



SCHOOL OF
PROFESSIONAL STUDIES
CENTER FOR TEACHING AND LEARNING



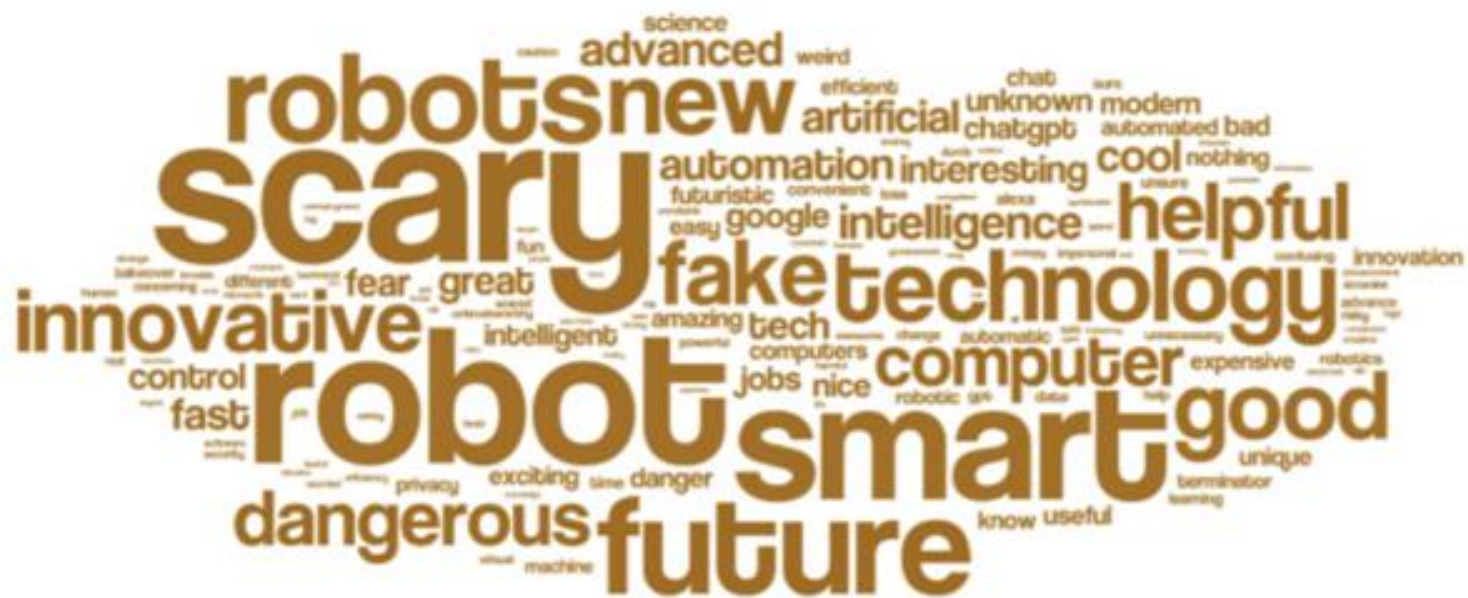
Finding the Yin-Yang in Faculty Development: Balancing AI-Centered with Student-Centered Learning



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Mindful Minute





☰ Active poll



Join at
slido.com
#2791 517



After the Mindful Minute, choose which best describes how you Feel?

Slower Breath Rate/Calm

☐ 0%

Improved Sense of Focus/Clarity

☐ 0%

Decreased Muscle Tension/Stress

☐ 0%

All of the Above

☐ 0%



Remember that feeling...

The state of AI in 2023: Generative AI's breakout year

www.mckinsey.com

A year of **explosive growth** in Generative AI

Looked like **science fiction** a year ago

[Another] **disruption** in education

→ COVID-19 Pandemic → Enrollment Cliff → **Generative AI**

Waterfall Pressures



All of Higher Education Ecosystem – Impacted





Drowning... Overwhelmed



New Apps
AI-Integrations
Media / News
Social Media Posts

Credit: Chris Goodall

Apps

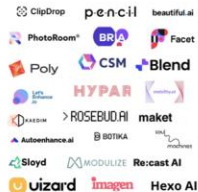
THE *GENERATIVE AI* STARTUP LANDSCAPE



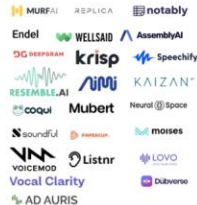
TEXT



IMAGE



AUDIO



CODE



CHATBOTS



VIDEO



ML PLATFORMS



SEARCH



GAMING



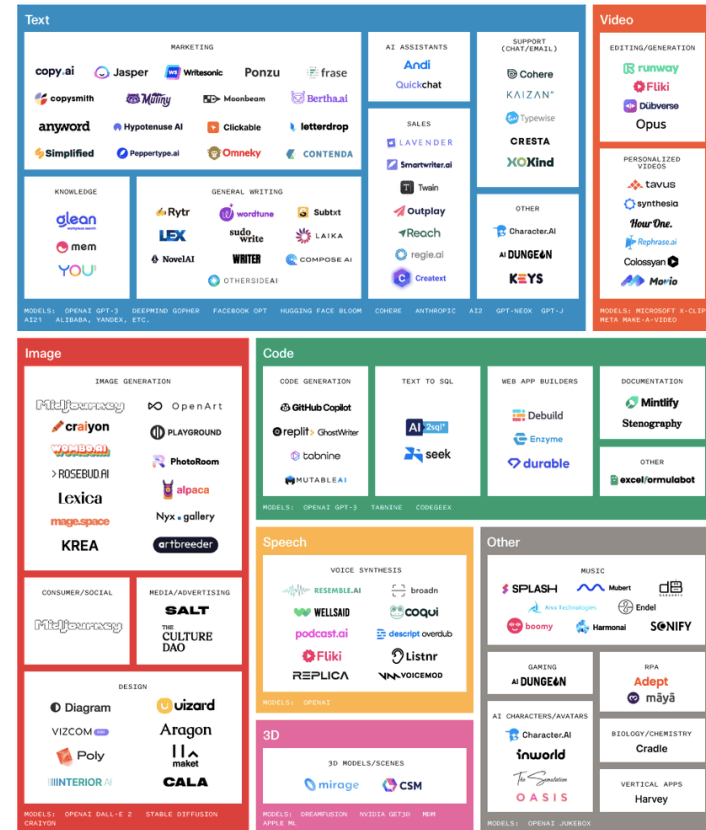
DATA



The Generative AI Application Landscape v2



A work in progress



March Madness Newness Uncertainty Fear



The Chronicle of Higher Education
<https://www.chronicle.com/article/chatgpt-is-alread...>

