Open Pathways: Testing the Degree Profile Rubric Development

Assessment Day

Marshall University

April 4, 2012

Open Pathways: Testing the Degree Profile: Activity 2 (in part)
March 26 – May 16

1. Make necessary changes to program outcomes and/or to the essential pre-capstone/culminating experience course outcomes.

2. Develop rubrics for each program outcome. *

Rubrics

- What is a rubric?
  - A rubric is a scoring guide that specifies the criteria that will be used to evaluate student work.

- Types of rubrics – Suskie (2009)
  - Checklist
  - Rating Scale
  - Descriptive
  - Holistic

Advantages of Descriptive Rubrics – Suskie (2009)

- Set clear performance standards
- Let students know our expectations
- Enable students to evaluate their work
- Make scoring easier and faster for instructor
- Make scoring more accurate, unbiased, and consistent
- Improve feedback to students
- Reduce disagreements between instructor and student and among evaluators

1. Clarify the important traits associated with the learning goal (outcome).

e.g. Ethical and Civic Thinking

Outcome: Students will assess their own values, examine a variety of viewpoints and evidence, balance theoretical and practical considerations, and propose and evaluate recommendations or solutions that are ethical and supportive of our civic wellbeing.

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Trait				
Ethical Self-Awareness				
Professional Rules and Standards of Conduct				
Civic Well Being				
Complex Ethical Issues				

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2. Choose a rating scale that describes levels of performance.

- Levels should show progression of knowledge and skills as students move from the beginning to the end of your program.

- Remember that expected competencies at graduation should apply to all students who graduate from Marshall University, i.e.
  - "C" students at the undergraduate level
  - "B" students at the graduate level

3. Choose a rating scale with at least three or four levels, e.g.

- Level 1 (Entering), Level 2, Level 3, Level 4 (Professional)
- Novice, Developing, Proficient, Accomplished
- Limited, Novice, Proficient, Mastery, Advanced
- Below Expectation, Meets Expectation, Exceeds Expectation
- Unacceptable, Needs Improvement, Proficient, Advanced

Ethical and Civic Thinking

Outcome: Students will assess their own values, examine a variety of viewpoints and evidence, balance theoretical and practical considerations, and propose and evaluate recommendations or solutions that are ethical and supportive of our civic wellbeing.

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Trait/ Performance Levels	Level 1 (Entering)	Level 2	Level 3	Level 4 (Professional)
Ethical Self-Awareness				
Professional Rules and Standards of Conduct				
Civic Well Being				
Complex Ethical Issues				

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4. How to describe levels of performance?

- Some Suggestions
  - Use verbs suggested by Bloom's Taxonomy to complete the cells.
  - Progress from lower to higher levels of cognitive ability.
  - Keep descriptive language positive.
  - Be sure that agreed upon "benchmark" levels set for graduation align with your stated outcomes.

or

5. Complete cells by

- First, describing performance you expect of students at the time of program completion.
- Second, describing work that is inadequate.
- Last, filling in descriptions for the remaining levels.

Measureable Verbs to Express Bloom's Taxonomy

Benjamin Bloom created a taxonomy of measurable verbs to help us describe and classify observable knowledge, skills, attitudes, behaviors and abilities. The theory is based upon the idea that there are levels of observable actions that indicate something is happening in the brain (cognitive activity.) By creating learning outcomes using measurable verbs, you indicate explicitly what the student must do in order to demonstrate learning.

- **Knowing**: Retrieving, recording, and recalling relevant knowledge from long-term memory.
- **Understanding**: Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, summarizing, inferring, and explaining.
- **Applying**: Carrying out or using a procedure; using previous knowledge to navigate an unfamiliar situation.
- **Analyzing**: Breaking material into constituent parts; determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
- **Evaluating**: Making judgments based on criteria and standards by measuring, diagnosing, and prioritizing.
- **Creating**: Putting disparate elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

Note: The taxonomy was revised in 2001 by Lorin Anderson (a student of Bloom's) by reversing the top two tiers and moving from nouns (e.g., "knowledge") to verbs (e.g., "knowing"). The list above reflects that revision.

