

Riding the RAILS of Rubric Assessment to Keep Information Literacy Learning on Track

Rubric Assessment of Information Literacy Skills

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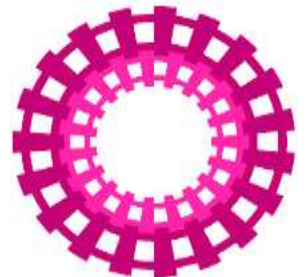
ACRL April 2013

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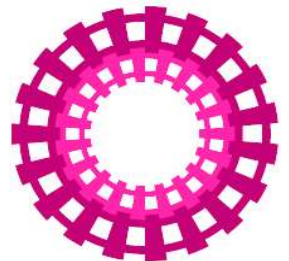


We'd like to
introduce our
fearless leader...
Megan Oakleaf,
founder of all
things RAILS.



Riding the RAILS of Rubric Assessment

- Introduction and overview
- Norming process overview & group practice activity
- Discussion: Lessons learned?
- Build your own rubric & follow-up discussion
- Creating an Action Plan
- Wrap Up/Conclusion



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Rubrics









Rubrics are powerful tools for assessment. The RAILS project is intended to help librarians create and use rubrics for information literacy assessment.

To this end, RAILS can serve as clearinghouse for information literacy rubrics. Existing RAILS rubrics are grouped by topic and/or by creator and accessible using the navigation links on the right. Any of these rubrics can be modified and saved by librarians; librarians can also upload new rubrics.

To do so, librarians should click the "participant login" link at the top of this page for site approval. Once approved as a RAILS website participant, librarians are welcome to adapt the rubrics as needed. To modify an existing rubric, approved participants should use the "Make and Save my own Rubric" button. (Note, this process does NOT actually change the existing rubric. Instead it makes a new copy that can be modified as needed.) To upload a new rubric, begin with a blank rubric found in the "Uncategorized" category. Please be sure to change the title of your new rubric!

Questions? Please post them in the forum area of the RAILS website!

Rubric Categories

-  [General](#)
-  [Define Information Needs](#)
-  [Evaluate Information](#)
-  [Locate Information](#)
-  [Non-Instructional Library](#)
- [Services](#)
-  [RAILS Cohort 2010-2011](#)
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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.



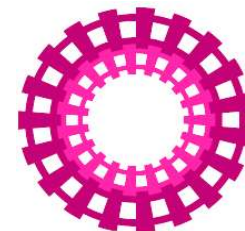
School of Information Studies
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WAYPOINT
OUTCOMES

We want to learn...

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



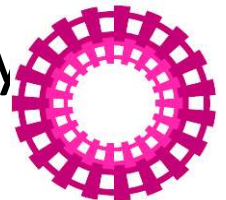
RAILS Project Purposes

Project Purpose

- Investigate an analytic rubric approach to IL assessment in higher education
- Develop a suite of IL rubrics
- Investigate rubric reliability & validity
- Develop training materials for training/norming/scoring
- Explore indicators of rater expertise

Participants' Purpose

- Develop a rubric for use on campus
- Identify opportunities for assessment within the curriculum
- Gain experience in norming
- Assess student work to learn about their information literacy skills



Other Information Literacy Assessment Approaches

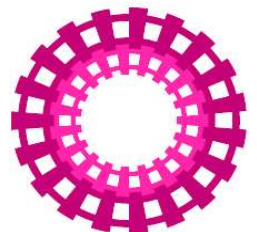
Surveys

Tests

**Performance
Assessments**

Without rubrics, performance
assessments sometimes lack
interrater reliability.

Without reliability, open to validity
problems too.



