A Rubric for Rubrics

A Tool for Assessing the Quality and Use of Rubrics in Education

Criteria	1	2	3	4
Criteria	Unacceptable	Acceptable	Good/Solid	Exemplary
Clarity of criteria	Criteria being assessed are unclear, inappropriate and/or have significant overlap	Criteria being assessed can be identified, but are not clearly differentiated or are inappropriate	Criteria being assessed are clear, appropriate and distinct	Each criteria is distinct, clearly delineated and fully appropriate for the assignment(s)/course
Distinction between Levels	Little/no distinction can be made between levels of achievement	Some distinction between levels is made, but is not totally clear how well	Distinction between levels is apparent	Each level is distinct and progresses in a clear and logical order
Reliability of Scoring	Cross-scoring among faculty and/or students often results in significant differences	Cross-scoring by faculty and/or students occasionally produces inconsistent results	There is general agreement between different scorers when using the rubric (e.g. differs by less than 5-10% or less than ½ level)	Cross-scoring of assignments using rubric results in consistent agreement among scorers
Clarity of Expectations/ Guidance to Learners	Rubric is not shared with learners	Rubric is shared and provides some idea of the assignment/ expectations	Rubric is referenced - used to introduce an assignment/guide learners	Rubric serves as primary reference point for discussion and guidance for assignments as well as evaluation of assignment(s),
Support of Metacognition (Awareness of Learning)	Rubric is not shared with learners	Rubric is shared but not discussed/ referenced with respect to what is being learned through the assignment(s)/course	Rubric is shared and identified as a tool for helping learners to understand what they are learning through the assignment/ in the course	Rubric is regularly referenced and used to help learners identify the skills and knowledge they are developing throughout the course/ assignment(s)
Engagement of Learners in Rubric Development/ Use *	Learners are not engaged in either development or use of the rubrics	Learners offered the rubric and may choose to use it for self assessment	Learners discuss the design of the rubric and offer feedback/input and are responsible for use of rubrics in peer and/or self-evaluation	Faculty and learners are jointly responsible for design of rubrics and learners use them in peer and/or self- evaluation

*Considered optional by some educators and a critical component by others

	Scoring:	0 - 10 = needs improvement	11 - 15 = workable	16 – 20 = solid/good	21 - 24 = exemplary
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A Rubric Template:

Criteria	Weight	1	2	3	4

Scoring:

A TAXONOMY OF SIGNIFICANT LEARNING



One important feature of this particular taxonomy is that each kind of learning is *interactive*, as illustrated in Figure 2 (next page). This means that each kind of learning can stimulate other kinds of learning. This has major implications for the selection of learning goals for your course. It may seem intimidating to include all six kinds of significant learning. But the more you can realistically include, the more the goals will support each other-and the more valuable will be your students' learning.

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Course Design with a Focus on Assessment Palo Alto College June 4, 2010

Barbara J. Millis Director, The Teaching and Learning Center The University of Texas at San Antonio









Faculty Involvement

"Faculty should be influential in the substantive determination of key learning outcomes at all levels: institutional, program, and course."



The Quiet Signal

• The teacher signals for quiet, often with a raised hand.

- Students complete their sentences.
- Students raise their hands and alert classmates to the signal.



The Three Step Interview

- A interviews B for the specified number of minutes, listening attentively and asking probing questions.
- At a signal, they reverse roles with B interviewing A for the same number of minutes with the same question(s).
- At another signal, each pair turns to another pair, forming a group of four (quad). Each member of the quad introduces his or her partner, highlighting the most interesting points.





First Things First

Always explain the structure to the students before you give them the task





When you assign group work where issues are discussed, you can easily gain in-depth insights into your students' learning and attitudes. Often comments you have overheard as you move from group to group can be integrated into a mini-lecture taking into account what you have learned about your students' learning.





To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you're going so that you better understand where you are now so that the steps you take are always in the right direction.

Stephen Covey, 7 Habits of Highly Effective People





http://www.deefinkandassociates.com/GuidetoCourseDesignAug05.pdf



)

- The teacher poses an open-ended question.
- Each group has one piece of paper and one pen.

Roundtable

- The first student writes one response, saying it out loud.
- He or she passes the paper to the left where a second student writes a response, etc.
- The "brainstorm" continues until time elapses.
- Students may say "pass"

Roundtable Question

What are the "situational" factors you and the faculty in your departmental need to take into account when planning a course?













Formulating Significant Learning Goals: Foundational Knowledge

- What key **information** (facts, terms, formula, concepts, relationships) is important for students to **understand and remember** in the future?
- What key **ideas** or perspectives are important for students to understand in this course?













Formulating Significant Learning Goals: Human Dimension

- What can or should students learn about themselves?
- What can or should students learn about understanding and interacting with **others**?

































- Course goals are *general statements* that define an effective course (what the **course** should do).
- Student learning outcomes are *specific results* the students must achieve in order to attain the course goals (what **students** can do).





- I want students to achieve a life-long interest in my subject
- I want students to develop self-assessment skills
- I want students to understand the nature of critical thinking

Example of student learning outcomes that are

action statements:

"Students will be able to":

- describe the scientific method and provide an example of its application;
- pick a single theory from the science represented by this course and explain its historical development;
- provide two examples of testable hypotheses;
- provide two specific examples that illustrate why it is important to the everyday life of an educated person to be able to understand science;
- describe two current examples of the relationship between physical science and public policy.... (4 more)"

Source: Ed Nuhfer, CSU, Channel Islands

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Good Student Learning Outcomes are:

- student-focused rather than professor-focused
- focused on the learning resulting from an activity rather than on the activity itself
- focused on **skills and abilities** central to the discipline and based on professional standards of excellence
- general enough to capture important learning but clear and specific enough to be **measurable**
- focused on aspects of learning that will develop and endure but that can be assessed in some form now.

