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Critical Assessment Practices: A Discussion on When and How to Use Student Learning Data Without Doing Harm

Zoe Fisher

Ebony Magnus

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Critical Assessment Practices

A Discussion on When and How to Use Student Learning Data Without Doing Harm

Zoe Fisher, Instructional Designer, Pierce College

Ebony Magnus, Library Manager, Southern Alberta Institute of Technology

Nicole Branch, Associate University Librarian for Learning & Engagement, Santa Clara University

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Today's Outcomes

Attendees will...

Consider critical approaches to library assessment practices

Examine trends and implications of libraries using student data through various modalities

Explore practical approaches and methodologies for implementing critical assessment of student learning

Our Thoughts

Zoe will talk about the current context for library assessment work, emerging trends, and the distinctions between student learning assessment and student surveillance.

Ebony will use a critical assessment frame to consider questions of motivation, accountability, and agency in relation to collection of student data.

Nicole will share her experiences using transformative mixed methods to model developing student learning outcomes for the ACRL Framework for Information Literacy.

Zoe Fisher

Instructional Designer, Pierce College

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What kinds of student learning data do we collect in the library, and why?

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We collect data in order to...

Provide services (e.g., collecting identifying information in order to establish borrowing privileges).

Measure existing library services/spaces/collections or **anticipate** needs for new services/spaces/collections.

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We also collect data in order to...

Be accountable and meet reporting requirements for internal and external stakeholders (e.g., accreditation).

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What are some trends in library use of student learning data?

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2010
VAL Report

2013-2016
Assessment in Action cohorts

2017
Academic Library Impact

Zoe Fisher
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ACADEMIC LIBRARY CONTRIBUTIONS TO STUDENT SUCCESS:
Documented Practices from the Field

THE VALUE OF ACADEMIC
A Comprehensive Research Review an

January 2015

ACRL
Advancing learning
Transforming scholarship
Association of College & Research Libraries
A division of the American Library Association

Part of the project "Assessment in Action: Academic Libraries
and Student Success" and made possible by a grant from
the Institute of Museum and Library Services.

Prepared by:
Karen Brown
Professor, Dominican University
Graduate School of Library and Information Science

Contributor:
Kara J. Malenfant
ACRL Senior Strategist for Special Initiatives

Association of College
& Research Libraries
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DOCUMENTED LIBRARY CONTRIBUTIONS TO STUDENT LEARNING AND SUCCESS:

Building Evidence with Team-Based Assessment in Action Campus Projects

THE VALUE OF AC
A Comprehensive Research

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April 2016

Zoe Fisher
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#ACRLInstruction

ACADEMIC LIBRARY IMPACT ON STUDENT LEARNING AND SUCCESS:

Findings from Assessment in Action Team Projects

April 2017

Prepared by:
Karen Brown
*Professor, Dominican University
School of Information Studies*

Contributor:
Kara J. Malenfant
ACRL Senior Strategist for Special Initiatives

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*Advancing learning
Transforming scholarship*

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ACADEMIC LIBRARY IMPACT ON STUDENT LEARNING AND SUCCESS:
Findings from Assessment in Action Team Projects

From the AiA Executive Summary (published April 2017)

Library use increases student success.
Several AiA studies point to increased academic success when students use the library. The analysis of multiple data points (e.g., circulation, library instruction session attendance, online database access, study room use, interlibrary loan) shows that students who used the library in some way achieved higher levels of academic success (e.g., GPA, course grades, retention) than students who did not use the library.

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the Institute of Museum and

Academic Library Impact:

Improving Practice and Essential Areas to Research

Lynn Silipigni Connaway
OCLC Research, Senior Research Scientist and Director of User Research

William Harvey
OCLC Research, Consulting Software Engineer

Vanessa Kitzie
School of Library & Information Science, University of South Carolina, Assistant Professor

Stephanie Mikitish
Rutgers University, User Engagement and Assessment Librarian

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Advancing learning Transforming scholarship

Suggested Actions (from *Academic Library Impact*, p.5)

- Know how other academic stakeholders are using learning analytics.
- Research the safeguards needed to ensure student privacy or confidentiality.
- Strategically collect data that can be integrated into learning analytics software.
- Advocate for the inclusion of library data in the volumes of information collected from multiple systems within the academic institution.
- Integrate library data into campus analytics components.
- Work with stakeholders to statistically analyze and predict student learning and success based on shared analytics.