Adapting the AAC&U VALUE Rubric for Specific Contexts

	Capstone	Midterm		Final
Determine the extent of information needed	Identify the range of the research question to be investigated (e.g., determine the context, scope, types of information sources, and/or research methods to be used in answer to the question).	Identify the range of the research question to be investigated (e.g., determine the context, scope of information sources, and/or research methods to be used in answer to the question).	Identify the range of the research question to be investigated (e.g., determine the context, scope of information sources, and/or research methods to be used in answer to the question).	Identify the range of the research question to be investigated (e.g., determine the context, scope of information sources, and/or research methods to be used in answer to the question).
Search for needed information	Locate information using effective search strategies, including appropriate search engines and other tools, and evaluate the results of the search.	Locate information using effective search strategies, including appropriate search engines and other tools, and evaluate the results of the search.	Locate information using effective search strategies, including appropriate search engines and other tools, and evaluate the results of the search.	Locate information using effective search strategies, including appropriate search engines and other tools, and evaluate the results of the search.
Evaluate information and its sources critically	Recognize the strengths and weaknesses of the sources and other tools used and evaluate the results of the search.	Recognize the strengths and weaknesses of the sources and other tools used and evaluate the results of the search.	Recognize the strengths and weaknesses of the sources and other tools used and evaluate the results of the search.	Recognize the strengths and weaknesses of the sources and other tools used and evaluate the results of the search.
Use information effectively to accomplish a specific purpose	Communicate, organize, and analyze information from sources to fully address a specific purpose with depth and insight.	Communicate, organize, and analyze information from sources to fully address a specific purpose.	Communicate, organize, and analyze information from sources to fully address a specific purpose.	Communicate, organize, and analyze information from sources to fully address a specific purpose.
Write an academic research paper with logic and clarity	Write an academic paper in the following categories: an abstract, a thesis statement, an introduction, a body of paragraphs, a conclusion, and a bibliography.	Write an academic paper in the following categories: an abstract, a thesis statement, an introduction, a body of paragraphs, a conclusion, and a bibliography.	Write an academic paper in the following categories: an abstract, a thesis statement, an introduction, a body of paragraphs, a conclusion, and a bibliography.	Write an academic paper in the following categories: an abstract, a thesis statement, an introduction, a body of paragraphs, a conclusion, and a bibliography.

Determine the extent of information...

	Performance Level	Performance Level	Performance Level	Performance Level
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description

Use effective research strategy...

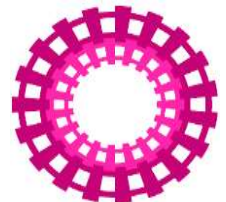
	Performance Level	Performance Level	Performance Level	Performance Level
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description

Identify relevant information sources...

	Performance Level	Performance Level	Performance Level	Performance Level
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description

Evaluate information effectively...

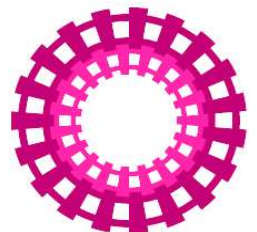
	Performance Level	Performance Level	Performance Level	Performance Level
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description
Criteria	Description	Description	Description	Description



2010-2012

10 Institutions

- 10 “lead” librarians met for intensive rubric training and developed draft rubric customized for their institution.
- Lead librarians secured examples of student work ($100 \times 10 = 1000$) and raters ($11 \times 10 = 110$).
- PI visited each campus to lead rubric revision, norming, scoring.
- Analysis completed.



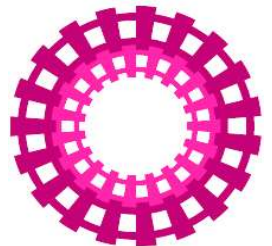
Faculty-Librarian Collaborations

Example Programs

- Nursing and pharmacy courses
- Biology courses
- First-year composition courses
- First-year seminar courses

Example Assignments

- Research papers
- Search histories
- Research logs
- Worksheets
- Annotated bibliographies

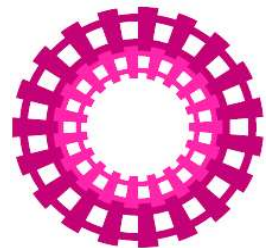


Norm!



