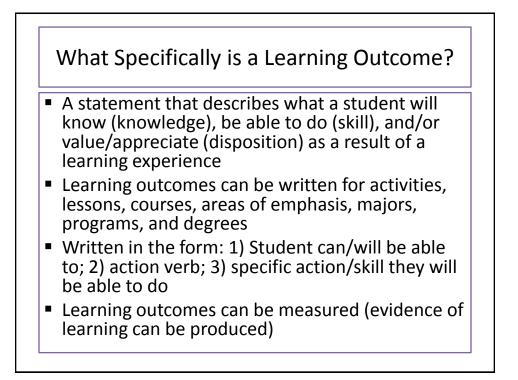
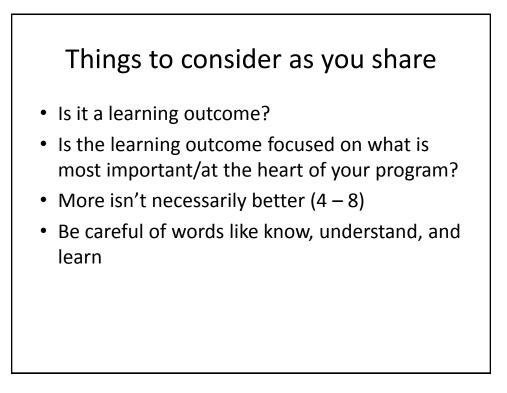


- With each lesson, course, and program, instructors are urged to ask, "What knowledge, skills, and dispositions do I want students to get from this?" and "What evidence do I have that students are getting it?
- Connects students with what is at the heart of the discipline; what students need to know, be able to do, and appreciate to live rich, full, productive lives.
- Helps instructors decide what is important to include and what can be let go
- Facilitates communication amongst faculty about what is important for students to know, be able to do and appreciate
- Assessment evidence provides valuable data for improving instruction and increasing student learning in courses and programs



## Is it a learning outcome?

- Engage students in global experiences
- Students will gain an understanding of professional and ethical responsibility
- Students will be able to read, interpret, and analyze common reference maps
- Students can describe cultural influences on language development
- Students will understand the fundamental principles of composition



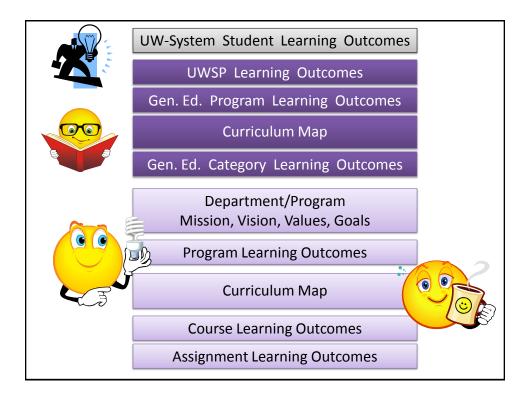
## Assessment Academy Workshop Part 2

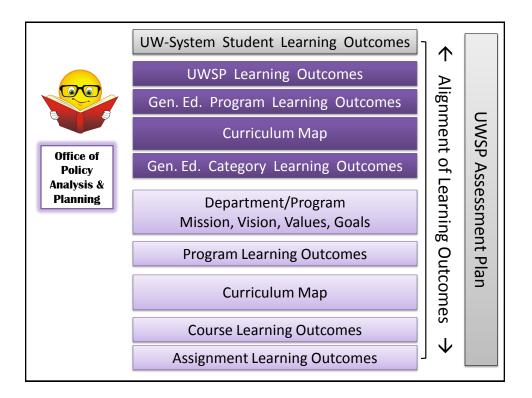
- With your drafts of Program Learning Outcomes, work at your table and discuss:
  - The specific draft that you have with you (How did you do with your learning outcomes?)
  - The process of working with your colleagues
  - Look for common themes to emerge
  - Successes/Challenges
  - Questions?
- Report back to larger group with brief summary

