Getting Started with Learning Outcomes Assessment

Purposes, Practical Options, & Impact

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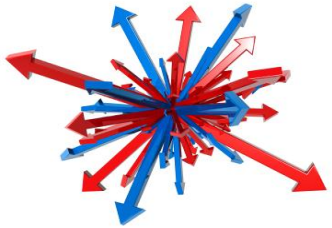
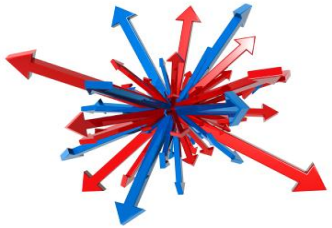


Why are you here?

✓ Tasked with assessing information literacy on your campus?

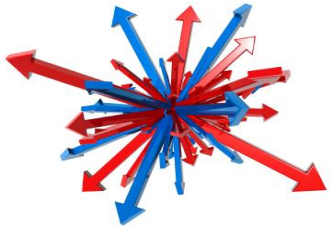
✓ Confused about your options?

✓ Dissatisfied with assessments you've already attempted?



Questions

- What is the purpose of learning outcomes assessment in my library?
- What assessment tools can I use? What are the strengths and limitations of each? How do I choose the right one for my campus?
- How will my choices impact teaching and learning? How will I “close the loop”?
- How might I use learning outcomes assessment to highlight the value of my library to my overarching institution?



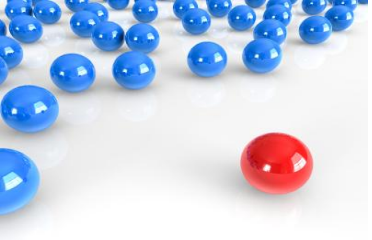
Agenda

- Purposes of Assessment
- Assessment Tools
  - ✓ Strengths
  - ✓ Weaknesses
- Choosing the “Right” Tool
- Closing the Loop
  - ✓ Impacting Teaching & Learning
  - ✓ Documenting & Reporting
- Demonstrating Value

Purposes of Assessment

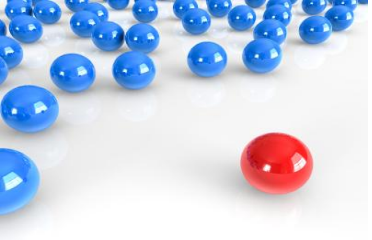
Why should I assess student learning?

- To respond to calls for accountability
- To participate in accreditation processes
- To inform decision-making regarding program structure/performance
- To improve teaching skills
- To improve student learning ★



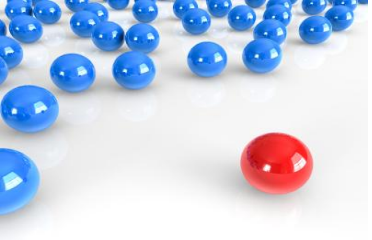
One Perspective

- Take an educational research or action research perspective.
  - Focus: impact & improvement
  - Application: decision-making
  - Accountability: accreditation, answering to stakeholders
  - Focus is not primarily on experimental design or “causation”



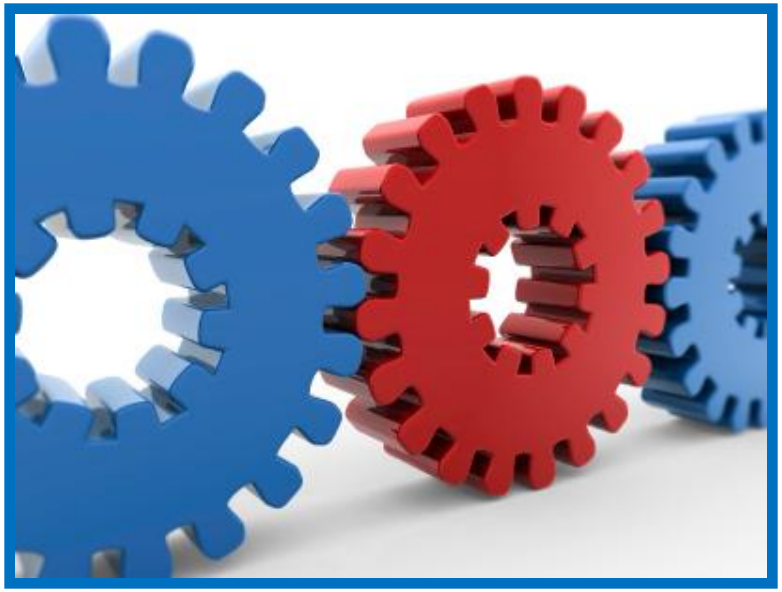
Focus on Academic Success

- Not students' satisfaction levels
- Not librarians' instruction skills



Where to Start?

- Institutional Mission
- Applicable Standards
  - Information Literacy Competency Standards for Higher Education
  - Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians
  - AASL Standards
  - General education standards
  - Academic department standards
  - Accreditation standards
  - More in my keynote article!



Assessment Tools

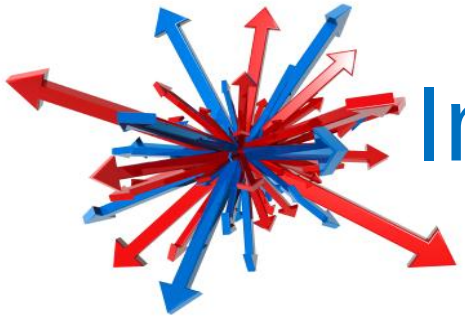
Tools

- Self report
  - Focus groups, interviews, surveys
- Tests
  - SAILS, ILT, Bay Area Community Colleges, etc.
- Performance assessments
  - Paper citation analysis, portfolios, sketch maps, etc.
- Rubrics
  - Used to measure performances or products that demonstrate student learning, AAC&U VALUE rubrics, RAILS, etc.

Self Report

Self Report

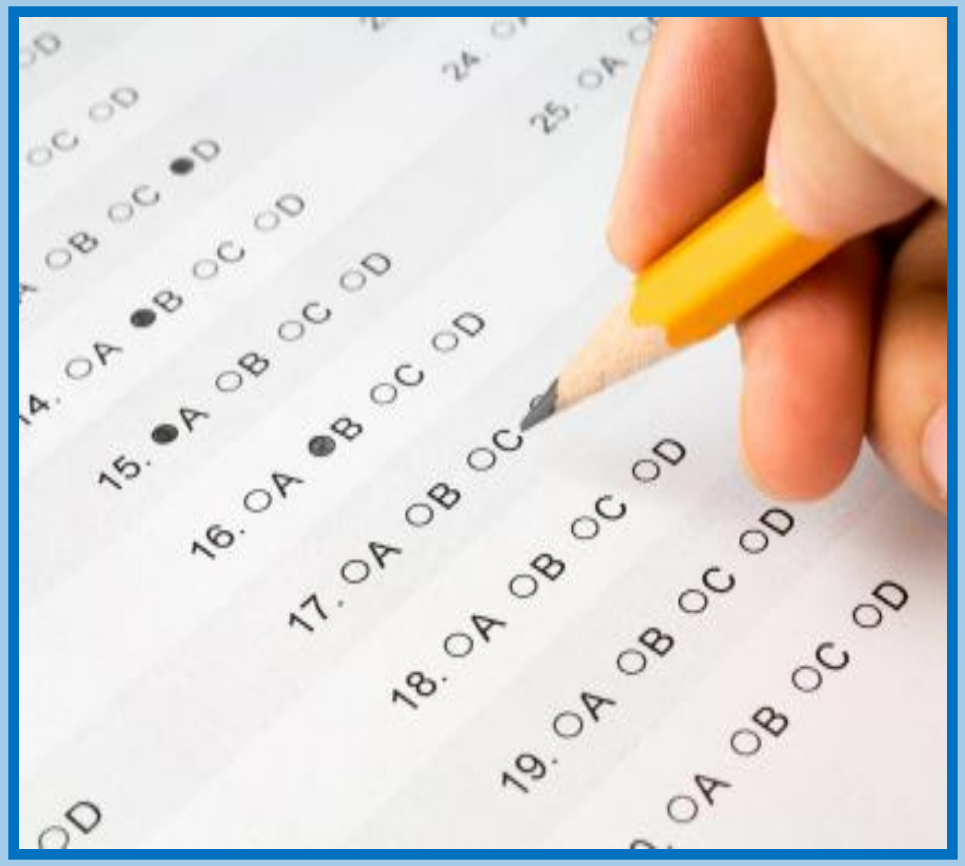
- Defined
  - Ask students to estimate their learning
  - Typical methods: survey, interview, focus group
- Benefits
  - Capture students' assessment of their learning
  - Conveyed in student language
- Limitations
  - Do not assess actual learning
  - Skilled students underestimate learning
  - Unskilled students overestimate learning



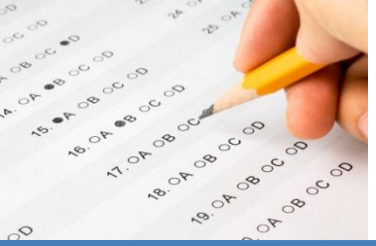
Interactive Exploration

Self Report

1. Brainstorm ways to have students “self report” their web evaluation skills.
2. Draft a question or two you might ask on a survey or during an interview or focus group.