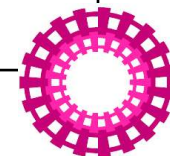
Norming is Crucial

- “I know it when I see it” does **not** mean “I can articulate it.”
- **Norming is critical** for establishing shared understanding of the rubric and achieving greater inter-rater reliability.



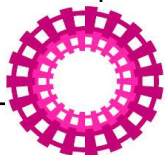
Access Needed Info: Original Rubric

	Advanced	Developing	Beginning
Determine Key Concepts	<p>Student:</p> <ul style="list-style-type: none"> Determines keywords/subject /subheadings that describe the research question/thesis fully including relevant variants 	<p>Student:</p> <ul style="list-style-type: none"> Determines keywords/subject /subheadings that describe the research question/thesis partially 	<p>Student:</p> <ul style="list-style-type: none"> Does not determine keywords/subject /subheadings that describe the research question/thesis
Access the Needed Information	<p>Student:</p> <ul style="list-style-type: none"> Accesses information using effective, well-designed search strategies. Demonstrates persistence and ability to refine search 	<p>Student:</p> <ul style="list-style-type: none"> Accesses information using simple search strategies 	<p>Student:</p> <ul style="list-style-type: none"> Accesses information randomly
Retrieves relevant information (Determine the extent of information needed)	<p>Student:</p> <ul style="list-style-type: none"> Retrieves information sources that fit search parameters, relates to concepts or answers research question 	<p>Student:</p> <ul style="list-style-type: none"> Retrieves information sources that partially fit search parameters, relates to concepts or answers research question 	<p>Student:</p> <ul style="list-style-type: none"> Does not retrieve information that fits search parameters, relates to concepts or answers research question



What do norming day revisions look like?

	Advanced	Developing	Beginning
Determine Key Concepts	<p>Student:</p> <ul style="list-style-type: none"> Determines keywords/subject /subheadings that fully describe the research question/thesis fully including relevant variants 	<p>Student:</p> <ul style="list-style-type: none"> Determines keywords/subject /subheadings that partially describe the research question/thesis partially 	<p>Student:</p> <ul style="list-style-type: none"> Does not determine keywords/subject /subheadings that describe the research question/thesis (pharm disease state & drug; nursing multi-faceted, omit shortage)
Access the Needed Information	<p>Student:</p> <ul style="list-style-type: none"> Accesses information using effective, a logical progression of advanced search strategies such as limits, Boolean searches, or combined searches Demonstrates persistence and ability to refine search 	<p>Student:</p> <ul style="list-style-type: none"> Accesses information using simple search strategies Accesses information using advanced search strategies, such as limits, Boolean searches, or combined searches 	<p>Student:</p> <ul style="list-style-type: none"> Accesses information randomly Accesses information using only simple search strategies
Retrieves relevant information (Determine the extent of information needed)	<p>Student:</p> <ul style="list-style-type: none"> Retrieves information sources that fully fit search parameters and relate to concepts or answer research question 	<p>Student:</p> <ul style="list-style-type: none"> Retrieves information sources that partially fit search parameters or relate to concepts answer research question 	<p>Student:</p> <ul style="list-style-type: none"> Does not retrieve information sources that either fit search parameters or relates to concepts or answer research question

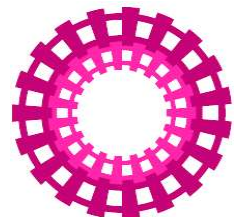


Norm, norm, norm!



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.



Workshop Norming Practice

Round 1

For first student work sample, Claire will “norm aloud.”

Participants will rate 2 work samples individually.

Group discussion: Can we reach consensus for what constitutes evidence for each performance level?

Round 2

Participants will rate 2 more work samples individually.

Group discussion: Are we closer to consensus?

Do we establish rating ground rules?

Does the rubric need to be modified?

