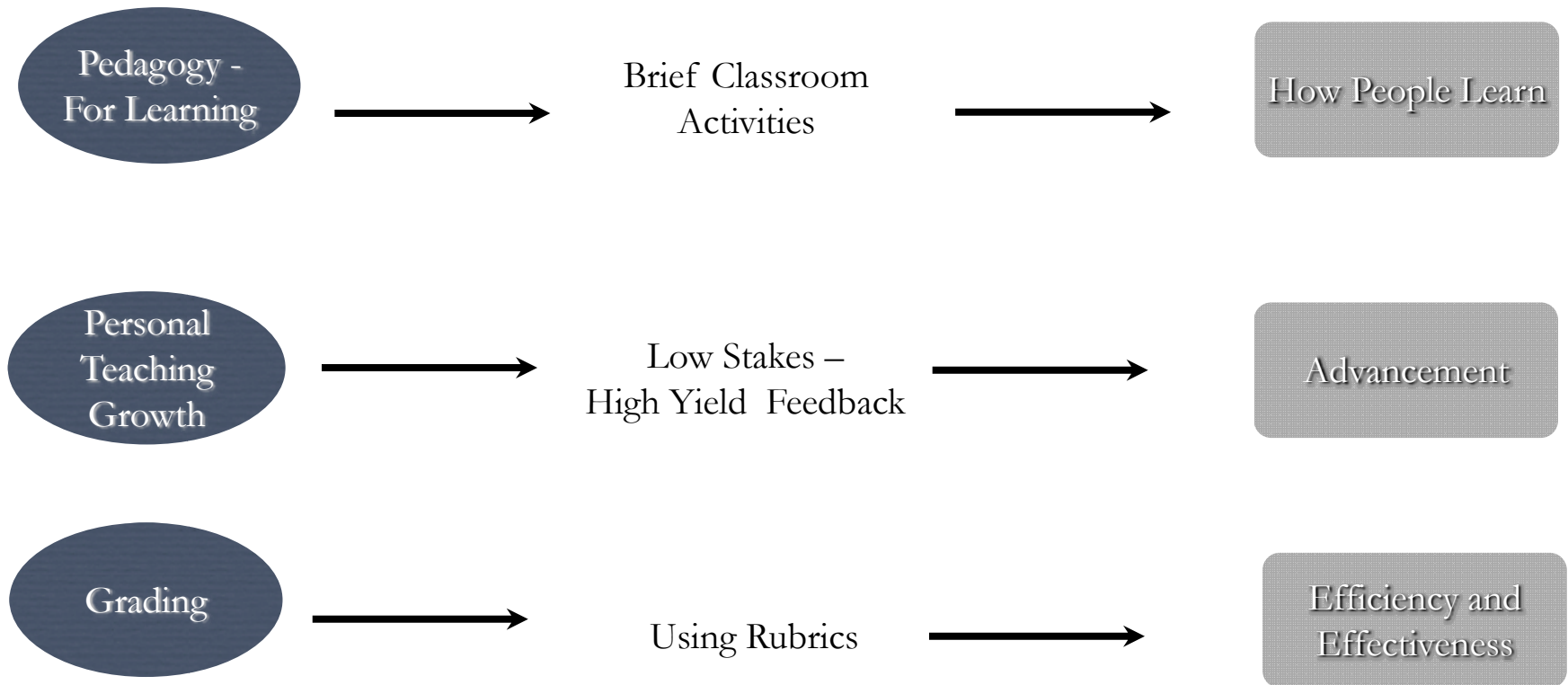


students, colleagues,
multi-tasking, publish,
politics, family, new living
situation, grants, institutional
rules, culture, fitting in,
committees, advising,
teaching, meetings etc., etc...

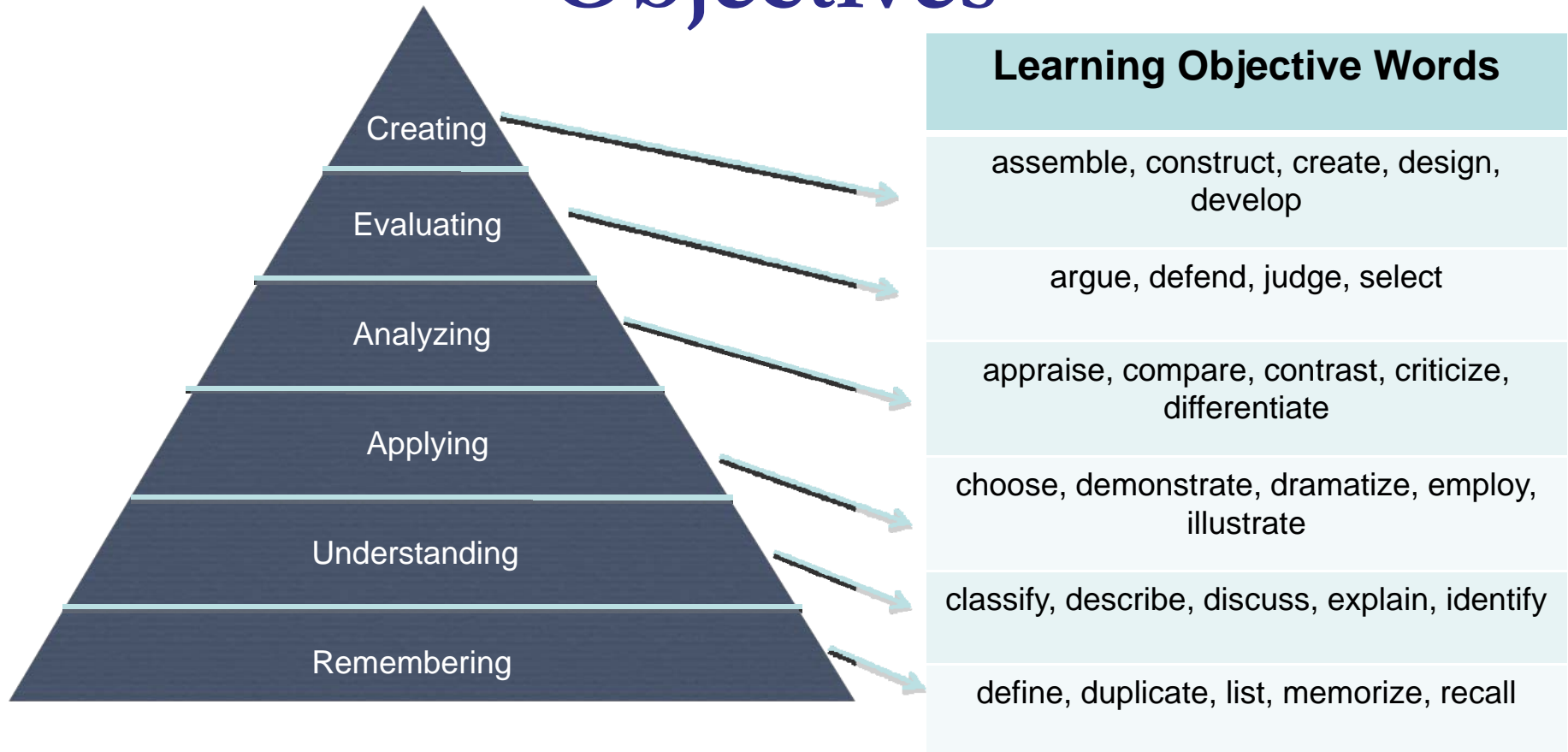
Can I do it?!!!



