- Who we are
- Extending the arc
- A literature review
- The IL disciplinary model
- The “Grand Scheme”
- IL at Southern Utah University
- Some theory and practice for teaching IL
- Assessment of IL
- Break-out session
- Q & A
- Southern Utah University (SUU)
  - Small, rural, public, liberal arts university
  - Degree-granting programs include those at the associate’s, bachelor’s, and master’s level
  - Total student headcount (2015) = 8,881
  - IL at SUU:
    - IL is a campus essential learning outcome (ELO)
    - One-credit general education IL course required
ACRL’s Framework for IL for Higher Education
- IL has ability to extend the arc of learning throughout students’ academic careers and beyond
- For this to happen faculty and librarians need to collaborate on cohesive curricula where students learn discipline-specific information practices
- [http://www.ala.org/acrl/standards/ilframework](http://www.ala.org/acrl/standards/ilframework)

Accreditation Bodies
- E.g. Middle States Commission on Higher Education, Western Association of Schools and Colleges, Southern Association of Colleges and schools, Association of American Colleges & Universities

- Need for IL integration
- Learning objectives / learning outcomes
- Haphazard (inconsistent) IL instruction
- Models for teaching information literacy across the curriculum (Curzon, 2004)
- Levels of librarian/faculty interactions (Raspa & Ward, 2000)
...librarians must view their ultimate objective as the full incorporation of IL as a central cog in the pedagogical wheel of their institutions.

(McGuinness, 2007)
Micro models / macro models of information literacy (Thompson & Lathey, 2013)

- Systematic instruction throughout educational career
- Long-term process
- Reinforce and accumulate skills
- From basic skills to high-level competencies
- Link between domain learning and information literacy (Thompson & Lathey, 2013)
- Match information literacy instruction with developmental stages of student learning
- Model of Domain Learning (Alexander, 2003)
  - How does expertise develop in academic domains?
  - Strategic processing, knowledge acquisition, motivation, and expertise
- Three stages of expertise development
  - Acclimation, competence, proficiency / expertise
<table>
<thead>
<tr>
<th>Novice Learners</th>
<th>IL Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acclimating to academic inquiry and scholarship</td>
<td>• Generic IL skills</td>
</tr>
<tr>
<td>• Transitioning from high school to college level research</td>
<td>• Formulate and state research questions, problems and issues</td>
</tr>
<tr>
<td>• Focus on survival and determining academic interest</td>
<td>• Determine key concepts, keywords, and key phrases</td>
</tr>
<tr>
<td>• Little knowledge of any discipline / low interest in topics</td>
<td>• Create effective search strategies, use Boolean operators</td>
</tr>
<tr>
<td>• Lack of experience</td>
<td>• Locate and retrieve relevant information</td>
</tr>
<tr>
<td>• Difficulty evaluating sources</td>
<td>• Evaluate information, identify scholarly, peer reviewed articles</td>
</tr>
<tr>
<td>(Thompson &amp; Lathey, 2013, p. 6 [Chart 1] and p. 10 [Chart 2])</td>
<td>• Cite and use information ethically</td>
</tr>
<tr>
<td>Competent Learners</td>
<td>IL Instruction</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Declared a major, taking required core courses</td>
<td>• Discipline specific research process</td>
</tr>
<tr>
<td>• Developing domain and topical interests</td>
<td>• Introduction to major disciplinary databases, reference sources, and journals</td>
</tr>
<tr>
<td>• Introduced to major concepts and discourse</td>
<td>• Expand on effective research strategies (thesaurus, subject headings), advanced Boolean</td>
</tr>
<tr>
<td>• Integrating domain knowledge in personal knowledge</td>
<td>• Information organization and synthesis</td>
</tr>
<tr>
<td>• Developing learning strategies to expand knowledge</td>
<td>• Reflection on the role of information in learning</td>
</tr>
<tr>
<td></td>
<td>• Information creation</td>
</tr>
</tbody>
</table>