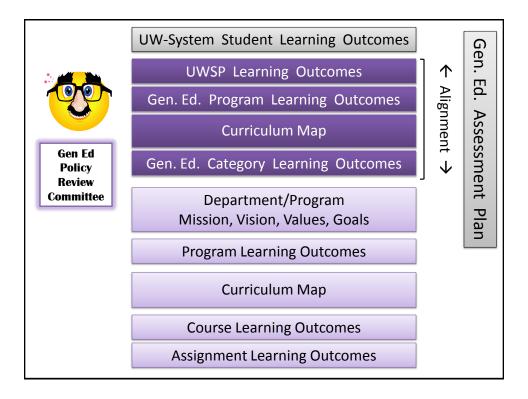
## Assessment Academy

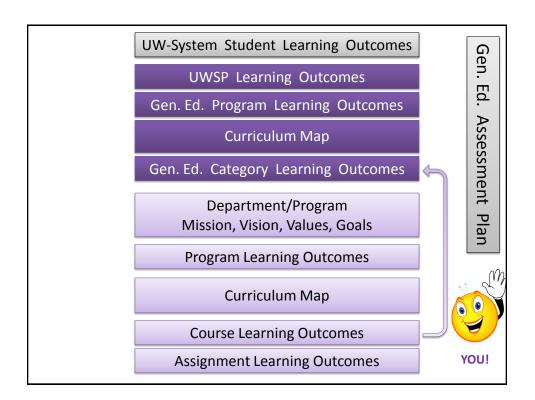
## Workshop Part 2

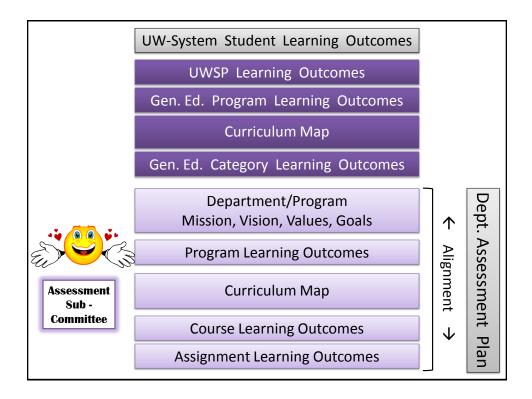
- The James & Greg Show!
  - James will provide an overview of the "big picture"
  - Greg will discuss program assessment using General Education as a model
  - Summary of the Timeline for Dept. Assessment Plans