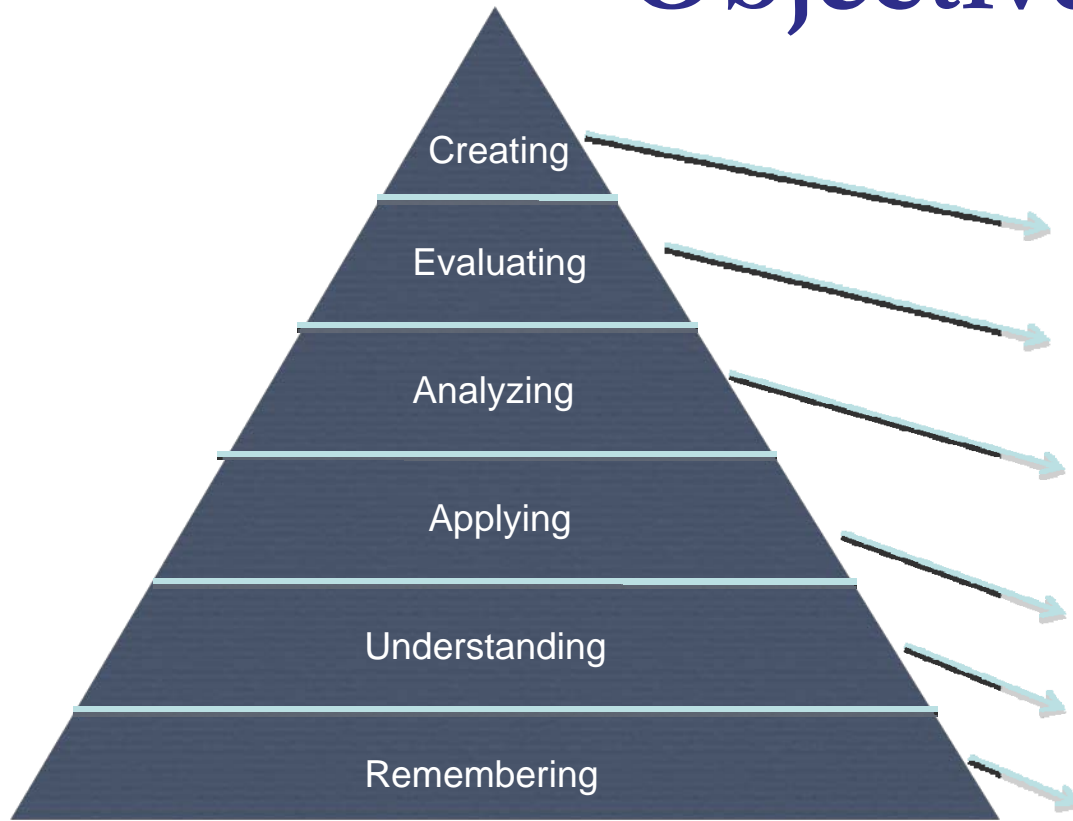
Building Assessment Skills



SKILL #1: Developing Learning Objectives



SKILL #1: Developing Learning Objectives



Learning Objectives

As a result of this class students will be able to ...assemble, construct, create, design, develop

When this class is completed students will be able toargue, defend, judge, select

The purpose of this assignment is to have studentsappraise, compare, contrast, criticize, differentiate

Students should be able to ...choose, demonstrate, dramatize, employ, illustrate

In order to successfully complete this class students will have toclassify, describe, discuss, explain, identify

A basic expectation is that students can ...define, duplicate, list, memorize, recall



Learning Objective Examples

EDU 492: Governance, Policy & Administration In Higher Education

Instructor: Andrew F. Wall, Ph.D.

Office: 1-347 Dewey

Office Hours: Friday's 10am to 3pm or by appointment

Phone: 585-275-8039 (office)

Email: afwall@Warner.Rochester.edu

Location: 1-160B Dewey 4:50 to 7:30pm

Course Description:

This course is intended for students who are pursuing an advanced degree in higher education or a related area. Students in this course will explore organization, administration and policy associated with higher education governance. The purposes of this class is to create a conceptual understanding of higher education organization and governance so that participants can apply multiple theoretic construction to critically examine educational organization functioning and to improve higher education. Students will use course readings, assignments, in class activities and personal reflection to develop the competence to be critical examiners of educational organizational functioning.

