WILU 2009 – Montréal, PQ. May 25, 2009
Prompting reflection to enhance learning and teaching
Margy MacMillan (Mount Royal College) mmacmillan@mtroyal.ca

Why reflection
I first became interested in prompting reflection because it seemed that postsecondary students rarely had the chance to see how far they'd come – outside of exams, which are not generally developed to provide a sense of accomplishment. Reading into this across the literatures of education and psychology, I became more and more convinced of the benefits of prompting reflection, not only for affect, but also to consolidate understanding through meta-learning. The more students think about their own learning, the better they learn, the more they retain and the more they integrate knowledge across courses, disciplines and aspects of their life. I have many citations on this – contact me if you're interested.

The I-SKILLS Résumé - A tool to prompt reflection
This idea for the I-SKILLS Résumé came from an icebreaker at the LOTW conference in 2000, where participants were asked to develop a group résumé. I was struck by how little explanation the activity required – résumés being a well-understood format, how positive the experience was, and the reflection it prompted. Adapting a résumé to focus on information skills provided an easy, relatively quick, and free way to provide students with a way to observe and reflect on their own learning. That I could watch learning happen too was a bonus, and has provided rich information to inform my teaching.

The I-SKILLS Résumé project
The project is a long-term study, now extended to ten years, of the information skills and knowledge of journalism students. The research project was developed to answer a number of questions about the tool itself – was it easy to use, was it useful, and about students' information use – what did they consider to be information tools/skills, did the skills develop over time, and if so, how, what, if any, effect did integrated information literacy sessions have, etc. More about the project can be found in "Open Résumé," cited below, and on my website: http://www2.mtroyal.ca/~mmacmillan/research.htm.

The process
Students were asked to fill out an initial I-SKILLS Résumé in November of their first year, after they had had some information literacy sessions integrated into a number of journalism courses. These were emailed back to the student in subsequent years for updating. To analyze the data, I adapted the phenomenographic approach Christine Bruce used in her landmark study: *The Seven Faces of Information Literacy.* I highly recommend her work to anyone interested in qualitative research. The analysis involved reading through the résumés, iteratively developing and coding categories of statements, and looking for patterns, convergences, differences and other interesting bits that jumped out. This form of study allowed me to recognize and track both the individual experiences of students and trends that occurred over time.

The results
Many of these are reported at great length in "Watching Learning Happen," cited below. An analysis of the résumés of all the students who submitted more than once showed change along three main lines – location of information (the range of tools students used, and the sophistication with which they used them increased over time), use of information (as students moved through the program, they linked information skills more explicitly to journalism skills) and subject knowledge (students broadened the areas they felt comfortable researching). These changes occurred in response to formal and informal instruction in school, at postsecondary institutions, at work and in pursuit of information for personal interest, and to changes in the information environment and the curriculum. Other interesting numbers:

- 65-84% of each cohort include using catalogues/books as an I-SKILL
- 75-91% include articles
- 75-93% include web searching (but fewest mentions of Google in 2007 cohort)
- Articles and web showed most changes over time

What students gained
- Reflecting on their own growth - Of the 93 students that submitted more than one résumé, only two showed no change.
- Greater awareness of learning - Students commented in the résumés and in accompanying emails that they were 'surprised' by their growth, and that it was 'interesting' to look back on what they had written in previous years.
- Seeing gaps - Students occasionally erased material they no longer felt comfortable including. Students occasionally asked for a 'refresher' on particular skills after submitting résumés – this was provided either in class or individually.
- Ability to self assess - Students were noticeably careful in their choice of descriptors – using terms like 'adept', 'familiar', 'expert', or 'just learning'. They were often candid about what they used as default strategies
- Ability to articulate their skills - Some students gave very clear descriptions, suitable for a non-librarian audience, most, perhaps because they were thinking of me as the intended audience, were more cryptic – I am going to give more direction about this next year.
- Integration of knowledge from many sources - The process of completing the résumés encouraged them to see how work, personal interests and formal classes all contributed to their learning, and some stated explicitly how knowledge acquired in class helped in practicum experiences and vice versa. Many also applied information skills developed for personal interests - sports, music, etc., to academic and professional work.

What I learned
I learned (and continue to learn about) a lot of new tools, and:
- Students don't come in as blank slates – they have all searched before.
- Students remember what they use most – teach what they'll need, make sure they'll need to use what you want them to learn
- There are many other aspects of information literacy than those 'controlled' by librarians – students learn from peers, relatives, work, and trial and error
- Journalists use information in different ways – sources and story ideas are key, academic articles from proprietary databases, generally less useful; books take too long for deadlines. BUT, as the students are also doing academic research for some journalism and most elective classes, they also need to know how to work in both academic and professional information environments.

What it means for teaching
- I teach IL from a journalist's perspective - I teach article databases, but to find sources students can contact, I highlight sites like StatsCan's Daily for story ideas, and I teach where, why and how to check the facts in Wikipedia and other sources. I start from the question "Who is likely to have the info you need?" to encourage more efficient searching.
- I've added classes to fill gaps - Added a class on finding out about interview subjects using social media and more traditional sources; added a class on using academic sources that includes citation.
- I revise constantly as new tools and needs develop - This year, included a class on information management – file structure, plus free cloudware like flexlists.com and delicious.

Information from the résumés has helped me improve my teaching, target the workshops to what students really need, and collaborate with faculty in the Journalism department. I would like to encourage you to use the I-SKILLS Résumé, and I'd be really interested to discuss results with you! Please stay in touch, and feel free to contact me if you have any questions about the tool, the data, the research project, the weather in Calgary, anything at all, really….mmacmillan@mtroyal.ca /403-440-6135.

References
- Bruce, C. (1997). *The Seven faces of information literacy*. Adelaide: Auslib Press.
- MacMillan, M. (2009). Watching Learning Happen: Results of a Longitudinal Study of Journalism Students, *Journal of Academic Librarianship*, *35*, (2), p. 132-142.
- MacMillan, M. (2005). Open Résumé: Magic Words for Assessment. *College & Research Library News*, *66*, (7), p. 516-520.