Welcome

Grab a name tag & find your seat!
(And try not to sit with close colleagues!)

Rubric Assessment of Information Literacy Skills

Spring 2011

The Institute of Museum and Library Services is the primary source of federal support for the nation's 123,000 libraries and 17,500 museums. The Institute's mission is to create strong libraries and museums that connect people to information and ideas.

Purpose

- Investigate an analytic rubric approach to information literacy assessment in higher education
- Develop:
  - A suite of information literacy rubrics
  - A model of analyzing scores (reliability & validity)
  - Training materials for training/norming/scoring
  - Indicators of rater expertise
  - Website to disseminate assessment results & information about teaching/learning improvements as a consequence of rubric assessment

We want to learn…

- Can librarians & disciplinary faculty use IL rubrics to provide valid & reliable scores of student learning?

- What skills/characteristics do librarians & faculty need to produce valid & reliable scores using IL rubrics?

- What training materials do librarians & faculty need to acquire these skills/characteristics?

- How can rubric assessment be used to improve IL instruction and services?

- How can rubric assessment increase student learning of IL skills?

The Need

- Librarians and disciplinary faculty need to be able to determine whether students acquire, use, and transfer information literacy skills.
  - May need to change/improve learning opportunities
  - May need to demonstrate instructional effectiveness
  - May want to celebrate successful learning
- What is information literacy?

The information literate student…

- **Determines** the nature and extent of **information needed**.
- **Accesses** needed information effectively and efficiently.
- **Evaluates** information and its sources critically.
- **Uses** information effectively to accomplish a specific purpose.
- Accesses and uses information **ethically and legally**.

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Other Information Literacy Assessment Approaches

- Tests
  - SAILS (Standardized Assessment of Information Literacy Skills)
  - iCritical Thinking
- Performance Assessments
  - Without rubrics, often lack interrater reliability. Without reliability, open to validity problems too.

What's a Rubric?

Rubrics…

- describe student learning in 2 dimensions
    1. parts, indicators, or *criteria* and
    2. *levels of performance*

- formatted on a grid or table

- employed to judge quality

- used to translate difficult, unwieldy data into a form that can be used for decision-making

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Rubric Types

- Checklists
- Likert scales
- Full-model rubrics
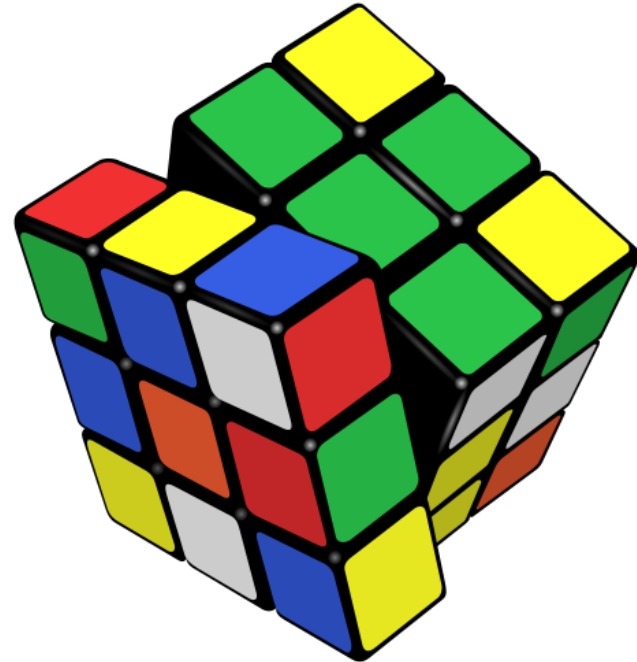
Checklists

CHECKLIST

CRITERIA ONLY

	Observed	Not Observed
Eye Contact	√	
Gestures		√

Likert Scales

	0	1	2
Eye Contact	√		
Gestures		√	

	Novice	Proficient	Professional
Eye Contact	√		
Gestures		√	

LIKERT SCALE

CRITERIA

&

PERFORMANCE LEVELS

(numbers or descriptive terms)

Scoring Guides

	Exemplary	Comments
Eye Contact	Maintains sustained eye contact with the audience.	
Gestures	Gestures are used to emphasize talking points.	

SCORING GUIDE

CRITERIA,

TOP PERFORMANCE LEVEL,

&

TOP PERFORMANCE DESCRIPTION

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Full-Model Rubrics

	Beginning	Developing	Exemplary
Eye Contact	Does not make eye contact with the audience.	Makes intermittent eye contact with the audience.	Maintains sustained eye contact with the audience.
Gestures	Gestures are not used.	Gestures are used, but do not emphasize talking points.	Gestures are used to emphasize talking points.