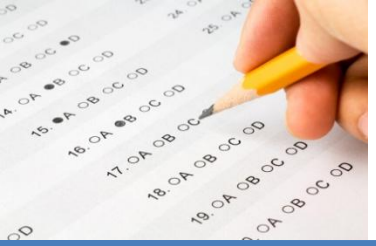


Tests



Tests Defined

- Are primarily multiple choice in format
- Strive for objectivity
- Grounded in early behaviorist educational theory



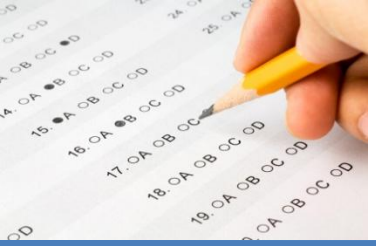
Tests – Benefits, 1 of 2

Learning

- Measure acquisition of facts

Data

- Are easy and inexpensive to score
- Provide data in numerical form
- Collect a lot of data quickly
- Tend to have high predictive validity with GPA or standardized tests scores
- Can be made highly reliable (by making them longer)
- Can be easily used to make pre/post comparisons
- Can be easily used to compare groups of students



Tests – Benefits, 2 of 2

If locally developed…

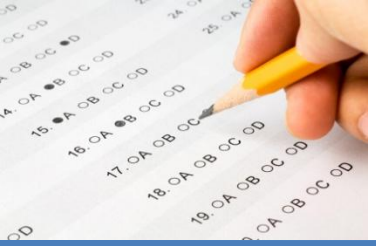
- Help librarians learn what they want to know about student skills
- Are adapted to local learning goals and students
- Can be locally graded and interpretation of results can be controlled

If non-locally developed…

- Can be implemented quickly
- Reduce staff time required for development and scoring

Other

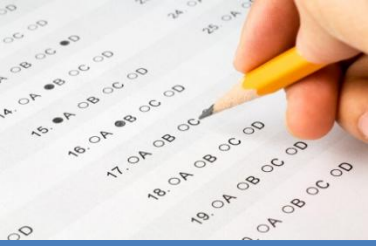
- Are widely accepted by the general public



Tests – Limitations, 1 of 2

Learning

- Measure recognition rather than recall
- Reward guessing
- Include oversimplifications
- Do not test higher-level thinking skills
- Do not measure complex behavior or "authentic" performances
- Do not facilitate learning through assessment



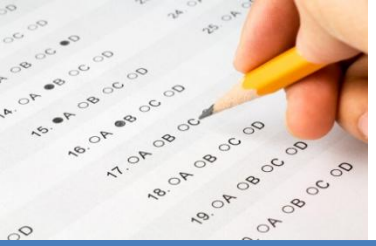
Tests – Limitations, 2 of 2

Data

- May be designed to create "score spread"
- May be used as "high stakes" tests

If locally developed…

- May be difficult to construct and analyze
- Require leadership and expertise in measurement
- May not be useful for external comparisons



Multiple Choice Test Questions, 1 of 3

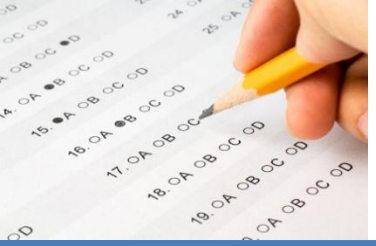
What student skills do you want to measure?

Which skills are *important* enough to measure?

Keep in mind…

Stem

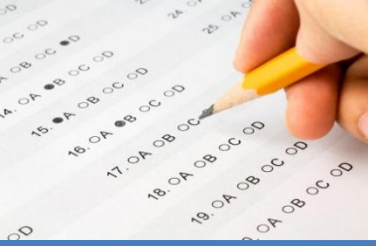
- Direct questions are better than incomplete sentences



Multiple Choice Test Questions, 2 of 3

Answer choices

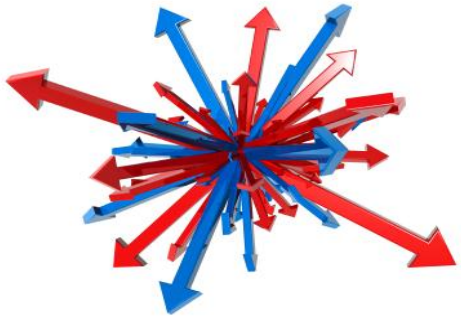
- Write the correct answer first
- Limit obviously incorrect choices; wrong answers should be plausible
- Use parallel construction and similar length
- Avoid negatively phrased answers
- Avoid “all of the above” and “none of the above”
- “Select best” more challenging than “select correct”



Multiple Choice Test Questions, 3 of 3

In general…

- Avoid unintentional clues
- Keep vocabulary, phrasing, & jargon simple
- Avoid extreme words (all, never, always) and vague words (may be, usually, typically)
- Omit needless words



Interactive Exploration

Multiple Choice Test Questions

1. Select a question from the test provided.
2. Does it adhere to the multiple choice guidelines?
3. What is the answer to the question? Do you agree? Why or why not?
4. What might you do to improve the question?

Performance Assessments

Performance Assessments Defined

- Focus on students' tasks or products/artifacts of those tasks
- Simulate real life application of skills, not drills
- Strive for contextualization & authenticity
- Grounded in constructivist, motivational, and "assessment for learning" theory

Performance Assessments – Benefits

Learning

- Align with learning goals
- Integrate learning and assessment
- Capture higher-order thinking skills
- Support learning in authentic (real life) contexts
- Facilitate transfer of knowledge

Data

- Supply valid data

Other

- Offer equitable approach to assessment

Collaborating with Campus Partners

- Form partnerships with:
  - Disciplinary faculty
    - Achieve both disciplinary and information literacy learning goals/outcomes
  - Student support personnel
    - Communicate about similar challenges
  - Institutional assessment officers
    - Tie into campus-wide efforts and practices