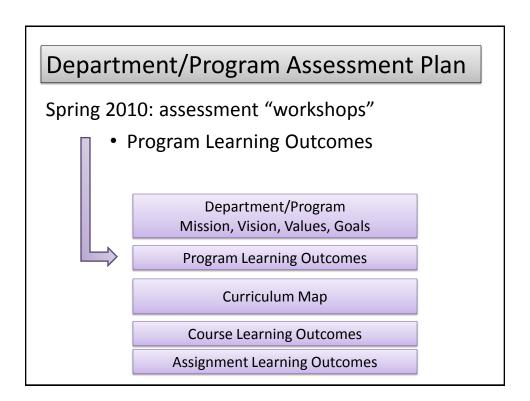


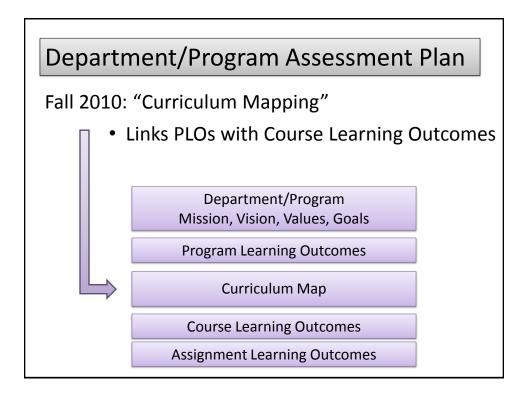




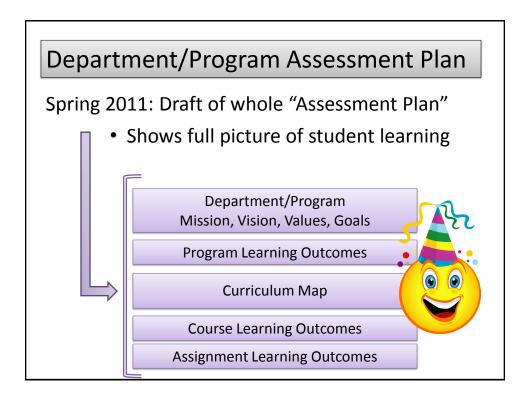


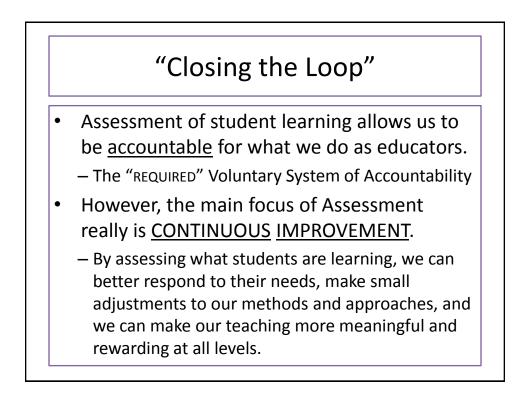


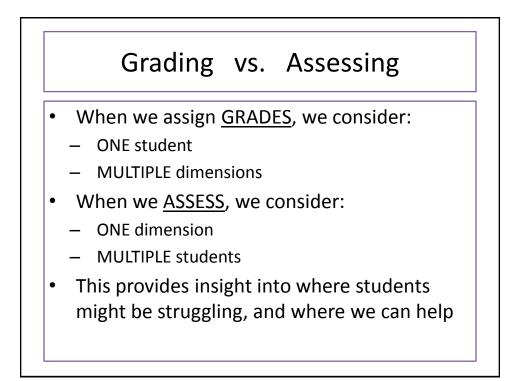


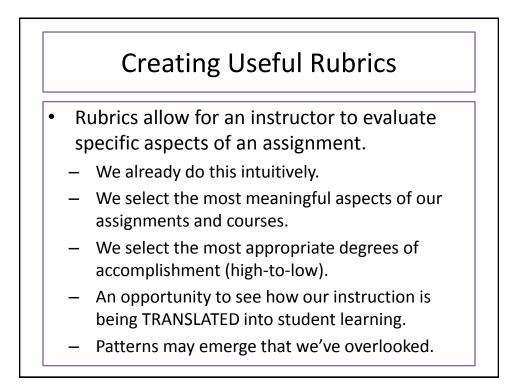


Curriculum Map									
	CRS101	CRS102	CRS 201	CRS 202	CRS 333	CRS 490			
Program Learning Outcome #1	Ι		D		D	Μ			
Program Learning Outcome #2		Ι			D	М			
Program Learning Outcome #3	Ι	D							
Program Learning Outcome #4		Ι				М			
Program Learning Outcome #5	Ι		D	D	D	М			
Program Learning Outcome #6		Ι		М					









	Rubric	S		
	Exceptional	Acceptable	Needs Work	
Assignment Outcome #1	1			
Assignment Outcome #2			1	
Assignment Outcome #3		1		Γ
Assignment Outcome #4		<ul> <li>Image: A set of the set of the</li></ul>		
Assignment Outcome #5	<ul> <li>Image: A start of the start of</li></ul>			
Assignment Outcome #6	<ul> <li>Image: A start of the start of</li></ul>			
				-



Association of American Colleges and Universities Fast 2009 VALUE QEANTITATIVE LITERACY METARUBRIC DRAFT FOR POBLIC RELEASE. This rubric is the first step in a rubric development process that will produce additional drafts, each responsive to the feedback received. Feedback deadline is February 15, 2009. The next draft of this rubric will be available in May 2009. For more information or to give feedback please email Wende Morgane at wendemm@gmail.com. Thank you!

