

# Teaching Students to Properly Use AI Platforms as Tools to Overcome Complex Research Challenges

**Facilitator:**

**Latasha Holt, Ph.D.**

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# Meet Our AI in ASREs FLC Team Leadership



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# Meet Our AI FLC Research Team



Latasha Holt



Amal Bakry



Jorge Villa



Chris Briggs



Sarah Young



Brooke Breaux



Min-Seok Choi



Sherry Krayesky

# Overview of Projects

<b>Lead</b>	<b>Subject/Course</b>	<b>Focus Area</b>	<b>Key AI Tools</b>
<b>Dr. Latasha Holt</b>	<b>LTCY 310 and LTCY 311</b>	<b>Using AI tools to enhance research-based practices in lesson planning.</b>	<b>Co-Pilot ChatGPT Magic School</b>
<b>Dr. Amal Bakry</b>	<b>CMCN 330</b>	<b>Using AI tool to develop an "Integrated Marketing Communications" Campaign</b>	<b>Co-Pilot ChatGPT Grammarly</b>
<b>Dr. Jorge Villa</b>	<b>ENVS 357 Wetland Soils</b>	<b>Apply available AI-powered tools to analyze course-relevant data</b>	<b>Copilot</b>
<b>Dr. Chris Briggs</b>	<b>EDCI 440</b>	<b>Use AI tools to develop data gathering tools for Action Research project for senior education majors</b>	<b>Copilot NotebookLM</b>
<b>Sarah Young</b>	<b>DSGN 101/DSGN 102</b>	<b>Having first year design students use AI tools to brainstorm</b>	<b>ChatGPT, Copilot</b>
<b>Dr. Brooke Breaux</b>	<b>PSYC 360</b>	<b>Responsible use of generative AI for classwork, including a research report.</b>	<b>Co-Pilot NotebookLM</b>
<b>Dr. Min-Seok Choi</b>	<b>EDCI 411</b>		



# Latasha Holt

Associate Professor  
Educational Curriculum and Instruction  
College of Education & Human Development

# LTCY 310: Teaching Literacy in Elementary School and LTCY 311: Literacy Practicum in an Elementary School

- Students are building knowledge of teaching literacy to elementary students.
  - Students are building knowledge of writing detailed lesson plans using scripted mandated lesson plans.
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- Students struggle to align standards, create measurable objectives and authentic assessments. Furthermore, generic scripted curricula often prove difficult to adapt to the specific needs of individual learners.

# What We Learned

## Student

- It was new to being encouraged to use AI tools to help build upon such an important assignment. Starting with a strong self-written lesson plan draft helps navigate AI proposed ideas when used
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## Professor

- Students needed encouragement and validation that using AI tools is an accepted way (not cheating) to enhance research-based practices in their lesson plans. These plans need to be authentic but also include the needed components to make them effective when being implemented.

Take-away: Start early in the semester with professor and student AI workshops. Give more defined prompt ideas that can guide students who may not be familiar with using AI in this way. Connect research-based practices through articles to the AI prompts and structure in the lesson planning process.



# Amal Bakry

Associate Professor  
Department of Communication  
College of Liberal Arts

# CMCN 330: Advertising Strategy & Practice

## Using AI tool to develop an "Integrated Marketing Communications" Campaign

Students complete a semester-long group project focused on developing an Integrated Marketing Communications (IMC) campaign.

The project provides hands-on experience with key advertising practices, including:

Advertising and market  
**secondary** and  
**primary** research

Strategic  
planning and  
audience  
segmentation

Creative strategy  
and campaign  
messaging

Media mix  
selection and  
integration of  
IMC tactics



CMCN  
330: Advertising Strategy & Practice  
Using AI tool to develop an "Integrated Marketing Communications" Campaign<sub>1</sub>



Market Research  
Focus Group

## Problem

- Students struggle to connect research insights to communication strategy, leading to campaigns that do not effectively solve the marketing problem—an area where **AI-supported analysis and synthesis can help.**