Source: Ed Nuhfer, CSU, Channel Islands

Another Look at Goals vs Measurable Student Learning Outcomes

Student Learning Outcomes Series Fall 2008

Goals, Objectives, and Learning Outcomes 101: Developing Student Learning Outcomes

Facilitated by: Dr. Francine Glazer, Director, Center for Teaching & Learning Dr. Michael Uttendorfer, Dean, School of Education

Course Goals vs. Student Learning Outcomes

- Course goals are *general statements* that define an effective course (what the **course** should do).
- Student learning outcomes are *specific results* the students must achieve in order to attain the course goals (what **students** can do).



(Mager, 1997)



Goals to SLOs

Course Goal

• Students will be able to do the research necessary to write a formal paper.

Derived Student Learning Outcome

- Students will be able to distinguish between scholarly and popular writing when identifying source material.
- · Students will evaluate web pages for reliability and credibility.

Goals to SLOs

Course Goal

- Students will be effective communicators.
- Derived Student Learning Outcome
- Students will be able to prepare and deliver a persuasive, professional speech on a current topic in their discipline.

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Goals to SLOs

Course Goal

- Students will be able to solve problems.
- Derived Student Learning Outcome
- Students will design, collect, and statistically analyze data to solve problems encountered by a professional in their chosen discipline.
- Students will support their conclusions by data generated from their research.

Goals to SLOs

Course Goal

- · Students will understand how to use technology effectively.
- Derived Student Learning Outcome
- Each student will be able to use word processing, spreadsheets, databases, and presentation graphics in preparing their final research project and report.



Goals to SLOs

Course Goal

- Students will demonstrate knowledge of the history, literature and function of the theatre, including works from various periods and cultures.
- Derived Student Learning Outcome
- Students will explain the theoretical bases of three dramatic genres and illustrate them with examples from plays of different eras.

Yet Another Look at Student Learning **Outcomes: Ron Carriveau, UNT**

Goal/Objective: 1 The student will understand literature (from a particular period or genre)

General Learning Outcome: 1.1 The student will demonstrate accurate, critical, analytic reading of literature by identifying pertinent information, recognizing inferences, and evaluating characters and idea.

Specific Learning Outcome Statements:

1.1.1 Determine the main idea/theme of a passage or piece of literature.

1.1.2 Identify important and supporting details in a passage or piece of literature.

1.1.3 Identify sequence of events in a passage or piece of literature.



Student Learning Outcome

Statement that tells what a student is expected to know and be able to do.

- The end result that is expected.
- Must be written in such a way that the expectation is measurable. Assessment
- General term for the various procedures that may be used to obtain information.
- . Tests, surveys, observations, performance, and group evaluation. Measurement

Assigning numbers (on a scale) to describe how much of some particular ability or characteristic a student has based on the student's responses to items on the particular assessment instrument used.









EXAMPLE: Learning Outcomes

Student will be able to:

- 1. Recognize the ways both poor and good communication skills affect organizations and business people's careers.
- 2. Explain the basic communication process.
- 3. Describe the attitudes and techniques shared by good communicators.
- 4. Contrast effective communication with efficient communication.
- 5. Discriminate between actions and behaviors that both impede and contribute to effective listening by participating in class discussions.
- 6. Identify writing principles that are important to business writing.
- 7. Write an effective formal analytical business report.
- 8. Demonstrate the ability to plan for and prepare an effective business presentation.
- 9. List with descriptions the seven-step job search process.
- 10. Describe how communication and interpersonal skills apply to business etiquette. 11. Analyze critical communication strategies that are relevant to the Millennium Generation

EXAMPLE: Goals and Student Learning Outcome Statements History 2620: United States History Since 1865

Goal 1: Students will demonstrate an understanding of the facts and chronology of United States History from 1865 to 1980.

General Student Learning Outcomes 1.1 Students will be able to identify significant persons and groups in U.S. history.

- - Specific Outcomes
 - 1.1.1 The student can identify significant persons and groups in history in connection to major events from 1865 to 1915.
 - 1.1.2 The student can identify significant persons and groups in history in connection to major events from 1915 to 1980

1.2 Students will be able to connect and evaluate factors of causation and consequence to major events in

Specific Outcomes

1.2.1 The student can explain causes and consequences for the implementation of Reconstruction in South

- 1.2.2 The student can identify and explain causes and consequences for the development of economic modernization through U.S. industrialization and urbanization from 1865 to 1900.
- 1.2.3 The student can identify labor and immigrant groups and explain their contribution to economic modernization

GUIDELINES FOR WRITING LEARNING OUTCOMES (Handbook page 6)

- Think of your outcome statements in terms of what you consider to be the most important learning 1. outcomes from the large domain of possible outcomes
- 2. Map the primary focal points of your instruction and course content so that you will have reference
- 3. Work from a hierarchical viewpoint in terms of the breadth and depth of what you want students to know and be able to do.
- 4. Identify what student behavior you would expect to see if a student were to correctly do what the outcome statement requires
- 5. Remember that the test item you build to measure the outcome can be written so that the item is more difficult or less difficult relative to the difficulty of the outcome statement.
- 6. Be careful not to pollute the outcome task by mixing in other outcome tasks that are not relevant to the specific task you want to measure.
- Think about the difficulty of the outcomes as a group. If all of the outcomes are extremely difficult tasks, the test developed from the outcomes will likely be extremely difficult.
- 8. Think in terms of what is important, reasonable, and fair when you develop outcomes and assessments.