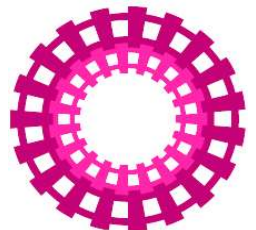
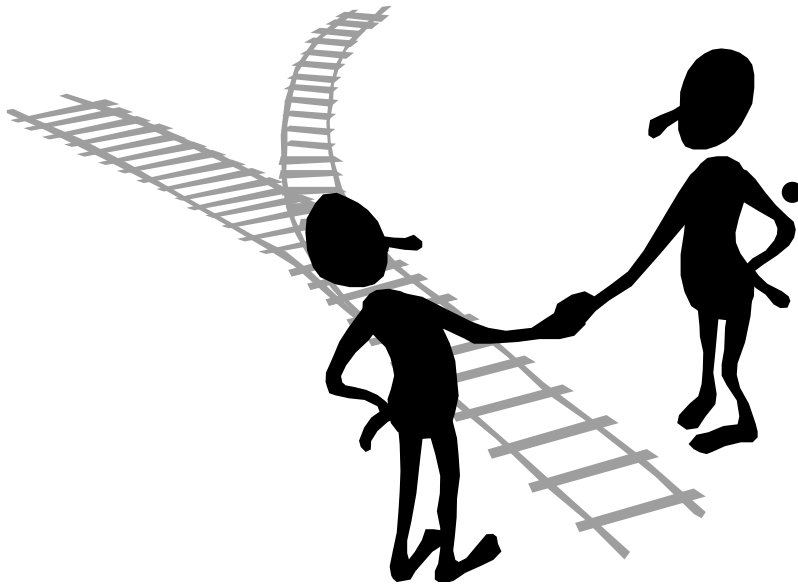
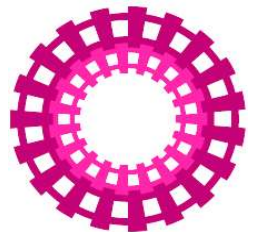


Table Discussion Prompts

- How did you achieve consensus?

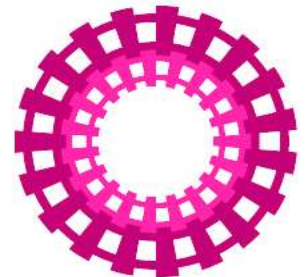


- What was challenging?



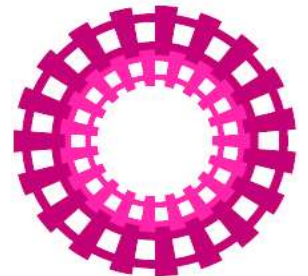
Scale-able Rubrics

- Identify artifacts that *actually* reveal information literacy learning
- Select key opportunities for assessment within the curriculum
- Determine how much is “enough” for your purpose (sample size calculators)
- Use multiple raters



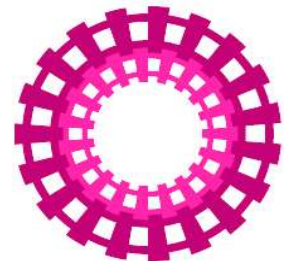
Specificity Lessons

- Specific, precise, explicit, detailed performance descriptions are crucial to achieve inter-rater reliability.
- Raters appear to be more confident about their ratings when student artifacts under analysis are **concrete, focused, and shorter in length.**



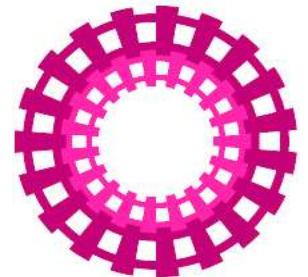
Norming Lessons

- There is **no magic-bullet** rater.
- The best raters “believe in” outcomes, value constructed consensus (or “disagree and commit”), negotiate meaning across disciplines, develop shared vocabulary, etc.