## Campaign Development Issues

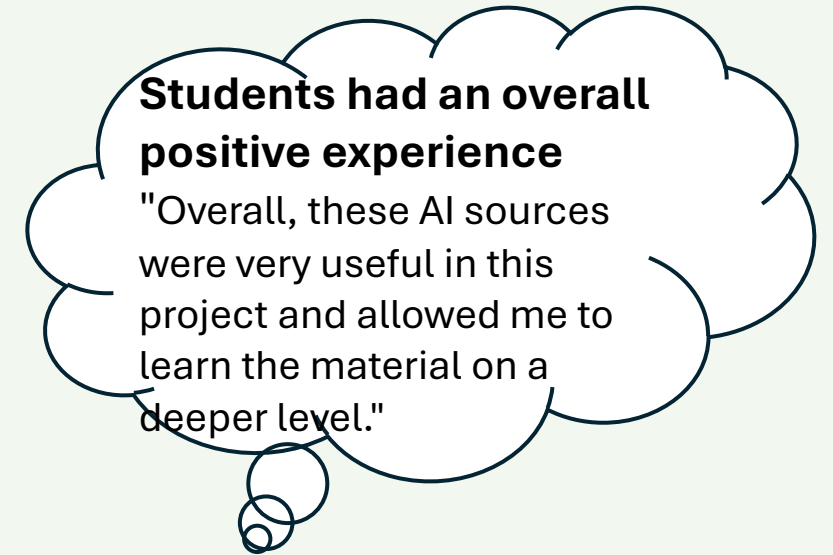
- Limited use of secondary research to inform the marketing problem
- Unclear or unfocused communication objectives
- Creative strategy does not fully align with research insights or stated objectives

# CMCN 330: Advertising Strategy & Practice

AI tools Utilized by students

## Learnings:

AI tools contributed to higher-quality projects and increased levels of student engagement.



### Secondary "deep research"

"Microsoft **Copilot's** deep research function to help gain an understanding of the logistics and competitors in the online communication and dating sectors. Telling us the estimated annual income that dating apps bring in, helping develop a SWOT analysis, and creating a comparison chart."

### Writing and editing

"I use **Grammarly** to refine and edit my writing. Typically, I compare my writing to Grammarly's suggestions and edit accordingly. Additionally, I use Grammarly as a plagiarism and AI checker to ensure all writing is accurately cited and to detect any generative AI use."

### Creative AND Media

A) **Creative:** I used **ChatGPT** and other AI resources for concept generation, topic explanation.  
B) **Media:** They also helped me to understand the difference between timing and duration, as well as the differences between flighting and pulsing advertisements. It also aided in my formation of a scheduling strategy chart.



# Jorge Villa

Assistant Professor  
School of Geosciences

# ENVS 357

## Wetland Soils

The issue: Students need more coursework where they learn soft skills related with data management and processing that are anticipated in the workplace.

The experiment: Students analyzed a real wetland soil dataset using Microsoft Excel and Microsoft Copilot to create visualizations and draw data-driven conclusions.

# ENVS 357

## Wetland Soils<sub>1</sub>

Results: Students synthesized relevant information in a quick and efficient manner. Some used Copilot to learn how to produce the plot and others to produce the plots and a basic interpretation.

Feedback: Students were asked to provide a statement with how many hours they thought they'll spend in the assignment and how many they really spend. The estimates ranged from 1 to 8 hours but overall, they all reported using less time than initially thought.



# Christine Briggs

Professor, College of Education and Human  
Development – Curriculum and Instruction  
Department

Christine J. Briggs, Ph.D.  
EDCI 440 01 (UG pathway course) Spring 2026  
AI Tools: CoPilot and NotebookLM

**Undergraduate Research Data Gathering Tools: Observations and Pre/Post Tests**

**Problem:** Challenges in creation of data gathering tools based on nine previous semesters of the course.... Had to be a better way.....

**Issues:**

- Lack of focus on desired behavior
- Lack of parallel stems for behaviors
- Broad ideas, with need to simplify criteria to allow for data gathering while teaching

**Implementation:**

Taught lessons on how to use Co-pilot and Notebook and required use of one of these tools during data gathering tools creation

**Requirements:**

Must prompt AI three times, share the three prompts, share the results for each prompt and share the final version using elements of the three AI results

**Example Prompt and Outcome:**

**Prompt:**

Create a positive behavior checklist to help in reducing mean comments and encourage positive peer-to-peer interactions in a fourth-grade classroom

**Results after three prompts:**

\_\_\_ Student used kind and respectful words (spoke politely, thought before they spoke)

\_\_\_ Student listened and responded to their peers respectfully (Did not interrupt)

\_\_\_ Student included others (worked with their peers and helped those who need)

\_\_\_ Student used problem-solving skills (calm words, fixed problems without being mean)