FULL-MODEL RUBRIC

CRITERIA,

PERFORMANCE LEVELS,

&

PERFORMANCE DESCRIPTIONS

Fiction Writing (Analytic) Rubric

B, M, E	has beginning has middle has end	has 1 or 2 parts but is missing B, M, E	no beginning no middle no end
Details	has lots of details	some details	no details
Punctuation	All sentences have punctuation.	some punctuation marks	no punctuation
Capitals	have capitals: -beg. of sentence -I -names	some capitals	no capitals
Spelling	all the words on the word wall are spelled right	some spelling is right	nothing is spelled right
Title	goes with the story	has a title that doesn't go with story	no title

Criteria

1. "the conditions a [student] must meet to be successful" (Wiggins)
2. "the set of indicators, markers, guides, or a list of measures or qualities that will help [a scorer] know when a [student] has met an outcome" (Bresciani, Zelna and Anderson)
3. what to look for in [student] performance "to determine progress…or determine when mastery has occurred" (Arter)

Performance Levels

mastery, progressing, emerging, satisfactory, marginal, proficient, high, middle, beginning, advanced, novice, intermediate, sophisticated, competent, professional, exemplary, needs work, adequate, developing, accomplished, distinguished

Performance Levels

If you want to force evaluative decisions, choose an even number of levels (usually 4).

If you want to have a middle ground, choose an odd number of levels (usually 3 or 5).

Choose a number that you can justify based on developmental service stages.

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Rubrics – Benefits, 1 of 2

Learning

- Articulate and communicate agreed upon learning goals
- Provide direct feedback to learners
- Facilitate self-evaluation
- Can focus on learning standards

Rubrics – Benefits, 2 of 2

Data

- Facilitate consistent, accurate, unbiased scoring
- Deliver data that is easy to understand, defend, and convey
- Offer detailed descriptions necessary for informed decision-making
- Can be used over time or across multiple programs

Other

- Are inexpensive ($) to design & implement

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Rubrics – Limitations

- May contain design flaws that impact data quality
- Require time for development

AAC&U's VALUE Rubric for Information Literacy

Purposes of VALUE Rubrics

- Integrate assessment & learning
- Assess student learning in context, authentically, focusing on performance of outcomes
- Prefer expert judgments of student learning over tests
- Provide basis for discussion and comparison over time or across programs

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VALUE Info Lit Rubric

- Strengths
  - ACRL Standards
  - Basis for conversation
  - Demonstrates need for "in progress" assessments
- Weaknesses
  - Formatting
  - Performance level labels
  - Inconsistent wording
  - Lack of mutually exclusive categories
  - Lack of specific details needed for scoring student work (more holistic than analytic)

Adapting for Specific Classes & Assignments

Determine the extent of information…

Use effective research strategy…

Identify relevant information sources…

Evaluate information effectively…

Assignment on Your Campus

DIRECTIONS ONLY!

- Describe the assignment(s) that generated student artifacts, how the assignment was selected, why it was selected, etc.

- Identify the learning standards (ACRL, AAC&U, etc.) that apply to the rubric.

- Explain how students were made aware of the rubric, if they were.

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Keep in mind…

- The rubric does not score discipline content; it scores information literacy skills.
- You can only score what you can see.

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Rubric for Your Campus

REPLACE THIS CONTENT!!

- Add rubric.

- Use this version to do an initial explanation.
  - Criteria (rows)
  - Performance levels (columns)
  - Performance descriptors (what's in the cells)

Rubric Norming Process

1. Think aloud through scoring several examples.
2. Ask raters to independently score a set of examples that reflects the range of services libraries produce.
3. Bring raters together to review their scores to identify patterns of consistent and inconsistent scores.
4. Discuss and then reconcile inconsistent scores.
5. Repeat the process of independent scoring on a new set of examples.
6. Again, bring all raters together to review their scores to identify patterns of consistent and inconsistent scores.
7. Discuss and then reconcile inconsistent scores. This process is repeated until raters reach consensus about applying the scoring rubric. Ordinarily, two to three of these sessions calibrate raters' responses.

Think Aloud Process

DIRECTIONS ONLY, DELETE THIS SLIDE!

- Let raters read artifact silently. Wait.
- Articulate why you rated the artifact the way you did.
- Go row by row (criterion by criterion).
  - "I gave this artifact a "2" or "developing" on the first criterion because of X, Y, and Z."
  - "I was tempted to give it a "1", but then I realized that the student stated X, Y, and Z."
- Be methodical and descriptive.
- Field questions from raters.

Thinking Aloud

What are appropriate scores for these examples?

Independent Scoring

What scores would you assign to these examples?

Reconciling Differences

Where do we disagree?