of User Research

William Harvey
OCLC Research, Consulting Software Engineer

Vanessa Kitzie
School of Library & Information Science, University of South Carolina, Assistant Professor

Stephanie Mikitish
Rutgers University, User Engagement and Assessment Librarian

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Library Assessment Conference 2018

Assessing Student Learning in Library Instruction: A Faculty Perspective
Doreen Bradley and Jo Angela Oehrli (University of Michigan)

Information Literacy Assessment for Instruction Improvement and Demonstration of Library Value: Comparing Locally-Grown and Commercially-Created Tests
Kathy Clarke (James Madison University) and Carolyn Radcliff (Carrick Enterprises)

Developing Library Learning Outcomes: Reflecting on Instruction across the Library
Ashley McMullin, Jennifer Schwarz, and Janice Scurio (DePaul University)

What Could We Do, If Only We Knew? Libraries, Learning Analytics, & Student Success
Megan Oakleaf (Syracuse University), Malcolm Brown (Educause), Scott Walter (DePaul University), Dean Hendrix (University of Texas at San Antonio), and Joe Lucia (Temple University)

Library Participation in Learning Analytics Initiatives: Library and Student Perspectives
Michael Perry (Northwestern University); M. Brooke Robertshaw (Oregon State University); Andrew Asher and Kyle Jones (Indiana University); Kristin Briney (University of Wisconsin-Milwaukee); Abigail Goben (University of Illinois at Chicago) and Dorothea Salo (University of Wisconsin at Madison)

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Are we interested in measuring what students *do*, or what they *learn*?

Zoe Fisher
@zoh_zoh
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Surveillance of student behavior in library assessment looks like…

EZ proxy logins

ID card swipes

Article downloads

Circulation records

Tracking the amount of time students spend in different spaces (physical and online)

… And then connecting these individual actions with individual student performance and achievement.

Zoe Fisher
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Surveillance of student behavior in library assessment looks like...

Correlating library use at 13 different access points with retention and GPA (Soria, Fransen, and Nackerud, 2013). Correlating EZ proxy logins and circulation of physical materials with retention (Murray, Ireland, and Hackathorn, 2016).

Correlating the use of online library resources with GPA (Eastern Kentucky University from Assessment in Action, 2016).

Correlating attendance at information literacy one-shot sessions with final course grades and retention (Northwest Arkansas Community College from Assessment in Action, 2016).

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In contrast, student learning assessment of information literacy looks like…

Writing and measuring student learning outcomes.

Collecting and reviewing samples of student work.

Reflective discussions among teachers about their pedagogy.

Revising assignments to improve student learning outcomes.

Revising student learning outcomes to improve student learning.

Zoe Fisher
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In contrast, student learning assessment looks like...

Writing and measuring student learning outcomes.

Collecting and reviewing samples of student work.

Reflective discussions among teachers about their pedagogy.

Revising assignments to improve student learning outcomes.

Revising student learning outcomes to improve student learning.

This kind of work might not get published or fed into a dashboard, but it matters, and it has a huge impact on your students.

Zoe Fisher
@zoh_zoh
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I would like to see academic library assessment that is...

Qualitative.

Ethnographic.

Longitudinal.

Rooted in conversations around pedagogy, power, and barriers/obstacles to learning faced by students.

Respectful of students and their experiences, honoring their voices and expertise.

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Recommend Readings Worth Your Time

"A day in the life: Practical strategies for understanding student space-use practices" (Asher et al, 2016)

"How do students get help with research assignments? Using drawings to understand students' help seeking behavior" (Beisler & Medaille, 2016)

"A phenomenographic study of English faculty's conceptions of information literacy" (Boon, Johnston, and Webber, 2007)

"The phenomenon of information literacy" (Bruce, 1998)

"Learning outcomes, portfolios, and rubrics, oh my! Authentic assessment of an information literacy program" (Diller & Phelps, 2008)

Academic Libraries for Commuter Students (Eds. Regalado & Smale, 2018)

ERIAL Project (www.erialproject.org)

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Ebony Magnus

Library Manager, Southern Alberta Institute of Technology

"Assessment is a social and political act, regardless of whether or not an agenda is made explicit."

DeLuca Fernandez, 2015, p. 5

How do institutional assumptions and agendas shape the student data we collect?

Where does our accountability lie in the creation and use of student data?

Are we engaging students in the creation, analysis, and communication of data and insight?

