

Dina Vyortkina

**AI IN EDUCATION:  
CHALLENGES AND OPPORTUNITIES**



**You**

write a brief poem praising FCRR



**You**

write a poem praising Florida Center for Reading Research (FCRR) located at FSU, Tallahassee, for their research, innovation, outreach



**You**

add more about advancing literacy and reading



**You**

make it shorter focusing on reading, innovation, research, outreach



**ChatGPT**

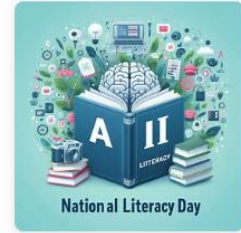
In Tallahassee's academic embrace,  
FCRR shines with boundless grace.  
Innovating in reading's realm,  
Their research, a steady helm.

From decoding mysteries to comprehension's lore,  
FCRR uncovers, opens new doors.  
In classrooms, their impact takes flight,  
Empowering readers with pure delight.

Outreach echoes far and wide,  
Their passion, a relentless tide.  
From FSU's halls, their legacy gleams,  
A beacon for literacy's dreams.

AI was named the word of the year 2023 by the Collins Dictionary

April 19, 2024—AI Literacy Day



"National AI Literacy Day April 19"

Designer

Powered by DALL·E 3

# At a Glance

- AI or not AI?
- AI exploration
  - AI glossary
  - AI benefits
  - AI concerns
- FSU's state of AI affairs
- AI in higher ed and K-12
- Reading and AI
- MS Copilot
- Prompt engineering
- From AI exploration to AI transformation
- Q&A

# Support Resources

## Online library



AI\_FCRR\_Apr2024

• Dina Wyorkina, *AI in Education: Challenges and Opportunities* (FCRR, April 17, 2024)

**AI glossaries**

- [Professor John McCarthy - Artificial Intelligence](#)
- [Glossary: artificial intelligence](#) (Council of Europe)
- [AI Glossary](#) (NIST)
- [AI Cheat Sheet](#) (i-m-a-n-brief)
- [EU AI Act: Terminology and Taxonomy for Artificial Intelligence | Strategy Europe's digital future](#)
- [7 Types of Artificial Intelligence](#)

**History of AI**

- [What is AI? The Human's Handbook to Computers that Think](#)
- [The history of Artificial Intelligence: Science in the News](#) (Harvard University)
- [History of Artificial Intelligence - Artificial Intelligence](#) (Council of Europe)
- [What is the history of artificial intelligence? \(UCL\) Textbox](#)
- [Infographic: Visualising the AI Revolution in One Infographic](#)

• [AI Timeline](#)

**AI in business and industry**

- [The impact of AI on the workplace: Evidence from OECD case studies of AI implementation](#)
- [AI Case Studies Articles and Reports](#)
- [Supplemental evidence on the productivity effects of generative artificial intelligence](#)
  - [Study Finds ChatGPT Boosts Quality For Student Business Communications](#)
- [Economic potential of generative AI | McKinsey](#)
- [AI and the automation of work](#)
- [The State of AI US Insights](#)
- [AI by MorningBrevi](#) (collection of resources)
- [LinkedIn: Open ChatGPT Releases Job Postings, but is Banned 21-Fold Since November](#)
- [AI \(OpenStax\): Technology \(collection of resources\)](#)
- [15 Artificial Intelligence projects from Deloitte: Practical cases of applied AI](#)
- [Generative AI is Disrupting Remote Work in the Future of Work Debate](#)
- [Gen AI Use cases by type and industry | Deloitte US](#) (40 use cases)

**Finance and Banking**

- [How AI is transforming a lending partner](#)
- [The Impact of Generative AI in Finance](#) (Deloitte US)

**Healthcare**

- [No longer science fiction, AI and robotics are transforming healthcare](#)
- [AI/IS Brings Generative AI to Medical Transcription Apps](#)
- [Global Health Crisis Lures AI to Promote Growth in AI Sector](#)
- [Study: Leveraging AI in Nursing Education. An Interview with Marlene Baier and Theresa Raphael-Grimm - AACN](#)

**Police work**

- [Los Angeles Police to Use AI Analysis of Body Cam Footage](#)
- [https://www.riepolicyjournal.com/abstracts/artificial-intelligence-applications-law-enforcement-overview/](#)
- [https://dailystar.com/uk/happens-when-police-use-ai-to-read-and-quantify-crime/](#)

**Food industry**

- [Gen Food: Cakes are Underwritten, Our AI Powered Robots Fill the Gap](#)
- [The Future of AI and the Food Industry](#)
- [How the Food Industry Can Benefit From AI](#)