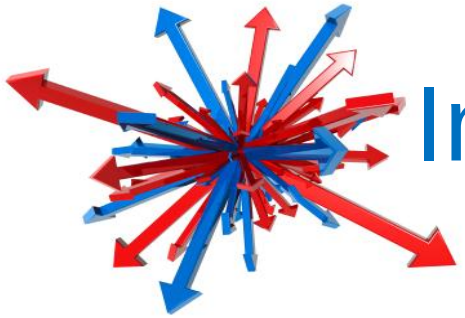
Performance Assessments – Limitations

Data

- May have limited generalizability to other settings and populations

Other

- Require time to create, administer, and score



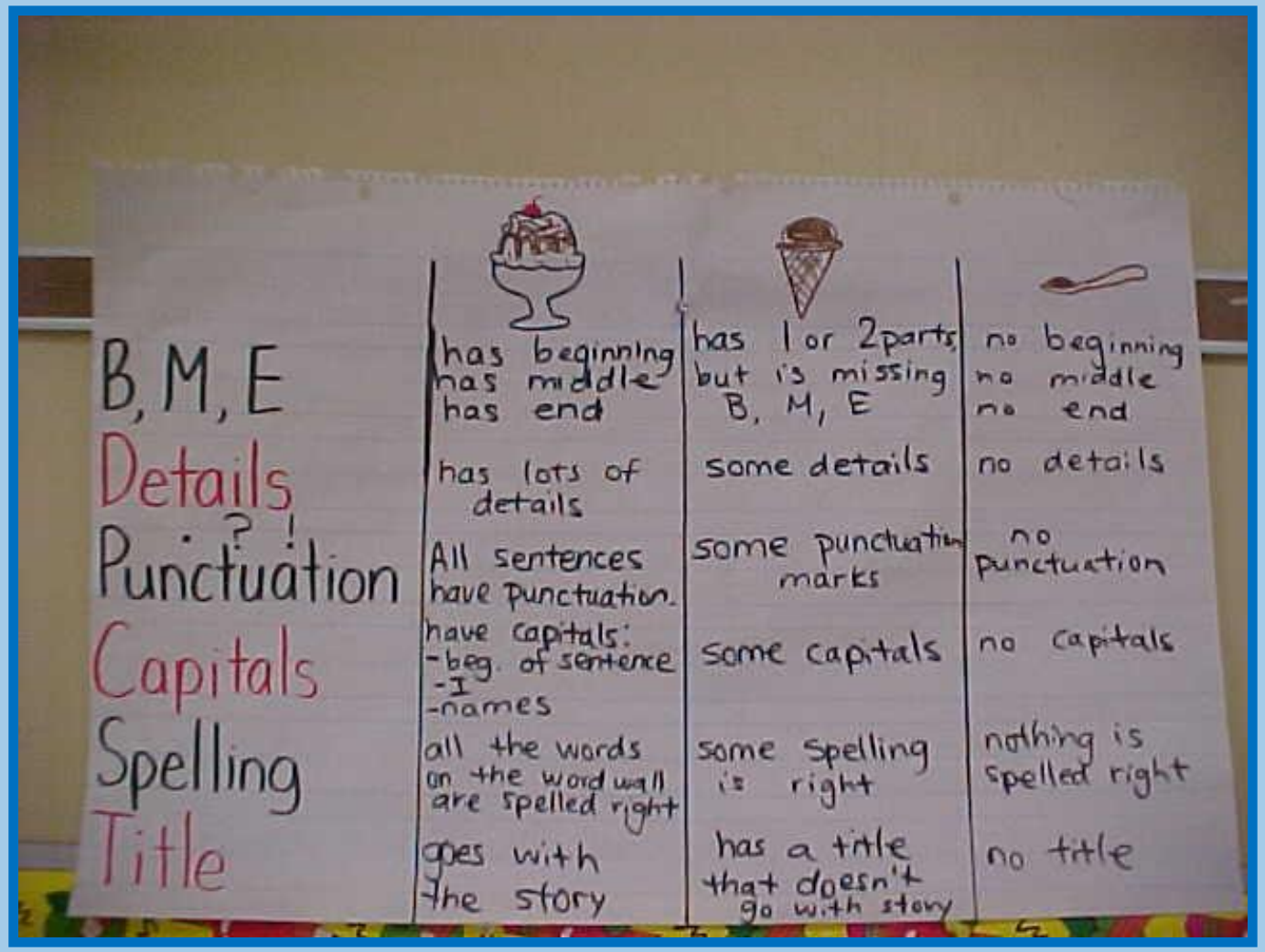
Interactive Exploration

Performance Assessments

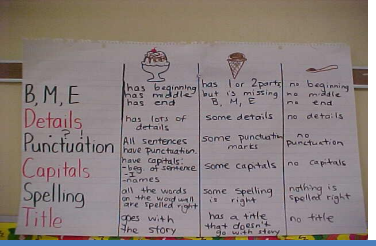
1. Select one of the outcomes below.
   - The student will develop a realistic overall plan and timeline to acquire needed information.
   - The student will construct and implement effectively-designed search strategies.
   - The student will analyze information to identify point of view or bias.
   - The student will acknowledge the use of information sources through documentation styles.
2. What “tasks” would reveal students’ ability to accomplish this outcome?
3. What “products” or “artifacts” could serve as evidence of their ability?
4. Create a list of tasks and/or artifacts that could be assessed to assess the outcome.

research journals reflective writing “think alouds” self or peer evaluations research drafts or papers open-ended question responses works cited pages annotated bibliographies speeches multimedia presentations posters	exhibits group projects performances portfolios library assignments worksheets concept maps citation maps tutorial responses role plays lab reports

Oakleaf, Megan. "Writing Information Literacy Assessment Plans: A Guide to Best Practice." *Communications in Information Literacy*. 3(2). 2010.


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

Rubrics



Rubrics Defined

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

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

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,

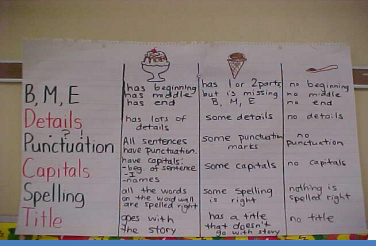
&

PERFORMANCE DESCRIPTIONS

Rubric for Assessing Student Ability to Evaluate Websites for Authority

Evaluation Criteria	Beginning	Developing	Exemplary
Articulates Criteria	0 - Student does not address authority issues. ◯	1 - Student addresses authority issues, but does not use criteria terminology. ◯	2 - Student addresses authority issues and uses criteria terminology such as: author, authority, authorship, or sponsorship. ◯
Cites Indicators of Criteria	0 - Student does not address authority indicators. ◯	1 - Student refers vaguely or broadly to authority indicators, but does not cite specific indicators. ◯	2 - Student cites specific authority indicators such as: domain, server/publisher/host, or ~ in URL; presence of personal or corporate author name, email, "About Us" or "Contact Us" links; or author credentials. ◯
Links Indicators to Examples from Source	0 - Student does not address examples of authority indicators from the site. ◯	1 - Student refers vaguely or broadly to examples of authority indicators from the site under consideration, but does not cite specific examples. ◯	2 - Student cites specific examples of authority indicators from the site under consideration. ◯
Judges Whether or Not To Use Source	0 - Student does not indicate whether or not the site is appropriate to use for the purpose at hand. ◯	1 - Student indicates whether or not the site is appropriate to use for the purpose at hand, but does not provide a rationale for that decision that cites authority issues and/or indicators. ◯	2 - Student indicates whether or not the site is appropriate to use for the purpose at hand and provides a rationale for that decision citing authority issues and/or indicators. ◯

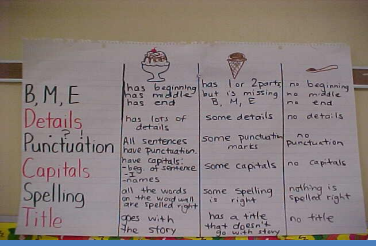
RESEARCHER USE ONLY: Total Score ___/8



Rubrics – Benefits, 1 of 2

Learning

- Articulate and communicate agreed upon learning goals
- Focus on deep learning and higher-order thinking skills
- Provide direct feedback to students
- Facilitate peer- and self-evaluation
- Make scores and grades meaningful
- Can focus on standards



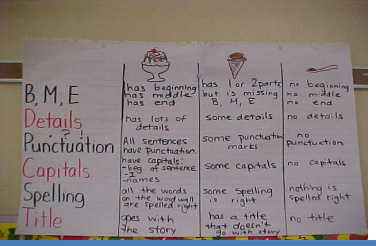
Rubrics – Benefits, 2 of 2

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

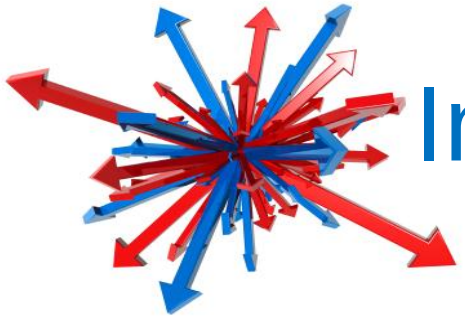
- Are inexpensive to design and implement



Rubrics – Limitations

Other

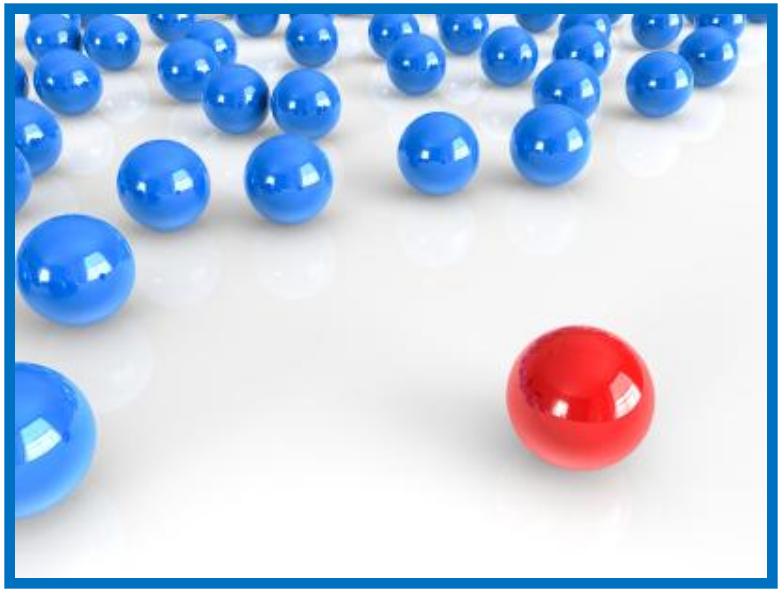
- May contain design flaws that impact data quality
- Require time for development
- Require time for training multiple rubric users



Interactive Exploration

Rubrics

1. **Chose an outcome to assess:**
   - The student will develop a realistic overall plan and timeline to acquire needed information.
   - The student will construct and implement effectively-designed search strategies.
   - The student will analyze information to identify point of view or bias.
   - The student will acknowledge the use of information sources through documentation styles.
2. **What "criteria" make up this outcome?**
3. **What does student performance "look like" at a beginning, developing, and exemplary level?**
4. **Enter the criteria and performance descriptions in the rubric provided.**



Choosing the “Right” Assessment Tool

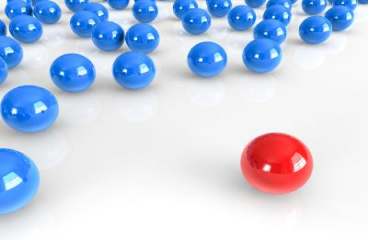
Oakleaf, Megan and Neal Kaske. "Guiding Questions for Assessing Information Literacy in Higher Education." *portal: Libraries and the Academy*. 9(2). 2009.

