

AI-Powered Learning: Blending AI with Active Learning in the Information Literacy Classroom

Kevin Reagan & Wilhelmina Randtke

Georgia International Conference on Information Literacy

April 19th, 2024

(†)



Abstract

The ACRL Framework for Information Literacy in Higher Education was a response to more voluminous and less reliable information. Existing lesson plans for teaching the ACRL Framework are readily transferable to teaching research and AI in a world where online content is written by AI, hallucinations and all. This presentation steps through existing published lesson plans for teaching the frames (with citations and links!), and applies these lesson plans to teaching AI.



ACRL Framework: A Long History, Lots of Lesson Plans

- Predecesor: Information Literacy Competency Standards for Higher Education (2000)
- Adopted in 2016
- Set up dispositions for students: information literacy as a process



DJ Palyeado, CC BY-SA 4.0 <https://creativeco mmons.org/licenses /by-sa/4.0>, via Wikimedia Commons



Misinformation, content farms, and artificial intelligence

The ACRL Framework was designed to address voluminous information and misinformation: "[T]he rapidly changing higher education environment, along with the dynamic and often uncertain information ecosystem in which all of us work and live, require new attention to be focused on foundational ideas about that ecosystem." (ACRL, 2016, 7).



mikemacmarketing, CC BY 2.0 <https://creativecommons.org/license s/by/2.0>, via Wikimedia Commons



The ACRL Framework

The Frames:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration



WordArt.com, CC0, via Wikimedia Commons



Cookbooks & Toolboxes = Lesson Plans Galore

							My Account
Advancing learning Transforming scholar Association of College & Research Libraries A division of the American Library Association	rship				Advancing learning Transforming scholarship	ACRL Framework for Information Literacy Sandbox	SEARCH: RESOURCES CONTRIBUTORS SITE
ACRL / LibGuides / ACRL Framework for Information Literacy Toolkit / Tool	ikit				Association of College & Research Libraries A douten of the American Library Association	A platform and repository for sharing Framework materials	Q, GO »
ACRL Framework for Information Litera		Search this Guide Search			Welcome Resources Cor	tributors About Help Center	
Toolkit Finding Time to Engage the Framework The Framew	work's Structure Foundations of the Framework Strategies for Using	the Framework					
Welcome Using the Toolkit Components ACRL Resources	s	Essential Links			YOUR RESOURCES	Welcome	
The ACRL Framework for Information Literacy Toolkit was initially	I launched in 2017 by the ACRL Framework for Information Literacy	ACRL Framework for information Literacy for Weber Education			Contribute a Resource		
The Framework Toolkit is intended as a freely available profession	and development resource that can be used and adapted by both				Resources	upgrading our site beginning March 1st.	ork for information Literacy Sandbox, we will be
individuals and groups in order to foster understanding and use of	of the ACRL Framework for Information Literacy for Higher Education	THE CHITI	ICAL THE	NKING		As this migration takes place, we expect some temporary lapses	in functionality. While all our current resources will be
You can dip into these materials on your own, set a regular time to explore them with a colleague, schedule a brown bag session with grown, or choose another annorach that suite your peeds. All materials that are prepared for and directly part of the toolkit are made		ADOLT SALL	KDAA	is not required.	migrated to the new site, there may be some changes in existing features. Thank you for your patience as we strive to ensure that the Sandbox remains a valuable resource for information literacy instructors, researchers, and learners!		
available under a Creative Commons Attribution-Noncommercial	(CC-BY-NC) license.	ABOUT SUUI	ILES COU	NDUU.	a contributor, create an	Questions? Email and candbox@rmail.com	
Want to hear what other librarians think about the Framework? To	ake a look at the ACRL's Spotlight on Scholarship series.					guiainna: Emai achainnack@gmai.com	
Looking for lesson plans and instructional materials to use in you Sandbox.	Ir classroom? Check out the ACRL Framework for Information Literat		edited by Sarah E.	Morris	g in here:	Welcome to the ACRL Framework for Information Literacy Sandbox	, a place to discover ways to use the Framework for
						Information Literacy for Higher Education in instructional settings, a	s well as share your own activities and teaching
Finding Time to Engage the Framework	The Framework's Structure		JI			Searching is open to everyone - a user login is not required.	
						To get started searching, click on the Resources tab to browse for r For further information, see "Searching and Browsing" in the Help C	esources or use the search box at the top of the page. Center.
					На	Create an account to contribute your own resources and enrich the	Sandbox.
					estion is for testing or not you are a		
	· · · · · · · · · · · · · · · · · · ·				visitor and to prevent ed spam submissions.		
Foundations of the Framework	Strategies for Using the Framework				I'm not a robot		
	(m. 41)			1000	-CAPTONA		
					frage tare		
					t new password		
					e a contributor		
News Upcoming Events							
RSS Feed Error							
Feed							

Last Updated: Jun 13, 2019 11:29 AM 🕴 URL: https://acrt.libguides.com/tramework/toolkit 🛛 🖨 Print Page

