Search and Compose: Exploring Parallels in the Research and Writing Processes

Matt Conner & Melissa Browne
University of California, Davis

Introduction

Context
We know that research goes on throughout the writing process. Could it be that the writing process extends beyond the beginning of research, into the information search process itself? We seek to explore these relationships by examining undergraduate search behaviors through the lens of two seminal works in Writing and Composition Studies:


Composing behavior is a fluid series of Planning, Translating, and Reviewing activities that are continuously applied as writers develop and refine their Goals.

“In the act of writing, people regenerate or recreate their own goals in light of what they learn.” (p.381)

- Diana Hacker’s The Bedford Handbook (1998)

Standard organizational principles for writing include Examples and Illustrations, Comparison and Contrast, Cause and Effect, and Classification and Division.

“There is nothing particularly magical about these patterns (sometimes called methods of development). They simply reflect some of the ways in which we think.” (p.84)

Purpose
Parallels found in the search process and the writing process have the potential to enhance instruction by enabling librarians to intervene more effectively in the writing process, and grow collaborative relationships between librarians and writing instructors to improve student learning.

Working Hypothesis
Successful undergraduate searchers generate more dynamic, short-term goals during the course of their search, i.e. they revise their goals based on what they learn, than less successful searchers. They also spend more effort planning and reviewing than less successful searchers.

Data Collection
We recorded and transcribed 19 search sessions from 10 undergraduate students using Academic Search Complete to locate relevant article citations on unfamiliar topics.

Data Analysis
We formulated two sets of codes, one for the writing process (derived from The Bedford Handbook) and one for the search process, and applied them to the search transcripts, to see whether they appeared and if there were patterns that were consistent with Flower and Hayes’ theory of composing.

Methods

Preliminary Results

Figure 1: The Bedford Handbook identifies 9 organizational principles. We noted the presence of 7 of them in our undergraduate search transcripts. Classification/Division and Example/Illustration were most frequently used.

Figure 2: We utilized 4 codes to note basic, recognized search behaviors. Students relied most heavily on Broadening/Narrowing and Recursive search strategies.

Figure 3: We analyzed 18 search transcripts from 10 undergraduate students. There were comparable numbers of the most commonly used Search and Writing strategies.

Figure 4: In the searches the researchers tagged as successful, 75% utilized Classification/Division as a primary strategy, and 50% utilized Example/Illustration.

Discussion & Next Steps

Our data is exploratory and does not lend itself to definitive conclusions. However, we do offer several observations. Most Writing Process Codes were represented in the transcripts, with a subset (Examples/Illustrations, comparison/contrast, cause/effect and classification/division) showing frequent use. Their presence in the transcripts suggests that in spite of new composition theories, students continue to make use of traditional writing paradigms.

Our preliminary analysis of the Search Process Codes is not surprising and confirms the importance of recognized search strategies, including broadening/narrowing, the use of synonyms and recursion. The fact that the highest frequencies for Writing Process Codes and Search Process Codes are comparable may indicate that both processes are in fact intertwined and occurring simultaneously.

We plan to examine additional transcripts to determine if the trends we have noted thus far are consistent. If so, our next step will be to begin looking for connections and patterns in how searchers move from one sub-goal (code) to another through the iterative processes of planning, translating, and reviewing, with the hope of developing an integrated model of the cognitive processes involved in searching and composing.

References