Know	Understand	Apply	Analyze	Evaluate	Create
Define	Articulate*	Act	Analyze	Appraise	Adapt
Identify	Characterize	Administer	Arrange*	Argue	Anticipate
Inventory*	Cite examples	Apply	Break down	Assess	Arrange*
List	Describe	Articulate*	Calculate	Choose	Assemble
Locate*	Diagram*	Choose	Categorize	Compare	Collect
Name	Discuss	Compute	Compare	Conclude	Combine
Recall	Explain	Control	Contrast	Critique	Compose
Record	Express	Demonstrate	Correlate	Determine	Construct
Repeat	Interpret	Dramatize	Debate	Diagnose*	Create
Restate*	Outline*	Employ	Deduce	Estimate	Design
State	Paraphrase	Generalize	Detect	Evaluate	Devise
Underline	Report	Illustrate	Determine	Judge	Develop
	Respond	Imitate	Diagnose*	Justify	Diagram*

Ethical and Civic Thinking

Students will **assess** their own values, **examine** a variety of viewpoints and evidence, **balance** theoretical and practical considerations, and **propose** and **evaluate** recommendations or solutions that are ethical and supportive of our civic wellbeing.

	Level 1 (Entering)	Level 2	Level 3	Level 4 (Professional)
Ethical self awareness	**Identifies** one's core beliefs and ethical values.	**Relates** one's core beliefs and ethical values to key life experiences (family, socio-economic background, traumas, gender, ethnic/racial/national traditions, etc.).	**Determines** bias in one's core beliefs and ethical values.	**Modifies** one's core beliefs and ethical values based on analysis of the perspectives and experiences of others.
Professional rules and standards of conduct	**Names** basic professional rules and standards of conduct.	**Applies** specific professional rules and standards of conduct for a particular profession.	**Evaluates** the ethical basis of specific professional rules and standards of conduct for a particular profession.	**Recommends** new professional rules and standards of conduct for a particular profession.
Civic well being & the Disciplines	**Describes** how a range of professions contributes to the public good. **Describes** how the public good drives the need for certain professions.	**Connects** trends in one's own academic field to changes in civic wellbeing.	**Evaluates** academic theories in the light of concrete experience in the community. **Evaluates** public policy and community planning in the light of academic theories.	**Creates** new, more accurate explanations for social problems on the basis of ongoing, discipline-specific civic involvement.
Complex ethical issues	**Names** a range of basic and obvious ethical issues.	**Defines** a specific ethical problem and **relates** it to its larger context.	**Analyzes** a complex ethical problem in order to determine the unique features of the situation and untangle any competing interests	**Evaluates** and **prioritizes** competing interests, theories, and evidence in order **make a decision or recommendation** about a complex ethical problem.

Compiled by Dr. Sherri Smith, Executive Director of the Center for Teaching and Learning and Associate Professor of English; adapted in part from the AAC& U "Civic Engagement" and "Ethical Reasoning" VALUE Rubrics.

Integrative Thinking Rubric

Learning Outcome: Students will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations.

