Integrating the ACRL Framework in Graduate Courses

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Purpose

- Challenges in STEM Librarianship
- Strategies to reach out
- Integrating the Frame: Authority is Constructed and Contextual
- Ideas for developing a collaborative instructional design
- Empirical methods for assessing our impact
Challenges

- Transformation of the librarian role
- Educational and professional background in the sciences
- *Evolving Scholarly Record* paradigm[1]
- Specialized nature of scientific research and learning practices
- Staffing

Transforming our Roles as STEM Librarians

**Print-Era**

- Collections
- Products
- Artifacts
- Outcomes

**Digital-Age**

- Part of researcher workflows
- Curator of researcher profiles
- Part of the research lifecycles
- Venues for diverse interactions

The Clemson Ecosystem

College of Engineering, Computing and Applied Sciences

Nasheili Marciano

- Graduate: 21%
- Undergraduate: 79%

Total Student, Faculty and Staff in CECAS: 7,700

Jan Comfort

College of Science

Nasheili Marciano

- Sciences: 38%
- Biological Sciences: 62%

Total Student, Faculty and Staff in CoS: 3,276

Megan Sheffield

[3] Clemson University Student Fact Sheet, 2017
ESED Ecosystem: People
ESED Ecosystem: Graduate Program

Prior
• Complete MS in STEM discipline

Year 1
• Coursework (11 units)
• Gain familiarity with research literature

Year 2
• Begin independent research

Year 3-4
• Complete dissertation
• Publish
ESED Ecosystem: Gallagher

STEM Cognition

Instructional Practice

Diversity & Equity

Teacher and Professional Identity

STEM Persistence

Active faculty-led research project
Active student-led research project
Frame: Authority is Constructed and Contextual

Information resources reflect their creators’ expertise and credibility, and are evaluated based on the information need and the context in which the information will be used.

Authority is constructed in that various communities may recognize different types of authority. It is contextual in that the information need may help to determine the level of authority required.

Construct and Contextualize your own Authority

Join a research workflow
- Attend student presentations
- Do follow-ups

Curate your librarian-researcher profiles
- Form a Library Teacher Forum
- Join the Library Journal Club

Participate in a research lifecycle
- Team up with a scholar
- Find common research interests

Be part of the diverse interactions
- Present at campus-wide symposia
- Be a judge at presentations or fairs
Access to Course:
- syllabus
- online platform
- auditing

ACRL Framework in STEM

frameworks
theories
constructs
concepts
Research Question:
Are they as information fluent (P) as they perceive themselves to be (SE)? What are their relationships?

Pre-ILSE Survey (SE)
Fetch 5 relevant articles (P) and (SE)

Visit #1: Advanced Database Searching
Critiques (SE)
Initial Lit Review Activity (P) & (SE)

Visit #2: Organizing your Findings
Journal Selection (P) (SE)
Review Matrix (P) (SE)
Critiques (SE)

Visit #3: Interpreting and Writing your Lit Review
Lit Review Draft (PE)

Visit #4: Peer-Reviewing
Critiques (SE)
Peer-Reviewing of Draft Paper (P)
Post-ILSE Survey (SE)
Team up with Mentors & Allies

**Internal**
- Science Team
- Facilities Manager
- Outreach Coordinator
- Library Instruction Coordinator
- Library Technical Staff
- Librarians with unique expertise

**External**
- Grad Student Service Managers
- Prof. Dev. Program Coordinators
- The Graduate School
- Mentoring Program Coordinators
- Office of Global Engagement
- Office of International Student Services
- Student Organizations
Questions for audience

- What are some of your challenges as a STEM Librarian?
- How you found an effective outreach strategy? Share it!
- Have you started conversations about the Framework?
  - With whom?
  - What are your thoughts on “Authority is Constructed and Contextual?”