Ebony Magnus | @ebonymagnus
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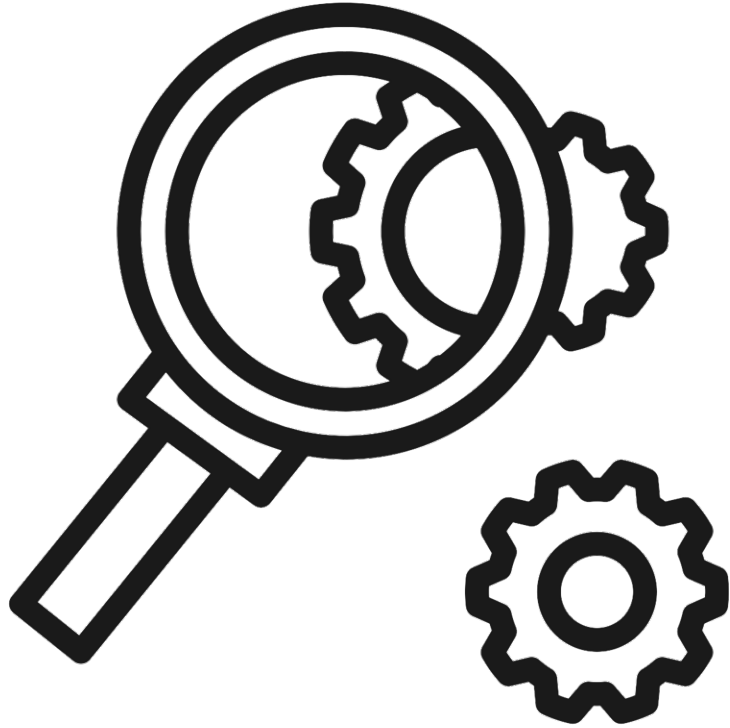
"Are we critically analyzing and questioning the rationale of our own governments' or institutions' demands for assessment, and the implications on our own libraries, staff, and users?"

Doucette, 2017, p. 293

Ebony Magnus | @ebonymagnus
#ACRLInstruction
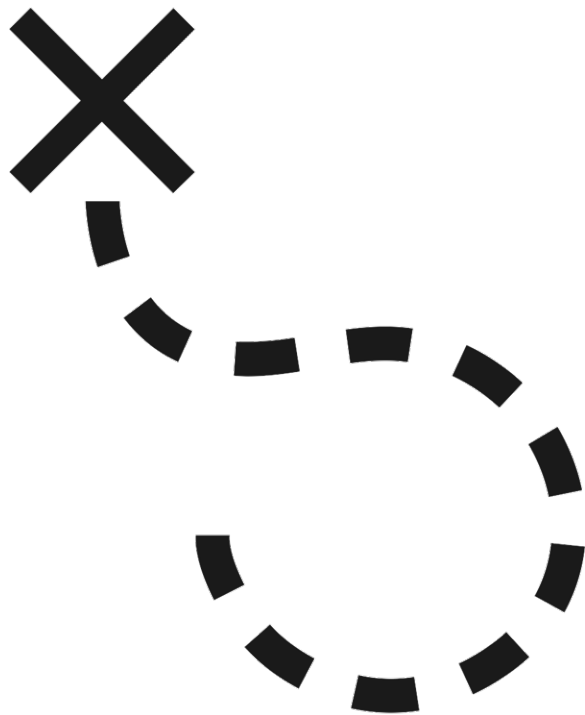
"Rarely are the people who participate in the research process as participants or "informants" considered to be the primary audience when it comes time to disseminate the research."

Gaudry, 2011, p. 113

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"This decision [to share or not share their data] belongs to the user and not to the library and the user being able to exercise full agency in this decision means fully informed consent with regard to what is collected and how it will be used and managed."

Hinchliffe, 2018

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"By raising consciousness of the ethical and value-based decisions implicit in any assessment context, the practice of assessment truly becomes a complex social practice rather than a collection of technical data gathering approaches that might unwittingly serve power interests unintended by well-meaning individuals."

Wall, Hursh, & Rodgers, 2014, p. 12

Ebony Magnus | @ebonymagnus
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Nicole Branch

Associate University Librarian for Learning & Engagement
Santa Clara University

Nicole Branch
@benicolebe

Applying Critical Assessment Practices

Adopt a theoretical stance

1

Apply critical approaches to the research/assessment process

Research/assess critical issues

2

Focus on issues of power, social justice, critical consciousness, and the common good

Align methodologies

3

Select methods that align with theoretical stance

Apply findings

4

Use findings to address issues of power, social justice, and the common good

Nicole Branch, @benicolebe

Applying Critical Assessment Practices

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Nicole Branch, @benicolebe

Transformative Research Paradigms

"recommend the adoption of an explicit goal for research to serve the ends of creating a more just and democratic society that permeates the entire research process" (2003, p. 159).

