Research as transformational experience: What students gain from research assignments
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This presentation is based on data collected through four rounds of Assessment Seminar interviews at Mount Royal University. For more information, see http://MRUasem.
Each round of interviews targeted a specific group of students – included in this study:

- 2010 - Round One - 96 students - 49 first and 47 second-year students
- 2011 - Round Two - 30 third-year students
- 2012 - Round Three - 96 final-year students (many have research/honours experience)
- 2013 - Round Four – 111 first-year students

Results
Different students gained different rewards from their research assignments, and while there were more ‘extract’ statements from students earlier in their programs and more ‘transform’ statements from senior students, the pattern was not universal and may be related to particular student characteristics, experiences or assignments. Similarly, students in the first two years tended to exhibit more ‘novice understanding of ACRL frames, while those in higher years often exhibited more expert, use of the frames to understand and use information.

There were interesting differences in approaches to research between students earlier and later in their programs. In the early years, students often did research to confirm their stance on a particular question, while in later years there were more statements around developing an opinion based on research. Also significant was a change in what ‘research’ meant: interviews with students in first or second year tend to relate research to going to the library to find existing knowledge; in third and fourth years, it was more likely to mean doing original work to create new knowledge.

Reading/Research - What’s the Point?
The transcripts reveal that students saw different end goals for research and/or experienced different rewards. Largely missing from the Framework are descriptions of what rewards students derive from applying IL – both cognitively and affectively.

Reading/Researching for Extraction: - more common in first and second-year students.
Reading/research as cherry picking bits of information to meet externally required (and often ill-understood) criteria without much integration of information into academic or life knowledge. The bits of info were ends in themselves; tribute offered up to the instructor, not rewards for the students. Some evidence in these statements that students found challenges in Searching as Strategic Exploration, Research as Inquiry, and Scholarship as Conversation.

Reading/Researching for Learning: This perspective focussed more on process than product, and often indicated an appreciation of learning through the reading or research. For some this learning was exciting in itself, for others more of a valuable by-product. Often, as with the next two categories of reward, research was on a topic of the students’ own choosing or where they could clearly see
relevance. Some evidence for Research as Inquiry, Information has Value, and Information Creation as a Process.

**Reading/Researching for Transfer/Transformation:** This perspective indicated a transfer of both process and content knowledge and often a transformation in their thinking derived from this transfer. The reward is seen as a change in thinking, in worldview, in approach, in ability and confidence, or even more fundamentally in the self. Transfer of knowledge to others was also seen as a rewarding aspect of research. Some evidence for Authority is Constructed and Contextual, Information Creation as a Process and Information has Value, in many cases linked to being creators of information.

**Reading/Researching for Affective Rewards:** Statements reflecting this perspective often described a passion, or at least a fondness for research. Students also took pride in becoming knowledgeable people in their communities, in knowing more than their peers and being able to develop more informed opinions because of their ability to read/research. Some evidence for Research as Inquiry and Information has Value.

**Reading/Research and the ACRL Framework**
While there were no direct questions relating to the ACRL Framework in the interviews, students’ reflections illustrate their struggles with troublesome knowledge and their understanding of aspects of all six frames. Learning appears to happen cumulatively as students complete assignments, not necessarily in conjunction with an IL session. Beyond the major categories in the framework, students exhibited many of the dispositions listed for all frames, including curiosity, persistence, and seeking appropriate help when needed. Knowledge practices were less evident, but that may be related to the interview questions. Students ascribed gains to help, time, and practice, occasionally to the salutary effect of not doing well on an assignment.

**Conclusion/Implications**

If we wish to move students to deeper conceptions of information literacy, and more engaged research practices, we need to develop assignments where students perceive the goal as more than the gathering of nuggets for someone in authority. While such papers may be a stepping stone to deeper learning, often they may trap students in a mechanistic simulation of the form of research, rather than engaging them in the integration of knowledge which can be transformative. The ACRL Framework and threshold concepts in general offer a way of looking at IL that focuses on this deeper learning.

*As some of this research has been reported elsewhere (to non-library audiences), portions of both the slides and the handout have been adapted from previous work by the presenter.*