Can we come to consensus?
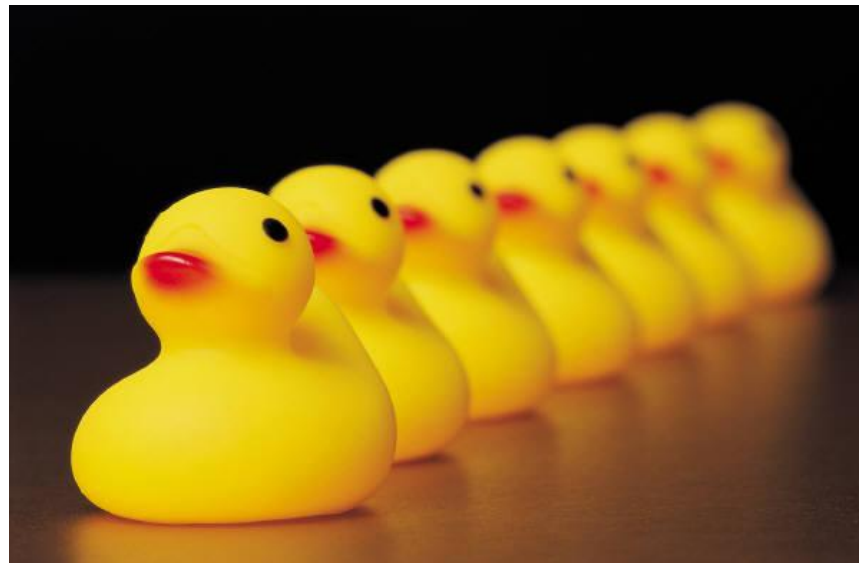
Extra Slides

Scoring Guides

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SCORING GUIDE

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TOP PERFORMANCE LEVEL,
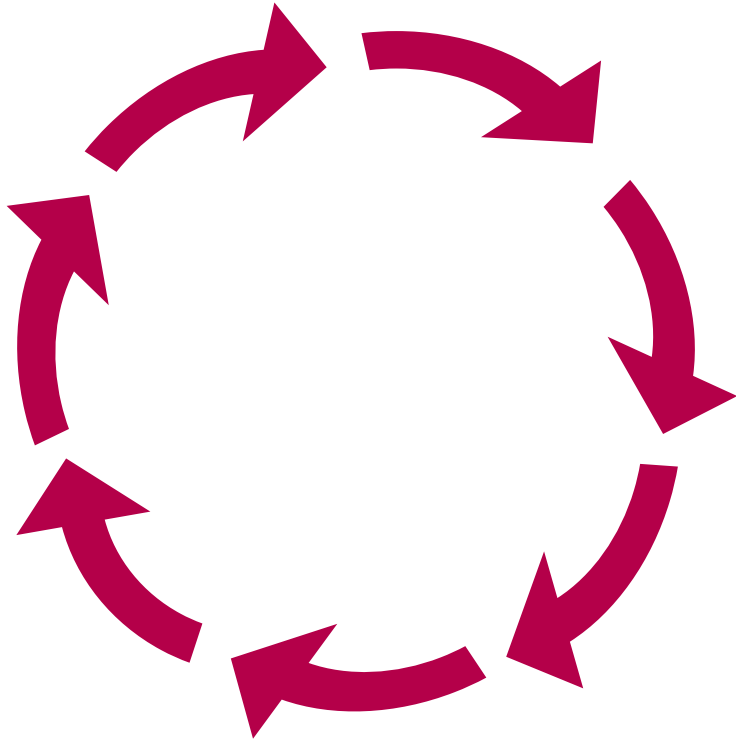
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TOP PERFORMANCE DESCRIPTION

Weighting & Grading

- Can weight some criteria more than others
- Use zeros? Or not?
- Calculate grades logically, not mathematically
- Don't assess all outcomes or criteria at once

Using Your Assessment Results

Three choices:

- Change/improve the instruction
- Change/improve the assessment
- Celebrate!

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Reporting Assessment Results

- Internally
  - Improvements to instruction
  - Improvements to future assessments
- Professionally!
  - Conferences
  - Publications

Selected Readings

Oakleaf, Megan. "Are They Learning? Are We? Learning and the Academic Library." *Library Quarterly*. 81.1. 2011.

Oakleaf, Megan. "Dangers and Opportunities: A Conceptual Map of Information Literacy Assessment Tools." *portal: Libraries and the Academy*. 8.3. 2008.

Oakleaf, Megan. "The Information Literacy Instruction Assessment Cycle: A Guide for Increasing Student Learning and Improving Librarian Instructional Skills." *Journal of Documentation*. 65.4. 2009.

Oakleaf, Megan. "Using Rubrics to Assess Information Literacy: An Examination of Methodology and Interrater Reliability." *Journal of the American Society for Information Science and Technology*. 60.5. 2009.

Oakleaf, Megan. "Using Rubrics to Collect Evidence for Decision-Making: What Do Librarians Need to Learn?" *Evidence Based Library and Information Practice*. 2.3. 2007.

Oakleaf, Megan and Lisa Hinchliffe. "Assessment Cycle or Circular File: Do Academic Librarians Use Information Literacy Assessment Data?" *Proceedings of the Library Assessment Conference*. Seattle, WA: Association of Research Libraries, 2008.