ChatGPT Is Already Upending Campus Practices. ...

Mar 6, 2023 — Higher education, rarely quick about anything, is still trying to comprehend the scope of its likely impact on teaching — and how it should respond. ChatGPT ...



The Conversation
<https://theconversation.com/chatgpt-is-the-push-high...>

ChatGPT is the push higher education needs to rethink ...

Mar 12, 2023 — ChatGPT is the push higher education needs to rethink assessment ... Students can reflect on articles produced by ChatGPT which have fabricated references ...



Forbes
<https://www.forbes.com/michaelnietzel/2023/03/20>

More Than Half Of College Students Believe Using ...

Mar 20, 2023 — Over half of college students (51%) believe that using artificial intelligence (AI) tools like ChatGPT to complete assignments and exams is cheating.



MTSU Sidelines
<https://mtsusidelines.com/2023/03/07/chat-gbt-is-c...>

Chat GPT is changing the way colleges look at online ...

Mar 7, 2023 — Chat GPT, launched in November 2022 by OpenAI has made its way to college campuses and infiltrated MTSU. Students are using the advanced artificial intelligence ...



The Journal
<https://www.thejournal.ie/chat-gpt-college-assessmen...>

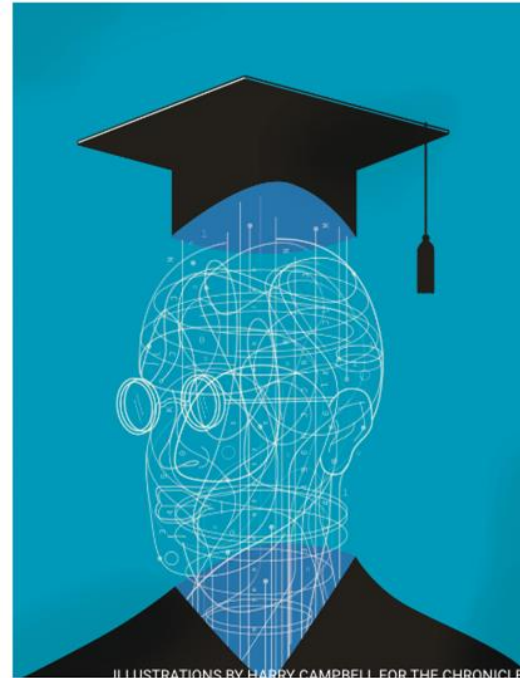
With the rise of ChatGPT, how are universities planning on ...

Mar 11, 2023 — The software can produce essays on almost any topic in seconds, causing worry among colleges about academic integrity

Changing Narrative: March to October 2023

May 2023

THE CHRONICLE
OF HIGHER EDUCATION



How Will
Artificial
Intelligence
Change
Higher Ed?

ChatGPT is just the
beginning. 12
scholars and
administrators
explain.

Changing Narrative: March to October 2023

October 2023



HOME >> CLASSROOM

OCT
20
2023

CLASSROOM

EDUCAUSE 2023: How AI Could Impact Student Success in Higher Ed



Artificial intelligence can support adaptive learning, but institutions should be mindful of how data is used.

Changing Narrative: March to October 2023

October 2023



Register

Login

Become a Member

Find A Job



October 27, 2023

Prioritize ChatGPT Proficiency to Enhance Teaching and Learning

Educators have a responsibility to think beyond cheat-proof assignments, teaching students to use AI proficiently and creatively in the classroom, writes Amy Kristof-Brown.

By Amy Kristof-Brown

Calmness
Hopefulness
Stability



Anxiety
Pressure

* Hot-off-the-Press *

November 2023

ChatGPT

Bing

Bard

Claude

Meet Grok



WATCH LIVE

TECH

Elon Musk debuts 'Grok' AI bot to rival ChatGPT, others

PUBLISHED SUN, NOV 5 2023·11:30 AM EST UPDATED SUN, NOV 5 2023·11:31 AM EST



Rebecca Picciotto
@BECCPICC

WATCH LIVE

KEY POINTS

- xAI, Elon Musk's new AI venture, launched its first AI chatbot technology named Grok.
- The prototype is in its first two months of training and is only available to a select group of users before a wider release.
- Musk is positioning xAI to compete with OpenAI, Inflection, Anthropic and others.



Remember that feeling...

