

Project RAILS: Rubrics, Results, & Recommendations

Rubric Assessment of Information Literacy Skills

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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

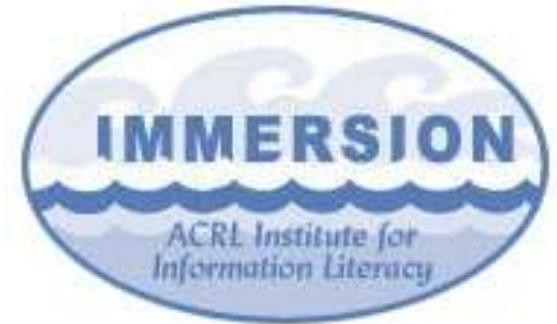
-  [General](#)
-  [Define Information Needs](#)
-  [Evaluate Information](#)
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WAYPOINT
OUTCOMES

RAILS Project Purposes

Project Purpose

- Create a clearinghouse of information literacy 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

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...almost!



	Capstone 4	3	Milestones 2	Benchmark 1
Determine the Extent of Information Needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.
Access the Needed Information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
Evaluate Information and its Sources Critically	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
Access and Use Information Ethically and Legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly one of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

Purposes of VALUE Rubrics

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



VALUE Info Lit Rubric

- **Strengths**
 - ACRL Standards
 - Basis for conversation
 - Demonstrates need for “in progress” assessments
- **Challenges** (when adapting to specific contexts)
 - Performance levels not mutually exclusive
 - Inconsistent wording across performance levels
 - Some adj/adv are open to broad interpretation
 - Specific details needed for scoring student work omitted



Adapting for Specific Contexts

	Expertise	Mastery		Novice
Determine the extent of information needed	Identifies the range of the research question to be investigated (can determine the context, scope, type of information sources, and the overall nature of concepts or ideas to be investigated)	Identifies the range of the research question to be investigated (can determine the context, scope of information sources, and the overall nature of concepts or ideas to be investigated)	Identifies the range of the research question to be investigated (can determine the context, scope of information sources, and the overall nature of concepts or ideas to be investigated)	Has difficulty defining the range of the question to be investigated (The overall nature of concepts, scope of information sources, and the overall nature of concepts or ideas to be investigated is unclear)
Search for useful information	Searches information using effective, well-planned search strategies and search engines, and uses appropriate search techniques	Searches information using simple search strategies and search engines, and uses appropriate search techniques	Searches information using simple search strategies and search engines, and uses appropriate search techniques	Searches information using simple search strategies and search engines, and uses appropriate search techniques
Evaluate information and its sources critically	Identifies the strengths and weaknesses of the information and its sources, and uses appropriate search techniques to evaluate the information and its sources	Identifies the strengths and weaknesses of the information and its sources, and uses appropriate search techniques to evaluate the information and its sources	Identifies the strengths and weaknesses of the information and its sources, and uses appropriate search techniques to evaluate the information and its sources	Identifies the strengths and weaknesses of the information and its sources, and uses appropriate search techniques to evaluate the information and its sources
Use information effectively to accomplish a specific purpose	Communicates, organizes, and analyzes information from various information sources to accomplish a specific purpose with clarity and logic	Communicates, organizes, and analyzes information from various information sources to accomplish a specific purpose with clarity and logic	Communicates, organizes, and analyzes information from various information sources to accomplish a specific purpose with clarity and logic	Communicates, organizes, and analyzes information from various information sources to accomplish a specific purpose with clarity and logic
Extend and evaluate information already used	Applies and extends the use of the following information sources: electronic databases, search engines, and other information sources to find relevant information. Analyzing the information and its sources to evaluate the information and its sources. Analyzing the information and its sources to evaluate the information and its sources.	Applies and extends the use of the following information sources: electronic databases, search engines, and other information sources to find relevant information. Analyzing the information and its sources to evaluate the information and its sources.	Applies and extends the use of the following information sources: electronic databases, search engines, and other information sources to find relevant information. Analyzing the information and its sources to evaluate the information and its sources.	Applies and extends the use of the following information sources: electronic databases, search engines, and other information sources to find relevant information. Analyzing the information and its sources to evaluate the information and its sources.

