

## **First Year College Students and Information: A Phenomenographic Investigation**

Melissa Gross<sup>1</sup>

Professor

School of library and Information Studies

The Florida State University

mgross@fsu.edu

Don Latham

Associate Professor

School of library and Information Studies

The Florida State University

The investigation reported here is part of the IMLS funded Attaining Information Literacy project. The AIL project seeks to integrate practice and research by grounding the development of an information literacy educational intervention in a deep understanding of the perspectives of first-year college students, particularly those who lack information literacy (IL) skills. Research has demonstrated that many students enter and leave college without attaining competence in information literacy (Foster, 2006; Maughan, 2001). Other research has demonstrated that students who test as non-proficient in terms of their IL skills tend to greatly overestimate their skill levels (Gross & Latham, 2007). This miscalibration between self-views and actual ability presents a variety of pedagogical problems: convincing such students that they need skills they believe they already possess, and recalibrating their self-views without destroying their sense of self-efficacy in being able to find, evaluate, and use information.

### **Theoretical Framework**

Kruger and Dunning (1999) theorize that the miscalibration between self-views and ability, among subjects who test as incompetent in a domain, is due to a lack of metacognitive skills. When people lack skills in a specific domain, they do not have the skill set to accurately assess their own ability or the ability of others in that domain. Once a skill set is learned, people become better at self assessment. However, since skill assessment is always situated within some set of standards, goal(s), or target for performance, it is important to assess not only skill levels, but also beliefs about what being good at something means. In other words, if two sets of people (librarians and students) are assessing a skill set using different definitions of skill, the outcomes of the assessments are likely to differ.

Also of concern is the effect of context on experiences with and perceptions of information. This study expands on previous information literacy literature by utilizing the imposed query model (Gross, 1995) as a framework for differentiating between experiences with imposed information seeking (e.g., school assignments) and experiences with self-generated information seeking (e.g., personal interest).

### **Methodology**

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<sup>1</sup> Corresponding author

In order to determine proficiency levels, participants were asked to complete an objective test of their information literacy skills. This was done to allow for analysis of ability in relation to student self-views of their skills, and to take these into account when approaching the task of developing an educational intervention.

Participants completed an objective test of their IL skills using the Information Literacy Test (ILT) developed at James Madison University (James Madison University, n.d.). The ILT is based on the ACRL *Information Literacy Standards for Higher Education* (2000). For the purpose of this study these standards provide a statement of the “authorized” view of what information literacy is. The word “authorized” is used here in the sense that the ACRL standards represent only one possible way to understand the concept (Marton, 1981) but one that is sanctioned by the higher education community.

In-depth interviews were performed with 77 first-year university and community college students. Students were told that there were no right or wrong answers to the conversational prompts, that the researchers had no vested interest in receiving a particular response, and that their participation would not in any way affect their grades or their relationship with their teachers, librarians, or schools. Interview questions explored how students go about finding, evaluating, and using information in both imposed and self-generated information seeking contexts. Participants were asked to describe what skills are needed to complete information tasks, what their ability is as compared to their peers, and how they might go about assessing the skills of others in finding, evaluating, and using information. The interviews were recorded and transcribed and a phenomenographic analysis of the transcripts was performed.

Phenomenography, developed by educators in Sweden in the mid 1970s, was chosen for this study as it was designed specifically to describe the relationship between research participants and their experience with a phenomenon and to derive categories of conceptions that allow the various relationships to be discovered (Marton, 1981, 1988). Further, the usefulness of phenomenography to investigate perceptions of information literacy has been demonstrated, beginning with Bruce’s groundbreaking research on educators’ perceptions of information literacy (1997). The goal of a phenomenographic analysis is to categorize conceptions of a phenomenon and to organize them in what is called the “outcome space” (Marton, 1994). The outcome space expresses the structural framework within which the categories of conception exist. Identifying the categories of conception and understanding the relationship between the categories provides a useful way to develop an understanding of the relationship between these students and information.

## **Findings**

Data analysis revealed four main categories of description that are hierarchically related. The first tier of the hierarchy is the Finding Information Conception, the second tier consists of the Information Technology Conception, the Information People Conception, and the Information Quality Conception. The third tier of the hierarchy differentiates between imposed and self-generated information experiences as related to the Information Technology Conception and the Information Quality Conception. Findings demonstrate that regardless of proficiency level, students measure success based on product, not process, use the Internet and people as primary sources for finding information, and do not consider information quality to be a huge concern. Academic resources are seen as “pre-vetted” and in self-generated contexts it is presumed that bad information would be self-evident. Overall, imposed information seeking contexts are seen as constraining while self-generated contexts are seen as more open and fun.

## Next Steps

The results of this study provide insight into the experiences and perceptions of information held by participants. These results will be triangulated with other data sources collected in the Attaining Information Literacy project in order to develop criteria for developing interventions focused on the instructional needs of students who lack information literacy skills. It is expected that this project will inform research and practice in the area of information literacy among college students and may also inform understanding of the development of information literacy skills in other user populations, such as children and senior adults.

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