

Uncovering tacit knowledge: Digital tools and the discourse-based interview (DBI)

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Study background & methods

- Engagement with the DBI in our longitudinal study of writing transfer in the major has led us to **explore the DBI methodologically**.
- We analyzed 10 articles and 10 dissertations** which used the DBI, selected at random from a larger group identified with a Google Scholar citation search.
- Preliminary analysis shows **wide variation in approaches to DBIs**, including methods used for question formation; media or technologies used as artifacts and/or for stimulation of recall; time scale; and adapting the DBI from mentors.

Our methods: After writing summaries of the 20 texts, we developed this list of methodological features to describe for each article or dissertation:

- Definition of tacit knowledge
- Explicit methodological concerns
- Question formation methods
- Medium or technology (artifact, recall)
- Engagement with time in methods
- Type of interviews
- Duration of interviews
- Scholarly lineage or influence

nutrition courses and decided to pursue nutrition as my minor. By the time of graduation, I will have ~~one more semester at WIU~~ completed six nutrition classes. I am very interested in animal care and the nutrition aspects, which are essential to proper animal health. My hope for the future is to work with animals at ~~some kind of a zoo or animal care facility or zoo, and perhaps, be involved in conservation or research~~. Through this internship, I hope to gain more experience in ~~animal care and conservation~~. I am currently enrolled in a ~~Conservation of Biological Diversity class at WIU where we learn about the causes of population losses, and methods for the conservation of genetics, populations, nutrition and habitats. We are also learning techniques in Microsoft Excel that can be applied to conservation studies. I have experience in animal animal care from~~. At Lincoln Land Community College in Springfield, IL, ~~where I was responsible for caring for the animals in the biology department. This included preparing diets, feeding animals, handling animals, and cleaning enclosures. Through Western Illinois University's Zoology Club, I have had the opportunity to volunteer at zoos in the area, where I have acquired exposure to animal care in a variety of zoo settings. These experiences have encouraged my desire to work with~~

Word processor generated comparison of two cover letter drafts, from a student DBI in our study.

What is the DBI? Why does it matter?

- Odell, Goswami, & Herrington (1983):** “The discourse-based interview: A procedure for exploring the tacit knowledge of writers in nonacademic settings” has been cited over 300 times.
- DBIs use **targeted questions to explore how writers make choices**. Interviewers pose alternative rhetorical choices and ask participants to explain their rationale: “Here you do X. In other pieces of writing, you do Y or Z. In this passage, would you be willing to do Y or Z rather than X?” (p. 223).
- These questions **stimulate the recall of tacit knowledge**, and are developed by analyzing supporting data from observations or interviews, or by comparing participants’ documents to others by the same writer or in the same genre.
- Many researchers have used DBIs to **explore academic writing and contexts**. This departs from the original workplace-oriented purpose of Odell et al.
- Though Polyani (1958) remains the most important source for theorizing tacit knowledge, DBIs could also explore “par-expertise” (Rice, 2015) or connections to craft knowledge (Van Ittersum, 2014).
- Researchers are **extending the DBI through the inclusion of digital media**, both by considering digital texts and integrating digital tools in DBI methods.

gathering agencies when dealing with terror crimes. ^B sections of the extensive bill also apply to criminal acts generally. The number of terror-related offenses was also increased, and reporting requirements, crimes, and penalties associated with money laundering were expanded” (No Author 1). ^B After the passing of this act, law enforcement at the federal level had the legal ability to wire tap and use other methods to gather intelligence and information regarding terrorist activities. In addition, the amount of crimes referred to as “terrorism” was increased allowing the authorities to pursue additional crimes and other domestic terrorist groups. A major concern of this act was the abuse of powers by law enforcement personnel, and it has been a continuous debate. ^E What citizens must look at is the amount of freedom given up in order for the act to still protect us, and not infringe upon all of our civil liberties, this is a very fine line. This fine line represents an ethical dilemma to law enforcement when what they are doing is right or wrong.

Since the terrorist attacks on 9/11, the United States has seen an increase in the amount of

Example DBI instrument. Questions indicated by red circled letters, and written on separate sheet: “(B): [Your teacher] notes your long paragraph length here, on page 3, and on page 5, too. What is driving paragraph length for you? How are you deciding when to break?”

Selected uses of digital tools with DBIs

- Olinger (2014):** following literacy history interviews, uses **version comparison** to form questions, then video-records DBIs to analyze participants’ gestures.
- Lancaster (2016):** case study uses **corpus analysis** of a student’s writing to generate questions for multiple DBIs with student and instructor (following preliminary interviews, and with careful follow-up).

Focuses: Textual comparisons & use of corpora

- For **Olinger**, comparisons enhance the DBI:
 - Identifying “**seemingly mundane disciplinary terms**” for examination;
 - Enabling “**parallel DBI**,” where multiple participants discuss the same text;
 - Supporting the rich complexity** of Olinger’s analysis, which includes video recordings of DBIs to include gesture.
- Lancaster’s** corpora are built from participants’ texts and MICUSP:
 - Allowing **broad highlighting of “hidden” choices** made by writers;
 - Addressing, for **both student and faculty participants**, linguistic and rhetorical features, their complex interactions, and influences (pedagogy, models).

Implications

- Extensions of the DBI via **digital tools are productive**, but underlying **methodology of tacit knowledge needs to be updated** given recent work.
- Some methods are **labor intensive** and require specific **disciplinary knowledge**.
- Researchers need to **systematically explore the methodological limitations of emergent digital tools**.

Future work

- Expand analysis by adding **more studies that use DBIs**, searching for researchers who use **DBI-like approaches without citing** Odell, Goswami, & Herrington, and through **second-stage coding** of researchers’ methods & methodology.
- Interview scholars** who’ve modified DBI procedures with digital tools to understand their motivations, evaluate the success of their methods, and explore generalization.
- Trace impacts of “lineage” DBI methods with **citation network analysis** and by interviewing researchers and the mentors who introduced the DBI to them.