CTL

Rapid Response

**Faculty
Development
Strategy**

Continuous Support

- Fast
- New
- Changing
- Hard

Reducing

- Uncertainty
- Fear
- Anxiety



**Counter
Pressure**

**Waterfall
Pressure**

**Emerging
Generative AI**

Continuous Pressure

- Fast
- New
- Changing
- Hard

Increasing

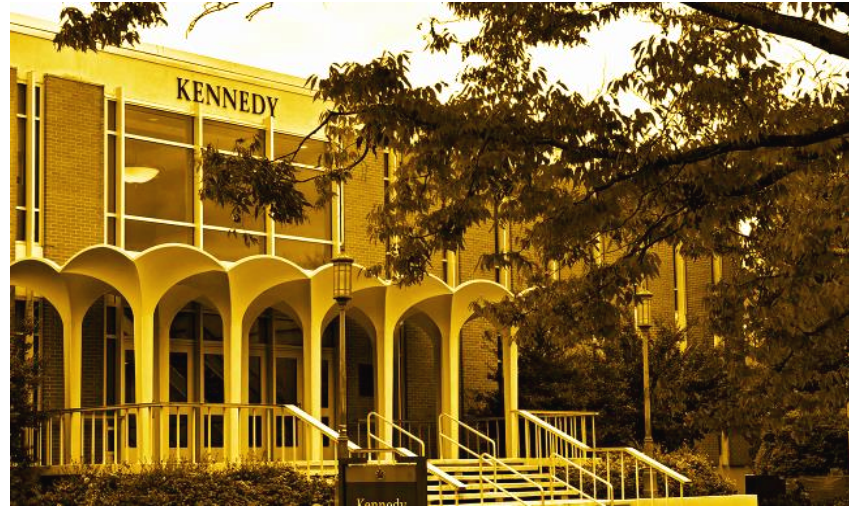
- Uncertainty
- Fear
- Anxiety

25 Years: Faculty Success → Student Success



**SCHOOL OF
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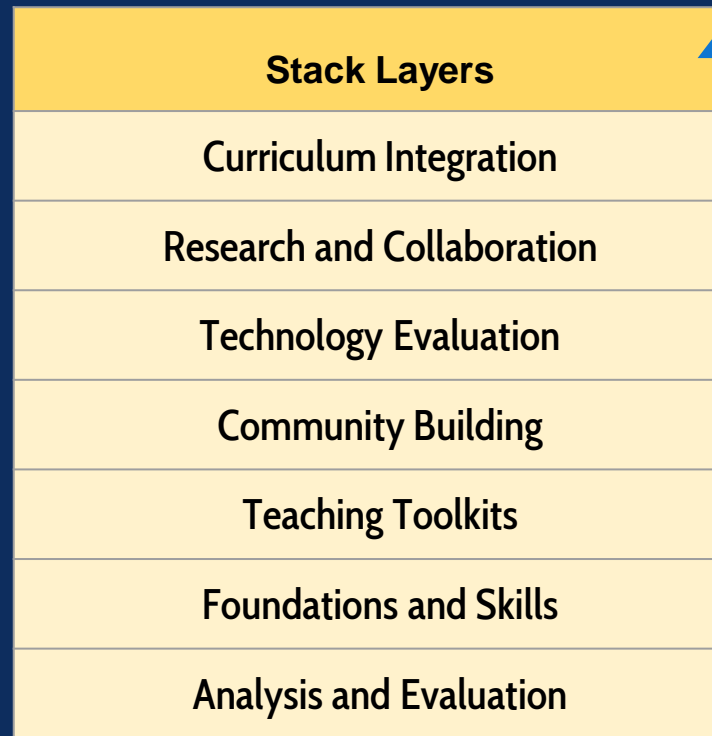
- 25 Years developing university teaching and learning culture for faculty excellence and student success
- Leadership and support function



Faculty Development Stack for Generative AI

Campus strategy for designing, implementing, and managing faculty development initiatives in higher education

Towards an AI-Ready Campus!



Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits

Foundations and Skills

Analysis and Evaluation



Pulse of the Campus on Generative AI



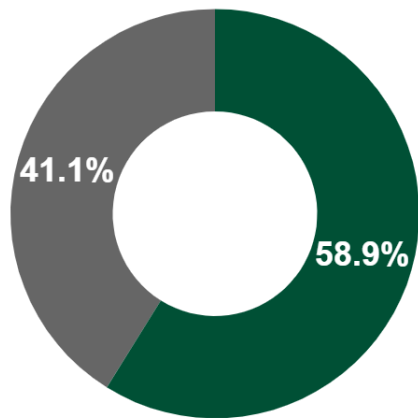
Intake Survey: April 4 to 24, 2023

Pulse of the Campus

April 4 to 24, 2023
149 responses

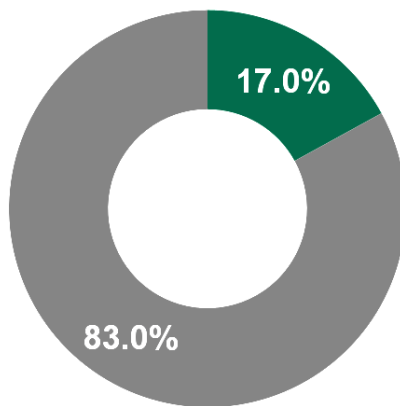
Used ChatGPT

● Yes ● No



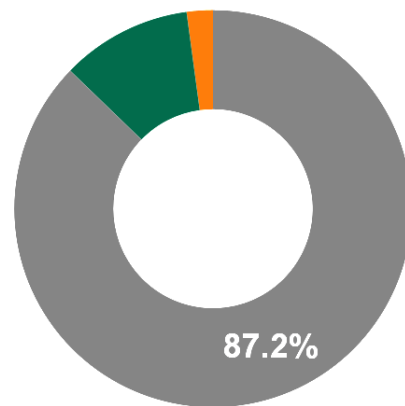
ChatGPT Skills in General

● Intermediate ● Beginner



ChatGPT Skills in Teaching

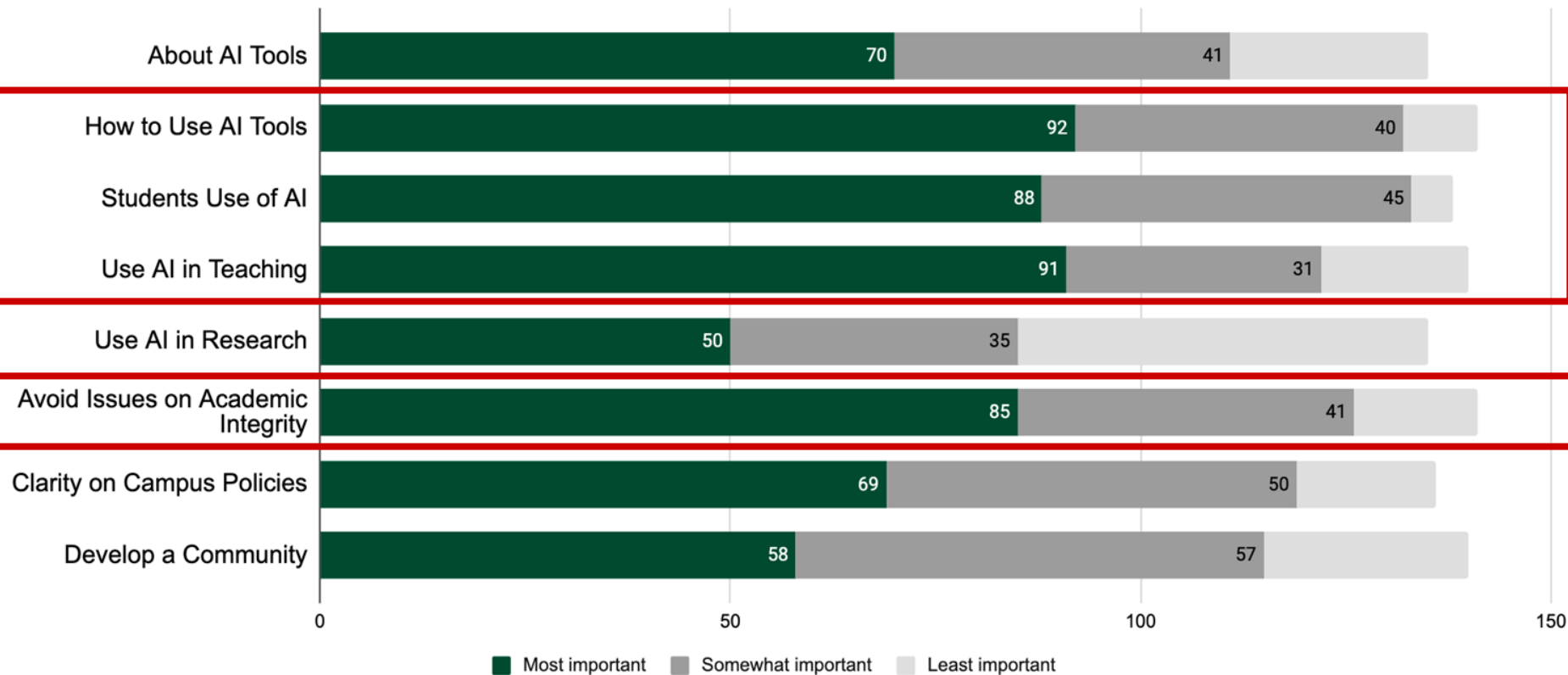
● Beginner ● Intermediate ● Advanced



April 4 to 24, 2023

149 responses

What do you want to learn about AI?



Connect to Campus Partners

- College Faculty
- Language Resource Center
- Library
- Student Accountability & Conflict Resolution

Listening, Brainstorming, Planning to Serve Campus Needs

Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits



Foundations and Skills



Analysis and Evaluation



Teaching Innovation Workshops

- Getting Started with ChatGPT
- Student Study Skills with ChatGPT
- Student Writing Skills with ChatGPT
- Syllabus and Classroom Communication on AI Tools

Study Skills with Generative AI

Generating Study Materials

1. Study Guides for Conceptual Understanding
2. Study Guides that Map to Learning Objectives
3. Vocabulary Review
4. Concept Maps
5. Practice Assessments
6. Case Studies
7. Application Problems

Welcoming A.I. as Study Buddy

1. Concept Explainers
2. Process Explainers
3. Worked Examples
4. Learning Conversations with the A.I.

Prompt Crafting - Prompt Engineering Cards

Example Prompts

Example 1:

Generate a study guide for a 1000 level psychology course on adolescent brain development. Format as an outline .

Instruction

Context

Input Data

Output Indicator

Example 2:

Write directions for a statistics project on hypothesis testing as a table with a check off list of action items

Instruction

Context

Input Data

Output Indicator

Project Management

Generate Project Plans

- Generate a project plan for a project on **[INPUT DATA]** that is due on **[INPUT DATA]**. Include the following requirements in the plan **[INPUT DATA]**. Include a timeline and group roles for **[#]** students.

Manage Progress and Timelines

- Create a timeline for a project on **[INPUT DATA]** due on **[INPUT DATA]** with the following requirements **[INPUT DATA]**.

Develop Group Roles

- Generate group roles for **[INPUT DATA]** for a project on **[INPUT DATA]** with the following requirements **[INPUT DATA]**. Build group roles based on the following student strengths **[INPUT DATA]**.
 - EX: Generate group roles for Jordan, Heidi, Jules, and Aubrey for a project on the effects of AI in education with the following requirements. Build group roles based on the following student strengths.

Requirements: Literature review, 10 page, double spaced research paper, oral presentation with google slides.

