From Holistic to Analytic: Adapting VALUE Rubrics to Individual Campus Contexts

Rubric Assessment of Information Literacy Skills

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rubric assessment of information literacy skills

home   about   updates   publications & presentations   press

contact   rubrics   forum   training   results   closing the loop

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

○ Trinity University

○ University of Kentucky

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.

Project 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…

- 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?

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Other Information Literacy Assessment Approaches

Surveys   **Tests**   **Performance Assessments**

Without rubrics, performance assessments sometimes lack interrater reliability.

Without reliability, open to validity problems too.

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VALUE Rubric for Information Literacy	Capstone 4	Milestones		Benchmark
		3	2	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.

VALUE Info Lit Rubric

- Strengths
  - ACRL Standards
  - Basis for conversation
  - Demonstrates need for "in progress" assessments
- Challenges
  - Inconsistent wording across performance levels
  - Performance levels not mutually exclusive
  - Specific details needed for scoring student work omitted

Adapting for Specific Contexts

2010-2011
The 1ˢᵗ Five Institutions

- 5 "lead" librarians met for intensive rubric training and developed draft rubric customized for their institution.

- Lead librarians secured examples of student work (100+ x 5 = 500+) and raters (10 x 5 = 50).

- PI visited each campus to lead rubric revision, norming, scoring.

- Analysis completed.

Example Collaboration

- Library instruction team and Eng 102, First Year Composition

- Annotated Bibliography assignment

- Rubric - Evaluates Information and its Sources Critically & Access the Needed Information

Example Collaboration

- Health Sciences Library Liaison and 2 courses
  - Nursing 3000, Professional Nursing
  - Pharmacy 6160, Drug Informatics

- Assignment – Search CINAHL/Medline

- Rubric - Access the Needed Information

Successful Campus Collaborations

- 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

Collaboration Challenges

- Embedding IL instruction and a shared assignment across multiple sections
- Time Constraints
- Grading- Librarian or Faculty?
- Norming the rubrics

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.

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Mini-exercise:
From Holistic to Analytic…

- Aim: develop strategies for adapting holistic rubrics into analytic rubrics for your own institutional context.

- Use 'Evaluate Information and its Sources Critically' row on IL VALUE rubric.

- Brainstorm how you would break this row down into multiple facets (10 minutes)

Small & Large Group Discussions

At your tables, please discuss the following questions (5 minutes):

- What was hard or easy about moving from the holistic rubric into an analytic rubric?

- How would you do this work at your own institution?
  - Who would be involved?
  - What would the adaptation process look like?
  - What benefits or barriers can you envision in doing this work at your own institution?

A closer look at our rubrics…

Institution #1	Advanced	Developing	Beginning
Determines Key Concepts	Student determines keywords/subject/subheadings that fully describe the research question/thesis. *Students rated as Advanced: 44%*	Student determines keywords/subject /subheadings that partially describe the research question/thesis. *Students rated as Developing: 50%*	Student does not determine keywords/subject /subheadings that describe the research question/thesis. *Students rated as Beginning: 6%*
Accesses the Needed Information	Student accesses information using a logical progression of advanced search strategies such as limits, Boolean searches, or combined searches. *Students rated as Advanced: 27%*	Student accesses information using advanced search strategies, such as limits, Boolean searches, or combined searches. *Students rated as Developing: 62%*	Student accesses information using only simple search strategies. *Students rated as Beginning: 11%*
Retrieves Relevant Information	Student retrieves information sources that fully fit search parameters and relate to concepts. *Students rated as Advanced: 37%*	Student retrieves information sources that partially fit search parameters or relate to concepts. *Students rated as Developing: 53%*	Student does not retrieve information sources that either fit search parameters or relates to concepts. *Students rated as Beginning: 10%*

Institution #2	Accomplished	Developing	Inadequate
Evaluates Authority	Student shows sufficient evidence of the author's credentials and qualifications. *Students rated as Accomplished: 46%*	Student briefly identifies the author's credentials and qualifications. *Students rated as Developing: 35%*	Student does not identify the author's credentials or qualifications. *Students rated as Inadequate: 19%*
Evaluates Currency	Student comments on the source's publication year and retrieves the source that is published within the last five years. *Students rated as Accomplished: 68%*	Student either comments on the source's publication year or retrieves a source that is published in the last five years, but does not do both. *Students rated as Developing: 26%*	Student does not comment on the source's publication year and does not retrieve a source that is published in the last five years. *Students rated as Inadequate: 6%*
Evaluates Reliability	Student shows adequate evidence of whether or not the source is trustworthy. *Students rated as Accomplished: 23%*	Student shows superficial evidence of whether or not the source is trustworthy. *Students rated as Developing: 53%*	Student does not show evidence of whether or not the source is trustworthy. *Students rated as Inadequate: 24%*
Evaluates Accuracy	Student provides a thorough explanation of the accuracy of the source. *Students rated as Accomplished: 21%*	Student provides superficial explanation of the accuracy of the source. *Students rated as Developing: 51%*	Student does not explain the accuracy of the source. *Students rated as Inadequate: 28%*
Evaluates Perspective	Student identifies the author's point of view in detail. *Students rated as Accomplished: 27%*	Student briefly identifies the author's point of view. *Students rated as Developing: 53%*	Student does not identify the author's point of view. *Students rated as Inadequate: 20%*
Evaluates Reflection of Source	Student explains in detail how the source contributes to his/her knowledge. *Students rated as Accomplished: 29%*	Student identifies how the source contributes to his/her knowledge. *Students rated as Developing: 51%*	Student does not identify how the source contributes to his/her knowledge. *Students rated as Inadequate: 20%*
Access the Needed Information	Student accesses information using effective, well-designed search strategies. *Students rated as Accomplished: 27%*	Student accesses information using simple strategies, including both search term(s) and tool(s). *Students rated as Developing: 53%*	Student does not specify strategy with both search term(s) and tool(s). *Students rated as Inadequate: 20%*