Desired Learning Outcomes:

- Develop an understanding of organization and governance of higher education.
- Be able to apply basic organizational principles to the practice of administration in higher education.
- Be able to articulate how governance is currently being implemented in higher education.
- Describe the interplay between higher education governance, administration and educational politics.
- Be able to identify the strength and limitations of different administrative approaches to governance in higher education.
- Be able to translate organizational and administrative theory into plans for practice to achieve specific organizational policy goals.

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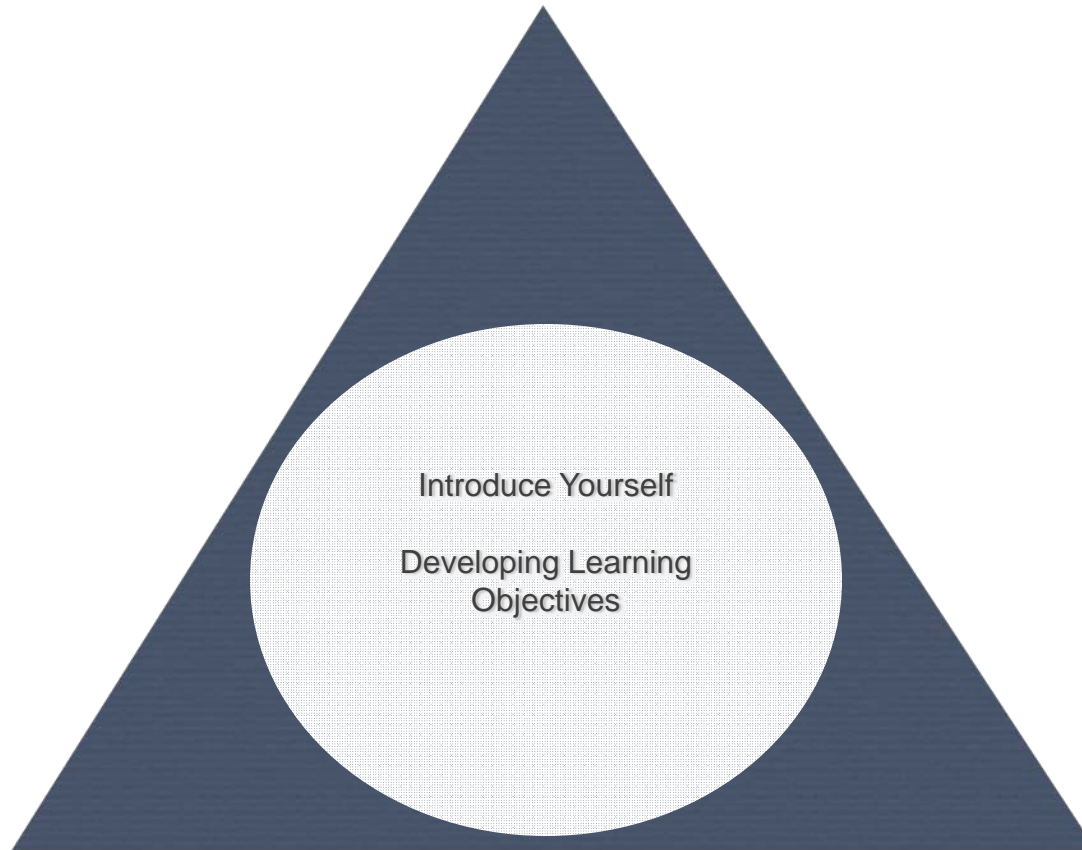
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Table Discussion #1



Strategies to Advance Your Teaching Using Assessment

Personal
Teaching
Growth

- Letter to the Professor
- Classroom Teaching Observation
- Mid-Semester Feedback



Improving Teaching: Important Toward Advancement

Personal
Teaching
Growth

Mid Semester
Formal
Feedback

Listen to Students to Ensure a
Course Goes Well

Letter to a
Professor



Gain Feedback From
Colleagues as Informal Low
Stakes Peer Review

Teaching
Observation

Teaching (and Student
Learning) Matters!!



Tips On Using Assessment to Improve Teaching

Personal
Teaching
Growth

Don't Get
Fancy

Ask Before
the Stakes
Are High

Low Stakes -
High Yield

Gather
Feedback –
Just Do It!

Ask Questions To
Which You Are
Willing to Hear the
Answers

Find People to
Talk About
Your Teaching
With

Respond to
Feedback -
Even if
Modestly

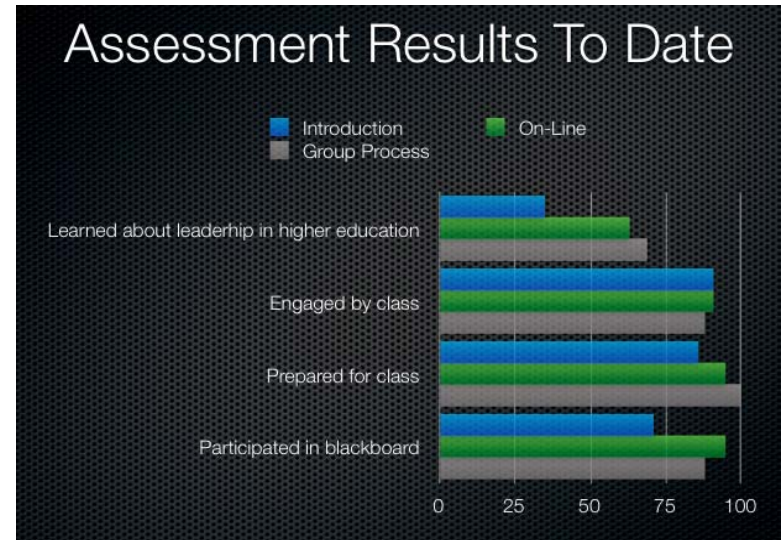


Formal Low Stakes - High Yield Feedback

Brief Blackboard Based Formal Feedback Form

- Likert Type Questions Automatically Tabulated
- Open Ended Response Categories
- Information on the Process of How the Class is Going

Pedagogy –
For Learning



Reflecting On Past Three Weeks

Themes By Week

- WEEK ONE: Good beginning, engaging, didn't enjoy discussion of syllabus.
- WEEK TWO: Good experiment, appreciated stretching and effort, chaotic, some technology problems.
- WEEK THREE: Tough group process (to find consensus), generally a good discussion was reported.