Choosing the Right Tool
PURPOSE

- Why are we conducting this assessment?
- Are we conducting assessment to respond to calls for accountability?
- Are we conducting assessment to strengthen instructional program performance?
- Are we conducting assessment to improve student learning?
- Are we conducting assessment for a formative or summative purpose?

Choosing the Right Tool
STAKEHOLDER NEEDS

- *Who are the stakeholders of this assessment effort?*
- *Are our stakeholders internal, external, or both?*
- *Will our audience prefer qualitative or quantitative data? Will they have other data preferences?*



Choosing the Right Tool
WHAT YOU WANT TO KNOW

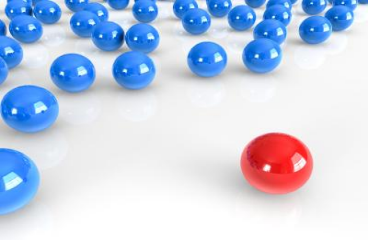
- Will the assessment establish a baseline?
- Will the assessment reveal new information?
- Will the assessment be trustworthy and accurate?
  - Will the assessment produce reliable results?
  - Will the assessment produce valid results?
- Does the nature of the assessment data (qualitative or quantitative) match stakeholder needs?

Choosing the Right Tool
COST

- What time costs will we incur?
- What financial costs will we incur?
- What personnel costs will we incur?
- Will these costs be initial or continuing?

Choosing the Right Tool
INSTITUTIONAL ISSUES

- Will the assessment support the goals of the overall institution?
- How will the assessment results be used by the overall institution?
- How might the assessment be used in a negative way against the library instruction program?



Large-Scale vs. Classroom Assessment

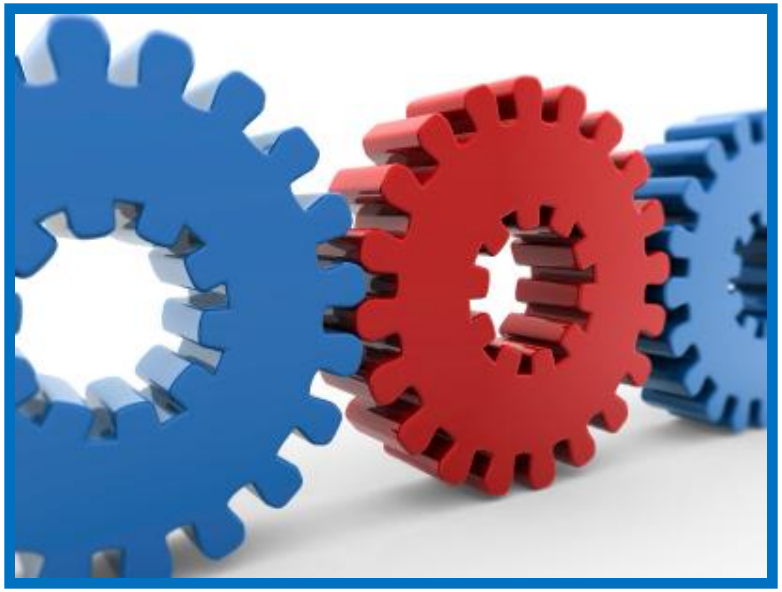
Large-Scale Assessment

- Formal
- Objective
- Time efficient
- Cost efficient
- Centrally processed
- Reduced to single scores
- Not focused on diagnosing and targeting needs of individual learners
- Politically charged
- Designed to support program decision-making

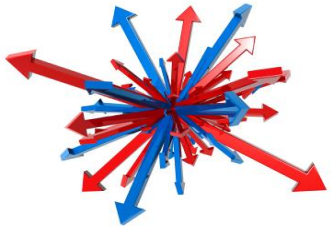
Classroom Assessment

Lorrie Shepard

- Informal
- Locally developed, scored, & interpreted
- Includes instructionally valuable tasks
- Shows short-term changes in student learning
- Provides feedback to students
- Useful for making changes to curricula/activities/assignments
- Conducted in a trusting environment
- Designed to support instruction



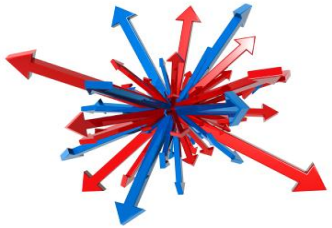
Closing the Loop…



Here's Your Data…Now What?

Interactive Exploration

- Self Report
  - Survey results
- Test
  - TRAILS-12
- Performance Assessment
  - Paper citations
- Rubric
  - Tutorial responses



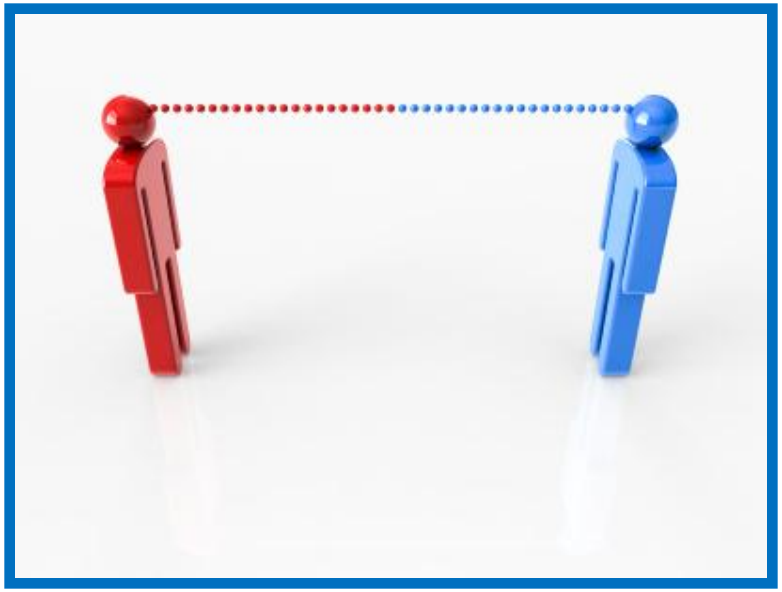
Based on this Data…

- What can you report to stakeholders?
- What decisions can you make?
- What instructional improvements can you make?
- What do you like about this assessment approach?
- What would you change about the next assessment?



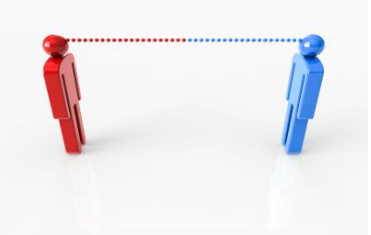
What is 1 question you have at this point?



Documenting & Reporting

Oakleaf, Megan. "Writing Information Literacy Assessment Plans: A Guide to Best Practice." *Communications in Information Literacy*. 3(2). 2010.



Why Document & Report Results?

- No one knows you're engaged in assessment unless you document and report it.
- Learning takes place when documenting—it enables you to "close the loop".
- Documenting gives you evidence of accomplishments and evidence of a plan for improvement.
- Accreditation requires documentation.