- Donna Mertens

Nicole Branch, @benicolebe

Elements of Transformative Paradigms

(a)   Do the authors openly reference a problem in a community of concern?

(b)   Do the authors openly declare a theoretical lens?

(c)   Were the research questions (or purposes) written with an advocacy stance?

(d)   Did the literature review include discussions of diversity and oppression?

(e)   Did the authors discuss appropriate labeling of the participants?

(f)   Did data collection and outcomes benefit the community?

(g)   Did the participants initiate the research, and/or were they actively engaged in the project?

(h)   Did the results elucidate power relationships?

(i)   Did the results facilitate social change?

(j)   Did the authors explicitly state their use of a transformative framework?

Sweetman, Badiee, & Creswell (2010)

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Applying Critical Assessment Practices

1 — Adopt a theoretical stance
Apply critical approaches to the research/assessment process

2 — Research/assess critical issues
Focus on issues of power, social justice, critical consciousness, and the common good

3 — Align methodologies
Select methods that align with theoretical stance

4 — Apply findings
Use findings to address issues of power, social justice, and the common good

Nicole Branch, @benicolebe

Research Interest

Problem/concern

- Local learning outcome development
- Assessability
- Critical practice
- Outcome dissatisfaction
- Learning outcomes as the foundation for assessment

Nicole Branch, @benicolebe

Research Interest

Problem/concern

- Local learning outcome development
- Assessability
- Critical practice
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- Learning outcomes as the foundation for assessment

How might we create local learning outcomes that are meaningful, important, and articulate social justice and critical thinking elements of the Framework?
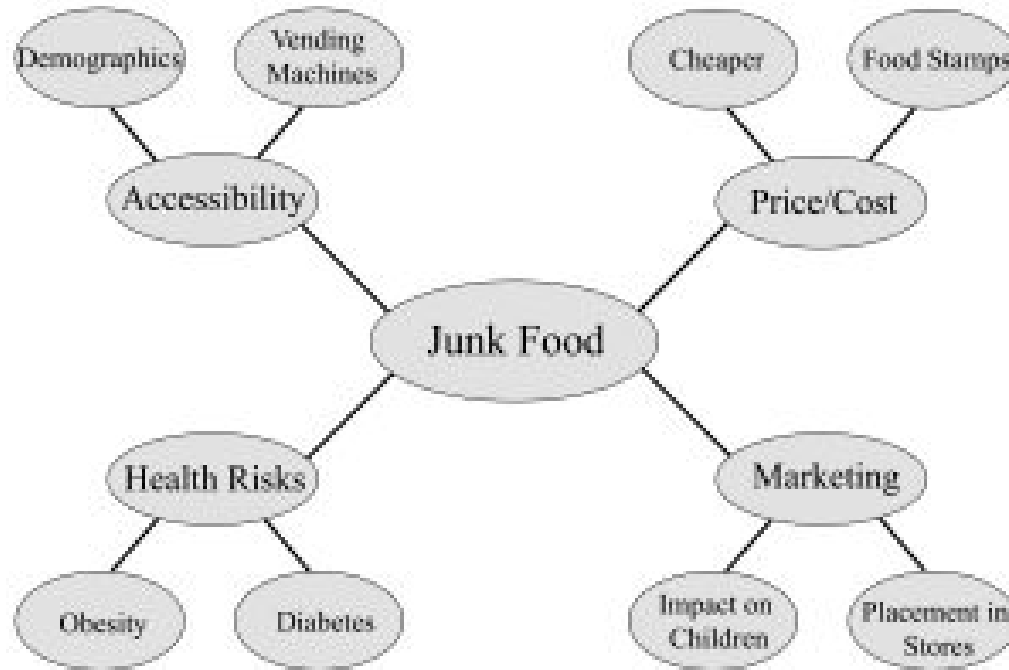
Nicole Branch, @benicolebe

