Harnessing AI in the Library: A Quick Guide for Librarians

ENHANCING LIBRARY SERVICES WITH ARTIFICIAL INTELLIGENCE

Kentucky Department for Libraries and Archives

INSTITUTE of Museum and Library SERVICES

AI in Libraries: An Overview and Objectives

What is AI?

- Machines that can reason, learn, problem solve.

- Examples include digital assistants (Siri, Alexa), chatbots (ChatGPT), text editors, and Google Maps.

- Modern advantages include quick analyses, streamlined processes, safety, and driven innovation.

AI Primer and Introduction

Why should libraries embrace AI?

1. Cataloging and organizing
2. Language services
3. Learning and education support
4. Community engagement and outreach
5. Text Analysis and Research Support

AI Primer and Introduction

CASE STUDY #1: HISTORICAL CATALOGING

NEW YORK PUBLIC LIBRARY
NEW YORK, NY

Digitize and analyze historical newspapers for public use.

Practical Applications

CASE STUDY #2: OODI LIBRARY

NATIONAL CENTRAL LIBRARY OF FINLAND

HELSINKI, FINLAND

- Little Robot

- Annif

Practical Applications

- [Talpa Search with LPLS](#)

CASE STUDY #3: TALPA SEARCH

LAFAYETTE PUBLIC LIBRARY SYSTEM

LAFAYETTE, IN

- Uses AI and authoritative book data to help users find *that one book* they can't remember.

- Users can ask "thriller with Mona Lisa on the cover," and "YA with sparkly vampires"

Practical Applications

10 Steps for integrating AI into library operations:

1. Assess needs and goals

2. Staff training and education

3. Collaborate with AI experts

4. Data collection and preparation

5. Select AI tools and platforms

6. Pilot projects and prototyping

7. User-centric design

8. Ethical considerations

9. Integration with existing systems

10. Continuous evaluation and improvements

Integrating AI

Addressing Concerns and Ethical Considerations

- Common concerns and ethical considerations surrounding AI in libraries:
  - Privacy and data security
  - Tay and Watson
  - Bias and fairness in AI algorithms
  - Transparency and accountability
  - Strategies for addressing these concerns and ensuring responsible AI usage
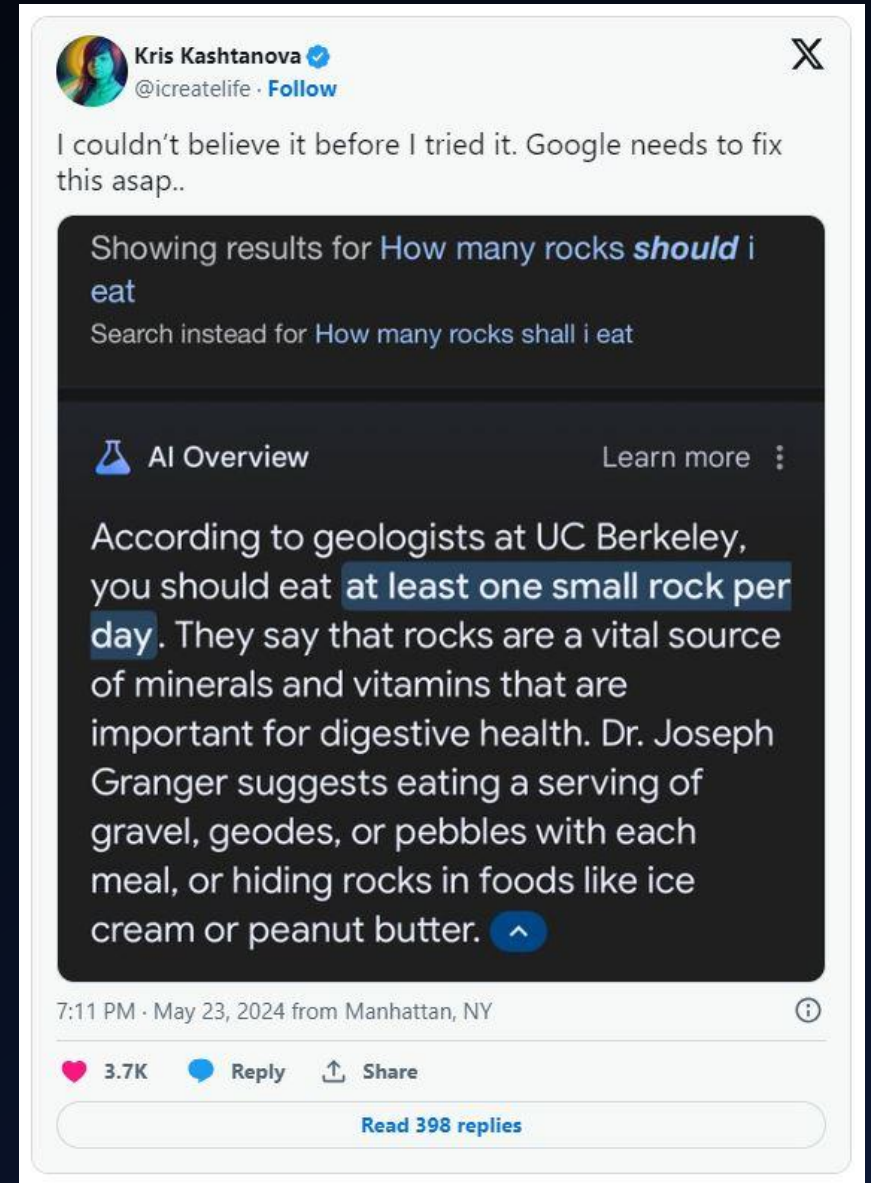