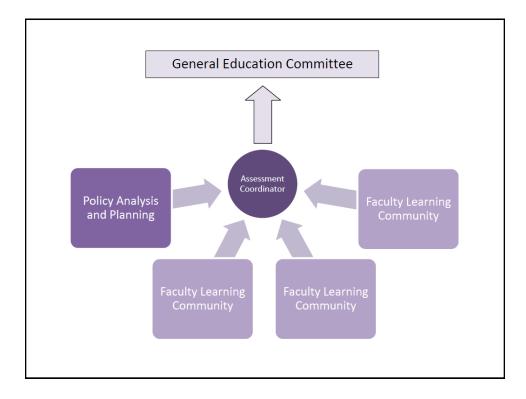
Quantitative literacy, also known as quantitative reasoning (QR), is a "habit of mind" that can be strengthened considerably during a student's college years. While curricular opportunities for students to enhance their quantitative literacy, skills come from across the curriculum and at all levels of the curriculum, not all students will encounter such curres each and every year. Opportunities for students to develop their (QR skills are strengly influences each and every year. Opportunities for students to develop their (QR skills are strengly influences each and every year. Opportunities for students to develop their (QR skills are strengly influences on to the four levels of the strengthener levels on the the four levels of competency to the fourt period press of levels. There, I kin constructed on a scale in which level 4 indicates exemplary skills, 3 indicates strong skills, 2 indicates limited skills, and 1 indicates very weak skills. Details on the scale are provided for the six quantitative literacy criteria below.

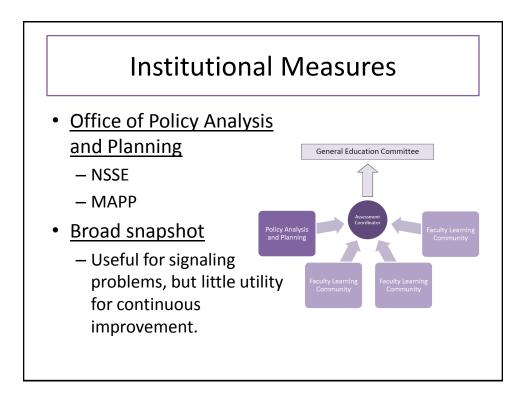
Evaluators are encouraged to assign a zero to any performance that doesn't meet level one performance.

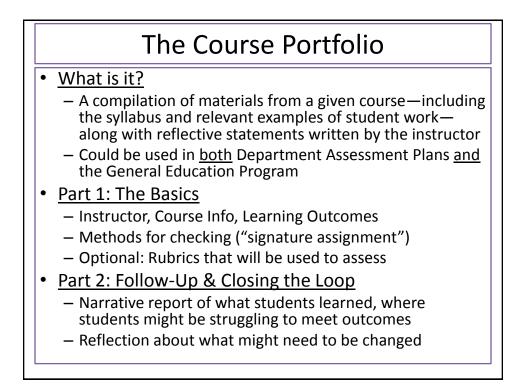
	4	3	2	1
Interpretation Ability to explain information presented in a mathematical form (e.g., equations, graphs, diagrams)	Skillfully explains information presented in mathematical form (e.g., equations, graphs, diagrams, tables). Consistently provides clear explanations with no errors.	Competently explains information presented in mathematical form (e.g., equations, graphs, diagrams, tables). Rarely makes errors or gives unclear explanations.	Developing the ability to explain information presented in mathematical form (e.g., equations, graphs, diagrams, tables). Sometimes makes errors or gives unclear explanations.	Attempts to explain information presented in a mathematical form (e.g., equations, graphs, diagrams, tables), but has trouble doing so correctly. Frequently makes errors or gives unclear explanations.
Representation Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, or diagrams).	Consistently demonstrates fluency in converting relevant information into various mathematical forms (e.g., equations, graphs, or diagrams, tables). Reliably chooses the best form for the problem at hand	Generally able to convert relevant information into various mathematical forms (e.g., equations, graphs, or diagrams, tables) accurately. Rarely makes errors and almost always chooses the best form for the problem at hand.	Developing the ability to convert relevant information into mathematical forms (e.g., equations, graphs, or diagrams, tables). Sometimes makes errors or uses forms that are not the best for the problem at hand.	Able to identify relevant information, but has difficulty converting it into mathematical forms (e.g., equations, graphs, or diagrams, tables). Frequently makes errors or uses forms that are not the best for the problem at hand.
Calculation	Successfully complete all of calculations for the task at hand with consistency.	Successfully complete most calculations for the task at hand most of the time, though they may not be able to successfully complete several of the tasks.	Ability to complete successfully calculations for the task at hand is limited. Perhaps the student can do a few of these calculations very well, but others are inconsistently completed and still others cannot be completed at all	Attempts to complete calculations for the task at hand are rarely and inconsistently successful.
Application / Analysis Ability to make judgments based on quantitative analysis of data	Makes informed judgments based on quantitative analysis of data. Consistently draws appropriate conclusions from the data and recognizes the limits of the analysis used.	Makes informed judgments based on quantitative analysis of data. Rarely making errors or drawing unwarranted conclusions.	Makes judgments based on quantitative analysis of data. Sometimes makes errors or draws unwarranted conclusions.	Attempts to make judgments based on quantitative analysis of data. Frequently makes errors or draws unwarranted conclusions.
Estimation / reasonableness checks Reality checks	Consistently checks calculated answers for reasonableness, makes good assumptions for estimation problems that involve unknown quantities; performs realify checks on numbers reported by others; as appropriate	Often checks calculated answers for reasonableness, makes good assumptions for estimation problems that involve unknown quantities; performs reality checks on numbers reported by others; as appropriate	Sometimes checks calculated answers for reasonableness; confident about making estimates that require assumptions about unknown quantities; performs reality checks on numbers reported by others; as appropriate	Rarely checks answers for reasonableness; confident in making estimates that require assumptions about unknown quantities; performs reality checks on numbers reported by others; as appropriate
Communication Expressing a solution so that an audience understands what the solution means	Clearly communicates quantitative information for reader or user, shaping it into an argument, solution, or conclusion as appropriate, using a well-chosen, effective format and placing values in context.	Clearly communicates quantitative information for reader or user, although information may not cohere as an argument, solution, or conclusion, may not be in the most effective format or with necessary context.	Communicates quantilative information for reader or user, but does not constitute a clear or coherent point, chosen format is neither the most effective nor in context.	Attempts to communicate quantitative information for reader or user, but is unsuccessful at making an argument, selecting an appropriate format, or placing in context.