Student strengths: Jordan: Content Knowledge, Jules: Project management, Heidi: Writing, Aubrey: Technology

Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits



Foundations and Skills



Analysis and Evaluation



Teaching Guides

AI for Teaching and Learning



1. [Opportunities for Teaching with AI](#)
2. [Supporting Student Study Skills with AI](#)
3. [Supporting Student Writing with AI](#)
4. [Classroom Strategies to Promote Responsible Use of A.I.](#)
5. [How AI Tools Like ChatGPT Work](#)
6. [Syllabus Guidelines for the Use of AI Tools](#)
7. [Classroom Communication on the Use of AI Tools](#)

Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits



Foundations and Skills



Analysis and Evaluation



Free Professional Certificate Course (Summer)



***Optional* Digital
Badge with
Capstone (\$49)**

<http://professional.uncc.edu/AICertificate>

Online Professional Certificate



1. Prompt Engineering
2. Evolution of Generative AI Tools
3. Self-Directed Learning
4. Project-Based Learning
5. Ethical Implications

One-Stop-Shop Website

Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits



Foundations and Skills



Analysis and Evaluation



AI ACROSS THE CURRICULUM

SHAPING NEXT-GENERATION LEARNING EXPERIENCES
WITH GENERATIVE AI TOOLS THROUGH
INNOVATION IN AI LITERACY, DESIGN, AND ETHICS

TOWARDS AN AI-READY CAMPUS!

The Center for Teaching and Learning has launched a stream of programs and resources for faculty and instructional staff to support the increasing role that Generative Artificial Intelligence (AI) is playing in shaping teaching, learning, and classroom learning experiences.

TEACHING INNOVATION WORKSHOPS

Faculty workshops are available for faculty and instructional staff to learn strategies on integrating Generative AI into curriculum while promoting effective and responsible use.

Registration in workshops is required for all participants to attend and receive professional development credit. [View all workshops now available and open for registration.](#)

Getting Started with ChatGPT

Faculty Development Workshop

Overview AI Tools

Faculty Development Workshop

Student Study Skills with ChatGPT

Faculty Development Workshop

Stack Layers

Curriculum Integration

Research and Collaboration

Technology Evaluation

Community Building

Teaching Toolkits

Foundations and Skills

Analysis and Evaluation



One-Day AI institute for UNC Charlotte faculty, staff, and administrators!

CHARLOTTE
**AI INSTITUTE FOR
SMARTER LEARNING**

SHAPING NEXT-GENERATION LEARNING EXPERIENCES WITH
GENERATIVE ARTIFICIAL INTELLIGENCE (AI) TOOLS

MAY 18, 2023 | 8:00 AM - 4:00 PM | DUBOIS CENTER

 CENTER FOR
TEACHING AND
LEARNING



Institute Goals

1. **Build awareness and knowledge** to comfortably navigate the rapid wave of generative AI tools
2. **Convene as a community of educators** to explore how AI can help meet student success goals
3. **Hands-on practice** with generative AI tools
4. **“Listen” to the campus:** Stories, experiences, challenges, solutions
5. **Engage in bold discussions** to pave the way forward for the campus



**SCHOOL OF
PROFESSIONAL STUDIES**
CENTER FOR TEACHING AND LEARNING

Faculty Development Stack for Generative AI

Campus strategy for designing,
implementing, and managing
faculty development initiatives in
higher education

Stack Layers	Faculty Development Programs, Support, and Resources
Curriculum Integration	<ul style="list-style-type: none">• <i>Project-Based Learning</i>
Research and Collaboration	<ul style="list-style-type: none">• <i>SOTL Grant Support</i>
Technology Evaluation	<ul style="list-style-type: none">• <i>Student Technology Council</i>• <i>Learning Technology Incubation Hub</i>
Community Building	<ul style="list-style-type: none">• Faculty Institute• <i>Faculty Fellow</i>• <i>Faculty Affinity Groups</i>
Teaching Toolkits	<ul style="list-style-type: none">• Resource Website• Prompt Cards• Syllabus Language
Foundations and Skills	<ul style="list-style-type: none">• Faculty Workshops• Online Teaching Guides• Professional Certificate
Analysis and Evaluation	<ul style="list-style-type: none">• <i>Campus Advisory Committee</i>• Listening Sessions• Data Analysis

Taking the Lead as a Center for Teaching and Learning

Lead the change

Shape what's next for your campus

Education 4.0



AI-Centered Curriculum


- Generative AI
- Hyper-Personalized Learning
- Adaptive Learning Pathways
- AI-Integrated Systems
- AI-Powered Student Support Tutors

Hyper-Personalized Learning: Giving AI a Role

LEARNING: RESEARCH AND PRACTICE
2023, VOL. 9, NO. 2, 159–167
<https://doi.org/10.1080/23735082.2023.2261131>

 **Routledge**
Taylor & Francis Group

 OPEN ACCESS

 Check for updates

Towards social generative AI for education: theory, practices and ethics

Mike Sharples 

Institute of Educational Technology, The Open University, Milton Keynes, UK

ABSTRACT

This opinion paper explores educational interactions involving humans and artificial intelligences not as sequences of prompts and responses, but as a social process of conversation and exploration. In this conception, learners continually converse with AI language models and other human learners within a dynamic computational medium of internet tools and resources. Learning happens when this distributed human-AI system sets goals, builds meaning from data, consolidates understanding, reconciles differences, and transfers knowledge to new domains. Building social generative AI for education will require development of powerful AI