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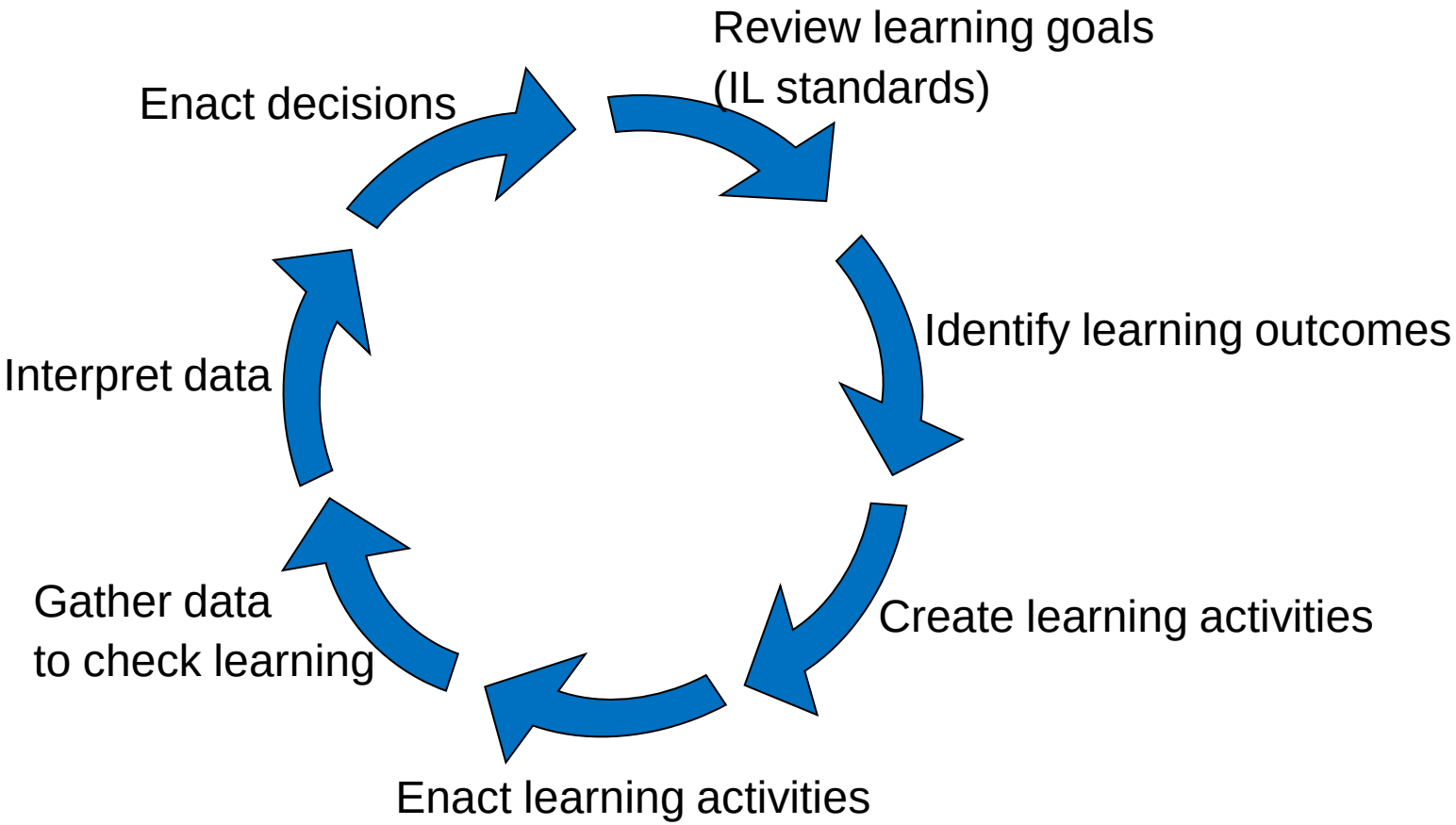
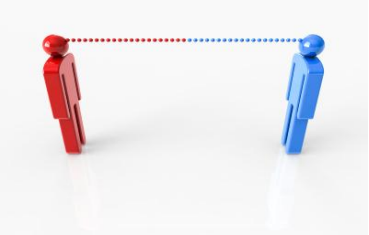
ILI Assessment Cycle

Adapted from Peggy Maki, PhD
& Marilee Bresciani, PhD
By Megan Oakleaf, PhD



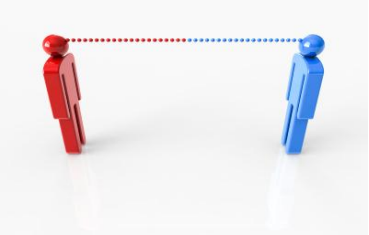
Oakleaf, Megan. "The Information Literacy Instruction Assessment Cycle: A Guide for Increasing Student Learning and Improving Librarian Instructional Skills." *Journal of Documentation*. 65(4). 2009.

Information Literacy Assessment Plan Purpose Theory Links to Strategic Documents Structures Resources Data Policies Goals & Outcomes Timeline for Continuous Assessment	
Outcome 1 1.1 Target Audience 1.2 Opportunities for Learning 1.3 What is Known 1.4 What is Unknown 1.5 Methods/Tools for Evidence Collection 1.6 Pilot Recommendations 1.7 Analysis of Evidence 1.8 How Assessors Know The Outcome Has Been Met 1.9 Result Scenarios & Decision Making Indicators 1.10 Responsible Parties 1.11 Tasks & Timeline 1.12 Resources Required 1.13 Results 1.14 Decision Makers 1.15 Reporting Suggestions 1.16 Decisions & Recommendations 1.17 Alternative Methods/Tools	Outcome 2 2.1 Target Audience 2.2 Opportunities for Learning 2.3 What is Known 2.4 What is Unknown 2.5 Methods/Tools for Evidence Collection 2.6 Pilot Recommendations 2.7 Analysis of Evidence 2.8 How Assessors Know The Outcome Has Been Met 2.9 Result Scenarios & Decision Making Indicators 2.10 Responsible Parties 2.11 Tasks & Timeline 2.12 Resources Required 2.13 Results 2.14 Decision Makers 2.15 Reporting Suggestions 2.16 Decisions & Recommendations 2.17 Alternative Methods/Tools



Documenting

- Articulate learning goals/outcomes
- Identify target student populations & stakeholder groups
- Explain rationale for assessment tool selection & consider pilot assessments
- Plan for staff responsibilities, especially data analysis
- Anticipate reporting processes



The Reporting Process

- Briefly report assessment method for each outcome.
- Document where the outcome was met.
- Document where the outcome was not met.
- Document decisions made for improvements.
- Refine and repeat assessment after improvements are implemented.

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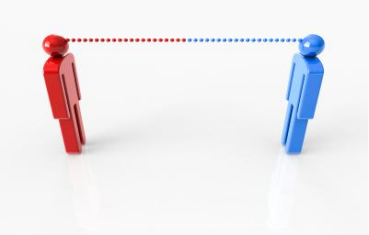

Know your Data & Tell a Story

- Understand your data.
- Consider professional literature and experiences.
- Look for patterns.
- Identify the data that tells you the most about your outcome and is most helpful in making improvements.
- Summarize.
- Determine *which* audiences need to know about *what* information in order to make improvements.

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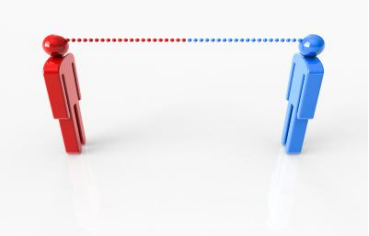
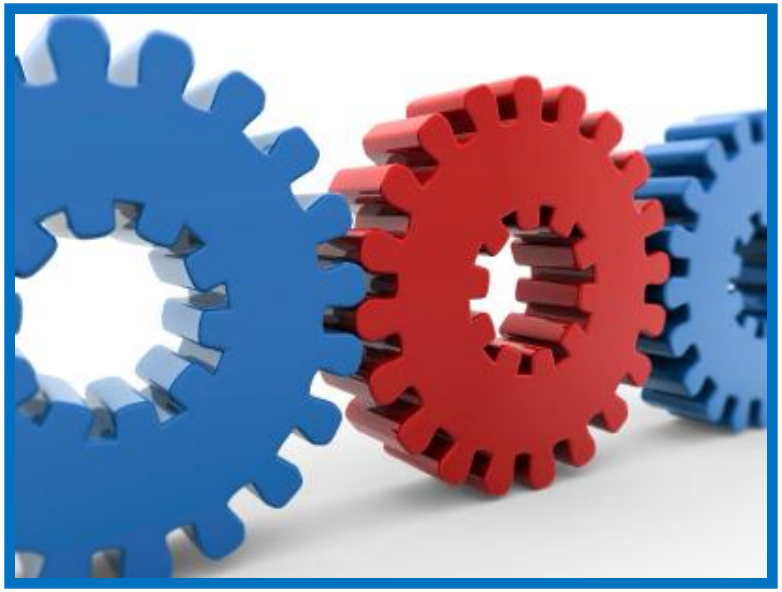


Reporting to Administrators

Use a 3-part reporting strategy:

1. Provide background about the assessment effort itself.
2. Provide assessment results and answer questions stakeholders are likely to have.
3. Provide a follow-up on the status of efforts for improvement and effectiveness of changes.

What about “bad” data?