Mid-Semester Feedback

Some or all of the following questions can be included on a mid-semester evaluation depending upon the specific characteristics of the subject being taught.

Mid-Semester Subject Evaluation

The goal of this evaluation is to provide feedback to the professor and teaching assistants about the course. Please be as specific and concrete as possible and provide suggestions for what can be realistically implemented or changed in the second half of the term.

1. Course content. What topics have been most interesting or useful? Which have been least interesting or useful?
2. Professor's teaching methods and style. Please comment on lectures, methods and management of class discussion, availability.
3. Textbook, course packet, readings. Please comment on clarity and how useful written material has been to helping you learn course material.
4. Teaching assistants. Please comment on availability, ability to provide additional instruction:
5. Problem sets, assignments. Please comment on usefulness, evaluation, timely return.
6. What parts (e.g., lectures, recitations, textbook, problem sets) of the course have been most helpful learning the material?
7. Is there anything else you particularly like or dislike about the course?
8. Suggestions for improvement in second half of the semester (please think about what can be reasonably implemented).



Mid-Semester Feedback

Type of Question/ Dimensions to Consider	Blackboard Survey Questions	Response Metric
Learning Objective Questions	To what extent are you confident you can describe the five ways that higher education is financed in the modern context?	Not at all, a little, moderately, extremely
Engagement Questions	How engaged have you been with the course thus far?	Not at all, a little, moderately, significantly, extremely
Involvement in Class	To what extent do you participate in class discussions?	Never, sometimes, most of the time, all of the time
Preparation for Class	To what extent have you completed the assigned material (reading, writing) prior to coming to class each week?	Never, sometimes, most of the time, all of the time
Teacher Preparation	How satisfied have you been with your teachers responsiveness to class questions?	Not at all, a little, moderately, extremely
Open Ended	Please list the three things you have learned in this class so far? What three things are you confused about or don't understand?	Open Ended



Table Discussion #2

Write me a letter about how the session is going, keep it short, but tell me about what you have learned and what you are thinking or take my quick survey at:

Develop a mid-semester feedback approach and questions for your teaching.



Managing Grading Effectively

Grading

Plan Assignment
Based Upon
Grading Time

Benchmark
Feedback

Use Rubrics

Sandwich
Feedback

Block Time To
Grade

Develop an
Organizational
Strategy

It would be
better if...

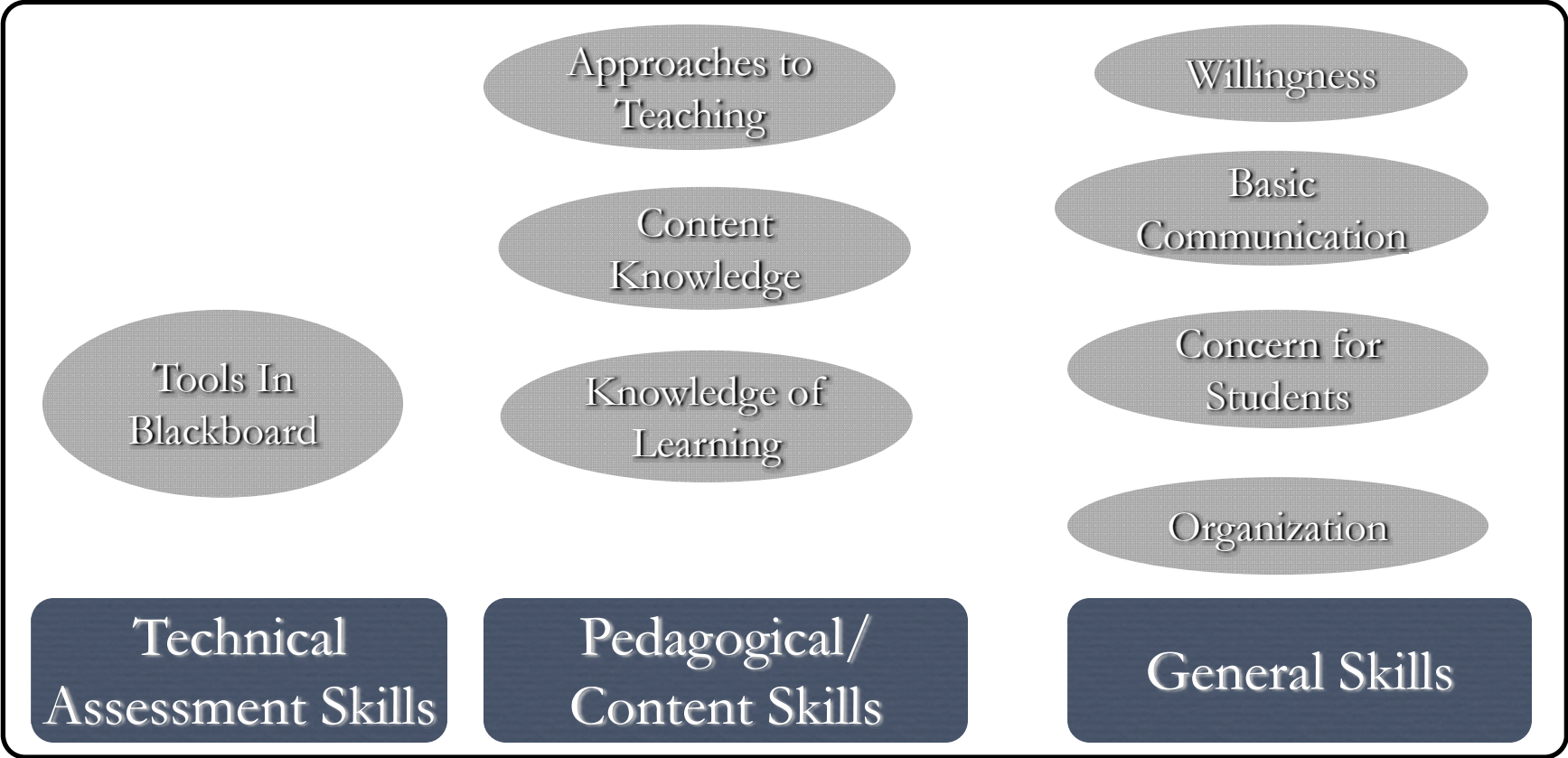
Plan Assignments
into Your
Academic
Calendar