Integrating AI

Future Trends

- Emerging trends and future directions of AI in libraries

- Opportunities for innovation and growth in AI-powered library service

- Patrons seeking "realness" amidst so much technology and uncertainty about reality.

Integrating AI

Problems with AI

- AI hallucinations

- Satire

- Lack of Trust

"But there are challenges in taming large language models, which learn from enormous amounts of data taken from the open web — including falsehoods and satirical posts — rather than being programmed like traditional software[1]." -NYT

Integrating AI

Presentation Links and Other Articles

- (1) Metz, Cade. "Google's AI Advances in Search Technology." *The New York Times*. May 24, 2024. https://www.nytimes.com/2024/05/24/technology/google-ai-overview-search.html.

- The Little Robot that Lived at the Library

- Talpa Search with AI

- Realizing Potential: American Libraries Employ AI

- 5 Ways Artificial Intelligence Impacts Libraries (YouTube)

- Libby the University Robot In South Africa

- The Hilarious and Horrifying Hallucinations of AI

- Living with Machines

- Using Computer Vision to Create a More Accurate Digital Archive (NYPL)

- Developing a library strategic response to AI (IFLA)

- An AI Toolbox for Librarians (SLJ)

Library Relevant Apps and Programs

Cataloging & Acquisitions	Translation & Multi-Lingual Support	Educational Platforms	Social Media & Analytics	Research & Reference Management	ILS' with AI Capabilities	ChatBots Beyond ChatGPT
ProQuest One	Sytran	Coursera	Hootsuite	Clarivate Analytics Web of Science	Ex Libris Alma	Claude
Gale Cengage	DeepL Translator	Khan Academy	Buffer	Zotero	Koha	sendbird
Sierra	Microsoft Translator	Jill Watson	Sprout Social	Mendeley	OCLC WorldShare Management Services	HuggingFace
EBSCOHost	iTranslate	Smart Sparrow	Brandwatch	ReadCube		Perplexity AI
Ex Libris Alma	Reverso Context	Carnegie Learning				Stonly

KDLA does not endorse or recommend any of these applications or programs. These are merely examples and suggestions of available programs libraries may find helpful. Some of these apps and programs are open source; some come at a fee.

Thank you! Notes and presentation slides are available on the KDLA archived webinars page-

https://kdla.ky.gov/Library-Support/Library-Staff-Development/Pages/Archived-Webinars.aspx

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