Building a Research Agenda: Problems, Models, Theories

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Research Matters

Triad to build, sustain and deepen field

- Tradition and established systems
- Experience and best practice
- Research and innovation
Lecture objectives

- To discuss how research matters to a field
- To provide 6 steps for conducting research that matters
- To consider the ISP as a model for the stages of your research
Six steps to research that matters

- Start with an important problem
- Apply framework of LIS – classic work, models and theories
- Stay with the problem to verify
- Develop concepts from the findings
- Design application for implementation
- Look to the future
Start with an important problem

- A real problem that is not able to be understood by experience and traditional practices.

- A problem that has important implications for information users, information retrieval and information services.
My research problem

- What is the user’s experience in information seeking?
- How can information services and systems help users to seek meaning?
- What is the student’s experience in learning through research?
- How can information services and systems help students to learn?
Apply framework of classic work models, theories

- LIS – Taylor – 4 levels of information need
  Saracevic – relevance and pertinence

- Education – Dewey – phases of reflective thinking

- Psychology – Kelly – personal construct theory
Method to study problem

- Qualitative
- Quantitative
- Longitudinal
- Survey, Interview, Observation
- Control or real setting
- Sample, subjects, participants
Results and Interpretation

- How will you show the findings?
  - Descriptions
  - Charts
  - Stories
  - Models
  - Theories
Dimensions of information seeking from the user’s perspective

- Affective (feeling)
- Cognitive (thinking)
- Physical (acting)
# Model of the Information Search Process

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Initiation</th>
<th>Selection</th>
<th>Exploration</th>
<th>Formulation</th>
<th>Collection</th>
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<tbody>
<tr>
<td>Feelings</td>
<td>uncertainly</td>
<td>optimism</td>
<td>confusion</td>
<td>clarity</td>
<td>sense of</td>
<td>satisfaction or</td>
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<td>Thoughts</td>
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<td>Actions</td>
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Kuhlthau (2004, p. 82)
Stay with problem to verify

- Same cohort in different context and time
- Diverse sample of subjects and participants
- Large scale studies
- Longitudinal case studies
- Combination of qualitative and quantitative

In addition workplace studies
implementation studies
longitudinal impact studies
Develop Concepts

- Think and reflect on the results
- Draw out the main ideas
- Develop concepts from the findings
Two critical stages in ISP

- Exploration – dip in confidence/increase uncertainty when encountering inconsistent and incompatible information.

- Formulation – turning point when focus is formed that provides a guiding idea or theme for the search.

- Indicates a need for guidance and assistance.
Uncertainty

Uncertainty is the beginning of learning.

“The mind doesn’t take everything and put it into order automatically...Understanding that is the biggest help.”
Zone of Intervention

- The area in which an information user can do with advice and assistance what he or she cannot do alone or can do only with difficulty.
Design application for implementation


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(Kuhlthau, 2004, p. 82.)

Kuhlthau, C., Maniotes, L., Caspari, A. GUIDED INQUIRY
## Guided Inquiry across the ISP

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<th>INQUIRY PROCESS</th>
<th>INFORMATION SEARCH PROCESS</th>
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<td>Explore</td>
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<tr>
<td>Identify</td>
<td>Formulation</td>
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<td>Gather</td>
<td>Collection</td>
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<td>Create &amp; Share</td>
<td>Presentation</td>
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<tr>
<td>Evaluate</td>
<td>Assessment</td>
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Kuhlthau, C., Maniotes, L., Caspari, A. GUIDED INQUIRY © 2012
## ISP and Guided Inquiry Design

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<th>Stage of ISP</th>
<th>Phase of Guided Inquiry</th>
<th>What the inquiry community is doing in Guided Inquiry</th>
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</table>
| Initiating research project   | Initiation  | Open                    | • Invitation to inquiry  
• Open minds  
• Stimulate curiosity |
| Selecting topic               | Selection   | Immerse                 | • Build background knowledge  
• Connect to content  
• Discover interesting ideas |
| Exploring information         | Exploration | Explore                 | • Explore interesting ideas  
• Look around  
• Dip in |
| Formulating focus             | Formulation | Identify                | • Identify inquiry question  
• Pause and ponder  
• Decide direction |

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| Collecting information on focus and seeking meaning | Collection | Gather | • Gather important information  
• Go broad  
• Go deep |
| Preparing to present | Presentation | Create | • Reflect on learning  
• Go beyond facts to make meaning  
• Create to communicate |
| Assessing process | Assessment | Evaluate | • Evaluate achievement of learning goals  
• Reflect on content  
• Reflect on process |

Kuhlthau, C., Maniotes, L., Caspari, A. GUIDED INQUIRY © 2012
Look to the future

- Research is an essential component to providing meaningful, relevant services and systems to meet the needs of young people in the changing information environment of the digital age.

Research
Tradition – Experience
Conducting Research that Matters

- Start with an important problem
- Apply the framework of classics and theories
- Stay with the problem to verify
- Develop concepts, models from the results
- Design application to address the problem
- Look to the future