QUALITY ASSURANCE CHECK LIST FOR OUTCOME STATEMENTS (p. 7)

1. Is the goal/objective representative of the larger domain of interest? (For example, the domain might be biology knowledge; thus, the goals/objectives would have to be related to biology knowledge).

2. Does the goal/objective statement contain the broader category words compared to the outcome statements? (For example, for the domain of *biology knowledge*, words such as *understand*, *know*, and *apply* could be used as goals/objectives, but *measurable* outcome statements would have to be more specific).

____3. Does the general learning outcome further define the goal/objective and make the instructional intent clear? (For example, the goal/outcome knows might be further defined by identify, define, describe, and distinguish between)

and using usin detivering. 4. Is the general learning outcome clearly the product that is expected and stated in terms of specific, observable, and measurable student performance? (For example, a general learning outcome statements such as, *Identify, define, describe, and distinguish between biology terms and concepts related to plant life,* clearly tell swhat type of performance is expected in order to be a sample and representative of the general outcome and goal).

Dottome and goal. 5. Do the specific learning outcomes that clarify a general learning outcome allow test items to be written that match the outcome statements? (For example, to determine that the student can identify, define, describe, and distinguish between, the specific learning outcomes might ask the student to: Relate terms to the concepts they represent. Use terms in original sentences.

Identify similarities and differences between sets of terms.

(Reference: Linn & Gronlund, 2000)









Writing Learning Goals (Activity to Guide Faculty through the Course Design Process)

- Select one course you teach and write 1-3 learning goals using Fink's Taxonomy
- Write a goal not currently in your course.
- Use the following preface: "BY THE END OF THIS COURSE, MY HOPE IS THAT STUDENTS WILL..."
- Pay attention to the verb used.
- Make it concrete and specific.
 Use the worksheet on page 11 ("Questions for Formulating Significant Learning Goals") if desired.









How People Learn: Brain, Mind, Experience, and School John D. Bransford, Ann L. Brown, and Rodney R. Cocking, editors Committee on Developments in the Science of Learning Commission on Behavioral and Social Sciences and Education National Research Council NATIONAL ACADEMY PRESS Washington, D.C. 1999

http://www.nap.edu/html/howpeople1/ notice.html



Three Key Learning Principles

•Prior Knowledge: Students construct new knowledge based on what they already know (or don't know);

•Deep Foundational Knowledge: Students need a deep knowledge base and conceptual frameworks;

•Metacognition: Students must identify learning goals and monitor their progress toward them.

Learning Principle #1

The contemporary view of learning is that people construct new knowledge and understandings based on what they already know and believe.



It is critically important to learn where your students are and what they already know or don't know,

including their misconceptions.





Background Knowledge Probe

Purposes

- (For students) BKP's highlight key information to be studied, offering both a preview of material to come and a review of prior knowledge;
- (For teachers) BKP's help determine the best starting point and the most appropriate level for a lesson;
- (For both) BKP's can be used for pre and postlesson assessment of learning.



(BKP) Please respond to the following questions:

- How familiar are you with Angelo and Cross's *Classroom Assessment Techniques: A Handbook for College Teachers*?
- In the interests of time, simply raise your hand:
 - 5 fingers = know it well
 - 3 fingers = know something about it
 - 1 finger (Index finger, please!) = never looked at it.









Focused Listing

- **Purpose:** This tool helps determine what learners recall about a specific topic, including the concepts they associate with the central point. Working in pairs can help students build their knowledge base and clarify their understanding. This technique can be used before, during, or after a lesson.
- **Steps:** Ask students to write the key word at the top of a page and within a set time limit (usually 2-3 minutes) to jot down related terms important to understanding that topic.

Assessment of Focused Listing:

Compare students' lists with a master one you have generated, looking at both the quantity and quality of their responses. Categorize responses into "related" or "unrelated" or "appropriate" or "inappropriate" stacks. Consider compiling a master list and having students then sort them by categories.



Focused Listing Applications in Various Disciplines

Jot down relevant associations with the following:

- Antenna
- Symbolism
- Astronaut
- Myth
- ReinforcementCorporation
- Random Distribution
- Electrical Circuits
 - Momentum
 - Bonding

Other Low-Preparation CATs: Directed Paraphrasing

- Students put into their own words key concepts or parts of a lesson for a specific audience or purpose (e.g., Explain the concept of "corporation" to high school students; Explain an "irrevocable trust" to a group of retirees);
- The responses can be sorted as "confused," "minimal," "adequate," or "excellent."

Application Cards Students give one or more real-world applications for an important principle, generalization, theory, or procedure. Examples: (Business) Stephen Covey recommends "Win-win performance agreements": give two specific applications, one related to current news and one related to your own life. (Government) Give a concrete example of the concept "due process." The responses can be sorted as "unacceptable," "marginal," "adequate,"

or "excellent."

 Down Hertel's "Key Principles and Restating"

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Here is a memory test ...

Apple	Fish
Banana	Hamster
Bird	I
Cat	Lamp
Chair	Orange
Couch	Peach
Desk	Plum
Dog	Table

One Way To Be Successful						
Pets	<u>Fruit</u>	Furniture				
Bird	Apple	Chair				
Cat	Banana	Couch				
Dog	Orange	Desk				
Fish	Peach	Lamp				
Hamster	Plum	Table				

Lessons Learned ...

- Taken separately, there was simply too much information to remember all at once.
- However, if we can impose some organizing framework on the information, then it becomes much easier to remember ... even over a long period of time.