Pedagogy -
For Learning

Personal
Teaching
Growth

Grading



Keys to Understanding Rubrics

Definition	Why Use a Rubric
<ul style="list-style-type: none">• Rubric is a systematic scoring guideline to evaluate students' performance through the use of a detailed description of performance standards.• Grading rubrics can be used to evaluate a broad range of subjects and activities (including papers, speeches, problem solutions, labs, portfolios, essays, and any other subjective task).• Typically, rubrics specify the performance expected for several levels of quality. These levels of quality may be ratings (e.g., Excellent, Good, Needs Improvement) or numerical scores (e.g., 4, 3, 2, 1) which are then utilized to determine an alphanumeric grade (e.g., A, B, C, etc).	<ul style="list-style-type: none">• Helps students understand the teachers' definition of "quality".• Reduces the subjectivity involved in evaluating work.• Allows instructors to provide more detailed feedback to individual students.• Allows instructors to detail comments on one or two elements and simply indicate ratings on others (can be time saving).• Having received the criteria with an assignment, students are able to write toward specific goals.• Encourages the clarification of criteria for quality work.



Keys to Understanding Rubrics

- Does the rubric relate to the outcome (s) being measured?
- If the assessment is to address critical thinking skills, does the rubric reflect that?
- Does it cover important dimensions of student performance?
- Do the criteria reflect current conceptions of excellence in the field?
- Does the rubric reflect what you emphasize in your teaching?
- Does the highest scale point represent a truly exemplary performance or product?
- Are the dimensions or scales well-defined?
- Is it clear to everyone what each scale measures?
- Is there a clear basis for assigning scores at each scale point?
- Is it clear exactly what a student needs to do to get a score at each scale point?



Rubric Examples

Course Paper Grading Rubric Feedback For EDU 576: Contemporary Issues in Higher Education Andrew F. Wall

For: _____ Date: _____

Rating Scale: Each area listed below is rated on a four-point scale. With the following values on that scale:

Preliminary – Reflects an area that is underdeveloped, incomplete, and insufficient quality, this should be seen as a clear directive to make dramatic improvement.

Needing Refinement – Reflects an area that is not fully at a level of graduate student work, but with further clarification, refinement or additional revision could meet the minimum barrier of quality.

Acceptable – Reflects the meeting the minimum quality, this should be seen as an area that needs continued review and refinement as you conduct further work on your project.

Excellent – Reflects an area of high quality work, which comfortably meets the standard for a graduate level project.

APA Format: This section reflects feedback as to the extent to which the paper is formatted in APA format throughout. Particularly this feedback reflects whether knowledge claims in your project are backed up by appropriate documentation. (5 points)

Area One: APA Format	Preliminary	Needing Refinement	Acceptable	Excellent
1. Project is formatted in APA Style (Title page, running head, pagination)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. In text references are correctly formatted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Knowledge claims are appropriately referenced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Quotations are appropriate and referenced with page number (appropriate includes not using lengthy quotes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Reference list is complete and formatted correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____				

Construction, Writing and Argument (Purpose): This section reflects feedback as to the extent to which the paper is well written. (10 points)

Area Two: Construction, Writing and Argument (Purpose)	Preliminary	Needing Refinement	Acceptable	Excellent
1. Project is clearly written throughout (reads cleanly, no typos, writing is clear)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Sentences and paragraphs are clear and well constructed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Project uses transitions between ideas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Writing tools are used to organize the paper (advance organizers, headings, well constructed summaries, circular writing of ideas)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. There is a clear argument to the paper that is carried throughout.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Paper has a unified style and reflects the voice of the author.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____				

Content: This section reflects feedback as to the extent to quality, breadth and depth of your paper (points)

Paper Content	Preliminary	Needing Refinement	Acceptable	Excellent
1. Originality: Paper makes a significant policy argument.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Relevance: Examines a policy topic that clearly contributes to our knowledge and is relevant to the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Logic: Makes a logical deductive or inductive argument about a higher education policy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Conclusions are based on evidence provided in the paper and are based on dependable/credible resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Uses relevant references, including references from scholarly research cited in books and/or journals. References from web-based resources are relevant and appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. If using interviews and other non-published resources, research is focused, clear, and contributes significant information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Evidence presented is clearly tied to the main argument of the paper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is clear that the right literature has been used in framing the argument of the paper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The paper is compelling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: _____				



Rubric Examples (Not Such A Great Example)