ARTICLE HISTORY

Received 12 June 2023

Accepted 16 September 2023

KEYWORDS

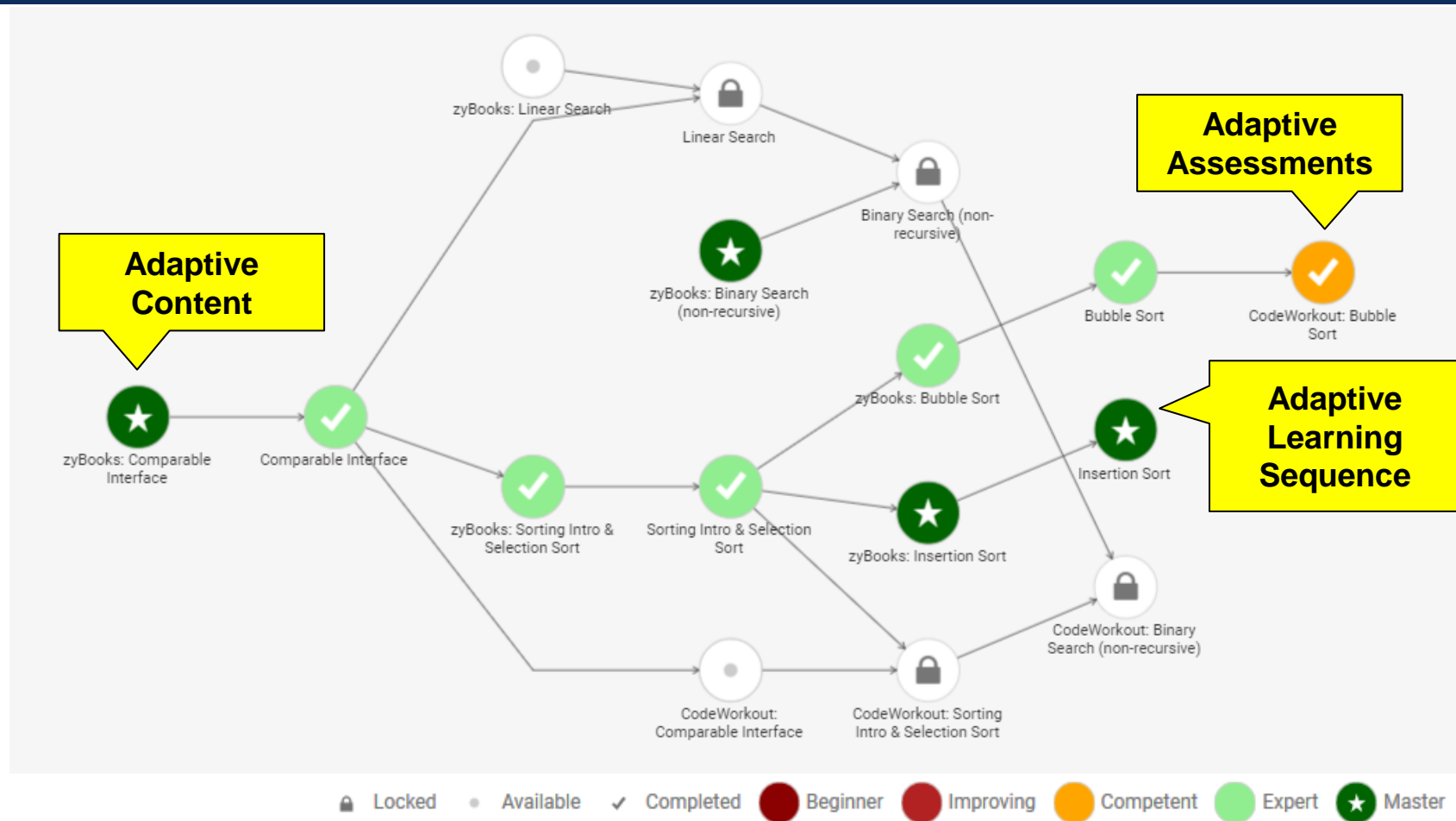
Generative artificial intelligence; dialogue; social interaction; collaborative learning

Giving AI a Role in Personalized Learning

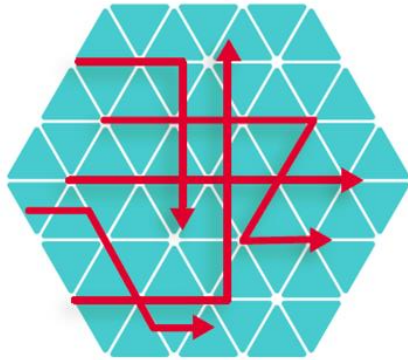
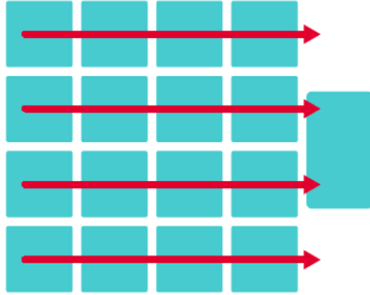
Table 1. Some roles for generative AI in cooperative and social learning.

Role	Description	Example
Possibility engine	AI generates alternative ways of expressing an idea.	Students write prompts in ChatGPT and submit each prompt multiple times to examine alternative responses.
Socratic Opponent	AI acts as a respondent to develop an argument.	Students enter prompts into ChatGPT to converse or debate. Teachers can ask students to use ChatGPT to prepare for discussions.
Collaboration coach	AI helps groups to research and solve problems together.	Working in groups, students use ChatGPT to discover information to complete assignments.
Co-designer	AI assists throughout the design process.	Students ask ChatGPT for ideas about designing or updating a website, or focus on specific goals (e.g., how to make the website more accessible).
Exploratorium	AI provides tools to play with, explore and interpret data.	Students use ChatGPT to explore different ways to visualize and explain a large database, such as census data.
Storyteller	AI creates stories that include diverse views, abilities and experiences.	Students take it in turn to ask to ChatGPT continue a story, prompting it to include a diversity of characters.