# Discoveries and Outcomes

## Student

- ▶ More options to choose – behaviors to observe (Co-Pilot), or questions to use to support student learning of a content area (Notebook)
- ▶ Less revisions from IRB on data gathering tools and consistency of these tools
- ▶ More ease during data gathering as tools were clear and easy to use

## Professor

- ▶ Less back and forth to refine data tools between professor and student
- ▶ More stems were positive, parallel in format, focused, and consistent in how they are phrased
- ▶ More ease to “see” the process during assessment of the AI created tools as they shared all three versions along with the final tool selection

**Tips:** 1) Explicitly share how to use tool, task expectations and requirements; 2) Provide examples to help ease the students in their AI tool attempts; 3) Provide encouragement as the students develop these tools – this is their first attempt with the creation of data tools and with AI data tools.



# Sarah Young

Associate Professor  
School of Architecture and Design  
College of the Arts

# Exploring AI as a Catalyst for Inquiry in an Analog First-Year Design Studio

**Sarah Young**  
Associate Professor  
School of Architecture  
and Design

## Questions

- Can AI support idea generation in an analog design studio?
- Does AI deepen students' understanding of physical testing and making?
- How useful is AI in relation to material and construction?

## What We Did

- All projects in DSGN 101/102 require production of physical 3D models
- Students allowed to use an AI chatbot at any stage during any multi-stage project
- Students reflected on AI use through guided online reflection form

# Exploring AI as a Catalyst for Inquiry in an Analog First-Year Design Studio

**Sarah Young**  
Associate Professor  
School of Architecture  
and Design

## Takeaways

- AI is effective for early-stage ideation and getting students unstuck
- AI outputs are often not materially or structurally viable; **students must translate, adapt, and test** ideas through hands-on making
- Prompting requires iteration and intentionality, reinforcing design thinking



“I often took the example given by the AI and put my own imaginative spin on it so it made more real-life sense and actually looked like a chair.”



“[AI] gave the idea to add sharp geometric shapes, triangular or shard-like shapes that block light.”



“I used slightly different materials than what Chat GPT said, and I switched it up a little bit. I had to figure out which materials were the most similar to the ones they suggested.”



# Brooke Breaux

Assistant Professor  
Interim Department Head  
Department of Psychology  
College of Liberal Arts

PSYC 360: Cognitive Psychology is the scientific study of the human mind and its processes (e.g., perception, language comprehension and production, problem solving, decision making).

Brooke O. Breaux is an Assistant Professor and Interim Department Head of Psychology.

Artificial Intelligence refers to the development of computer systems capable of performing tasks that typically require the human mind and its processes, so the course content already introduces students to the concept artificial intelligence (AI), more generally, and large language models (LLMs), more specifically.

Spring 2026 Additions included . . .

- providing clearer guidance regarding acceptable use of AI in my course syllabus,
- incorporating several assignments where students reflected on and engaged with AI,
- and allowing students to use AI in the development of their final research report.

## Course Syllabus – clearer guidance regarding acceptable use of AI

- Each graded course component has a bullet point that addresses whether AI use is allowed
  - **In-Class Engagement** - Only allowed when you are given explicit instruction.
  - **In-Class Exams** - Allowed for study purposes but not allowed during the exam.
  - **Homework** - Allowed but restricted to Ace (Ace is an AI that you can embed in Top Hat).
  - **Research Report** - Allowed as long as use is documented in AI disclosure statement.

## What worked and what didn't?

- Clear guidance helped students avoid the use of AI when it was considered unacceptable
- Some students reported being concerned about the focus on AI

## What would I do differently?

- Provide information about how I will use AI in the development or grading of the course

## Several Assignments – students reflected on and engaged with AI

- Responses before and after learning about AI and LLMs
  - **Frequency of AI Use:** After homework, realized that they use AI more than they thought
  - **Bad/Useless vs Good/Useful:** After homework, increased good/useful rating
  - **What is AI:** After homework, correctly identified more computerized systems as AI
- Invited to use generative AI to assist with summarizing their empirical article research notes
  - Required students to review and edit generative AI output
  - Practiced writing AI disclosure statement
- Reflect on development of AI knowledge and skills as well as intentions to use in the future

## What worked and what didn't?

- Students chose whether to use AI but not whether an AI disclosure statement was required
- There was some confusion regarding the specific requirements of the assignment

## What would I do differently?

- Be more explicit and detailed in my instructions to students

## Research Report – allowing students to use AI

- Students write a brief, APA Style research report using data we collected as a class
  - AI disclosure statement is required

## What worked and what didn't?

- Students not as nervous about being wrongly accused of unacceptable AI use
- Not enough specifics in the assignment description/rubric related to (un)acceptable AI use

## What would I do differently?

- Add specifics to the assignment description/rubric related to (un)acceptable AI use

## Student Wins

In addition to learning about AI in this course, students are provided guidance on how to engage with generative AI in ethical ways when working on course assignments and conducting research. Students can work on developing the skills needed to use AI effectively.