Bousfield, W.A. (1953). The occurrence of clustering in the recall of randomly arranged associates. <u>Journal of General</u> <u>Psychology</u>, <u>30</u>, 149-165.

y

"Making categorical chunking a regular part of classroom instruction can raise student learning, thinking, and retention significantly"

—Sousa, D. A. (2001). *How the Brain Learns: A Classroom Teacher's Guide*. 2nd Ed. Corwin: Sage.



Learning Principle #3

A "metacognitive" approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.



Teaching/Learning Implications from Key Finding #3

"The teaching of metacognitive skills ["thinking about thinking"] should be integrated into the curriculum in a variety of ways."

—Bransford, Brown, & Cocking, Eds. How People Learn: Brain, Mind, Experience, and School.

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Punctuated Lectures

- How fully and consistently were you concentrating on the lecture during these few minutes? Did you get distracted at any point? If so, how did you bring your attention back into focus?
- What were you doing to record the information you were receiving? How successful were you?
- What were you doing to make connections between this "new" information and what you already know?
- What did you expect to come next in the lecture and why?

Paired Talk-Aloud Problem Solving

- Have students pair.
- A student takes a difficult problem and talks through it, going into his/her thought process.

the same with a second

problem.





Minute Paper for Papers

Before students hand in their papers, they answer questions or complete sentences such as the following:

- I'm most satisfied with, I'm least satisfied with ... I'm having problems with ...
- In writing this essay, what did you learn that surprised you? When editing your paper, what were you unsure about?
- What changes would you make to this assignment?
- This lesson/assignment is important to my role as an Air Force officer because...



Forward Looking Assessment

- · Focus on what students should be able to DO in the future.
- Students imagine themselves in a situation where people are actually using this knowledge.
- · Create assignments and tests that require judgment/exploration rather than reciting or restating facts.
- Focus on real-life context
- · Focus assessment on integrated use of skills

Dee Fink

Self Assessment

- Create multiple opportunities for students to engage in self-assessment of their performance.
- Students need to identify relevant criteria for assessing their work and the work of others.
- Students need to practice using the criteria for quality on their own work.
- [Ideas similar to Bransford's third key learning principle, metacognition]

Dee Fink







Definition of Rubric

"As applied to student work, a rubric reveals ... the scoring 'rules.' It explains to students the criteria against which their work will be judged. More importantly, ... It makes public key criteria that students can use in developing, revising, and judging their own work."

Huba, M. E. & Freed, J. E. (2000). Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning. Boston: Allyn and Bacon, p. 155.





Acknowledgement The following eleven slides on rubric construction are brought to you courtesy of Dr. Ray Shackelford, Ball State University, Muncie, IN (<u>rshackelford@bsu.edu</u>) They come from a presentation made September 2005 at the Lilly North Conference, Constructing and Assessing Rubrics: Do your rubrics really work?



Criterion / Scale and Standards						
Dimensions	Novice 1 PT.	Apprentice 2 PT.	Proficient 3 PT.	Distinguished 4 PT.	WGT %	Earne Point
1.						
			-	ion		
		A	Dimen	•		
2.		rix anu	iptions			
	Ma	Desci	4			
2						
5.						







Criterion /	Scale and Standards					
Dimensions	Novice 1 PT.	Apprentice 2 PT.	Proficient 3 PT.	Distinguished 4 PT.	WGT %	Earne Point
1.	WG	Т				
	%					
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3.	val	ue				
3.	val	ue				







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- Application . . .
 - Review and edit the rubric
 - Pilot the rubric
 - Use and revise rubric as needed



Acknowledgement

Selected slides in this presentation are based on a session on "Taking the Pain Out of Grading" by Marilla Svinicki at Lilly North, 2006. They will de designated by the portrait of Marilla.

Begin with defensible grading.

- Have sound measurements
- Be very familiar with student performance
- Understand student expectations and motivations



• Are based on authentic situations (What Dee Fink calls "Forward-looking Assessment")



Sound measurement: Reliability

- Would provide the same approximate score if regraded by same grader at a different time.
- Would provide the same approximate score if graded by a different grader.
- The key is the use of <u>reasonable rubrics</u>.



• Use the rubrics to explain the grading – After but also before they do the assignment

Using the rubrics

- Have them apply the rubrics
 - To a sample work
 - To their own work before submission
 - To peer work
- Have them develop the rubrics

9

Forward Looking Assessment

- Focus on what students should be able to DO in the future.
- Students imagine themselves in a situation where people are actually using this knowledge.
- Create assignments and tests that require judgment/exploration rather than reciting or restating facts.
- · Focus on real-life context
- · Focus assessment on integrated use of skills

























Assessment	Methods by Level
State - Nation	Collegiate Learning Assessment MAPP CAAP National Survey of Student Engagement SAT/ACT scores
Institution	College Learning Assessment (CLA) MAPP CAPP National Survey of Student Engagement SAT/ACT scores Exit surveys Aumni Surveys Earollment Grant Funding
College-School-Unit	Exit Surveys Alumni Surveys Errollment Grant Funding Standardized exams Aggregated measures of student learning Aggregated measures of student satisfaction

Assessment Methods by Level, Cont.

1	Exit Surveys
	Enrollment
	Grant Funding
	Credit by exam
	Aggregated measures of student
	learning
	Aggregated measures of student
	satisfaction
Courses - Events	Exams/Quiz items
	Assignments
	Information/feedback
	Course/event evaluations
	Enrollment







INFORMATION ABOUT RUBRICS

Developed by Stewart Ross., University Of Minnesota at Mankato. Used with Permission

What is a rubric?