Collaboration Lessons

- Start with established partners, existing librarian/disciplinary faculty collaborations
- Evaluate a skill relevant to many campus partners (ex. use information legally and ethically)
- Include those who can help disseminate results and promote IL assessment efforts across campus
- Meet with stakeholders regularly to review and improve assignment and rubric

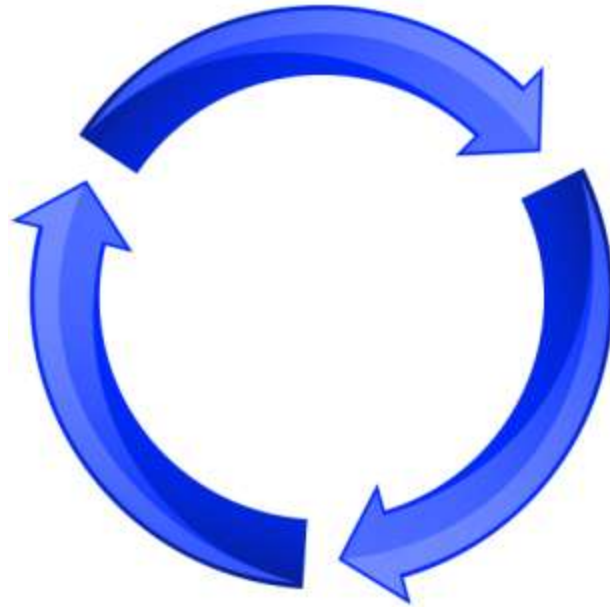


Activity: Rubric building

- How do you build a rubric?
- Build a rubric with your group

Rubric Creation Process

1. Reflecting
2. Listing
3. Grouping
4. Creating



Reflecting

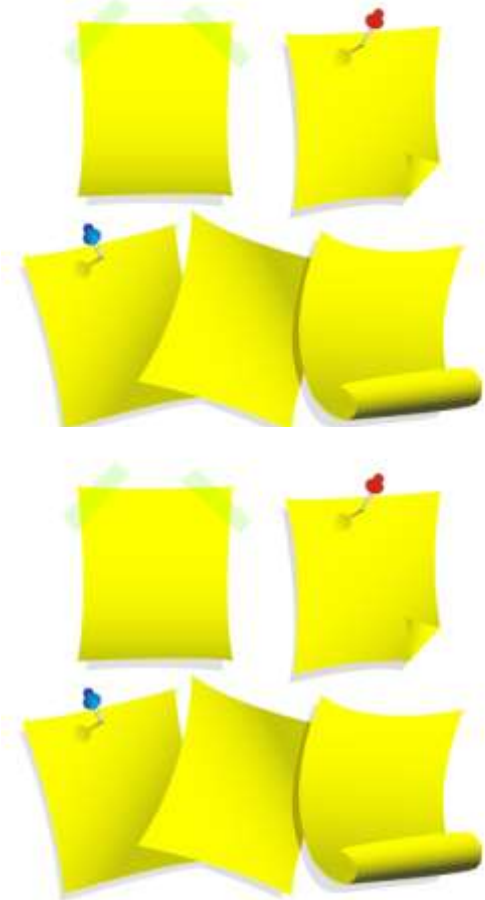
Consider:

1. Why did we create this assignment?
2. What happened when we used this assignment in the past?
3. What is the relationship between this assignment and the rest of what we're trying to teach?



Listing

1. What are our expectations of students completing this assignment? What does a successful learning of this type look like?
2. What specific learning outcomes do we want to see in the completed assignment?
3. What evidence can we find that will demonstrate learning success?