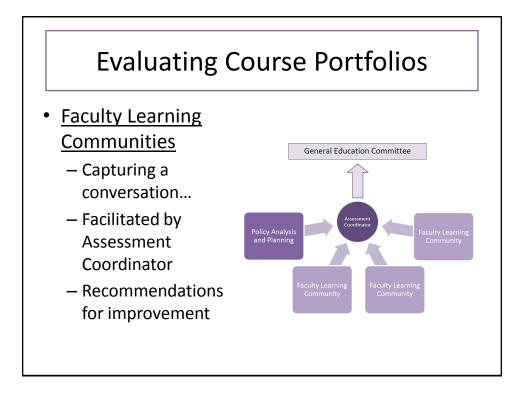
Created by a team of faculty from higher education institutions across the United State.

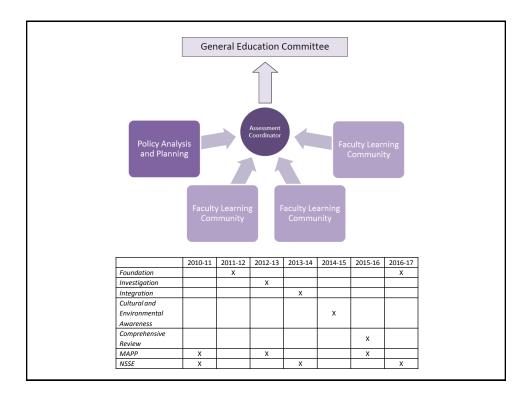
Mission Statement: The General Education Program provides the framework of a Diseral education, equipoling																
students with the knowledge and skills to facilitate intellectual and personal growth, pursue their advanced studies, and improve the world in which they live.	Foundation: Developing Fundamental Skills				Investigation: Understanding the Physical, Social, and Cultural Worlds				Integration: Applying Knowledge and Skills			Cultural & Environmental Awareness				
Program Outcomes	First Year Seminar	Witten and One Communication	Quantitative Literacy	Weiness	Arts	Humanilies	Historical Perspectives	Social Sciences	Netural Sciences	Interdisciplinary Studies	Experiential Learning	Communication in the Major	Capstone Experience in the Major	Global Awareness	U.S. Diversity	Environm Responsi
Demonstrate critical thinking, quantitative, and communication skills necessary to succeed in a rapidly changing global society.	I	D	D		D	D	D	D	D	D	D	м	м			
Acquire broad knowledge of the shysical, social, and cultural worlds as well as the methods by which this knowledge is produced.	I				D	D	D	D	D	D	D		м			
Recognize that responsible global ditzenship involves personal accountability, social equity, and environmental sustalnability.	I			1						D	D		м	D	D	D
Apply their knowledge and skills, working in interdisciplinary ways to solve problems.							I.	I.	I.	D	D	D	м			