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

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



Belmont example – case study

- Nashville, TN
- 6600 students
- Liberal and professional education in a Christian community



Information Literacy at Belmont

- Integrated into the General Education curriculum
 - Freshman and junior level courses
- Integrated into some disciplines
 - Health Science programs were the first
 - Pharmacy and Nursing have long-standing relationships with library



IL in Nursing & Pharmacy

- Standard 2: Access the needed info
- Class session: Librarian leads demonstration of search strategies
- Assignment: Search CINAHL/Medline for relevant articles within certain search parameters
- Artifact: search history from databases



Nursing prompt

Search the CINAHL database using the search strategies discussed in class for articles on the following research question:

- **As a way to alleviate the nursing shortage there are now multiple educational pathways to RN licensure. One can sit for the licensure exam with an associate, baccalaureate, or masters degree and receive the same RN license. What impact has this had on the nursing profession?**
- Look for articles from peer-reviewed journals, published in the last five years, in English. Choose articles that are relevant to the research question and that provide the best possible evidence.

Query	Limiters/Expanders	Last Run Via	Results
nursing shortage and degree	Limiters - Published Date from: 20060101-20110131; English Language; Peer Reviewed	Interface - EBSCOhost	34
	Search modes - Boolean/Phrase	Search Screen - Advanced Search	
		Database - CINAHL Plus with Full Text	
((MM "Licensure, Nursing/ED") OR (MH "Nursing Shortage")) and RN licence	Limiters - Published Date from: 20060101-20110131; English Language; Peer Reviewed	Interface - EBSCOhost	0
	Search modes - Boolean/Phrase	Search Screen - Advanced Search	
		Database - CINAHL Plus with Full Text	
(MM "Licensure, Nursing/ED") OR (MH "Nursing Shortage")	Limiters - Published Date from: 20060101-20110131; English Language; Peer Reviewed	Interface - EBSCOhost	1429
	Search modes - Boolean/Phrase	Search Screen - Advanced Search	
		Database - CINAHL Plus with Full Text	
(MM "Licensure, Nursing/ED") OR (MH "Nursing Shortage")	Limiters - Published Date from: 20110101-20060131; English Language; Peer Reviewed	Interface - EBSCOhost	0
	Search modes - Boolean/Phrase	Search Screen - Advanced Search	
		Database - CINAHL Plus with Full Text	
(MM "Licensure, Nursing/ED") OR (MH "Nursing Shortage")	Search modes - Boolean/Phrase	Interface - EBSCOhost	8583
		Search Screen - Advanced Search	
		Database - CINAHL Plus with Full Text	



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

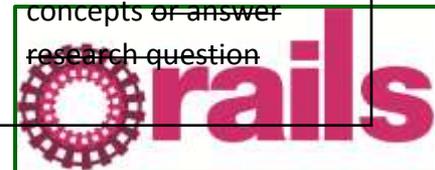
Rubric Norming Process

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.



Norming Day Revisions

	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



Improved Teaching

- The process of writing and rating with rubrics results in improvements in teaching, assessment, collaboration, etc.
- RAILS “changed the way I teach...session has more structure, and the students seemed much more engaged.”
- Student comment on changed instruction: “The day that we went as a class to the library...was probably one of the most beneficial days of my semester.”



Making Rubrics Scale

- 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
- Act on results



Specificity Lessons

- **Analytical rubrics** appear to be more effective when assessing student artifacts than holistic rubrics.
- 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

- “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.
- 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

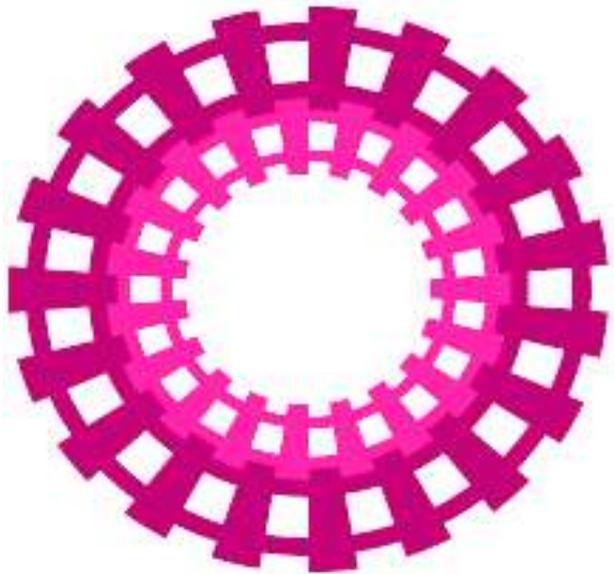


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