Demonstrating Value

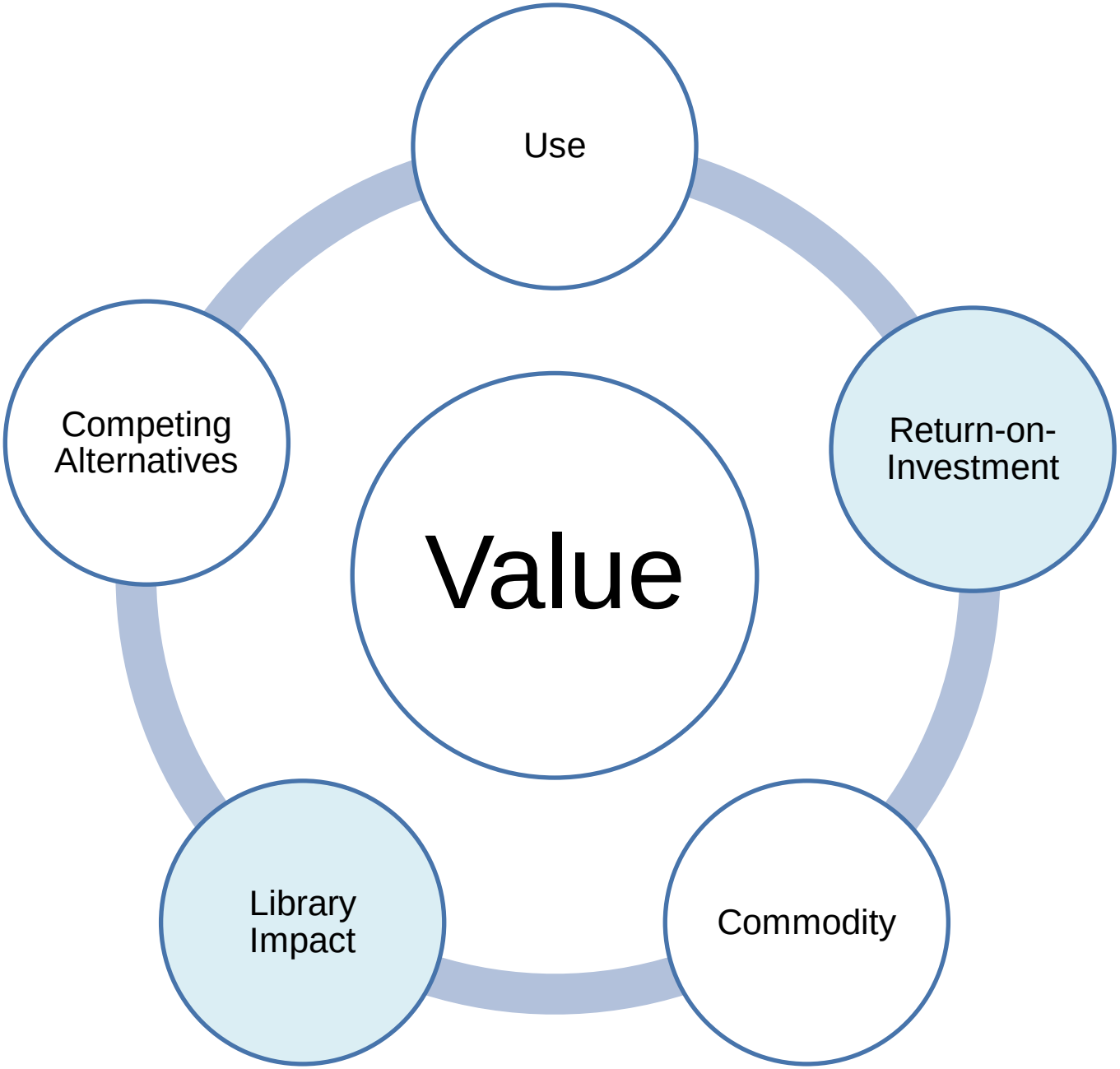
THE VALUE OF ACADEMIC LIBRARIES

A Comprehensive Research Review and Report

ACRL Association of College & Research Libraries
A Division of the American Library Association

Prepared by Dr. Megan Oakleaf, Syracuse University
for the Association of College and Research Libraries

M. Oakleaf, LAC 2010



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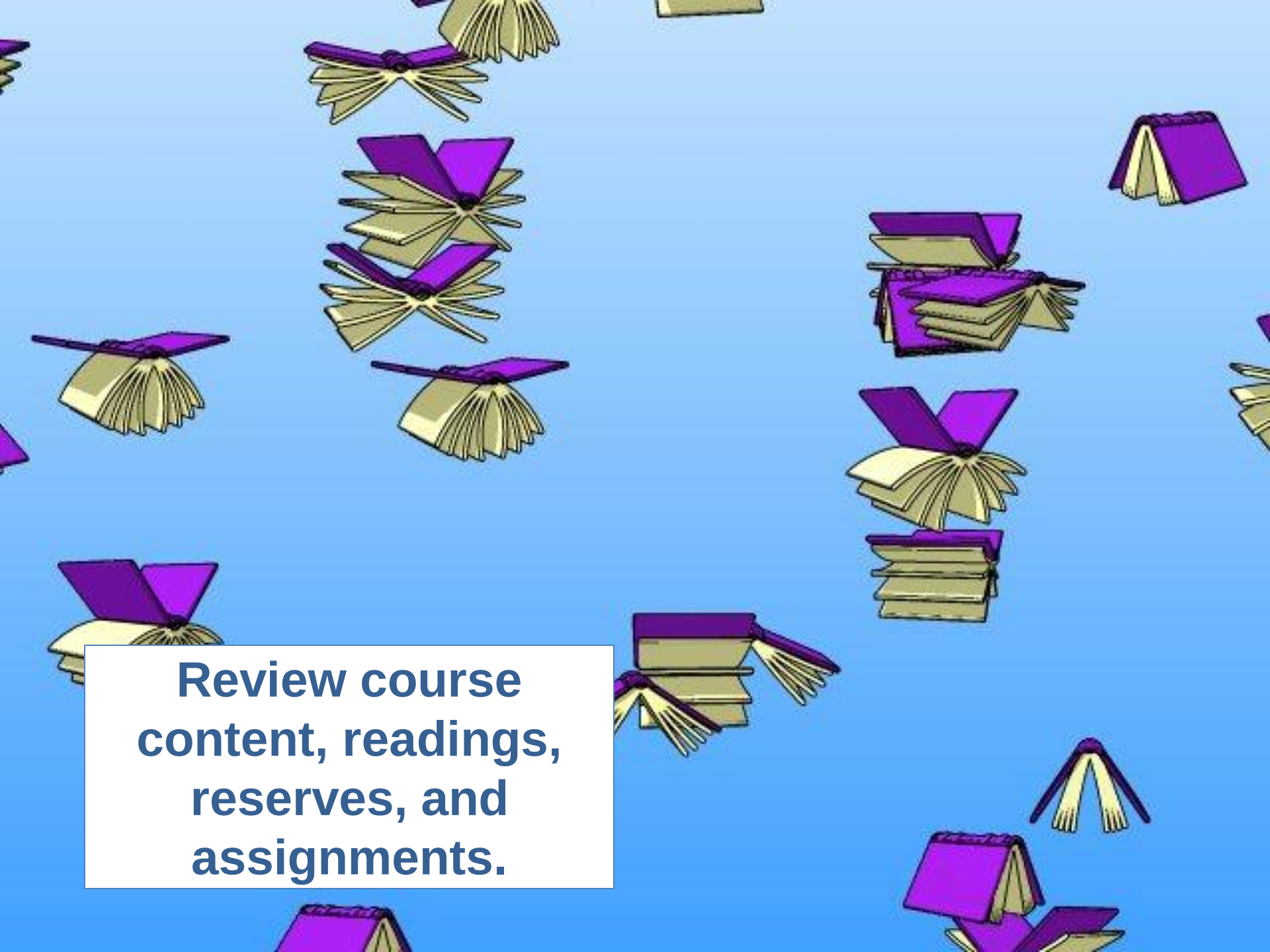
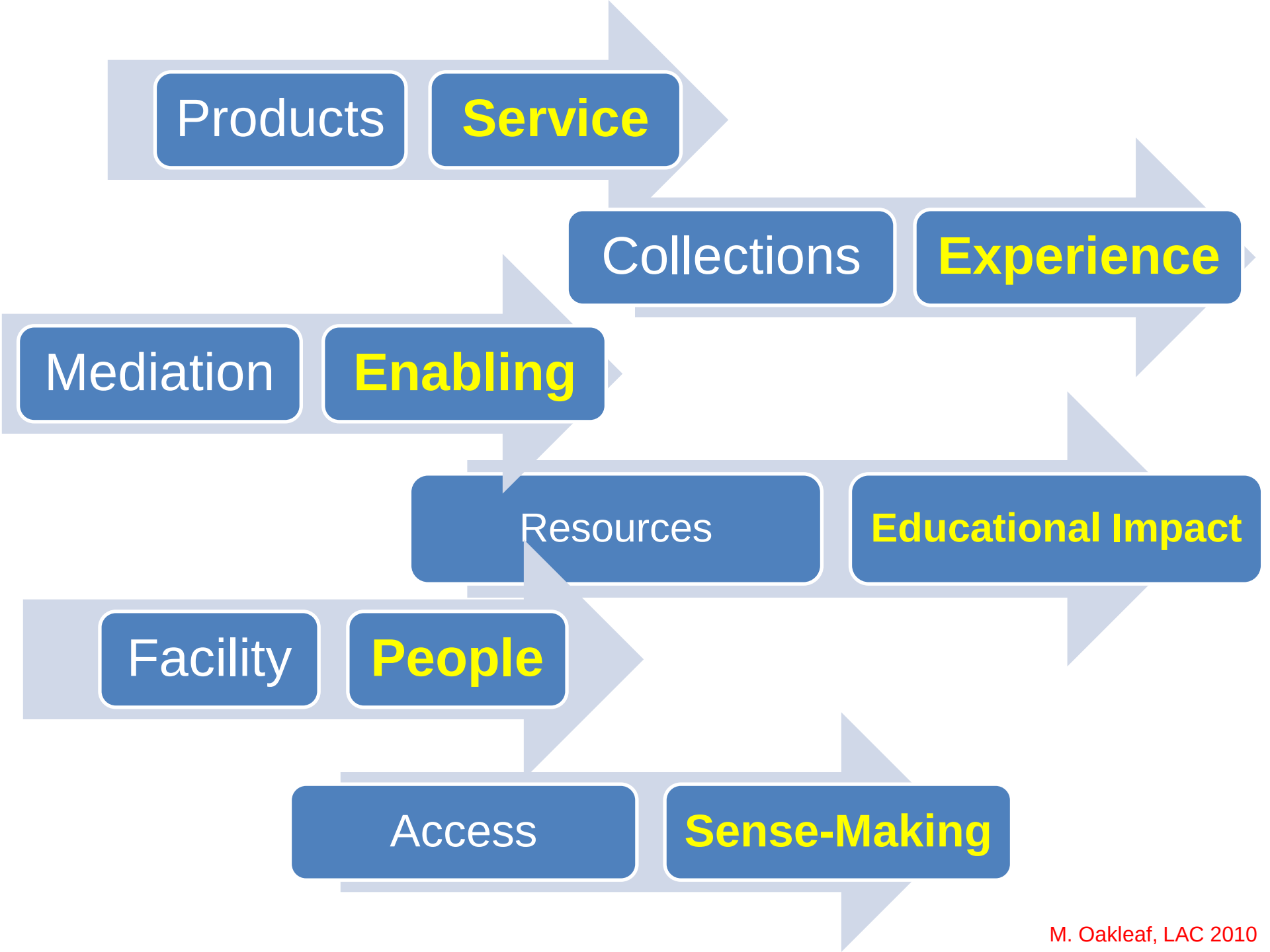