	Level 1 (Entering)	Level 2	Level 3	Level 4 (Professional)
Connections Among Disciplines *Makes connections among disciplines.*	**Indentifies** examples, facts, or theories from more than one discipline.	**Connects** examples, facts, or theories from more than one discipline.	**Analyzes** and/or **uses connections** of examples, facts, or theories from more than one discipline.	**Creates wholes** out of multiple parts (**synthesizes**) or draws conclusions by combining examples, facts, or theories from more than one discipline.
Relation Among Domains of Thinking *Distinguishes, compares, and applies varying combinations of the seven core domains of thinking.*	**Describes** and **compares** and **contrasts** fundamental elements of the seven domains.	**Analyzes** and **explains** how the various domains are being used and relate.	**Applies** skills from varying core domains in such as way that their interrelation is important to the success of the project.	**Devises** innovative applications of skills from different domains toward the realization of a project.
Transfer *Adapts and applies skills, abilities, theories, or methodologies gained in one situation and/or discipline to other situations and/or other disciplines.*	**Describes** how skills, abilities, theories, or methodologies gained in one situation and/or *discipline* could be used in other situations and/or other disciplines.	**Uses** skills, abilities, theories, or methodologies gained in one situation and/or discipline to other situations and/or other disciplines *to contribute to understanding* of problems or issues.	**Adapts** skills, abilities, theories, or methodologies gained in one situation and/or discipline to other situations and/or other disciplines to solve problems or explore issues.	**Integrates** skills, abilities, theories, or methodologies gained in varied situations and/or disciplines to other situations and/or other disciplines to solve *difficult* problems or explore *complex* issues in original ways.