Institution #3	3	2	1
Organizes Content **Are the sources in the right places?**	Consistently organizes cited information in a manner that supports the purposes and format of the product/performance. *Students rated as 3: 35%*	Inconsistently organizes cited information in a manner that supports the purposes and format of the product/performance. *Students rated as 2: 45%*	Does not organize cited information in a manner that supports the purposes and format of the product/performance. *Students rated as 1: 20%*
Synthesizes New and Prior Information **Do the sources help to support new claims or make points?**	Consistently connects new and prior information to create a product/performance. *Students rated as 3: 27%*	Inconsistently connects new and prior information to create a product/performance. *Students rated as 2: 48%*	Does not connect new and prior knowledge to create a product/performance. *Students rated as 1: 25%*
Communicates Information **Do they have sources?**	Consistently communicates information from sources via products/performances. *Students rated as 3: 37%*	Inconsistently communicates information from sources via products/performances. *Students rated as 2: 50%*	Does not communicate information from sources via products/performances. *Students rated as 1: 13%*

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Institution #4	**Advanced** *Applies outcome successfully; Many strengths are present*	**Developing** *Shows skill in this outcome; Improvement needed*	**Beginning** *Evidence of the outcome may be minimally or not at all present; Need for improvement outweighs apparent strengths*
Style conventions	Follows style guide conventions with few errors. *Students rated as Advanced: 22%*	Follows style guide conventions with frequent errors. *Students rated as Developing: 65%*	Does not follow style guide conventions. *Students rated as Beginning: 13%*
Correspondence of bibliography and in-text citations	Bibliography and in-text citations correspond. *Students rated as Advanced: 39%*	Bibliography and in-text citations do not correspond. *Students rated as Developing: 53%*	Does not include a functional bibliography and/or in-text citations. *Students rated as Beginning: 8%*
Common knowledge and attribution of ideas	Consistently distinguishes between common knowledge and ideas requiring attribution. *Students rated as Advanced: 33%*	Inconsistently distinguishes between common knowledge and ideas requiring attribution. *Students rated as Developing: 59%*	Does not distinguish between common knowledge and ideas requiring attribution. *Students rated as Beginning: 8%*
Paraphrasing, summarizing, quoting	Summarizes, paraphrases, or quotes in order to integrate the work of others into their own. *Students rated as Advanced: 43%*	Summarizes, paraphrases, or quotes, but does not always select appropriate method for integrating the work of others into their own. *Students rated as Developing: 53%*	Does not summarize, paraphrase, or quote in order to integrate the work of others into their own. *Students rated as Beginning: 4%*

Institution #5	Advanced	Developing	Beginning
Access the Needed Information	Student: • Searches and locates websites or journal articles using effective search techniques demonstrated. • Finds relevant and diverse information sources for assignment. • Demonstrates persistence and ability to refine search when necessary. *Students rated as Advanced: 51%*	Student: • Searches and locates websites or journal articles using simple search strategies demonstrated. • Finds information with partial relevance and quality for assignment. *Students rated as Developing: 41%*	Student: • Accesses websites or journal articles randomly. • Does not apply new techniques demonstrated. • Retrieves information that lacks relevance and quality for assignment. *Students rated as Beginning: 9%*
Use Information Ethically and Legally	Student: • Follows style guide conventions correctly. • Citations are mostly complete and accurate. *Students rated as Advanced: 41%*	Student: • Follows style guide conventions with errors. • Citations have partially correct information. *Students rated as Developing: 48%*	Student: • Does not follow style guide conventions. • Citations are not included. *Students rated as Beginning: 11%*
Evaluate Information and its Sources Critically	Student: • Uses 4-5 of the points on the comprehensive list of evaluation criteria provided. • Provides a reasoned rationale for using information for a given context. *Students rated as Advanced: 48%*	Student: • Uses a 2-3 points on the comprehensive evaluation criteria list provided. • Provides a limited or incomplete rationale for using information for a given context. *Students rated as Developing: 39%*	Student: • Does not apply the evaluation criteria provided or uses only 1 of 5. • Provides no rationale for selecting sources for analysis. *Students rated as Beginning: 13%*

"Closing the Loop" Survey

RAILS - Closing the Loop

Exit this survey

1. Improvements Resulting from RAILS Participation

RAILS seeks to improve teaching, learning, and assessment. It may also result in increased collaboration, organizational change, or other positive impacts.