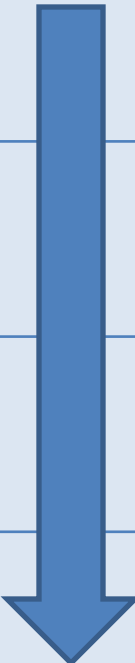


Grouping & Labeling

1. Can we group our brainstorming into categories?
2. How can we label them?




Labeled Groups = Criteria



Performance Levels

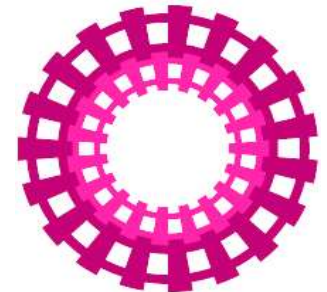
mastery, progressing, emerging,
satisfactory, marginal, proficient, high,
middle, beginning, advanced, novice,
intermediate, sophisticated,
competent, professional, exemplary,
needs work, adequate, developing,
accomplished, distinguished or
numerical designations

Performances = Performance Levels

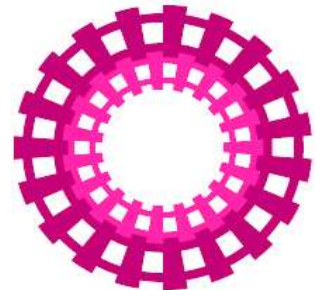
Best Possible Performance

1. For each group area (“criteria”), what are our highest expectations of student learning? What is the best possible performance?