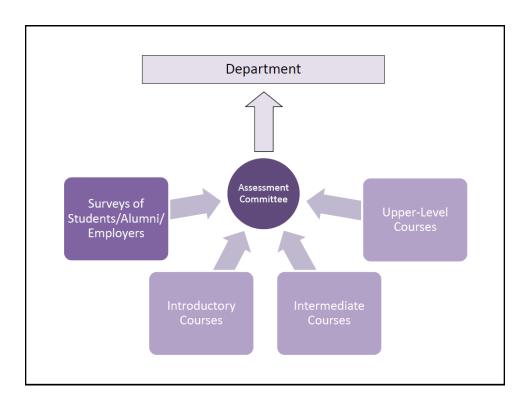








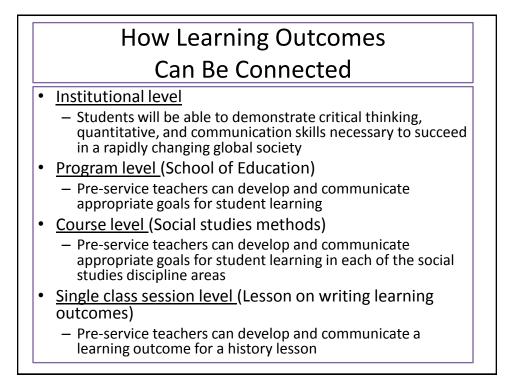






## Meaningful, Manageable, and Measurable Learning Outcomes

- Program learning outcomes should be focused on what is most important for students to learn so they are meaningful to faculty and students, and it is worth the time and effort to assess them
- Program learning outcomes should be limited in number and broad enough to keep them manageable
- Program learning outcomes should be matched to appropriate student performances/tasks so they can be assessed/measured



# Learning Outcomes Can be Assessed in a Variety of Ways (Written, Oral, Visual)

- Project
- Essay
- Portfolio
- Discussion
- Exam
- Power Point
- Debate
- Problem solution
- Research report

- Performance
- Poster
- Re-enactment
- Menu
- Speech
- Business plan
- Architectural Design
- Model

	ASSESSMENT METHOD								
Choosing the Right Assessment									
LEARNING TARGET	Selected Response	Extended Written Response	Performance Assessment	Personal Communication					
Knowledge Mastery	Good match for assessing mastery of elements of knowledge.	Good match for tapping understanding of relationships among elements of knowledge.	Not a good match—too time-consuming to cover everything.	Can be used if assessor asks questions, evaluates answers, and infers mastery—but a time- consuming option.					
Reasoning Proficiency	Good match only for assessing understanding of some patterns of reasoning out of context.	Written descriptions of complex problem solutions can provide a window into reasoning proficiency.	Assessor can watch students solve some problems and infer their reasoning proficiency.	Can be used if assessor asks student to "think aloud" or asks follow-up questions to probe reasoning.					
Skills		mastery of the knowledge the skill well, but cannot measure	Good match. Assessor can observe and evaluate skills as they are being performed.	Strong match when skill is oral communication proficiency; not a good match otherwise.					
Ability to Create Products	Not a good match. Can assess mastery of the knowledge students need to create quality products, but cannot assess the quality of products themselves.	Strong match only when the product is written. Not a good match when the product is not written.	Good match. Can assess the attributes of the product itself.	Not a good match.					

# Work Time



- Using the resources/handouts provided, match a possible assessment with your learning outcomes
- Consider a student performance/task that encompasses more than one learning outcome
- Consider how you will assess the student work (Will you need to develop a rubric and what criteria might it include for assessment?)