**AI in entertainment and media**

- [The Impact of Generative AI on Hollywood and Entertainment](#)
- [Generative AI tools in media and entertainment | Deloitte Insights](#)
- [Artificial Intelligence, Machine Learning, and The Future of Entertainment](#)

**AI in sports**

- [Vinnycom Launches digital Coaching Solution Powered By Artificial Intelligence](#)
- [AI in Sports and Training](#)
- [How AI is Powering the Future of Sports?](#)
- [7 Ways ChatGPT AI Applications in the Sports Industry](#)
- [AI in Sports: How are Sports Being Shaped by Artificial Intelligence](#)
- [USA Artificial Intelligence: Enhancing Player Performance](#)
- [How ChatGPT might be able to help the world's poorest and the organisations that work with them](#)

**AI in Higher Education**

- [Artificial Intelligence and the Future of Teaching and Learning](#) (US DOE)
- [Guidelines for responsible AI in education and research](#) (UNESCO)

# AI or Not AI?

- Remote controlled helicopter
- Electric toothbrush
- Autonomous car
- Facial recognition
- Smart thermostat
- Virtual assistants (Siri, Alexa, etc.)
- Robot vacuum (Roomba, Shark)
- Calculator
- Automatic sliding doors



# AI or Not AI?



**AI or not AI?**  
Please drag and drop.

Items	AI	Not AI
Remote controlled helicopter		
Electric toothbrush		
Autonomous car		
Facial recognition		
Smart thermostat		
Virtual assistants (Siri, Alexa, etc.)		
Robot vacuum (Roomba, Shark)		
Calculator		
Automatic sliding doors		

# AI or Not AI

## AI

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## Not AI

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AP photo

**Elementary school teachers picket against use of calculators in grade school**  
The teachers feel if students use calculators too early, they won't learn math concepts

## Math teachers protest against calculator use

By JILL LAWRENCE

"My older kids don't pay any strate," he said. "Teachers are

# AI

A set of sciences, theories, and techniques with the purpose of reproducing by a machine the cognitive abilities of a human being

# AI Glossary

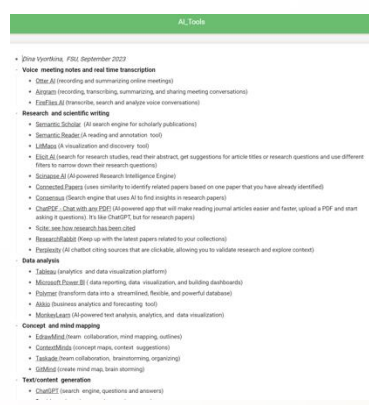
- Machine learning
- Large Language Models (LLM)
- Generative
- Prompt engineering
- AI hallucinations
- Bias



Available from <https://dataedo.com/cartoon/we-need-to-be-innovative>

# AI

- Not a new phenomenon
- Generative AI
  - Many tools (text, video, images, data)
- Benefits
- Concerns





Can a neural network learn to recognize doodling?

Help teach it by adding your drawings to the [world's largest doodling data set](#), shared publicly to help with machine learning research.

Let's Draw!

<https://quickdraw.withgoogle.com/>

# FSU's State of AI Affairs

- No FSU-wide policy
- FSU's Turnitin will not detect AI
- AI information sharing group on MS Teams
- AI @ FSU (ITS)
- AI chatbot "Ruby" (still in training by ITS)
- MS Copilot available to all
- Zoom AI companion
- Info sessions for faculty and students



# AI Detection

- FSU's version of Turnitin does not detect AI
- AI detection (overall) algorithms
  - Vocabulary choices
  - Syntax
  - Grammar
  - Text perplexity
- \*Submitting student work to AI detection tools (might be a violation of intellectual property rights)\*

## AI detection and plagiarism (deemed not to be too effective :))

- [PROOF POINTS: It's easy to fool ChatGPT detectors](#)
- [Time for Class 2023 Report Shows Number One Faculty Concern: Preventing Student Cheating Via AI](#) (full report [here](#))
- [OpenAI discontinues its AI writing detector due to "low rate of accuracy" | Ars Technica](#)
- [AI detection software](#) (list of 10; 2023)
- [16 of the best AI and ChatGPT content detectors compared](#) (a list of 16; 2023)
- [WinstonAI](#)
- [ZeroGPT](#)
- [AI Content Detector](#)
- [AI Detector for ChatGPT, GPT4, Bard & More](#)
- [GPT Zero](#)

## AI-Detection Tools

No detection tools for identifying AI-generated text are endorsed by FDA or FSU. If an instructor decides to use such detectors, then they are advised to use multiple detectors (not a single tool in isolation). Best practices for assessing the origins of text remain the same: Timely student-instructor dialogue and evaluation of students' comprehension/mastery regarding assignment submissions. Refer to the "[Allegation Discussion Guide for Faculty](#)" (PDF) for more information.

