SHARE Framework for Scholarly Co-Writing with AI

Introduction

The framework for scholarly co-writing with AI aims to integrate generative AI into the academic writing process. This approach is designed to help students and educators navigate the complexities of authorship, cognitive offloading, and the ethical use of AI in scholarly work.

Key Concepts

Abundant Intelligences – Indigenous AI:

- **Definition**: Unlike the traditional singular idea of artificial intelligence, abundant intelligence reflects a broader, more inclusive perspective that encompasses multiple forms of intelligence and interconnectedness.
- **Application**: Encourages viewing AI as part of a symbiotic relationship within a network of intelligences, promoting a holistic approach to intelligence that includes human, AI, and other forms of intelligence. In the SHARE framework, AI and human collaborate together while the human retains authorship and accountability.
- **See the work of the Abundant Intelligences research group**

Generative AI and Authorship:

- **AI Limitations**: AI cannot be an author due to the lack of moral agency and responsibility. Most academic publishers require human authors to maintain accountability for scholarly work.
- **Moral Agency**: Authorship requires moral agency, and as generative AI draws on a "hypercommons" of untraceable data, it cannot take on full authorial responsibilities, particularly around attribution.
- **Transparency**: The use of generative AI should be disclosed in introductions, methods sections, appendices, or through citations to maintain transparency and accountability.

- **Practical Implications**: While generative AI can support the writing process by allowing authors to focus on critical, analytical, and creative aspects, there is a risk of reducing the quality and innovation of scholarly work if over-relied upon.
- **Philosophical Shifts**: The concept of authorship is evolving, with a potential shift from the traditional role of the writer to a focus on the moral and creative agent. This raises questions about the importance of human creativity and novelty in scholarly work.

Generative AI, Writing, and Student Learning:

- **Benefits**:
  - **Reduction in Cognitive Barriers**: AI can help reduce cognitive barriers by assisting with brainstorming, organization, and writing skills.
  - **Enhanced Engagement**: AI can enhance student engagement and self-efficacy by providing support and reducing the cognitive load associated with writing tasks.
- **Challenges**:
  - **Over-Reliance**: There is a risk of students becoming over-reliant on AI, leading to less critical engagement, creativity, and ethical writing practices.
  - **Ethical Concerns**: The use of AI in writing raises ethical concerns, including the need for oversight to ensure originality and awareness of potential biases in AI-generated content.
- **Recommendations for Educators**:
  - **Foster Critical AI Literacy**: Educators should help students understand how AI works, its strengths and limitations, and the potential for bias in AI outputs.
  - **Anchor Learning in Meaningful Goals**: Emphasize the importance of critical thinking, academic writing, and citation practices within and beyond the discipline.

- **Treat AI as a Collaborator**: Encourage students to view AI as a collaborator rather than a shortcut or magic solution, providing structure and support to guide their learning process.

Cognitive Offloading:

- **Definition**: Cognitive offloading involves using tools or actions to reduce the cognitive demand of a task, allowing individuals to focus on more critical aspects of learning.
- **Application in Writing**: AI can be used to handle less critical aspects of writing, such as grammar and organization, enabling students to concentrate on essential learning tasks like argumentation and analysis.

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