This form seeks to collect improvements that result from your participation in RAILS, large or small.

You may (and are encouraged) to return to this survey as often as you like.

*1. What improvements, impacts, or changes resulted from your RAILS participation?

*2. Is this a change in:

☐ Teaching Methods

☐ Student Learning

☐ Assessment Practice

☐ Collaboration

☐ Organizational Change

All institutions report improved *teaching*.

"Closing the Loop"
Survey Results
April 2011 to July 2011

	Institution #1	Institution #2	Institution #3	Institution #4	Institution #5	Examples
Improved Teaching	X	X	X	X	X	RAILS "changed the way I teach…[the teaching] session has more structure, and the students seemed much more engaged." [I1] Student comment about changed instruction: "The day that we went as a class to the library…was probably one of the most beneficial days of my semester." [I1] "Professor was very pleased with the resulting student work and would like to use the rubric again in the future." [I1] Faculty feedback: "My teaching in [course] improved and the students' work improved also." [I2] "We…revisited the ACRL Standards and are in the process of revising our assignment, goals, and outcomes." [I2] Librarians have been invited to work with faculty to "better identify and align…course outlines to other information literacy standards." [I3] Changes in sequencing of instruction and ideas for promoting IL skills throughout the research process for disciplinary assignments. [I4] "I made sure to cover how to [specific IL skill] in…classes I taught post-RAILS." [I4]

All institutions report increased *assessment* activity.

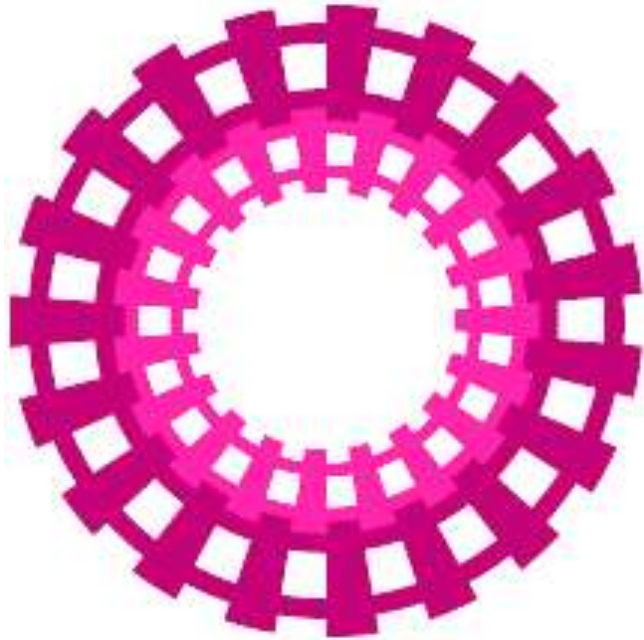|						
						"I learned that there are definite improvements needed to change our assignment title and in how I handle teaching [specific IL skill]…the opportunity to revise the assignment will come this fall." [I5] "We need to be clearer in the assignment." [I5] "I learned that grading the assignments in the RAILS project was an empowering act for me. It will strengthen my teaching the next time because I now understand what the students really are not getting. This rubric creation and rating experience has facilitated valuable reflection on my teaching practice and I hope to weave what I now understand into my teaching the next time around." [I5]
Improved Assessment	X	X	X	X	X	Faculty who participated in RAILS "are now interested in using IL rubrics in another class." [I1] Developments: "Institutional implementation of customized VALUE rubrics for IL and in other areas. Redesigning [course] IL rubrics and instructional materials." [I2] "We re-examined our current rubric for freshmen and simplified it." [I2] "Project RAILS heightened the need for our college to purchase a software program…as a mechanism in which to consistently document feedback during artifact scoring sessions." [I3] "The current information literacy rubric training will now be modified to include steps and strategies [from RAILS training]." [I3] "All the librarians who participated in RAILS are 'on board' with the idea of assessment; however, not many of us were collecting final papers/artifacts. Seeing this final work helps us to build up a much richer picture of our teaching and of student learning, and we are now planning to collect final papers routinely from targeted classes." [I4] "Participating in RAILS has enabled us to develop and pilot a process for collecting and assessing student work….. As a result of RAILS, we have developed a student consent form for collecting and using student work. We were also able to work out how best to approach faculty to ask their permission to use class work and talk to their students, as well as how best to talk to students about why and how we would use their work. This was an unexpected opportunity to make more visible to students what is actually involved in doing research. In short, RAILS has enabled us to put systems and procedures in place that we will draw on for all subsequent assessment efforts!" [I4] "I learned that we must find a way to participate in the campus plan to prepare for this accreditation review." [I5]

Closing the Loop - RAILS. (n.d.). Retrieved February 16, 2012, from http://railsontrack.info/loop.aspx

And more…

- 5 of 5 are disseminating results via publications/presentations locally and nationally.

- 3 of 5 document more collaboration with institutional colleagues (faculty, staff, administration, co-curricular professionals).

- 2 of 5 are developing add-on research projects.

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Questions?

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