APPLICATION OF CHATGPT IN INFORMATION LITERACY INSTRUCTIONAL DESIGN

JELENA MADUNIĆ
& MATIJA SOVULJ

UNIVERSITY OF SPLIT LIBRARY

INTRODUCTION

GPT: Generative
Pre-trained Transformer
architecture

Statistical model for
generating new data
based on variable
relationships in a dataset

Impact: altering the
information landscape

APPLICATION IN ACADEMIC LIBRARY SETTING

o knowledge and research services

o AI expectation management

o AI research assistance (IRIS AI, sCite, consensus.app, elicit.org, etc.)

o Data-driven services (API services, research data management)

o AI literacy (providing support and promoting ethical use)

RESEARCH QUESTION

How can the model be applied in information literacy instructional design and creation of OER?

METHODOLOGY

1. DEVELOPING A STRATEGY FOR PRODUCING INFORMATION LITERACY SYLLABUS USING CHATGPT

2. TRAINING THE MODEL ACCORDING TO PREDEFINED STANDARDS

3. CONDUCTING THE REVIEW PROCESS

STRATEGY

o   assign the model the role of a subject-matter expert (SME);

o   provide the model with context;

o   instruct the model to use specific standards, i.e. Information Literacy Competency Standards for Higher Education (ALA/ACRL, 2000); Association of College & Research Libraries' Framework for Information Literacy for Higher Education (ALA/ACRL, 2015);

o   instruct the model to use a specific output format

MODEL TRAINING (1)

o prompt engineering according to the guidelines/ criteria from available literature

o Lo, 2023: CLEAR Framework for Prompt Engineering, i.e. concise and user-friendly method tailored to optimize interactions with generative AI language models

o Eager & Brunton, 2023: instructional advice for writing instructional text to guide the generation of quality outputs from AI models

MODEL TRAINING (2)

- o starting point: "Academic/Scholarly Writing" course implementation plan (postgraduate study programme in Economics and Management)

- o input: number of lecture and seminar hours, percentage of e-learning, course objectives, learning outcomes, course contents, assessment methods

- o initial prompts (prompt script), feedback and reflection prompts

REVIEW

o output evaluated by 2 reviewers (profiles: university information literacy programme coordinator; Assistant Professor of English Language)

o evaluation criteria

- usability (does it fit the purpose?)

- relevance (is it relevant to the context in which it's intended to be used?)

- quality (is it coherent and well-organised?; correctness and readability of the AI-generated content)

o review in the format of a descriptive text

Certainly, here's a syllabus outline for your 1st year PhD course in Academic/Scholarly Writing, organized into 6 modules based on the course parameters, learning outcomes, and course contents:

Module 1: Introduction to Academic Writing and Research

- Week 1-2
  - Understanding the Social Role of Research
  - Identifying Users and Beneficiaries of Scientific Research
  - Defining the Role of Researchers
  - Recognizing the Needs of Various Stakeholders

Module 2: Formulating and Defining Research Topics

- Week 3-4
  - Selecting and Defining Research Topics
  - Assessing the Existing Scholarly Literature
  - Establishing the Scientific Contribution
  - Crafting the Introductory Chapter in a Research Work

Module 3: Literature Review and Citation

- Week 5-7
  - Principles of Conducting a Literature Review
  - Maintaining Originality in Scientific Writing
  - Understanding (Auto)plagiarism and Avoidance
  - Proper Sources and Citation Practices

Module 4: Text Analysis and Critical Reading

Send a message

Free Research Preview. ChatGPT may produce ina

Prompt script testing results in the format of a 15-page document with the following subheadings:

o Introduction

o Course Description (Course Objectives, Learning Outcomes, Course Contents, Course Schedule)

o Workshop Plan: "From Research Topic to Research Questions" (+ facilitator notes and participant handouts)

o Assessment activities, criteria and grading rubric

o Interactive activity lesson plan (+ notes and handouts)