Realizeit: Adaptive Learning Pathways



Adaptive Learning Pathways


















Linear Learning

- One-Size-Fits-All learning
- Single, linear learning sequence

Flexible, Personalized Learning

- Learners have options
- Multi-directional learning sequences

Smart Systems offer Descriptive and Predictive Analytics

All students Started Repeating Involved in pairing Working behind Working ahead Needs Verify No DK DK done Not started Completed										Search...
Last work	Access key	Time spent	Est Time left	State status	Lesson covered	Learning progress	Composite score			
Feb 17		5 hrs 12 mins		 Enthusiastic	 Lesson covered	 Master: 93%	93%			
Feb 17		6 hrs 16 mins		 Frustrated	 Lesson covered	 Competent: 78%	83%			
Feb 17		5 hrs		 Unhappy	 Lesson covered	 Competent: 82%	82%			
Feb 17		1 hr 17 mins		 Unhappy	 Lesson covered	 Competent: 88%	89%			
Apr 29		3 hrs 29 mins		 Enthusiastic	 Lesson covered	 Master: 96%	96%			

AI-Powered Student Support Tutors and Communities

- InScribe: Tutoring and Semantic Analysis

The screenshot displays the InScribe user interface. At the top, there is a header bar with a user profile icon, an "Ask a Question" button, and a "Share Something" button. Below this is a text input field containing the question "I don't understand cellular respiration". To the right of the input field is a "Members" button. Below the input field is a rich text editor toolbar with icons for image, video, link, code, insert, undo, redo, bold, italic, and text color. Below the toolbar is a section titled "Do any of these answer your question?" with an orange arrow pointing to it. This section contains three cards, each with a question and a "PREVIEW" button. The first card is titled "Practice Question Assessment 2" and asks "What are the 4 stages of aerobic cellular respiration?". The second card is titled "Practice Assessment Question" and asks "What organelle is responsible for cellular respiration?A) nucleib)..." with 1 comment. The third card is titled "Practice Exam Question" and asks "What is responsible for cellular respiration in plant cells?a)..." with 0 comments.

Ask a Question Share Something

I don't understand cellular respiration

Members

Do any of these answer your question?

Practice Question Assessment 2

What are the 4 stages of aerobic cellular respiration?

PREVIEW 0

Practice Assessment Question

What organelle is responsible for cellular respiration?A) nucleib)...

PREVIEW 1

Practice Exam Question

What is responsible for cellular respiration in plant cells?a)...

PREVIEW 0

What to Expect: Coming Soon

The LMS is changing...

AI Tools → AI-Integrated Systems

AI Integrated Systems

Blackboard

AI Design Assistant

Pharmacology

Auto-Generate Learning Modules

ⓘ This is auto-generated content and needs to be checked for accuracy

Define Learning Modules

Description

Enter course description or learning objectives...

Title prefix

None

☒ Include images


Complexity

Low High

Number of Learning Modules

1 20

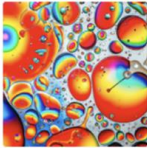
☒



Introduction to Pharmacology

An overview of the field of pharmacology, including its history, principles, and importance in healthcare. Students will learn about the different branches of pharmacology and the role of pharmacologists in drug development and patient care.


☒



Basic Pharmacokinetics

An exploration of how drugs are absorbed, distributed, metabolized, and excreted by the body. Students will learn about drug concentration-time profiles, routes of administration, and factors that influence drug absorption and elimination. Case studies and practical examples will be used to illustrate key concepts.


☒



Drug Classes and Mechanisms of Action

An in-depth study of major drug classes and their mechanisms of action. Students will learn about common medications used to treat various disease conditions, including their molecular targets and therapeutic effects. Emphasis will be placed on understanding the pharmacological basis of drug actions and potential adverse effects.

☒



Clinical Applications and Drug Safety

AI Integrated Systems

Canvas Emerging AI Marketplace



CopyLeaks Detection

Our exclusive AI-powered text analysis can identify potential plagiarism, recognize AI-generated content, verify ownership, and empower error-free writing.

[Join Waitlist](#)[Learn More →](#)

IdeA11y

IdeA11y Writing Companion (IWC) is an AI-enabled non-invasive companion that helps you proofread and optimize for accessibility and DEI as you write.

[Join Waitlist](#)[Learn More →](#)

Khanmigo

Say hello to Khanmigo, Khan Academy's AI-powered guide. Tutor for learners. Assistant for teachers.

[Join Waitlist](#)[Learn More →](#)

NOLEJ AI

NOLEJ AI for Canvas can convert any suitable material you add to your course, into interactive eLearning modules, in minutes!

[Join Waitlist](#)[Learn More →](#)

Noodle Factory

Our AI teaching assistant helps educators create no-code AI tutors effortlessly. Streamline tasks. Boost student engagement.

[Join Waitlist](#)[Learn More →](#)

Outcomes Insights

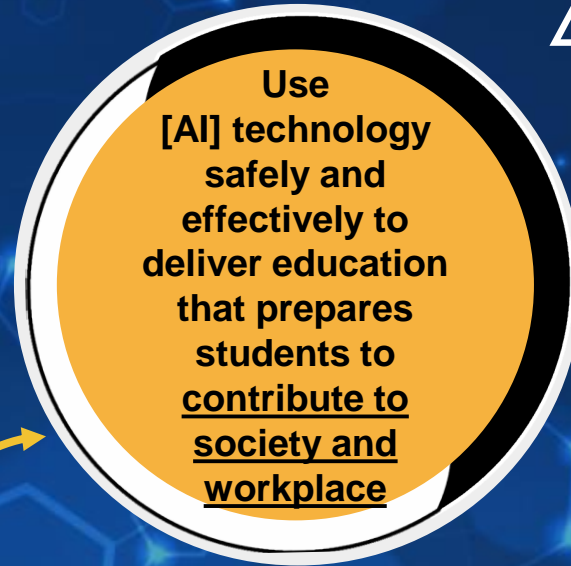
The learning outcome quality checker will identify common errors in learning outcome authoring and recommend an improved version of the outcome for instructional designers and faculty.