# AI Concerns

- Bias
- Ethics
- Copyright
- Academic integrity violations

## - Concerns about AI

- [Hands-On AI Projects for the Classroom: A Guide on Ethics and AI](#)

## - Challenges and limitations of AI

### - *Ethics*

- [Why You Need an AI Ethics Committee](#)
- [Advisory Council for the Institute for Ethics in AI at Oxford University](#)

### - *Security*

- [AI Security Initiative](#) (Berkeley)
- [ChatGPT ban: Which countries will follow Italy in blocking AI giant](#)

### - *Bias*

- [When it comes to employment decisions, it's not just AI that may have biases - Route Fifty](#)
- [Create critical awareness of AI apartheid](#)
- [Women could be hit hardest by AI job replacement](#)

### - *Cheating and plagiarism*

- [How to Tackle AI—and Cheating—in the Classroom | WIRED](#)
- [Can creatives protect their work from generative AI?](#)

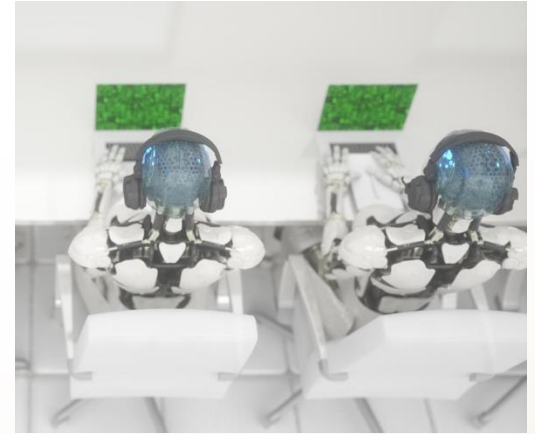
# E.D.I.T.

- **E**valuate the content for language, facts, and structure
- **D**etermine accuracy and corroborate sources
- **I**dentify biases and misinformation
- **T**ransform the content to reflect any of your own adjustments

From *[The AI Classroom: The Ultimate Guide to Artificial Intelligence in Education” for the Higher Education Environment](#)*

# AI in HE

- Teaching and learning
- Student support
- Research productivity
- Institutional effectiveness
- Fundraising and donor relations
- Rankings ([WURI 2024](#)) and [Best Global Universities for Artificial Intelligence](#) (U.S. & News Report)





# University's Responsibility

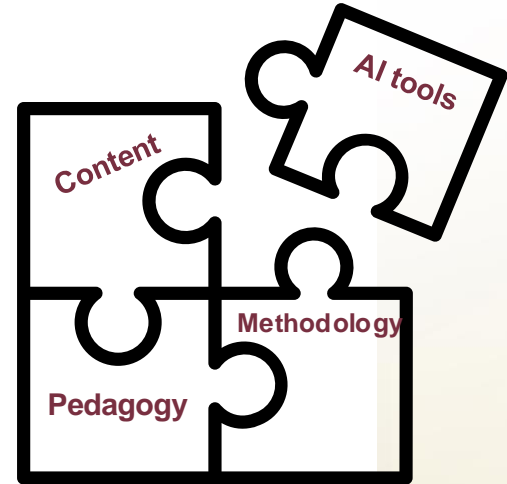
1. Support AI-literacy
2. Equip staff and faculty to support students in using AI effectively and ethically
3. Adapt teaching and assessment
4. Ensure academic rigor and integrity
5. Collaborate to share best practices related to AI

UK Russell Group (2023)

# AI in Reading

## - Reading

- [The Science of Reading Meets AI: Empowering Young Learners through Amira Learning](#) (Amira Learning is an AI tool that uses personalized real-time assessment and feedback to help students with oral reading fluency, vocabulary, and comprehension.)
  - [Amira Learning](#)
- [Measuring Reading Comprehension Is Hard. Can AI and Adaptive Tools Help?](#)
  - [Quill](#)
- [Grant Update: Impact of AI tools on reader comprehension](#)
- [Artificial Intelligence \(AI\) Innovation Enhance Children's Reading Engagement and Attainment](#)
- [Reading bots: The implication of deep learning on guided reading](#)
- [8 Ways to Use AI to Teach ESL Reading](#)
- [20 AI use cases to make money for Elementary School Reading Aide](#)
- [AI tools and use cases for reading](#)
  - [70 AI tools for reading](#) (scroll down)
- [AI Meets the Science of Reading and Writing Skill Development](#)
  - [Ello](#)
  - [Ready4Reading](#)
- [ReadAheadAI](#)
- [This free AI tool is helping kids become better readers](#) (youtube video)
  - [Microsoft Reading Coach](#)
- [Lexia® Core5® Reading](#)
- [Kids Are Jumping Multiple Reading Levels](#) (AI-powered tutor)