Review course content, readings, reserves, and assignments.



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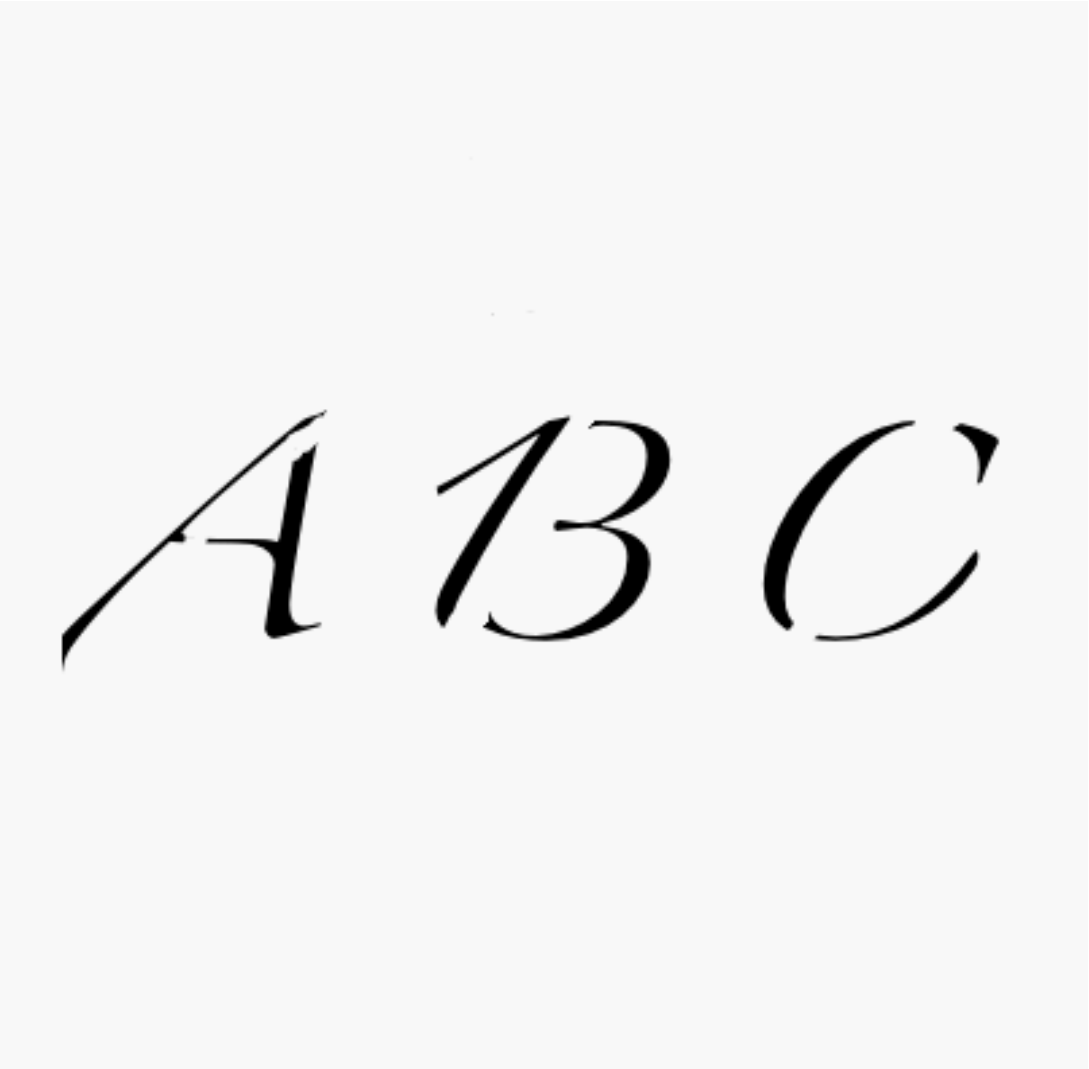
Define outcomes.



Identify & document impact.