Connections to Experience *Connects relevant experience and academic knowledge.*	**Identifies** connections between life experiences and those academic texts and ideas perceived as similar and related.	**Compares** life experiences and academic knowledge to infer differences, as well as similarities.	**Selects** and **develops** examples of life experiences drawn from a variety of contexts (e.g., family life, artistic participation, work experience) to illuminate concepts, theories, or frameworks in fields of study and/or extracurricular undertakings.	**Synthesizes** connections among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to engage fields of study and/or extracurricular undertakings.

Compiled by Dr. Chris Green, Associate Professor of English and Chair of the General Education Council; adapted in part from the AAC& U "Integrative and Applied Learning" VALUE Rubric.

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March 26 – May 16

1. Make necessary changes to program outcomes and/or to the essential pre-capstone/culminating experience course outcomes.

2. Develop rubrics for each program outcome. *

3. Identify assessment measures for each program outcome (at a minimum of two assessment points, with final being the capstone/culminating experience).

4. Make necessary revisions to program's undergraduate capstone or graduate culminating experience.

5. Submit updated assessment plan. *

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Suggestions for how to determine program assessment points

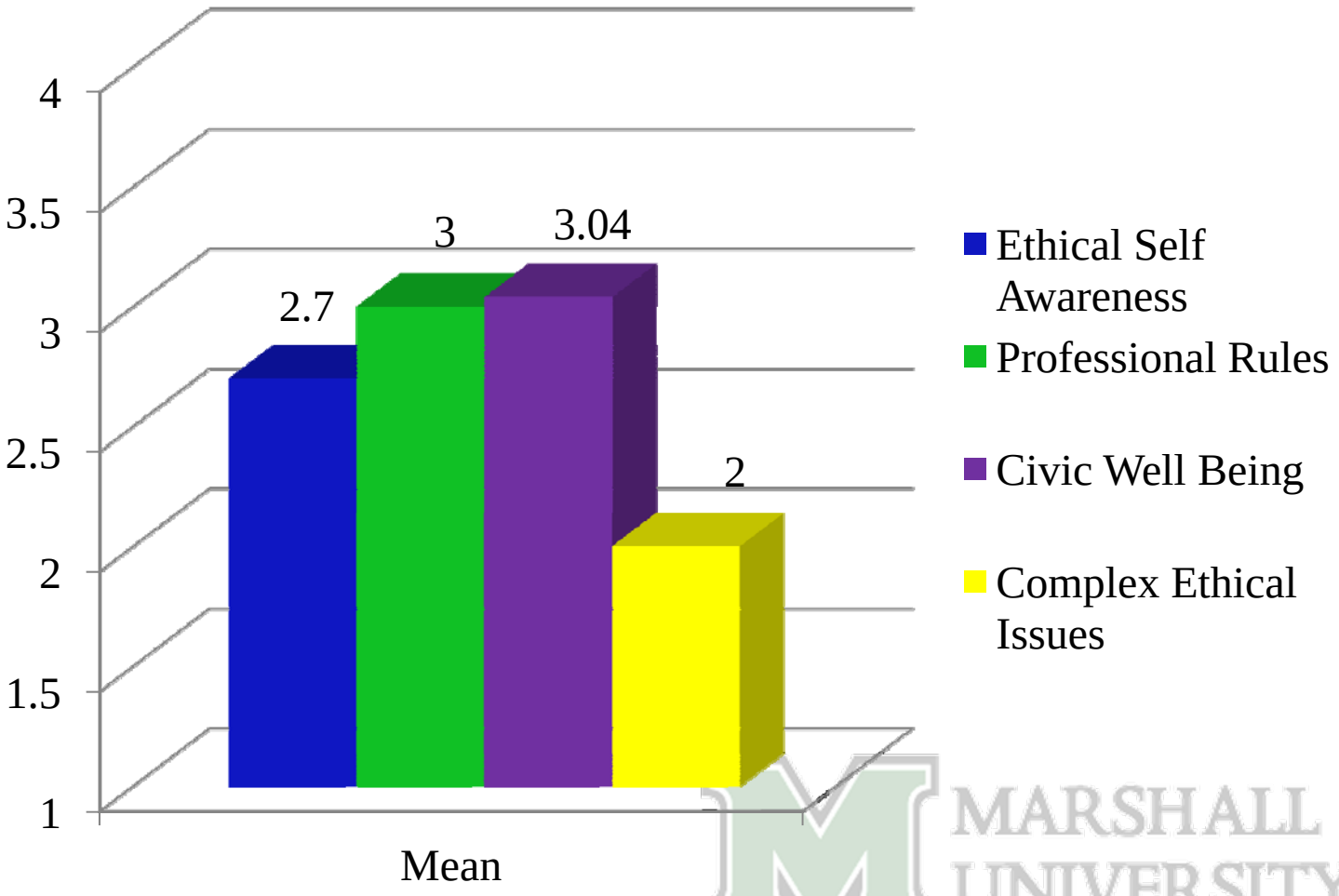
Example (not exhaustive) [see Maki (2004) for other examples]