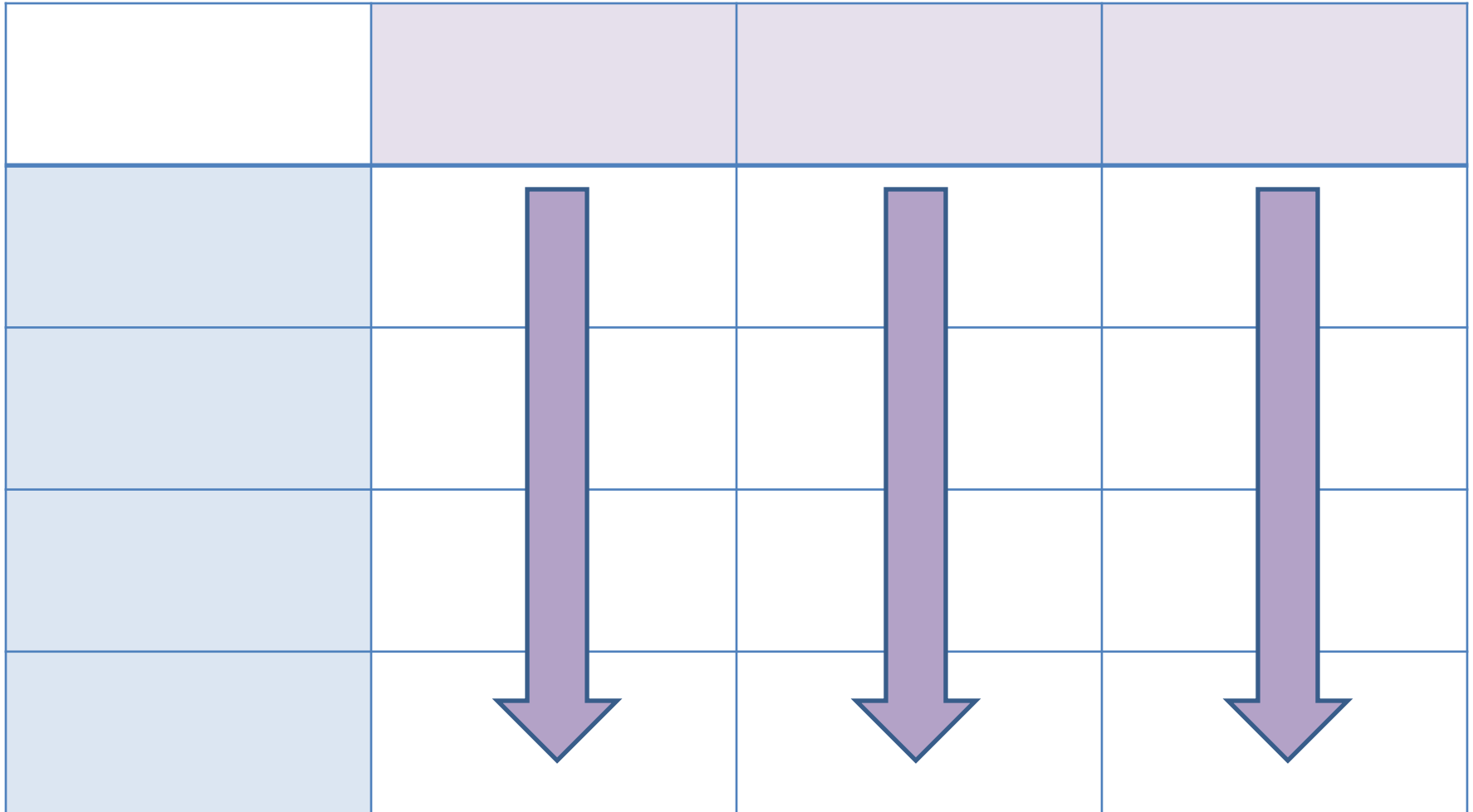


Other Possible Performances

1. For each group area (“criteria”), what are our highest expectations of student learning? What is the best possible performance?
2. The worst?
3. The other expected levels?

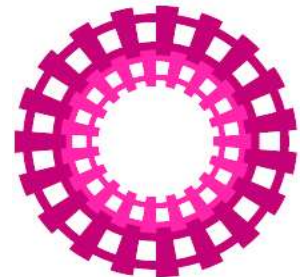


Performances = Performance Descriptions

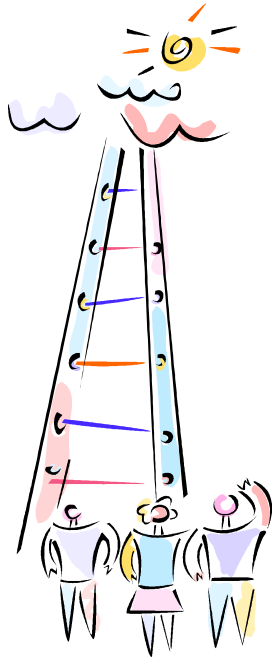


Create your own rubric

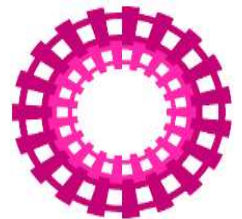
- Instructional Scenario: Freshman Writing Class
- ACRL Standard 2
- Learning Outcomes:
 1. Brainstorm keywords and identify subject headings in order to narrow a topic.
 2. Construct and implement search strategies in order to effectively access information in the library catalog and databases.



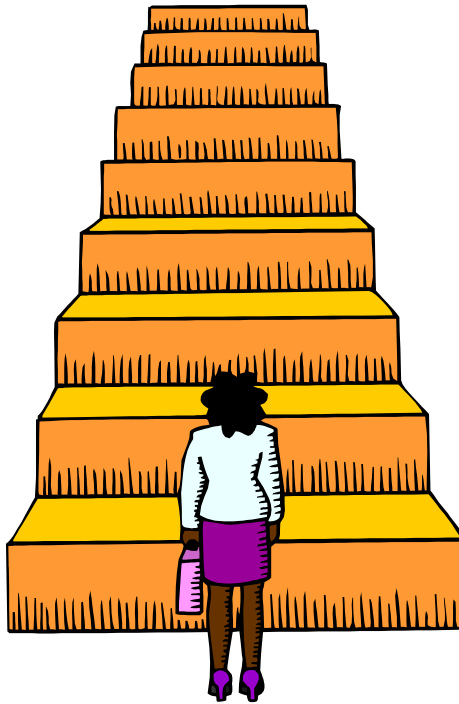
Discussion



- What was easy or challenging about this process?
- How did your group come to consensus?
- Did you make changes to the sample criteria?



Next steps...



- Creating an action plan



Conclusion/wrap up

- Thank you!
- Materials available on RAILS website
<http://railsontrack.info/>