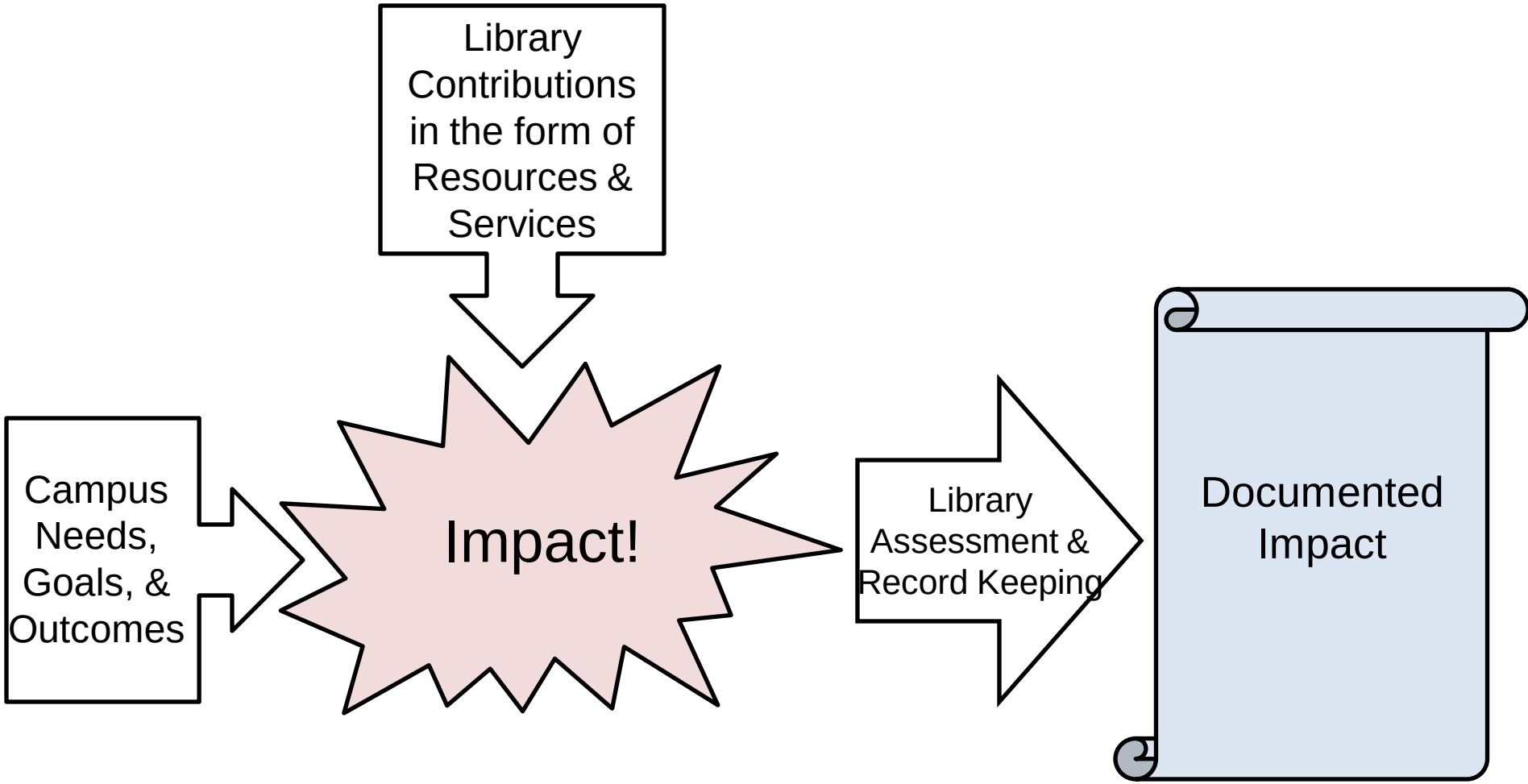
Changing Perspectives

How does the library contribute to campus needs including student…

- Enrollment?
- Learning?
- Experience?
- Achievement?
- Retention?
- Graduation rates?
- Success?

Changing Perspectives

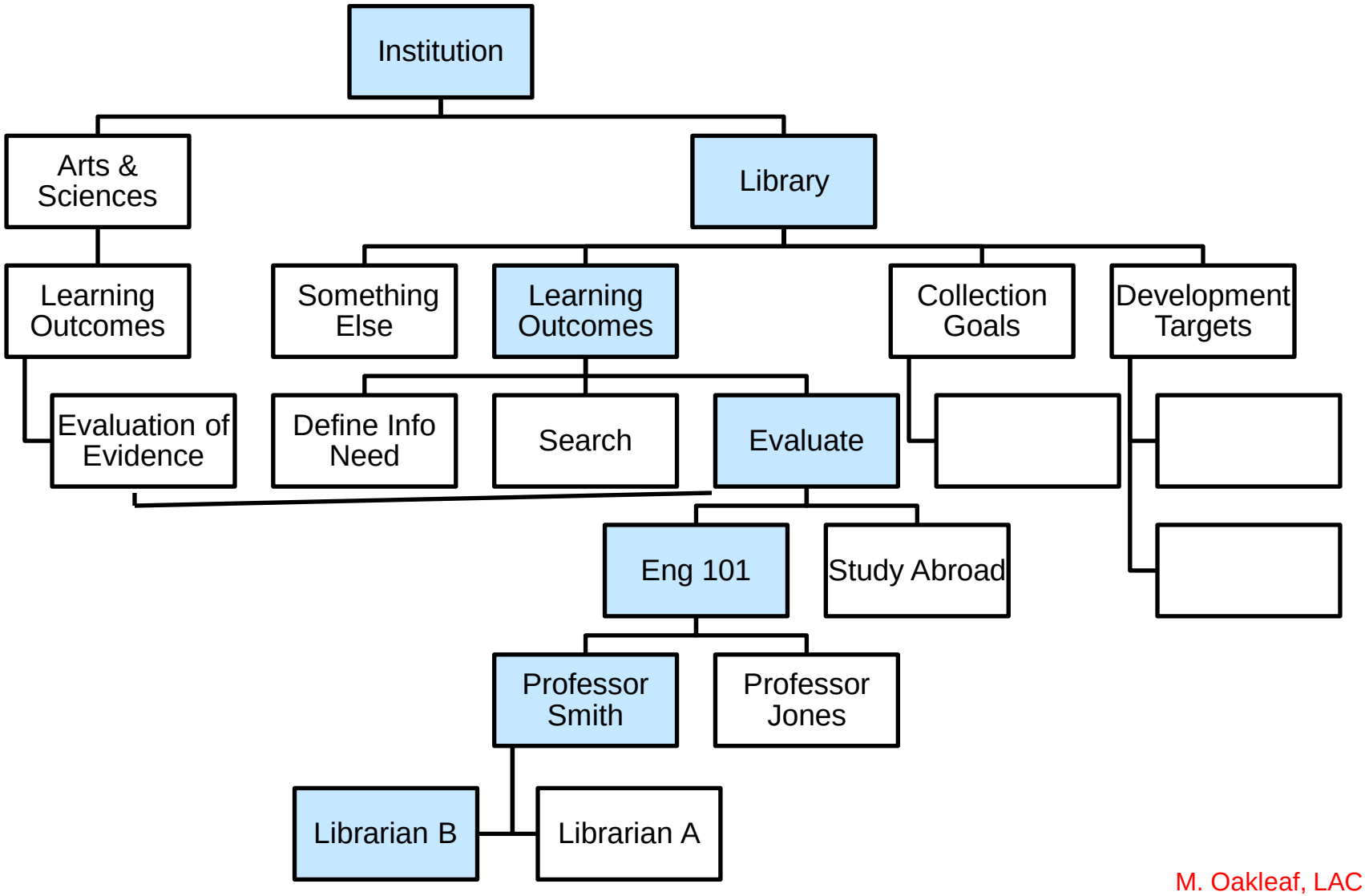
How does the library contribute to campus needs including faculty teaching?



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

Campus Needs, Goals, & Outcomes	Face to Face Instruction	Online Tutorials	Assignment Design	LibGuides	Reference Service
Student Enrollment					
Student Retention					
Student Graduation Rates					
Student Success					
Student Achievement					
Student Learning					
Student Experience					

Can an aggregate assessment serve as institutional assessment?



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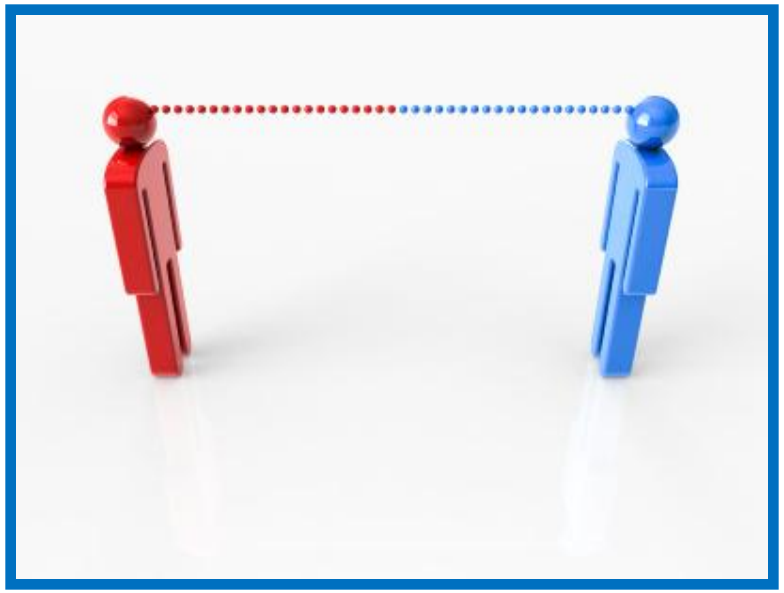
Engage in higher education assessment initiatives…

including accreditation.



Meeting Challenges

What are you afraid of?

What challenges might I face?

Difficulties with:

- Time
- Resources
- Knowledge & Skills
- Coordination of the Process
- Conceptual Framework for Assessment
- Collaboration with Faculty
- Trust
- Managing Expectations

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How can I surmount them?

- Educate
- Clarify
- Collaborate
- Coordinate
- Celebrate
- Be Flexible
- Keep It Simple

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Getting Started with Learning Outcomes Assessment

Purposes, Practical Options, & Impact

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Library Assessment Conference
October 2010