Align Methodologies

Adopt a theoretical stance

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Nicole Branch, @benicolebe

Concept Mapping

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Concept Mapping

Kane, L. W., & McSweeney, Advancing Information Literacy in a Semester-Long Library Instruction Course: A Case Study, *The Journal of Interactive Technology and Pedagogy,* June 11, 2018.
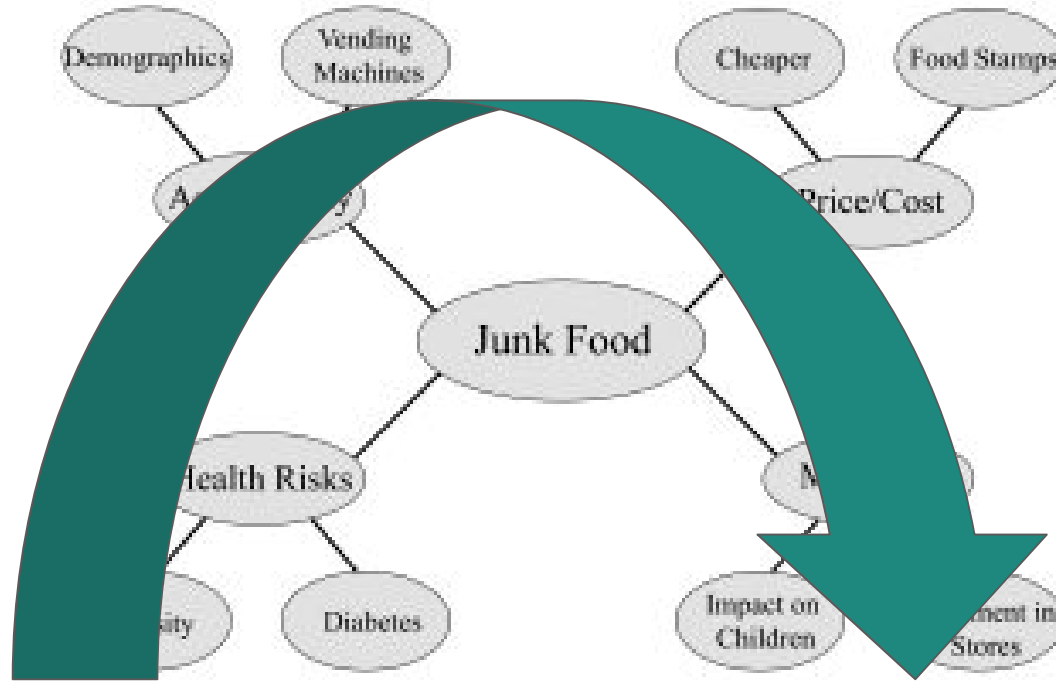
Concept Mapping

Kane, L. W., & McSweeney, Advancing Information Literacy in a Semester-Long Library Instruction Course: A Case Study, *The Journal of Interactive Technology and Pedagogy,* June 11, 2018.

Concept Mapping Methodology

- Developed by William Trochim
- Integrated mixed methods
- Collaborative engagement of stakeholder knowledge
- Core elements include
  - Brainstorming
  - Sorting
  - Rating
  - Mapping

Nicole Branch, @benicolebe

Concept Mapping & Transformative Paradigm

- Focus on social justice/issues of power
- Engagement of participants as research partners
- Could address an issue in a community
- May be used to affect change/benefit community

Nicole Branch, @benicolebe

Study

- 11 Librarians from across the country
- Subject areas (humanities, STEM, business, assessment)
- Variety of institution types
- Concept "Information has value"
- Conducted entirely virtually

