

https://dspace.org/

Digital search literacy, self-directed learning and epistemic cognition in a South African undergraduate student sample

Herselman, Taryn Elise

2016

http://hdl.handle.net/10539/22427

Herselman, Taryn Elise (2016) Digital search literacy, self-directed learning and epistemic cognition in a South African undergraduate student sample, University of the Witwatersrand, Johannesburg, <http://hdl.handle.net/10539/22427>

Downloaded from a DSpace repository. https://dspace.org/

Abstract

Undergraduate students' require a certain degree of digital literacy in order to make use of the internet as a resource and educational tool. This report argues that two critical aspects of digital search literacy are the student's ability to effectively execute and monitor the search strategies used to navigate the ever-increasing number of webpages; and the critical thinking skills required to evaluate those documents in an academic context. Therefore, digital literacy requires effective self-directed learning (SDL) skills and appropriate epistemic cognition (EC). The present research used a sequential explanatory design, which comprised of two phases: Stage 1, N = 119 and Stage 2, N=17. The sample for both phases of the project was drawn from students enrolled for first-year level psychology courses at the University of the Witwatersrand. The sample for Stage 2 was drawn from students who had already completed Stage 1, which required the completion an online questionnaire. During the second phase, students were tasked with conducting a web-based search on an essay topic relating to the discipline of psychology. Several research objectives were examined; general self-reported epistemic cognition and readiness for self-directed learning levels of a sample of undergraduate South African university students; self-reported self-directed learning behaviours, epistemic cognition and digital search literacy issues; the impact of search strategies on the type and quality of information sources located; and the psychology-specific epistemic beliefs involved in the evaluation of source features of web based documents.

Findings showed that students did indeed engage specific self-directed learning and epistemic cognition behaviours while searching for resources online. The key components of digital search literacy included, self-directed learning (monitoring and strategy use) and epistemic cognition (source evaluation). In terms of rating the sources, personal justification and justification by authority were the most predominant when students rated the most credible sources; while relevance to task, personal justification and format/style were applied more often when rating the least credible web documents. In conclusion, future research on digital literacy should include the relative contribution of SDL and EC components as important mechanisms for online search strategies and critical source evaluation.

Keywords: self-directed learning, epistemic cognition and beliefs, source evaluation, web search, navigation behaviour, strategies