Gross, M. (2005). The impact of low-level skills on information-seeking behavior: Implications of competency theory for research and practice. *Reference & User Services Quarterly, 45 (2),* 155-62.

Abstract (from the article): Competency theory suggests that people who function at a low level of skill lack the metacognitive ability to recognize their own incompetence and are unable to accurately assess the skill levels of others. Therefore, they tend to overestimate their own abilities and to proceed with confidence as they develop awkward strategies and make poor decisions. Worse still, because the incompetent do not know they are incompetent, they may be unlikely to seek training or skill-remediation services. This article reviews competency theory and outlines how this theoretical perspective may allow for a new approach to research and practice in the area of information literacy instruction.

Article Review

Introduction to Competency Theory

Melissa Gross introduces her readers to the discipline of library and information science studies and how the discipline recognizes the many approaches to information seeking and use that people employ, regardless of their skill level. She explains that the discipline also recognizes the many benefits individuals who know how to use information services and systems reap, and that the discipline is devoted to helping people achieve information literacy "both as a goal of professional practice and as an important area of research" (p. 155). Gross goes on to explain that any lack of skill can be remedied through training, ensuring access to information, and by improving information system design, and the issue she is addressing here is that individuals with low levels of information-seeking skills lack the competence to realize their deficiencies which means they are less likely to seek help with improving their skills and level of understanding. Competency theory suggests that:

. . . one of the biggest problems with incompetents is that they do not know they are incompetent. They are unaware that the approaches they develop and decisions they make are not optimal because they do not have the skills needed to critically assess their own work . . . So instead of proceeding with caution, they proceed with confidence. (p. 156)

As well as being unlikely to seek training, people with low levels of information-seeking skills may have difficulty with recognizing an information need, recognizing the value of libraries and reference services to their needs, accessing services, and determining relevance of information to their need. If competence is developed through attainment of skills and by acquiring the knowledge base associated with a particular domain, where, how, and when do people with low levels of information-seeking skills obtain the knowledge needed to overcome their incompetence?

Competent Information-seeking Behavior

Gross discusses information literacy standards for both primary level students (K-12) and secondary level students (college and beyond). For primary levels, Gross defines three standards as outlined in the publication *Information Power: Building Partnerships for Learning*. These standards suggest that information literate students can access information efficiently and effectively, they can evaluate information critically and competently, and they can use information accurately and creatively. The idea behind the standards is that children will be prepared early on for life-long learning and they will develop a solid foundation of the information literacy expectations defined at the college level. Basically, the standards help to develop competency in information-seeking. Gross uses the

Information Literacy Competency Standards for Higher Education to define what it means to be a competent information seeker at the secondary level. These standards cover the skills needed to recognize an information need, to effectively access information, to evaluate information, to critically analyze information to build one's own knowledge base, to use information for a specified purpose, and to understand the underlying ethical, social, economic, and legal issues associated with the access and use of information. These skills build on what should have been previously taught during the formative primary years.

Library Anxiety

Gross explains the phenomenon of library anxiety to further address the issue of low level information-seeking skills. She suggests that non-use, uncertainty, and the feeling of inadequacy when people experience difficulty in expressing an information need all contribute to the perpetual cycle of information-seeking of the incompetent user. Infrequent use of libraries or other information services directly relates to the competency level of information-seekers. Research addressing the issue of library anxiety in relation to competency theory aims to answer these questions:

1. Is there a relationship between level of information-seeking skill and the experience of library anxiety?

2. Do students with low-level information literacy skills demonstrate inflated self-assessments of performance?

3. Is the experience of library anxiety related to question type (self-generated versus imposed)?

4. Does the need to respond to an imposed query force recognition of lack of metacognitive skills?

5. Are self-generated needs associated with library anxiety too?

6. What role do chronic self-views play in the experience of library anxiety independent of performance?

7. Can self-views be utilized in intervention strategies that promote information literacy skills?

Conclusions

Gross reveals that little is known about the information-seeking behavior of students with low-level literacy skills, "including to what extent they recognize that they are skill-deficient and to what extent such skill deficiencies have consequences that these students will attribute to their own low-level skill set" (p. 160). It is suggested that one of the greatest challenges for information professionals and educators in general will be the development of more outreach efforts that will attract the attention of those users who *think* they are performing well, but in performance is poor. Further research into low-level information literacy, development of more effective outreach strategies, and introducing students to competency theory are steps information professionals can take to give people the skills they lack and to continue to address the issue of incompetency.