At its most basic, a rubric is a scoring tool that lays out the specific expectations for an assignment. Rubrics divide an assignment into its component parts and provide a detailed description of what constitutes acceptable or unacceptable levels of performance for each of those parts.

Rubrics can be used for grading a large variety of assignments and tasks:

-research papers
-book critiques
-discussion participation
-lab reports
-portfolios
-group work
-oral presentations
-musical performances

Do you need a rubric?

Here are some sure signs that you need to develop a rubric:

-you are developing carpal tunnel syndrome from writing the same comments on every student paper

-you are worried papers were graded differently depending on your mood or when you grading them over the course of the last week

-student constantly complain they don't know what you what in an assignment

-it takes an entire class period to explain an assignment and your expectations for it -you are beginning to wonder if students are right in complaining about their grade

Is it Worth the Time and Effort?

For beginners the first few rubrics may take more time than they save. However, this time is not wasted. Overall, they cut down on grading time and provide feedback to students. The most time will come in reflection, putting into words basic assumptions and beliefs about teaching, assessment, and scholarship. Some professors involve students in developing the rubrics used in the course. This makes the process of learning as collaborative as possible.

Rubrics not only save time in the long run, but they are also a valuable pedagogical tool that can make us more aware of our individual teaching styles. They allow us to impart more clearly our intentions and expectations while providing timely information and feedback to students.

What are the parts of a good rubric?

Good rubrics tend to have four basic parts:

- 1. The assignment or task description
- 2. A scale of some sort or levels of achievement (could even be in form of grades)
- 3. The dimensions of the assignment (the skills involved)
- 4. Descriptions of what constitutes each level of performance (feedback)

One technique used by many professors is to feature these four parts by using a grid such as the following:

Title

Task Description

	Scale level 1	Scale level 2	Scale level 3
Dimension 1			
Dimension 2			
Dimension 3			
Dimension 4			

Figure 1.1 Basic rubric grid format.

Task Description:

This is usually framed by the professor and involved a "performance" of some sort by the student. This is placed at the top of the grid as a reference throughout the process. We know that students focus on grades but by framing the task students begin to see beyond the grade. Here is an example for a course titled," Changing Communities in Our City."

"Each student will make a 5-minute presentation on the changes in one Minnesota community over the past 30 years. The student may focus the presentation in any way he or she wishes, but there needs to be a thesis of some sort, not just a chronological exposition. The presentation should include appropriate photographs, maps, graphs, and other visual aids for the audience."

The Scale:

The scale describes how well or poorly any given task has been performed. Some words to consider for this include:

-mastery	
-partial mastery	
-progressing	
-emerging	
-high level	
-middle level	
-beginning level	

-exemplary -proficient -marginal -unacceptable -accomplished -average

When first constructing a new rubric it is suggested one confine yourself to three levels of performance. Once the rubric is used with students the teacher can expand to four or five levels.

	Excellent	Competent	Needs work
Dimension 1			
Dimension 2			
Dimension 3			
Dimension 4			

Figure 1.3 Part 2: Scales.

There is an argument to be made for more or less levels for a scale:

-More levels—make the task clearer for the student and reduces the professor's time needed to furnish detailed notes for grading.

-Less levels—the more levels used, the more difficult it becomes to differentiate between them and to articulate precisely why one student's work falls into the scale level it does.

Dimensions:

The part of a rubric lays out the task by breaking down into components:

-Grammar?

-Analysis?

-Research techniques?

-weight of each area?

These areas don't describe the quality of the work, only the areas to be assessed and the value put on each area.

	Excellent	Competent	Needs work
Knowledge/understanding 20%/20 points			
Thinking/inquiry 30%/30 points			
Communication 20%/20 points			
Use of visual aids 20%/20 points			
Presentation skills 10%/10 points			

Figure 1.4 Part 3: Dimensions.

Four Key Stages in Constructing a Rubric

Stage 1: Reflecting

In this stage, the professor takes time to reflect on what is wanted from the students, why the assignment was created, what happened the last time the assignment was given, and what our expectations are.

Constructing a quality rubric requires reflection on the overall class objectives, the assignment, its purposes, the objectives, and students' prior knowledge. It also demands professors think about their previous experience with this type of assignment. Here are some questions to consider at this point of rubric creation:

- 1. Why did you create this assignment?
- 2. Have you given this assignment or a similar assignment before?
- 3. How does this assignment relate to the rest of what you are teaching?

4. What skills will students need to have or develop to successfully complete this assignment?

5. What exactly is the task assigned?

6. What evidence can students provide in this assignment that would show they have accomplished what you hoped they would accomplish when you created the assignment?

7. What are the highest expectations you have for student performance on this assignment overall? What does an exemplary product look like?

8. What is the worst fulfillment of the assignment you can imagine, short of simply not turning in the work at all?

Stage 2: Listing

We focus on the particular details of the assignment and what specific learning objectives we hope to see in the completed assignment. We try to capture the details of the assignment. Lists of learning objectives can vary tremendously, even in classes that seem very similar and that are taught by the same professor. Here are some examples of learning objectives for a possible course titled, "freshmen studies."

- 1. Develop public speaking skills.
- 2. Work well together as a group.
- 3. Learn to organize data and build a logical argument.
- 4. Show an awareness of different points of view including those of the presenters.

5. Recognize and express individual biases and opinions without letting them dominate or distort the evidence.

6. Compile and effectively utilize accurate and appropriate evidence to support all points of an argument.

The point of this stage is to develop your overall learning objectives that will be listed for the assignment. Under each objective you will also have a list that describes what the highest performance expectations for that particular objective are.