Course/ Program Outcome	Course 1	Course 2	Course 3	Course 4	Course 5	Capstone/ Culminating Experience
PO 1	X					X
PO2			X			X
PO3		X				X
PO4			X		X	X
PO5		X	X	X		X
PO6	X					X

Using a Rubric for Program Assessment Purposes

- Each course instructor
  - Determines mean score for each trait across all students in class
  - Determines percentage of students who scored at each level
  - Chair or program assessment coordinator compiles data from assessments in all courses
- Doing above will identify relative strengths and weaknesses.
- Instructional strategies can be modified to address weaknesses or other improvement plans can be implemented.

Analysis of Ethical and Civic Thinking Data



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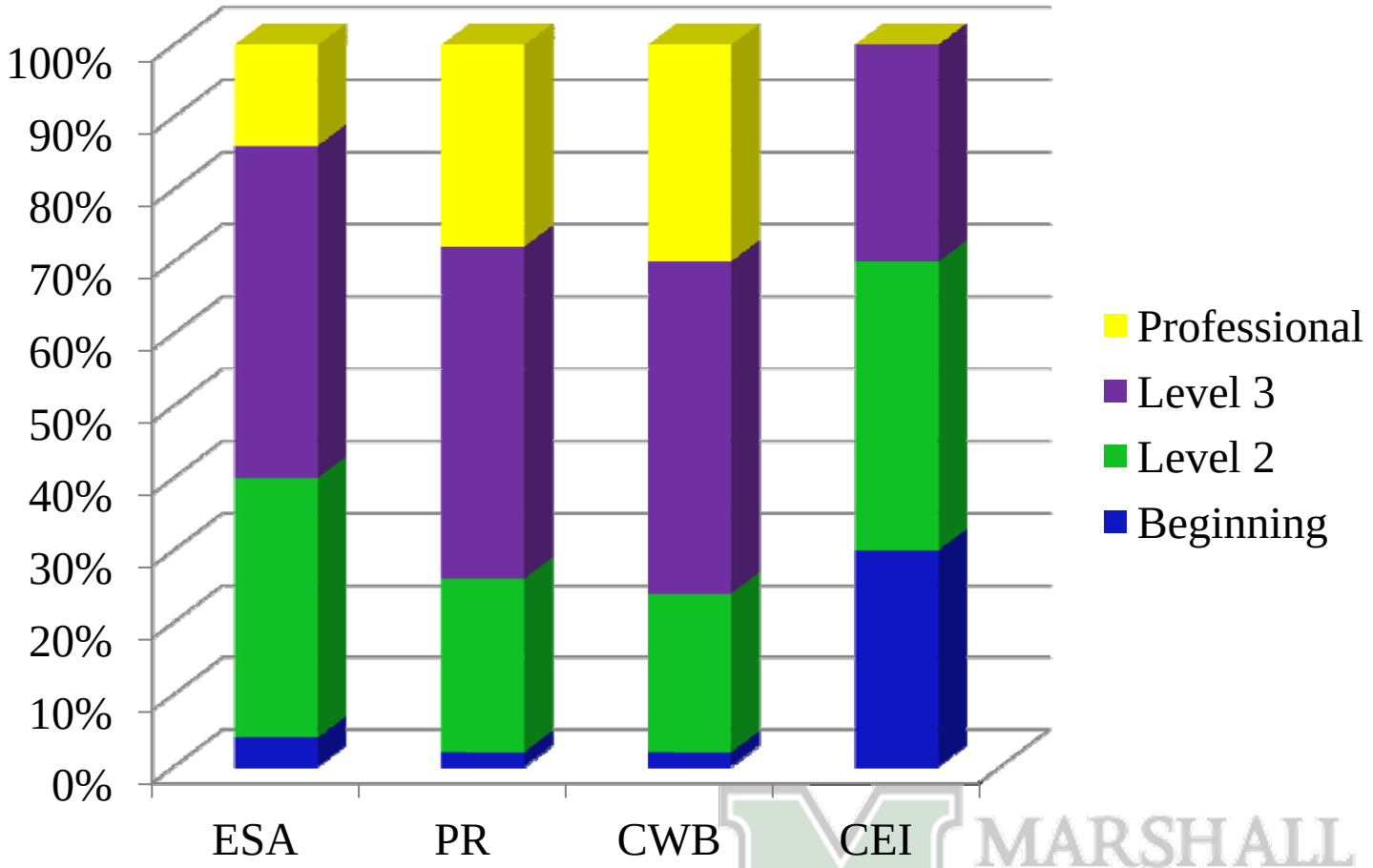

Resources: Assessment Website

- www.marshall.edu/assessment
  - Entrance to Assessment website
- http://www.marshall.edu/assessment/Resources/AssessmentResources.aspx
  - Bloom's Taxonomy of Measurable Verbs
  - AAC&U Value Rubrics

Examples of Descriptive Rubrics can be found in the following sources

- *AAC & U Value Rubrics* can be accessed at http://www.aacu.org/value/rubrics/index.cfm
  - Critical Thinking
  - Inquiry and Analysis
  - Creative Thinking
  - Written Communication
  - Oral Communication
  - Reading
  - Quantitative Literacy
  - Information Literacy
  - Teamwork
  - Problem Solving
  - Civic Knowledge and Engagement – Global and Local
  - Intercultural Knowledge and Competence
  - Ethical Reasoning
  - Foundations and Skills for Lifelong Learning
  - Integrative and Applied Learning

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Examples of Descriptive Rubrics can be found in the following sources

- Maki, P. L. (2004). *Assessing for Learning: Building a sustainable commitment across the institution.* Sterling, VA: Stylus Publishing, LLC.
  - Quantitative Reasoning
  - Information Literacy

References

- Maki, P. L. (2004). *Assessing for learning: Building a sustainable commitment across the institution.* Sterling, VA: Stylus Publishing, LLC.
- Rhodes, Terrel, (ed. 2010). *Assessing Outcomes and Improving Achievement: Tips and Tools for Using Rubrics*. Washington, DC: Association of American Colleges and Universities.
- Suskie, L. (2009). *Assessing student learning: A common sense guide (2nd ed).* San Francisco, CA: Jossey-Bass.

Now It's Your Turn

- Choose one program learning outcome.
- Begin the process of developing a descriptive, analytic rubric to assess student performance on this outcome.