Rubric for Benchmarking Memo		Great	Fine	Work on it
Professionalism/Format 20%	5, 3, 1	Handed in on time.	Needed special handling.	Handed in late.
	5, 3, 1	Printed easily.		Wouldn't print.
	5, 3, 1	No Grammar or Spelling issues.	One or two grammar or spelling problems.	Frequent grammar and spelling issues; these should not be occurring at the senior level.
	5, 3, 1	Professional looking/Consistent format. Proper tabular format.	Some formatting problems.	Looks like it was typed last-minute, random format changes.
Content 80%	10, 6, 2	At least two types of customers specified. Needs of each customer thoroughly identified and discussed. Clear ranking of needs presented.	Only one customer specified. Needs are briefly identified, not thoroughly discussed. A few needs are missing. Ranking is somewhat arbitrary.	Type of customer being considered is not addressed. Insufficient list of needs; discussion of needs is absent. Ranking is not present or does not reflect actual importance of needs.
	15, 8, 3	A QUANTITATIVE metric is presented for each need. Appropriate units and target values given (and their choice clearly motivated).	Metrics are given for all needs, but metrics which could be quantified are not. Some metrics are missing units or target values. A few target values given are not logical or realistic.	Most needs are missing meaningful metrics. Obvious opportunities to quantify metrics were ignored. Target values given are not logical or realistic.
	10, 6, 1	Benchmark your device against both customers' needs. Clear representation of both your device's performance and at least one competing device's performance.	Benchmarking of one device is insufficient. Comparison between your and competing device is given but not thorough.	Benchmarking of either device (your or competitor) is missing completely. Benchmarking is illogical and does not serve its intended function.
	5, 3, 1	Brief introduction to House of Quality analysis and results.	Unnecessarily long introduction to HoQ.	Absent introduction to HoQ.
	20, 10, 2	House of Quality used to compare your device against competitors. HoQ is easy to interpret, and shows thorough analysis of both products and customers. HoQ can be split between multiple pages for spacing purposes, so long as labels are clear.	HoQ is not fully filled out, or is somewhat difficult to interpret. Some analysis of product or customers is missing. Table format is used, but HoQ comparisons not included.	HoQ is very difficult to read or interpret. Data is not presented in tabular form, but instead is only included in text. Competitor's product not considered at all. (0 if HoQ analysis is not present)
	5, 3, 1	Brief summary of device performance given that highlights observations, opportunities for improvements and comparison to alternatives.	Unnecessarily long summary, or incomplete summary given.	No summary given; only tabular presentation of analysis.
	15, 8, 3	At least one device metric measured. Appropriate statistical analysis is conducted to allow for meaningful interpretation of device's performance. Both the statistical output and a clear interpretation of its meaning is given.	Statistical analysis choice is incorrect, but close to the appropriate choice. Measurement/statistics choice not optimized for meaningful interpretation of device's performance. Interpretation of statistical results is flawed.	Numerous errors in statistical analysis. No interpretation of output from statistical testing. (0 if no statistical analysis is conducted)
Team issues	I, II, III (No grade)	Teamwork seems fine	Might be some apparent teamwork issues, but don't seem to be effecting your output	Team dynamics seem to be getting in your way. Please invite an instructor to your next team meeting.



Rubric Examples

Represent information in multiple ways (Rutgers Physics Dept. example)

Scientific Ability		Missing	Inadequate	Needs some improvement	Adequate
1	Is able to extract the information from representation correctly	No visible attempt is made to extract information from the problem.	Information that is extracted contains errors such as labeling quantities incorrectly.	Some of the information is extracted correctly, but not all of the information. Numbers are just extracted with correct labels but no units are extracted with them.	All necessary information has been extracted correctly and is visible through a constructed representation.
2	Is able to construct new representations from previous representations	No attempt is made to construct a different representation.	Representations are attempted, but use incorrect information or the representation does not agree with the information used.	Representations are created without mistakes, but there is information missing, i.e. labels, variables.	Representations are constructed with all given (or understood) information and contain no major flaws.
3	Is able to evaluate the consistency of different representations and modify them when necessary	No representation is made to evaluate the consistency.	At least one representation is made but there are major discrepancies between the constructed representation and the given one.	Representations created agree with each other but may have slight discrepancies with the given representation. Can be seen that modifications were made to a representation.	All representations, both created and given, are in agreement with each other.
4	Is able to use representations to solve problems	No attempt is made to answer the problem.	Question is answered incorrectly.	Question is answered correctly without the use of a representation.	Question is answered correctly with the use of a representation other than a mathematical.