Stage 3: Grouping and Labeling

We organize the results of our reflections in Stages 1 and 2, grouping similar expectations together in what will become the rubric dimensions. In reading through your list of performance expectations you can begin to group together items that are related. Once the performance descriptions are in groups of similar skills, we read them and start to find out what is common across the group and label it. These labels will become the dimensions on the rubric so it is crucial that they be clear and neutral. Try to limit them to one word such as "organization," "Analysis," or "Citations."

The learning objectives will be hidden in the rubric but expressed through the individual descriptions of the performance expectations.

Stage 4: Application

The professor applies the dimensions and descriptions from Stage 3 to the final form of the rubric, using a grid format. Now you can transfer your lists and groupings to a rubric grid. The left column will contain the labels for the groups of performance expectations (dimensions).

Bloom's Revised Taxonomy Planning Framework

		Actions	Products	Learning Activities
	<u>Creating</u>	Designing	Film	
		Constructing	Story	
	(Putting together ideas	Planning	Project	
	or elements to develop	Producing	Plan	
	an original idea or	Inventing	New game	
	engage in creative	Devising	Song	
	thinking)	Making	Media product	
	uninking).	Waking	Advertisement	
Ð			Dointing	
÷	Evelvetin r	Oh a al-la a	Palliung	
¥۲	Evaluating	Checking	Debate	
.=		Hypotnesising	Panel	
der th	(Judging the value of	Critiquing	Report	
	ideas, materials and	Experimenting	Evaluation	
	methods by developing	Judging	Investigation	
5	and applying standards	Testing	Verdict	
Ŀ	and criteria).	Detecting	Conclusion	
ē		Monitoring	Persuasive	
두			speech	
i≓ĭ	Analyzing	Comparing	Survey	
±		Organising	Database	
	(Breaking information	Deconstructing	Mobile	
	down into its component	Attributing	Abstract	
	elements).	Outlining	Report	
		Structuring	Graph	
		Integrating	Spreadsheet	
		integrating	Checklist	
			Chart	
			Outline	
	Applying	Implementing	Illustration	
	Apprying	Corrying out	Simulation	
	(Liping strategies	Lloing	Simulation	
	(Using strategies,	Using	Demonstration	
	concepts, principles and	Executing	Demonstration	
	theories in new		Presentation	
	situations).		Interview	
			Performance	
b			Diary	
			Journal	
÷	Understanding	Interpreting	Recitation	
È		Exemplifying	Summary	
Ē	(Understanding of given	Summarising	Collection	
<u> </u>	information).	Inferring	Explanation	
ē		Paraphrasing	Show and tell	
ğ		Classifying	Example	
ō		Comparing	Quiz	
Ľ		Explaining	List	
é			Label	
Š			Outline	
Ľ	Rememberina	Recognisina	Quiz	
-		Listing	Definition	
	(Recall or recognition of	Describing	Fact	
	specific information)	Identifying	Worksheet	
		Retrieving	Test	
		Naming	Label	
		Locating	Liet	
		Finding	Workbook	
		i muniy	Poproduction	
			Reproduction	

INTERACTIVE NATURE OF SIGNIFICANT LEARNING



Dee Fink's Model

The Key Components Of INTEGRATED COURSE DESIGN



Précis of the INITIAL DESIGN PHASE (Steps 1-5)

DESIGNING COURSES THAT PROMOTE SIGNIFICANT LEARNING

If professors want to create courses in which students have "significant learning experiences,"

they need to <u>design that quality into their courses</u>. How can they do that? By following the five basic steps of the instructional design process, as laid out below:

Step 1. Give careful consideration to a variety of SITUATIONAL FACTORS

- What is the special instructional challenge of this particular course?
- 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?

Use the "BACKWARD DESIGN" Process

This process starts at the "end" of the learning process and works "back" toward the beginning. Use information about the Situational Factors (Step 1, above), as you make the following key decisions:

Step 2. <u>Learning Goals</u> What do you want students to learn by the end of the course, that will still be with them several years later?

- Think expansively, beyond "understand and remember" kinds of learning.
- Suggestion: Use the taxonomy of "Significant Learning" (Figure 1) as a framework.

Step 3. <u>Feedback & Assessment Procedures</u> What will the students have to do, to demonstrate that they have achieved the learning goals (as identified in Step "A" above)?

- Think about what you can do that will *help students learn*, as well as give you a basis for issuing a course grade.
- Suggestion: Consider ideas of "Educative Assessment."

Step 4. <u>**Teaching/Learning Activities**</u> What would have to happen *during* the course for students to do well on the Feedback & Assessment activities?

- Think creatively for ways of *involving students* that will support your more expansive learning goals.
- 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*.

Step 5. <u>Make sure that the Key Components are all INTEGRATED</u>

• Check to ensure that the key components (Steps 1-4) are all consistent with, and support each other.

Step 1. Worksheet from Dee Fink's Creating Significant Learning Experiences

SITUATIONAL FACTORS TO CONSIDER

1. Specific Context of the Teaching/Learning Situation

How many students are in the class? Is the course lower division, upper division, or graduate level? How long and frequent are the class meetings? How will the course be delivered: live, online, or in a classroom or lab? What physical elements of the learning environment will affect the class?

2. General Context of the Learning Situation

What learning expectations are placed on this course or curriculum by: the university, college and/or department? the profession? society?

3. Nature of the Subject

Is this subject primarily theoretical, practical, or a combination? Is the subject primarily convergent or divergent? Are there important changes or controversies occurring within the field?

4. Characteristics of the Learners

What is the life situation of the learners (e.g., working, family, professional goals)? What prior knowledge, experiences, and initial feelings do students usually have about this subject? What are their learning goals, expectations, and preferred learning styles?