(Thompson & Lathey, 2013, p. 6 [Chart 1] and p. 10 [Chart 2])
<table>
<thead>
<tr>
<th>Proficient Learners</th>
<th>IL Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enduring interest in the field, strong interest in special topics</td>
<td>• Discipline specific research process, research as inquiry, field specific information practices</td>
</tr>
<tr>
<td>• Advanced topical knowledge, proficient with discourse</td>
<td>• Scholarly communication (research venues, journals, professional organizations, conferences, social media, databases, datasets)</td>
</tr>
<tr>
<td>• High level of strategic learning skills, conceptual and critical thinking skills</td>
<td>• Ethical use of information, proprietary data, privacy, copyright</td>
</tr>
<tr>
<td>• Future orientation toward discipline and career preparation</td>
<td>• Information synthesis, building coherent arguments</td>
</tr>
<tr>
<td></td>
<td>• Collaborative research projects</td>
</tr>
</tbody>
</table>

(Thompson & Lathey, 2013, p. 6 [Chart 1] and p. 10 [Chart 2])
Information Literacy is one of our campus essential learning outcomes (ELOs)

- **LM 1010 (Information Literacy)** – a one-credit, required general education course

- All students graduating with a bachelor’s degree are required to successfully complete (with a grade of C- or better) Library Media 1010 - *Information Literacy*

- LM 1010 is designed for students to achieve competence in IL

- The library faculty annually conducts over 100 library instruction sessions

- Pre- and post-test administered to measure baseline skills and growth

- One-shot library instruction sessions for other campus courses

- All students currently receive baseline skills
- **LM 1010 currently required**
- **Gateway courses**
  - Introduction to the major courses
  - Sophomore-junior level
  - Scaffolding IL skills
- **Capstone courses**
  - Senior level
  - Discipline-specific information practices
Collaboration between librarians and teaching faculty

Apply ADDIE Model to design / redesign IL

Strategies: concise content, “chunking,” logical sequencing, limit redundancy, focus on critical learning

Interview: instructor interview, analyze syllabus, student profiles

Design: purposeful curriculum planning

Embed: integration of IL content / using v. searching

Assess & reassess: analyze outcomes for learning & effectiveness

(Mullins, 2016)
Theme-based case-study approach coupled with IL instruction
Psychology class: students presented with the scenario of their employer asking them to address theft within their company
Better equips students to apply skills to their professional lives
Methodology easily adapts to other subjects
Stimulating for students to explore
- Evidence-based educational intervention
- New, complex IL / “Themes of Expanding Awareness”
- Skills needed for professional work environment
- Apply “Variation Theory”
- Introduce concepts more than once
- Pair various learning concepts together

(Forster, 2016)
Scenario-based, active learning— instructor is “guide on the side”

Problems need to be complex—no “one” answer

Designed with discipline-specific information literacy needs in mind

Students synthesize information from various sources to meet an information need

Uses real world examples that students may encounter in their professional lives

Engages critical thinking

Prepares students for information-seeking in the workplace
Learning is a “constant search for meaning”

Pillars move learners from novice to proficient (expert)
  - Identify: Identify lack of knowledge / articulate information found / take personal responsibility
  - Scope: Recognize data gaps / identify available tools / determine what’s available, accessible
  - Plan: Define a strategy / select appropriate tools / implement best techniques
  - Gather: Construct complex searches / access full text / locate expert help
  - Evaluate: Read critically / assess resources found / know when to stop
  - Manage: Create bibliographies / cite sources properly
  - Present: Summarize information gleaned / communicate new knowledge effectively

The process in not linear

Lenses developed to address various communities / areas of study

(Society of College, National and University Libraries, 2011)
- Students participate as individuals with group interaction ("free rider problem")
- Solve real-world situations and foster collaborative skills: transferrable to the workplace
- Use technology to communicate
- Collaborative, situated IL instruction
- Tests / quizzes (including pre and post tests): Novice learners
- Muddiest point paper: Novice learners
- Minute paper: Novice, competent learners
- Practical application: Novice, competent learners
- Homework: Novice, competent learners
- Annotation: Competent, proficient learners
- Peer teaching: Competent, proficient learners
- Presentation: Competent, proficient learners
- Research project / portfolio: Proficient learners
At your table, please take five minutes to discuss:
- What does IL instruction throughout the curriculum look like at your institution?
  - What works?
  - What doesn’t work?
  - What would you like it to look like?
- Prepare to share out your ideas
- How can we best familiarize students with the information ecosystems and knowledge practices specific to their future professions?
  - Domain model of IL

- What are ways in which we can teach students to effectively use information for learning in their fields of interest and for individual growth?
  - Theory and practice

- Do you have any questions for us?
- Any other points for discussion?
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