**Scholarship as Conversation**

Key sentence: Developing familiarity with the sources of evidence, methods, and modes of discourse in the field assists novice learners to enter the conversation. New forms of scholarly and research conversations provide more avenues in which a wide variety of individuals may have a voice in the conversation.

Knowledge practices:

a. cite the contributing work of others in their own information production;
b. contribute to scholarly conversation at an appropriate level, locally and within the field;
c. identify barriers to entering scholarly conversation via various venues;
d. critically evaluate contributions made by others in participatory information environments;
e. identify the contribution that particular scholarly works make to disciplinary knowledge;
f. summarize the changes in scholarly perspective over time in a topic or discipline;
g. recognize that a given scholarly work may not represent the majority perspective.

**Information Creation as a Process**

Key sentence: Novice learners begin to recognize the significance of the creation process, leading them to increasingly sophisticated choices when matching information products with their information needs.

Knowledge practices:

a. articulate the capabilities and constraints of various creation processes;
b. assess the fit between a creation process and an information need;
c. articulate the processes of information creation and dissemination in a particular discipline;
d. recognize that information may be perceived differently based on its format;
e. recognize the implications of information formats that contain static or dynamic information;
f. monitor the value that is placed upon different types of information products;
g. transfer knowledge of capabilities and constraints to new types of information products;
h. Understand that their choices impact the purpose and message of information.

**Information Has Value**

Key sentence: The novice learner may struggle to understand the diverse values of information in an environment where "free" information and related services are plentiful and the concept of intellectual property is first encountered through rules of citation or warnings about plagiarism and copyright law.

Knowledge practices:

a. give credit to the original ideas of others through proper attribution and citation;
b. understand that intellectual property is an important legal and social construct;
c. articulate the purpose and distinguishing characteristics of copyright, fair use, open access, and the public domain;
d. understand why some individuals or groups may be underrepresented or marginalized within information systems;
e. recognize issues of access or lack of access to information sources;
f. decide where and how their information is published;
g. understand how the commodification of personal information and online interactions affects them;
h. make informed choices regarding their online actions in full awareness of the above issues.
Research as Inquiry

Key sentence: Novice learners acquire strategic perspectives on inquiry and a greater repertoire of investigative methods.

Knowledge practices:

- formulate questions for research based on information gaps or existing information;
- determine an appropriate scope of investigation;
- deal with complex research by breaking complex questions into simple ones;
- use various research methods, based on need, circumstance, and type of inquiry;
- monitor gathered information and assess for gaps or weaknesses;
- organize information in meaningful ways;
- synthesize ideas gathered from multiple sources;
- draw reasonable conclusions based on the analysis and interpretation of information.

Authority is Constructed and Contextual

Key Sentence: Novice learners may need to rely on basic indicators of authority, such as type of publication or author credentials, where experts recognize schools of thought or discipline-specific paradigms.

Knowledge practices:

- define different types of authority, such as subject, societal, or special;
- use research tools and indicators of authority to determine the credibility of sources;
- understand that disciplines have acknowledged authorities: scholars and publications considered "standard";
- recognize that authoritative content may include sources of all media types;
- acknowledge they are developing their own authoritative voices and responsibilities;
- understand the increasingly social nature of the information ecosystem where authorities connect.

Searching as Strategic Exploration

Key sentence: Novice learners may search a limited set of resources, while experts may search more broadly and deeply to determine the most appropriate information within the project scope. Likewise, novice learners tend to use few search strategies, while experts select from various search strategies, depending on the sources, scope, and context of the information need.

Knowledge practices:

- determine the initial scope of the task required to meet their information needs;
- identify interested parties who might produce information about a topic and then determine how to access that information;
- utilize divergent (e.g., brainstorming) and convergent (e.g., selecting the best source) thinking when searching;
- match information needs and search strategies to appropriate search tools;
- design and refine needs and search strategies as necessary, based on search results;
- understand how information systems are organized in order to access relevant information;
- use different types of searching language (e.g., controlled vocabulary, keywords, natural language) appropriately;
- manage searching processes and results effectively.