5. Characteristics of the Teacher

What beliefs and values does the teacher have about teaching and learning? What is his/her attitude toward: the subject? students? What level of knowledge or familiarity does s/he have with this subject? What are his/her strengths in teaching?

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Step 2. Worksheet

Questions for Formulating Significant Learning Goals

"A year (or more) after this course is over, I want and hope that students will _____

Foundational Knowledge

- What key <u>information</u> (e.g., facts, terms, formulae, concepts, principles, relationships, etc.) is/are important for students to <u>understand and remember</u> in the future?
- What key <u>ideas</u> (or perspectives) are important for students to understand in this course?

Application Goals

- What kinds of thinking are important for students to learn?
 - <u>Critical thinking</u>, in which students analyze and evaluate
 - <u>Creative thinking</u>, in which students imagine and create
 - <u>Practical thinking</u>, in which students solve problems and make decisions
- What important <u>skills</u> do students need to gain?
- Do students need to learn how to manage complex projects?

Integration Goals

- What <u>connections</u> (similarities and interactions) should students recognize and make...:
 - Among ideas *within* this course?
 - Among the information, ideas, and perspectives in this course and those in other courses or areas?
 - Among material in this course and the students' own personal, social, and/or work life?

Human Dimensions Goals

- What could or should students learn about <u>themselves</u>?
- What could or should students learn about <u>understanding others</u> and/or <u>interacting</u> <u>with them</u>?

Caring Goals

- What changes/values do you hope students will adopt?
 - Feelings? Interests? Ideas?

"Learning-How-to-Learn" Goals

- What would you like for students to learn about:
 - how to be good students in a course like this?
 - how to learn about this particular subject?
 - <u>how to become a self-directed learner</u> of this subject, i.e., having a learning agenda of what they need/want to learn, and a *plan* for learning it?

Step 3. Worksheet

Procedures for Educative Assessment

1. **Forward-Looking Assessment** Formulate one or two ideas for forward-looking assessment. Identify a situation in which students are likely to use what they have learned, and try to replicate that situation with a question, problem, or issue.

2. <u>Criteria & Standards</u> Select one of your main learning goals, and identify at least two *criteria* that would distinguish exceptional achievement from poor performance. Then write two or three levels of *standards* for each of these criteria.

3. <u>Self-Assessment</u> What opportunities can you create for students to engage in self-assessment of their performance?

- 4. **<u>"FIDeLity" Feedback</u>** What procedures can you develop that will allow you to give students feedback that is:
 - <u>F</u>requent
 - <u>I</u>mmediate

- **D**iscriminating, i.e., based on clear criteria and standards
- <u>Lovingly delivered</u>

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The Faculty Role in Assessment

May 28, 2010 Share This Story

Amid <u>continuing debate</u>, and sometimes disagreement, about the value and wisdom of measuring student learning outcomes in higher education, a few areas of consensus are slowly emerging.

One is that faculty members are usually too little involved in setting their institutions' strategies for assessing student learning and in using the results of those efforts to change teaching and learning practices. Another is that without meaningful involvement by the faculty, efforts to assess student learning are close to meaningless.

Those dueling realities suggest a pretty big problem for what might be called the assessment "movement": If campus leaders can't figure out a way to more meaningfully involve faculty members in their institutions' efforts to gauge the quality and extent of learning, the campaign is likely never to take hold.

That problem is seemingly being engaged everywhere you turn these days. Patricia Hutchings confronts it in <u>an essay</u> published this spring by the National Institute for Learning Outcomes Assessment, in which she examines why many professors have often viewed the learning outcomes movement with suspicion, describes a slight change in the weather on that front, and suggests how higher education leaders might build on that progress. The paper follows <u>a survey</u> <u>released last year</u> by NILOA that found, among other things, that campus leaders considered involving faculty in assessment to be one of their greatest challenges.

And the same themes were all over <u>the agenda</u> at last month's meeting in Chicago of the Higher Learning Commission of the North Central Association of Colleges and Schools. The agenda featured a slew of sessions on the role of the faculty in assessment ("Developing Faculty Engagement in Teaching and Assessing General Education Outcomes," "Involving Faculty in Campus-wide General Education Assessment Strategies," "Regular Program Assessment by Motivated Faculty -- a Win-Win!"), and the role of the faculty came up in virtually every major discussion during the days-long meeting.

Assessment and Accountability

Hutchings's paper, "<u>Opening Doors to Faculty Involvement in Assessment</u>," cites several major reasons why faculty members have been slow to embrace the idea that measuring student learning is not only necessary, but actually in their best interests. Chief among them is the fact that while "assessment was seen first and foremost as an educational practice" in its early days, Hutchings notes, it has often been championed by politicians and others outside academe as a way to hold higher education accountable for its performance.

Given the fierce protectiveness with which people tend to view their professional responsibilities, that has often made assessment seem like a tool that could be used against professors, to prove that they're not doing a good job. Not surprisingly, that hasn't exactly encouraged them to get with the program. "From the faculty point of view, [assessment] looked a lot like someone else's agenda -- and not an altogether friendly someone else, at that," Hutchings writes.

The language commonly associated with assessing student learning --"accounting, testing, evaluation, measurement, benchmarking, and so forth" -hasn't helped, drawn as it is from "business and education, not the most respected fields on most campuses," Hutchings writes. "[I]t is striking how quickly assessment can come to be seen as part of 'the management culture' rather than as a process at the heart of faculty's work and interactions with students."