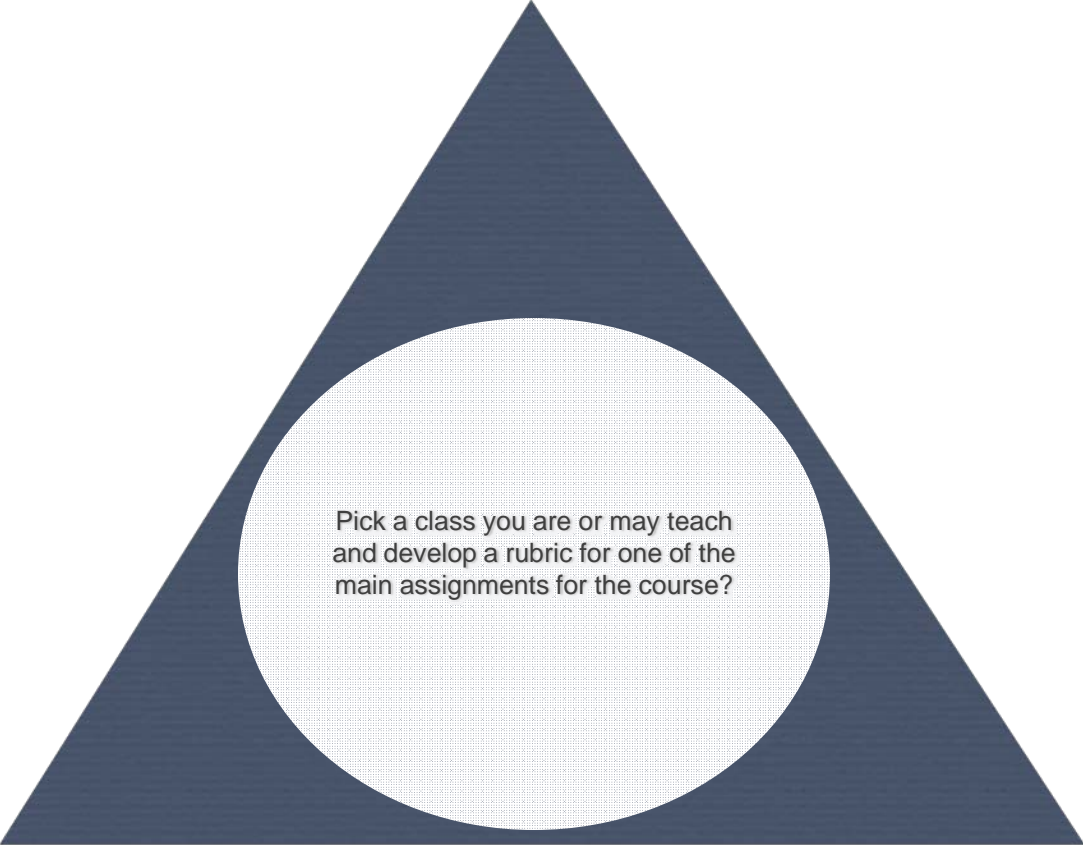


Rubric Examples

Elements	Unsatisfactory	Satisfactory	Honors
Project Selection and Problem Identification	<p>Project selected is too narrow or too broad in scope with unclear or inconsistent goals. Project is not relevant to health care leadership and program/course content.</p> <p>Project selected does not meet organizational and/or student learning needs. There is no measureable student achievement. Student is not able to clearly articulate scope, benefits and background.</p>	<p>Project was appropriately selected and planned in collaboration with the agency/organization. Student achievement is measurable. Scope of project is appropriate to both organizational needs as well as student learning needs and student is easily able to articulate scope, benefits and background.</p>	<p>Project was selected developed and planned with a high degree of independent collaboration with agency/organization professionals. Scope of project was at highest organizational level possible. Student demonstrated exceptional ability to identify and select a project that both met organizational goals as well as student learning goals. Student is able to articulate not only scope, benefits and background, but also national and local benchmarking of project and background.</p>
Theoretical Perspective	<p>A theoretical framework is not shared or inaccurately identified. Student is not able to relate project to any theoretical perspective. the strengths and limitations of the theory and the extent to which it has or could influence decisions related to the project have not been demonstrated</p>	<p>A theoretical perspective has been appropriately described and referenced. Student is easily able to articulate theoretical perspective appropriate to this project and organization. Student demonstrates a thorough knowledge of theoretical framework. Student is able to identify strengths and limitations</p>	<p>Student not only demonstrates in depth knowledge of appropriately selected theoretical framework but clearly applies it to all phases of project. Student is easily able to articulate how theoretical framework will inform broad leadership practice in related project development. Student also demonstrates insight into</p>



Table Discussion #3



Pick a class you are or may teach
and develop a rubric for one of the
main assignments for the course?



Connecting Classroom Assessment to Learning

Pedagogy –
For Learning

One Minute
Paper



Engaging Preconceived Ideas

Think, Pair
Share



Organization of Knowledge
for Retrieval

Metacognitive Activity



Additional Brief Classroom Assessment Activities

Pedagogy –
For Learning

- Think, Pair, Share
- Chain Letter
- Blackboard
Feedback Form -
For Anytime

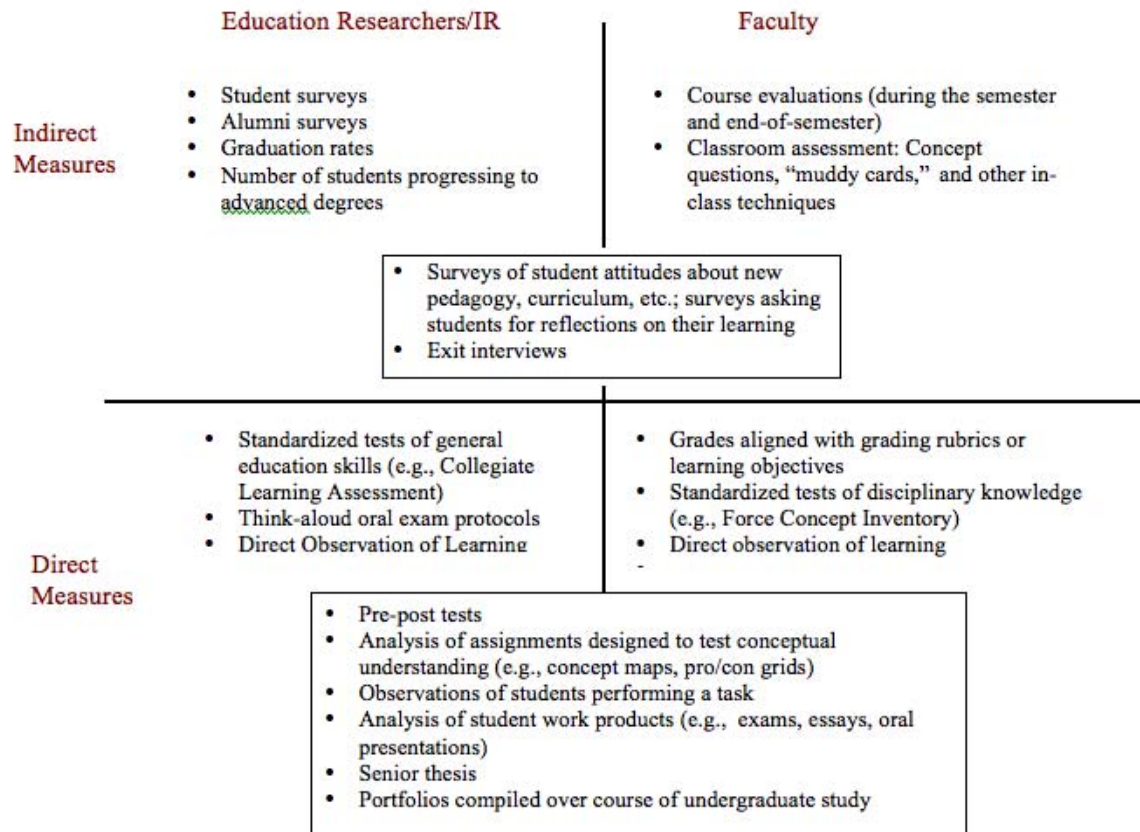
Have Students Think for
One Minute on Session Topic