DISCUSSION & FURTHER RESEARCH

EVALUATION RESULTS

ETHICAL CONSIDERATIONS

FURTHER STEPS

Reviewer's comments to be used to further train the model and refine results
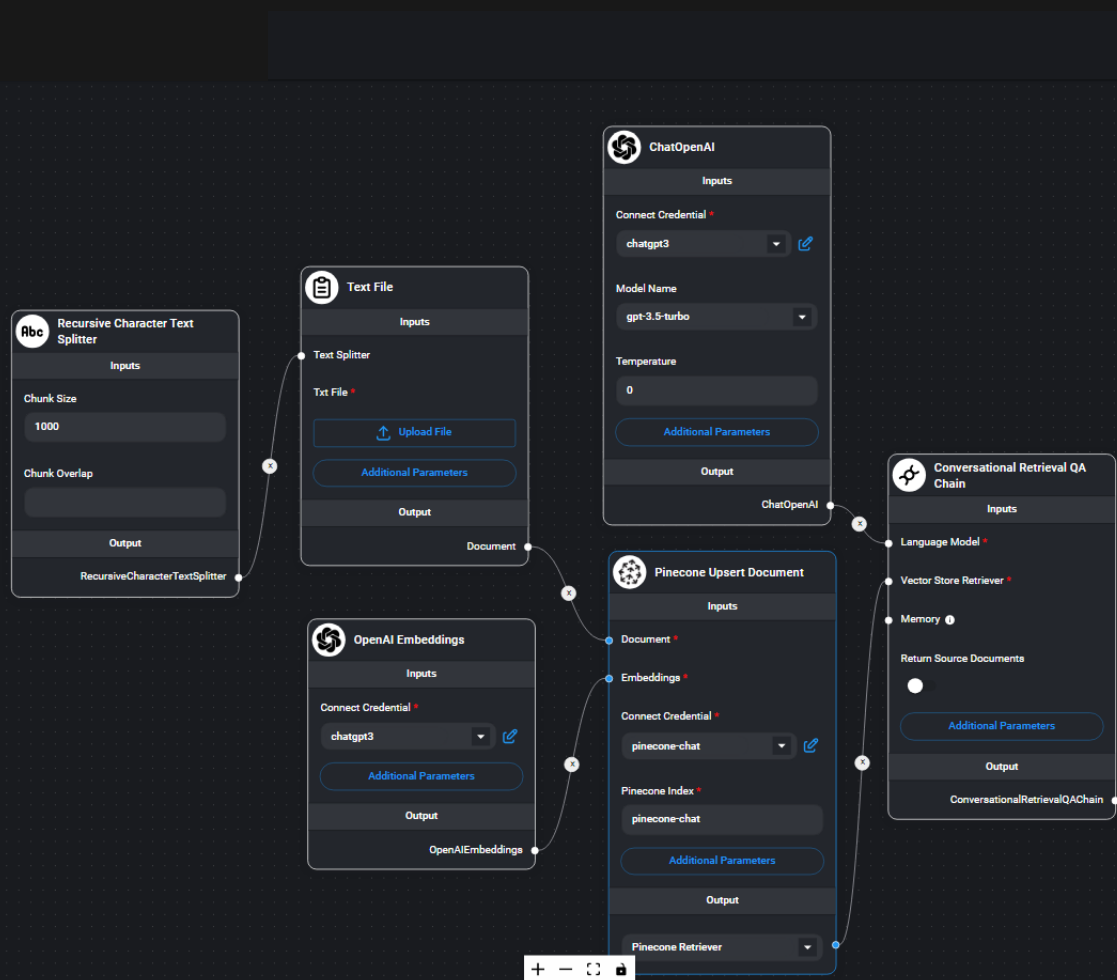
Acknowledgment of the use of ChatGPT in the production of AI-generated content

Developing a model with a modified dataset

MODIFIED DATASET MODEL

Custom AI ChatGPT Chatbot

o Render: unified cloud that builds and runs all your apps (used as a server)

o Flowise: Open-source UI visual tool that builds your customized LLM flow using LangchainJS

o Pinecone: vector database for storing data

o Flowise lets you create different chatflows by adding nodes (such as chat models, vectors stores, text splitters etc.)

Certainly! Here's a concise summary of the key concepts related to the Six Frames of ACRL Framework for Information Literacy in the context of information skills that PhD students should have:

Authority is Constructed and Contextual: PhD students should understand that auth... academic writing is not fixed but is constructed within a context. They need to criti... evaluate sources and recognize that expertise can vary depending on the situati... frame emphasizes the importance of questioning and examining the credibilit...

Information Creation as a Process: Students should grasp that information... evolves through various processes. They should learn to engage with info... by understanding how knowledge is generated, published, and dissem... encourages students to see themselves as active participants in the...

Information Has Value: PhD students must appreciate the value o... terms of intellectual property and the economic and social aspe... understand issues related to copyright, plagiarism, and open... use of information in scholarly work.

Research as Inquiry: This frame encourages students to... and questioning process. PhD students should be ade... exploring diverse perspectives, and adapting their i... topics. It fosters a sense of curiosity and intellectu...

Scholarship as Conversation: PhD students sh... ongoing conversation. They need to learn to... understanding the value of citations, peer... This frame emphasizes the importance...

Searching as Strategic Exploration: E... They should develop strategic app...

a message

ree Research Preview. ChatGPT may

THANK YOU

jmadunic@svkst.hr

msovulj@svkst.hr