## Faculty Wins

Course syllabus can be used as a tool to help determine if AI was used inappropriately.

Brooke O. Breaux can be contacted at [brooke.breaux@louisiana.edu](mailto:brooke.breaux@louisiana.edu).



# Min-Seok Choi

Assistant Professor, Department of  
Educational Curriculum and Instruction

# EDCI 411: Developmental Assessment and Research in Early Childhood Education

## The Challenge

Preservice teachers struggle to:

- Align standards, objectives, and assessments using backward design
- Design assessments that produce meaningful 3E evidence (Product, Performance, Process)
- Ensure equity, accessibility, and developmental appropriateness in assessment plans

## AI Integration Approach

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**Custom GPT:** *Backward Design Assessment Coach*

**Designed to audit, not author.**

The GPT checks alignment between standards, objectives, and assessments; generates counterexamples to test understanding depth; and flags equity/accessibility gaps.

**Students must draft first, then consult the GPT, then revise with justification.**

**Course:** EDCI 411 (UG, senior education majors)

**AI Tool:** Custom GPT (ChatGPT)

**Assignment:** Unit Assessment Plan (Watermark artifact)

# Think – Talk – Think: AI as Audit Tool

*Students own the design; the GPT stress-tests it.*

## Think 1

*Draft First (No AI)*

- Student writes initial draft in their own words
- Understandings, objectives, anchor task outline, or assessment ideas
- Establishes ownership before any AI interaction

## Talk

*Audit with GPT*

- Ask GPT to check alignment between standards, objectives, and assessments
- Request counter-examples and alternative framings
- Flag equity, accessibility, and developmental appropriateness issues

## Think 2

*Revise + Justify*

- Revise based on GPT feedback
- Write a decision memo: what was kept, changed, or rejected
- Justify using backward design language (alignment, validity, DAP, equity)

## Required AI Design Log: 4 cycles minimum

(a) Stage 1 understandings & objectives   (b) 3E evidence plan across the unit   (c) Anchor task + rubric

(d) Paper-and-pencil test items   *Each log entry: draft → GPT prompt → GPT excerpt → revision + decision memo + attribution*

# What We Learned<sub>1</sub>

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## Student

The Think-Talk-Think structure gave students a clear entry point: draft first, then consult. Several groups reported that seeing the GPT challenge their alignment helped them understand backward design more concretely.

Students used the GPT to add measurable criteria (e.g., "with 80% accuracy"), refine rubric wording, and strengthen accommodations for ELLs and IEP students.

*The decision memo requirement pushed students beyond "accept all suggestions" toward genuine professional judgment.*

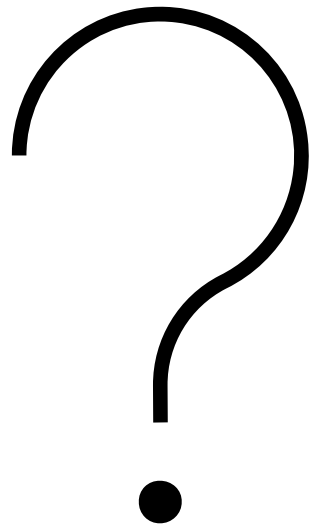
## Professor

The AI Design Log made student reasoning visible and assessable. Instead of grading a finished product alone, I could trace how decisions were made.

Requiring attribution and excerpts prevented copy-paste use. Students who engaged deeply with the cycle produced noticeably stronger alignment across standards, objectives, and evidence.

*The custom GPT needs further calibration: some prompts returned generic suggestions rather than backward-design-specific feedback.*

**Take-away:** Position AI as an audit partner within a structured design cycle. The Think-Talk-Think framework ensures student ownership while leveraging AI for alignment checking, equity auditing, and design refinement.



Questions?

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Thank you!