Have Students Pair Up to Discuss
What They Thought About

Have Students Share With The Class
The Nature of Their Discussions



Indirect verses Direct Measurement of Learning



Indirect verses Direct Measurement of Learning

Type of Measure	Example
Direct Measure Via Survey	Please describe the difference between direct and indirect measures of learning?
Indirect Measure Via Survey	To what extent do you know the difference between direct and indirect measures of learning?
Direct Observation of Learning (Authentic Assessment)	Observing written examples of survey questions that are direct measures of learning and scoring using a rubric to determine quality.
Indirect Description of Learning Using Interview	Description of individual as to whether they know how to differential indirect or direct measures of learning.
Direct Description of Learning Using Interview	Description of an individual as to how to write survey items that are direct and indirect and a differentiating when each approach is appropriate.



Brief Classroom Activities

- Having students do a one minute paper regularly in class has several purposes:

It focuses student attention on the "big idea" of the session.

- It focuses student attention on unclear points.
 - It informs you of student questions and general misunderstandings.
 - It builds continuity over time.
- Students need to know that their comments have been heard and taken seriously, which means that you need to give them feedback on their comments.
 - Include several examples of what students say they like about the class.
 - Choose one or more suggestions for change that you also believe will improve the course and that you feel you can implement.
 - Discuss your feedback with someone who can be objective and help you to keep it in perspective.

One Minute Paper

What are the three most useful or meaningful thing you learned during this session?

What two question(s) remain upper-most in your mind as we end this session?



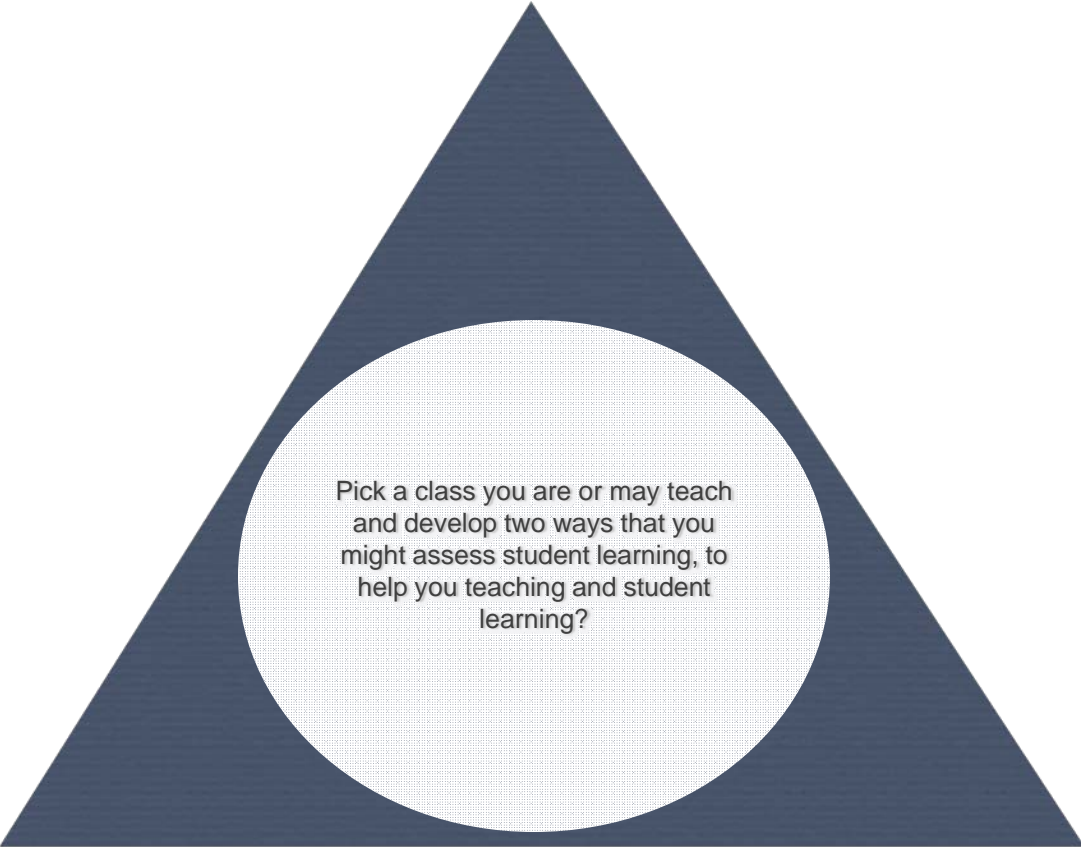
Workshop: Informal Feedback

What ideas have you found potentially useful, and how would you have to adopt them to fit your content area (situation)?

What items are unclear, and what questions do you have about the information presented so far?



Table Discussion #4



Pick a class you are or may teach and develop two ways that you might assess student learning, to help you teaching and student learning?