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Concept Mapping Procedures

Step 1

Step 2

Step 3

Step 4

Step 5

Step 6

Define the Concept

"Information has value" as defined in the Framework for Information Literacy

Brainstorm Focus Group

90 minutes, via Zoom

Generated 100 learning outcome statements

Statement Synthesis

Removed redundancies

Adjusted language

Optional feedback from group

75 final statements

Sorting & Rating

Individually sorted and rated

usabiliTEST card sorting software

Qualtrics survey software

Completed in one week

Map Generation

Applied hierarchical cluster analysis to multi-dimensional scale

Named clusters and calculated the average cluster rating

Final Reflection

Process reflection and feedback

Group analysis/reflection on map

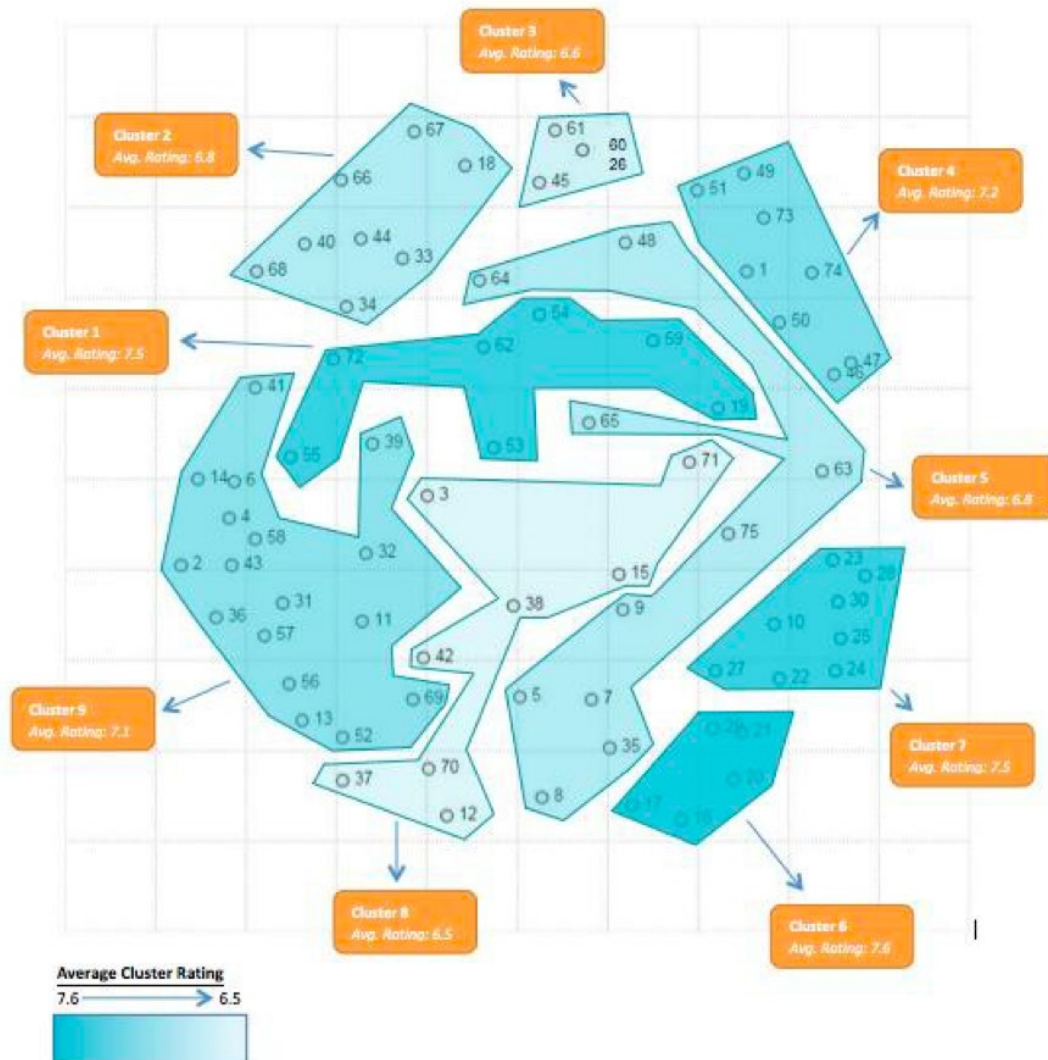| Cluster	Sample Learning Outcome
1. Value of Information Communities	recognize the value of human networks in accessing information
2. Scholarly Conventions of Value	critique traditional systems of assigning value to information in specific disciplines
3. Access & Navigation	demonstrate facility in navigating systems of information to meet information needs
4. Formal Recognition of Value	use citation to acknowledge the work of others, including those who have been traditionally marginalized
5. Access(ibility) is Power	critique the concept of information neutrality
6. Information Privilege	appraise their own and others' information privilege and marginalization
7. Information is Power(ful)	recognize that the distribution of information can be politically motivated
8. Information Agency & Responsibility	navigate the ambiguity, complexity, and discomfort of finding and using information to arrive at greater understanding
9. Systems of Value	recognize that the value of information can be context-specific

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Concept Map

Apply Findings

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Use findings to address issues of power, social justice, and the common good

Nicole Branch, @benicolebe

Applying Findings

Assessing student work

- Coding student work
- Document-based interviews
- Other approaches?

Illuminating Social Justice in the Framework, *Communications in Information Literacy,* Summer 2019

Q&A/Discussion

More questions than we can answer today? Feel free to contact us.

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Ebony Magnus - ebony[dot]magnus at sait[dot]ca or [at]ebonymagnus on twitter

Nicole Branch - nbranch at scu[dot]edu

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