Login to LibApps



Strategies for teaching artificial intelligence in the classroom

- 1. Acceptance: Al is here to stay 1956
- 2. Identify why and how students are likely to use AI in your classroom
- 3. Deploy active learning activities to encourage the ethical use of AI
- 4. Use HuggingChat: Does not require login



Mam'Gobozi Design Factory (MDF), CC BY-SA 4.0 <https://creativeco mmons.org/licenses/ by-sa/4.0>, via Wikimedia Commons



Hugging Chat

BuggingChat v0.7.0 Making the community's best AI chat	Current Model Mistralai/Mixtral-8x7B-In	struct-v0.1	
models available to everyone.		③ Website	
Examples			
Write an email from bullet list	Code a snake game	Assist in a task	
Search web ④			
Ask anything		4	
Model: mistralai/Mixtral-8x7B-Instruct-v0.1 · Generated con	itent may be inaccurate or false.		



Authority is Constructed & Contextual & Information Creation as a Process

- ZODIAC Test (Reagan, 2024a).
- Hidden Layer: Intellectual Privacy and Generative AI (Hartman-Caverly, 2023).
- Card games to teach how machine learning algorithms work (Bell & Talboom, 2023)



Rigo Peter, CC BY 4.0 <https://creativecommons.o rg/licenses/by/4.0>, via Wikimedia Commons



Searching as Strategic Exploration & Research as Inquiry

- Search tools comparison (Fitzgibbons, 2023).
- Teaching prompt engineering with an analogy to shooting pool (Nesbitt & Stilwell, 2023).
- The Case of the Unsolved Hallucination (Reagan, 2024a).



Artificial intelligence generated images of hands made by Dall-E 2 and featuring hallucinated extra fingers.



Scholarship as Conversation & Information Has Value

- Al Prompt Engineering (Reagan, 2024d)
- Building Confidence in using AI to Generate Citations/Humans v. AI (Reagan, 2024b)
- AI & Personal Information: An Investigation(Reagan, 2024c)



Riemogerz, Public domain, via Wikimedia Commons



Disclaimer: Digital Divide & Al Divide



Alan Turin9, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0 >, via Wikimedia Commons



Think-Pair-Share

Think of a lesson plan you commonly implement in your IL classroom. Think of strategies to connect the lesson to AI literacy. Bonus: How might you incorporate AI into the lesson?



References

- Association of College and Research Libraries (ACRL) (2016). ACRL Framework for information literacy for higher education. Chicago, IL: American Library Association. https://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/infolit/framework1.pdf
- Bell, M. and Talboom, L. (2023). More Than Just Algorithms: A Machine Learning Club for Information Specialists. In The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries (pp. 61-70). Association of College and Research Libraries.
- Fitzgibbons, M. (2023). Concordia University Library, April 2023. Search tools comparison (jigsaw group activity). ACRL Sandbox. https://sandbox.acrl.org/library-collection/search-tool-comparison-activity
- Fonseca, T., & King, M. (2000). Incorporating the Internet into Traditional Library Instruction. Computers in Libraries, 20(2), 38.
- Hartman-Caverly, S. (2023). Hidden layer: Intellectual privacy and generative AI. ACRL Sandbox. https://sandbox.acrl.org/system/tdf/resources/HiddenLayer_LessonPlan_CCBYSA_HartmanCaverly_2023.pdf
- Hugging Face. (n.d.). HuggingChat. Retrieved March 15, 2024 from. https://huggingface.co/chat/
- Nesbitt, T. and Stilwell, K. (2023, October 4-6). Al and the Meta Poster [Conference presentation]. Georgia Library Conference, Athens, GA, United States. https://www.canva.com/design/DAFtJUH6kXU/IBErazVEjP_thvjN5ZoQOw/view
- Reagan, K. (2024a). The ZODIAC Test. https://georgiasouthern.libguides.com/informationliteracyai
- Reagan, K. (2024b). The Unsolved Case of the Hallucination. https://sandbox.acrl.org https://georgiasouthern.libguides.com/informationliteracyai
- Reagan, K. (2024c). Building citations with AI. https://georgiasouthern.libguides.com/informationliteracyai
- Reagan, K. (2024d). AI & Personal Information Commodification. https://georgiasouthern.libguides.com/informationliteracyai
- Reagan, K. (2024e). Engineering AI prompts to develop keywords. https://georgiasouthern.libguides.com/informationliteracyai



Continuing the Conversation

We are interested in collecting more lesson plans using the ACRL Framework, which are easily adaptable to teaching artificial intelligence. If you have any to share, feel free to email us at kreagan@georgiasouthern.edu or wrandtke@georgiasouthern.edu to share.



AI-Powered Learning: Blending AI with Active Learning in the Information Literacy Classroom

Kevin Reagan and Wilhelmina Randtke

Georgia International Conference on Information Literacy

April 19th, 2024

(†)