

Application of ChatGPT in information literacy instructional design

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ABSTRACT

Recent developments in ChatGPT have initiated a prompt response in the academic libraries' community. This includes discussions on possible applications of AI text generators (Fernandez, 2023) and the implications of ChatGPT for academic libraries (Cox and Tzoc, 2023). In various segments of library services, ranging from reference services, cataloguing and metadata creation to content creation, ChatGPT can be used for natural language processing activities.

In this paper, our aim is to investigate a specific application of ChatGPT in relation to Open Educational Resources (OER): instructional design for information literacy courses in academic libraries. The starting point for our research is using openly-licensed informational resources, i.e. 'content infrastructure' as facilitators in creating educational resources. It is widely recognised that large language models (LLMs), which use deep learning techniques to generate text based on prompts, greatly contribute to the speed of creating informational resources which comprise the content infrastructure (Wiley, 2023). However, ensuring the quality of the generated output and the requirement for review and improvements is an issue.

Our analysis of the model will be conducted in three stages: 1. developing a strategy for producing information literacy syllabus using ChatGPT; 2. training the model according to predefined standards; 3. conducting the review process. In the first stage, the following guidelines will be applied: assign the model the role of a subject-matter expert (SME); provide context; instruct the model to use specific standards, i.e. "Information Literacy Competency Standards for Higher Education" (ALA/ACRL, 2000) and direct the model to use a specific output format. The second stage, or model training, will consist of a series of structured prompts, including feedback and reflection prompts. In the third stage, two external reviewers will be included in the process, with the following profiles: 1. an academic library information literacy programme coordinator; 2. English language specialist (assistant professor, PhD level). The purpose of the review is twofold: to check for pedagogical accuracy and psychometric validity, as well as usability in the actual academic environment.

The results will provide some insight into the benefits of strategic and well-planned use of ChatGPT technology in creating content, while also considering responsible and ethical use of the new technology in the academic library sector.

KEYWORDS

ChatGPT; information literacy; instructional design; Open Education Resources (OER)

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