[Join Waitlist](#)[Learn More →](#)

Education 4.0

Student-Centered Curriculum

- Enhance Human Super Strengths
- Experiential Curriculum
- Humanity-Centered Learning
- Pedagogies of Care



Education 5.0

AI-Centered Curriculum

- Generative AI
- Hyper-Personalized Learning
- Adaptive Learning Pathways
- AI-Integrated Systems
- AI-Powered Student Support Tutors

Develop Human Super Strengths



- Analytical judgment
- Flexibility
- Emotional intelligence
- Intellectual curiosity
- Bias detection and handling
- AI delegation (prompts)

Colette Stallbaumer

MICROSOFT

Re-Connect Learning with Society



**Extending
Learning
Outcomes**

What the world needs...

Support student outcomes that
**focus on what
the world needs**

Support student outcomes that
aim for social good

UN Sustainable Development Goals (SDGs) 2015-2030



Build Humanity-Centered Curriculum

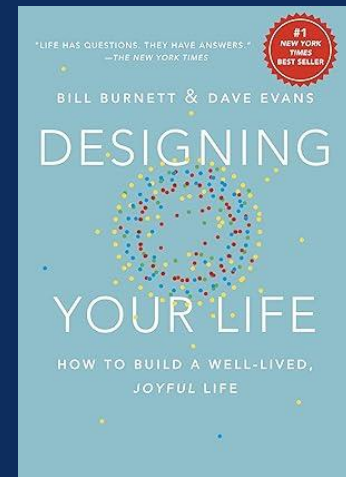
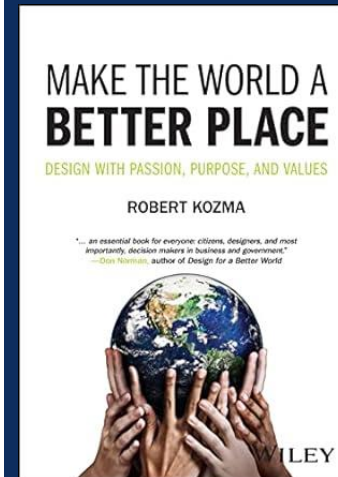
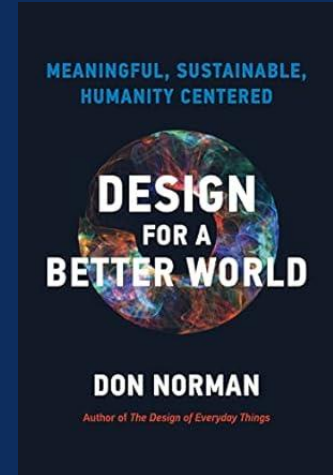
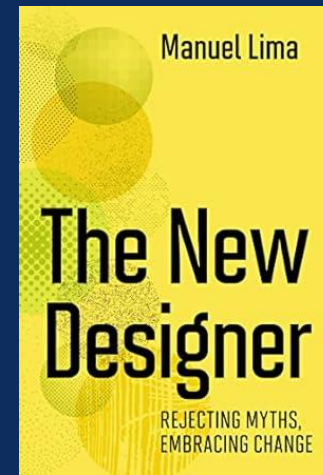
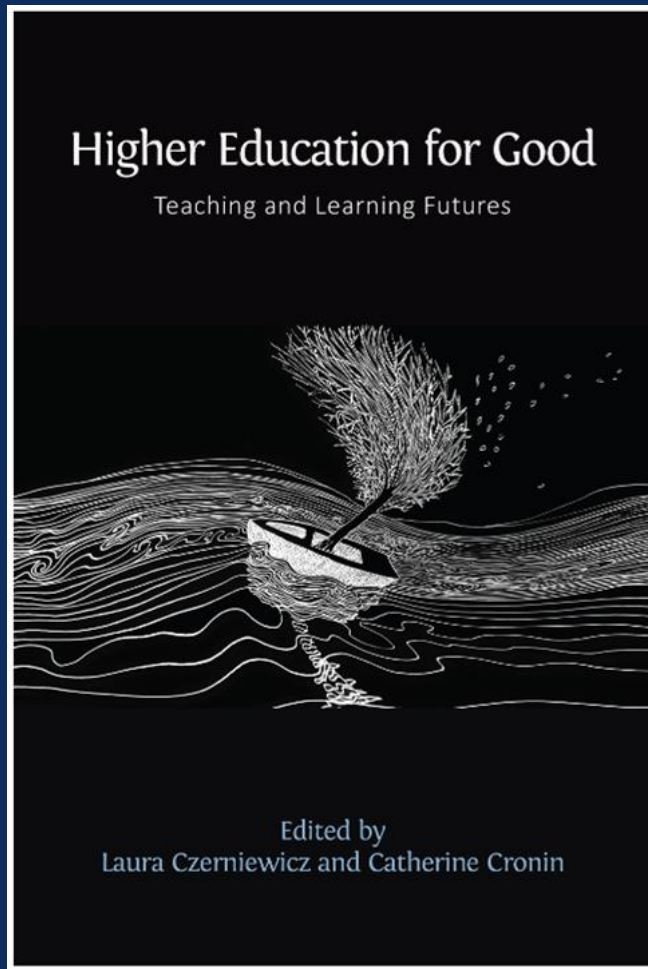
- **Look** “outside”
- **Feel** the community
- **Analyze** the society we live in
- **Apply** technology to solve worldly problems



Explore New Theories and Curriculum

- Sense of Responsibility
- Pedagogies of Care
- Challenge-Based Learning
- Socio-Technical Skills
- Futurist Literacies
- Participatory Learning & Partnerships

Reads



Education 4.0

Student-Centered Curriculum

- Enhance Human Super Strengths
- Experiential Curriculum
- Humanity-Centered Learning
- Pedagogies of Care

AI-Centered Curriculum

- Generative AI
- Hyper-Personalized Learning
- Adaptive Learning Pathways
- AI-Integrated Systems
- AI-Powered Student Support Tutors

Use
[AI] technology
safely and
effectively to
deliver education
that prepares
students to
contribute to
society and
workplace

Education 5.0

Lead and Support Faculty
Development



Remember that feeling...

Thank you! Questions?



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