# AI Content Sources

- Government publications
- K-12 AI curricula
- Special reports
- Digests related to technology in higher education and K-12 technology
- Tool kits
- Organizations, societies, associations
- Benchmarked universities known for their work in AI
- Benchmarked school districts known for their work in AI
- AI competencies
- AI-related publications
- AI books covering AI in K-12 or higher education
- Conferences dedicated to AI or having AI as a thread

# AI Tools and Their Selection

- Fit for purposes
- Intended audience
- Compliance with data security, accessibility, FERPA, COPPA, and other
- Usability
- Availability of support resources or guides
- Availability of free accounts and trial periods
- Cost

## - Selecting AI tools

- [DV's collection of AI tools \(Oct 2023\)](#) (over 70 tools in many categories)
- [DV's collection of AI tools for K-12](#) (teachers and students)
- [AI Tools for Teachers | Edutopia](#)
- [10 Best Free AI Tools for Teachers – Making Students Excited about Education](#)
- [30 AI tools for the classroom](#)
- [AI Educator Tools](#)
- [5 questions to ask when evaluating AI edtech tools - SmartBrief](#)
- [Control Alt Achieve: Rubric for Evaluating AI Tools for Schools](#)

# MS Copilot



- FSU license
- Data security
- Training resources

#### Tutorials

- [Streamlining Your Work with Microsoft Copilot Online Class | LinkedIn Learning, formerly Lynda.com](#) (video; Streamlining your workflow, generating ideas and summarizing data, solving common work problems, planning itineraries, scheduling, and communicating with others; 34 mins)
- [Learning Microsoft 365 Copilot Online Class | LinkedIn Learning, formerly Lynda.com](#) (video; How to use Copilot in other Microsoft applications such as Word, PowerPoint, Excel, Teams, Outlook; 34 min)
- [Get Started with Copilot for Microsoft 365](#) (Text and video format; 3 Modules: 1) Introduction to Copilot for Microsoft 365, 2) Explore the possibilities with Copilot for Microsoft 365, 3) Optimize and extend Copilot for Microsoft 365; 1 hour, 49 min)
- [A beginner's guide to Microsoft 365 Copilot](#) (video; Copilot overview, copilot in word, copilot in PowerPoint, Copilot in excel, copilot in excel, copilot in teams; 2 hours, 10 min)
- [Microsoft Copilot: Your Ultimate Excel Help](#) (video; Copilot in Excel; 22 min)
- [Microsoft Copilot in Excel: Here's How To Use It](#) (video; Copilot in Excel; 10 min)
- [How to Use Microsoft Copilot in PowerPoint](#) (video; Copilot in PowerPoint; 9 min)
- [Microsoft Copilot in PowerPoint: Tutorial and Tips for Success](#) (video; Copilot in PowerPoint; 24 min)
- [Copilot in Teams bootcamp | Mastering Microsoft 365 Copilot Products](#) (video; Copilot in Microsoft Teams; 15 min)
- [How do Microsoft use Copilot in Microsoft Teams Meetings](#) (video; Copilot in Microsoft Teams; 8 min)
- [How to use Microsoft Copilot in Word - Full Tutorial](#) (video; Copilot in Microsoft Word; 15 min)
- [5 Ways to Use Copilot in Word to Make Your Life More Productive](#) (video; Copilot in Microsoft Word; 10 min)
- [How to Use Microsoft Copilot in Outlook](#) (video; Copilot in Microsoft Outlook; 15 min)
- [7 Essential Copilot AI Tips for Microsoft Outlook Users](#) (video; Copilot in Microsoft Outlook; 9 min)

#### Prompt engineering

- [What is AI prompting](#) (text format; Copilot Prompt Engineering from ITS Service Desk)
- [Microsoft Copilot: Improve your Prompts](#) (video; Copilot Prompt Engineering; 15 min)
- [Prompt Engineering, the Complete Guide](#) (website; 12 min read)

# Prompt Engineering

- Precision
- Context
- Emotions

# Play with It!

Suggest app names

Generate five catchy names for a productivity app designed to help users manage their tasks and time efficiently

# What's Next?

- Building an *AI Agility* Framework
- Curating resources
- From *AI exploration* to *AI transformation*
- How is your field responding to AI?
  - Learning
  - Teaching
  - Research
  - Publishing
  - ???



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