The structure and rewards of faculty work, as they are currently set up, also make assessment a hard sell, Hutchings writes. Teaching in general is undervalued and rarely emphasized in graduate programs, and "reflecting on educational purposes, formulating learning goals, designing assessments and exams, and using data for improvement" are little examined in many faculty development programs, as well. And the tilt of many campus tenure and promotion systems favoring research over teaching and institutional service means that younger professors often have little incentive assessment to invest their time and energy in such activities -- habits that may be hard to break later on.

Lastly, but importantly, Hutchings argues, professors may look around and see assessment activity making relatively little difference on their campuses, making their reluctance to jump into the fray "a rational decision." "The fact remains that the benefits of assessment are uncertain and that faculty facing rising demands on their time and energy must make choices," she said.

Hutchings sees hope in some recent developments, notably the increasing breadth and quality of scholarship on teaching and learning, the slow but steady expansion of campus policies that reward teaching effectiveness, and the emergence of better tools to help colleges and instructors gauge their students' progress and learning. Her recommendations -- including building assessment activities directly into the "regular, ongoing work" of instructors and students in the classroom, more clearly recognizing assessment work as legitimate scholarship -- are designed to build on that progress.

Building From the Ground Up

The role of the faculty in furthering (or fighting) the assessment of student learning outcomes was a common topic at the Higher Learning Commission meeting, where national policy makers and rank and file faculty members alike seemed to agree that they were beginning to see increasing acceptance, if not exactly welcoming, of the need for professors to play a role in the right kind of assessment.

"We still haven't turned the corner in trying to engage the faculty the way we would want to," Peter T. Ewell, vice president of the National Center for Higher Education Management Systems and a founder of NILOA, said in a presentation at the accrediting meeting. There has been some progress, he said. "The English professor used to say, you can't do this. Now, the English professor is reluctantly saying, 'Yeah, it's got to be done.' But we're still not at the point of authentic faculty ownership."

That's because too much of the assessment rhetoric still focuses on institutional accountability rather than on the importance of working from the classroom level up to improve how, and how much, students learn, Molly Corbett Broad, president of the American Council on Education, told the Higher Learning Commission crowd. "If the chain of logic [behind learning outcomes assessment] begins from an accountability perspective, the focus is on the institution, and if it is primarily an institutional measure, it is potentially disconnected from how individual faculty members teach.

"Faculty must own [assessment] and live it in the context of each student," Broad said. "Because if faculty do not own outcomes assessment, there will be minimal impact on teaching and learning and, therefore, on student achievement," which is supposed to be the point, she said.

In one of the numerous sessions about engaging faculty meaningfully in assessment activities, officials from Blackburn College <u>described their efforts</u> in the 2008-9 academic year to "reframe assessment" in the wake of an earlier, largely failed initiative that had been seen by many professors there as "an external attempt at standardization and control," said Sam Meredith, a political scientist there who helped lead the effort. "We were hoping to move from a standardized test that we would get from outside to be used for reporting, to something that was an integral part of the teaching process," built on and integrated into a revision of the general education goals that the Illinois liberal arts college had just completed, Meredith said.

Blackburn officials used pressure from the college's accreditor, the Higher Learning Commission, as a "stick" that helped them argue that "there was a fairly firm mandate that we had to achieve," and that they were in a position to "design a process to achieve our own goals in a way that fufilled that mandate, too," he said.

The college's relatively small size ("Our faculty can get in a single room and look at each other," Meredith said) enhanced (but did not make easy) the process by which humanists and scientists and others came to agreement on a common set of goals for critical thinking, writing and multicultural understanding, creating "rubrics" for gauging when students had achieved those goals, and then building assignments designed to test the rubrics into each and every course.

The process is ongoing, and the college is just beginning to collect solid data to help it decide how to adjust its curriculum to improve students' mastery of the desired learning outcomes.

But Blackburn has already achieved its primary goal, said Provost Jeffery P. Aper, of helping faculty members to see assessment not as an "occupying force," but "as an organic part of their work."

— Doug Lederman

Comments on The Faculty Role in Assessment

- Fixing Assessment
- Posted by David Eubanks, Dean of Academic Support Services at JCSU on May 28, 2010 at 8:00am EDT
- Backtrack to my prescription: "<u>Fixing Assessment''.</u>

Summary:

What we have is a confusion of priorities, methods that don't make sense, and alienation of the people we're trying to engage. There needs to be a clear and achievable expectation at each level of administration. It's not that hard.

- so, does it make a difference or not?
- Posted by RSP, Associat Prof on May 28, 2010 at 8:15am EDT
- To me, this is the clincher: "The fact remains that the benefits of assessment are uncertain and that faculty facing rising demands on their time and energy must make choices". I've spent much time reading journal articles where rigorous studies were done to see if a change in teaching practice improved student learning. Sometimes the gains are significant, but rarely do they report more than a very minimal improvement...i.e. a 72 average vs. 70 average for example. Despite the faculty member devoting almost their *entire* time to this project, minimal gains result. Regardless what changes we make, there will never be more than minimal gains (prove me wrong!). Students seem to be very resilient to changes we make in our teaching and curriculum...they'll do the least they can to get by regardless of our efforts to help them succeed in learning (primarily because most of them are not in college to learn anything).

http://www.insidehighered.com/layout/set/print/news/2010/05/28/assess

<downloaded May 28, 2010>

Worksheet for Designing a Course

Dee Fink's Creating Significant Learning Experiences

Learning Goals for Course:	Ways of Assessing This Kind of Learning:	Actual Teaching-Learning Activities:	Helpful Resources: (e.g., people, things)
1.			
2.			
3.			
4.			
5.			
6.			