Exploring the Cognitive Dimension of Online Legal Research

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STUDY PURPOSE

The purpose of this exploratory study is to examine law students' cognitive processes as they conduct legal research in order to solve a legal problem.

Research Question: What cognitive processes do law students experience while conducting online legal research?

METHODS & PARTICIPANTS

Study Design: A qualitative approach to data collection and analysis was used, with think-aloud protocols as the main data source.

Participants: Six JD students from an Ontario university participated in the study.

Data Sources & Material:

1. *Demographic questionnaire*: The questionnaire consisted of thirteen open and closed-ended questions about participants' demographics and legal research experience.
2. *Online legal research task*: Participants were asked to read a fact pattern and to find three potentially relevant cases. They could use only one database – WestlawNext – to conduct legal research. They had thirty minutes in which to complete the task. At the end of the session, they were asked to provide a list of cases along with an oral explanation of their reasons for choosing them. Their online actions were recorded using the screen capture software program, Camtasia.
3. *Virtual revisit think-aloud*: Participants were asked to verbalize what they were thinking during the online legal research task whilst viewing a recording of their legal research session. Their verbalizations were recorded along with their online research session using Camtasia.
4. *Semi-structured interview*: Following the think-aloud session, participants participated in a brief semi-structured interview. The interview contained two questions related to the cognitive processes experienced during the online legal research session.

PRELIMINARY RESULTS

LEGEND

Knowledge Types	Definition
Knowledge of Law	Substantive knowledge of the law and legal system as well as knowledge of legal analysis and legal problem-solving approaches.
Legal Research Knowledge	Knolwedge of the legal research process as well as knowledge of legal research tools, strategies, search tactics, and legal citation.
Metacognitive Knowledge	Knowledge of cognition in general as well as awareness and knowledge of one's own cognition (Anderson & Krathwohl, 2001).

CREATE
Put elements together to form a coherent or functional whole
(Anderson & Krathwohl, 2001)

"I went to my notes and provided a brief verbal explanation … basically just practicing what I would say to my partner about each of the cases that I had found and why I had cited them as important."

Knowledge of Law
- Generating ideas on areas of research
- Generating a hypothesis
- Synthesizing a legal rule
- Constructing arguments
- Planning advice to principle or client
- Producing the final written product
- Preparing for the oral presentation

Legal Research Knowledge
- Generating ideas on areas of research

EVALUATE
Make judgments based on criteria and standards
(Anderson & Krathwohl, 2001)

"This 'nuisance view' search wasn't getting great results. Let's go back to our original keywords – 'blocking view'. 'View' itself is clearly far too broad of a word."

Knowledge of Law
- Evaluating the relevance of a document or case
- Deciding to use a document or case
- Evaluating the clarity of the law
- Evaluating the legal research process
- Evaluating the relevance of search results
- Evaluating a source

Legal Research Knowledge
- Evaluating the legal research process
- Evaluating research tactics
- Evaluating the relevance of search results
- Evaluating a source

Metacognitive Knowledge
- Monitoring progress on the task
- Monitoring time

ANALYZE
Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose
(Anderson & Krathwohl, 2001)

"The context was unreasonable because he did it to get back at their neighbour where in the case at hand, there was no malicious intent. I thought it was a really important distinguishing factor because although this case had come to a different conclusion there was this clear difference."

Knowledge of Law
- Reasoning by analogy
- Identifying the elements of a case
- Selecting a relevant definition
- Selecting relevant keywords from a document

Legal Research Knowledge
- Selecting relevant keywords from a document

Metacognitive Knowledge
- Identifying a gap in one's own knowledge

APPLY
Carry out or use a procedure in relation to a task
(Anderson & Krathwohl, 2001)

"And then I went to Westlaw and since I knew I was going into nuisance I started directly with the Canadian Encyclopedic Digest because I thought this would be a good first step to go through the research."

Legal Research Knowledge
- Implementing a research process or search procedure
- Executing a search technique

Metacognitive Knowledge
- Focusing on the task at hand
- Checking back for something that may have been missed

REMEMBER
Retrieve relevant knowledge from long-term memory
(Anderson & Krathwohl, 2001)

"Antrim Truck…this seems like a case I've read before. However, I know it's not necessarily a blocking view case. This is more of a public private nuisance case."

Knowledge of Law
- Retrieving relevant prior knowledge
- Recognizing a familiar case or piece of information

Legal Research Knowledge
- Retrieving relevant prior knowledge
- Recognizing a familiar legal research tool

UNDERSTAND
Construct meaning from oral, written or graphic communication
(Anderson & Krathwohl, 2001)

"And I basically skimmed this to see what it was saying and whether it had an in-depth analysis and what I found was it did .. it referred to Supreme Court of Canada cases and past precedents."

Knowledge of Law
- Summarizing the law
- Paraphrasing the judge's reasoning
- Comparing major elements of cases
- Summarizing the key points in a case

Metacognitive Knowledge
- Interpreting the objective/parameters of the assigned task

Bloom's Taxonomy Revised

Create
Evaluate
Analyze
Apply
Understand
Remember

Correa, M. (2018). Critical Approaches to Heritage language learning: From linguistic survival to resistance and action, 10.1007/978-3-319-44694-3_8

Reference: Anderson, L.W. & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing*, New York, NY: Logman.