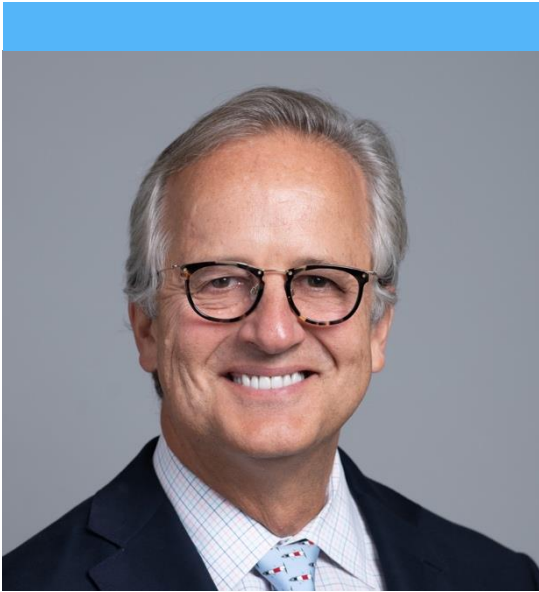




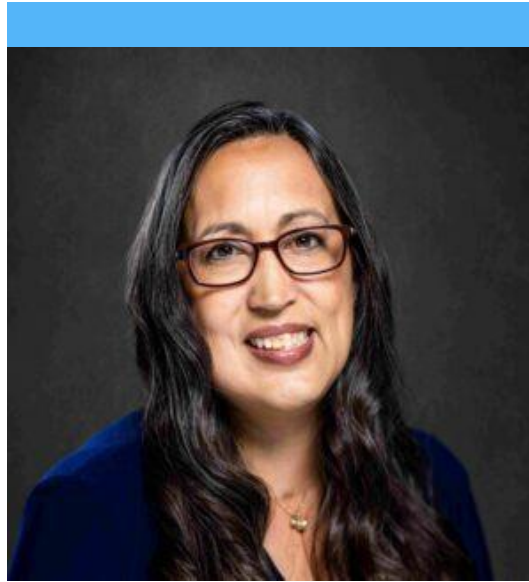
# News From the Front: Professors Using AI

June 17<sup>th</sup>, 2026

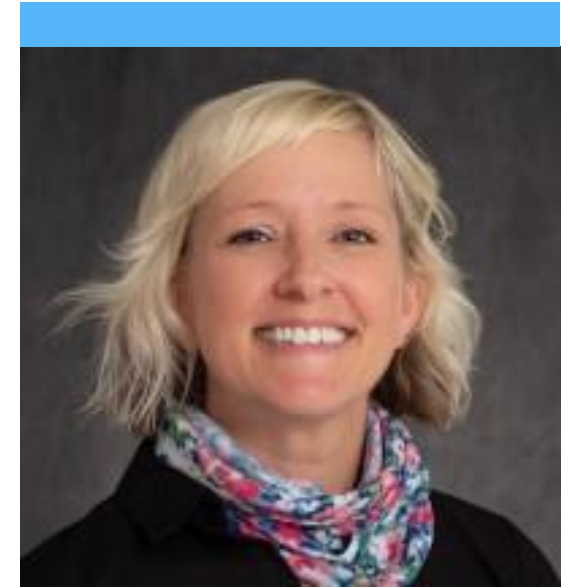
## Today's Speakers



**Robert Gray Atkins**  
Founder and Ceo  
Gray Decision Intelligence



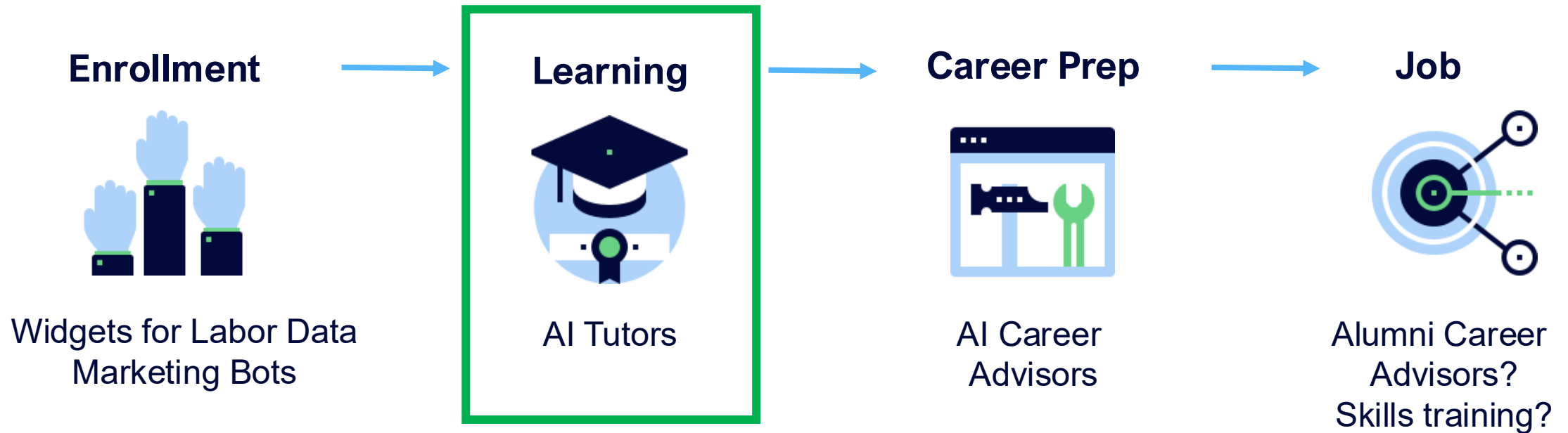
**Jenny Allert, DNP, RN**  
Department Chair and Faculty



**Susan Citrak, PhD**  
Assistant Professor  
Chemical and Biological Sciences



## AI and the Student Lifecycle







*“Institutions that have not yet developed coherent AI policies or incorporated the technology into their instructional frameworks are increasingly out of step with the students they serve.”*

## How can AI tools help students?

Based on 27,006 AI/student interactions, 88% of student usage is between 8 PM and 8 AM.

Hourly Distribution (EDT-Adjusted)

TIME WINDOW (EDT)	MESSAGES	SHARE	DISTRIBUTION
8:00 PM – Midnight	18,263	67.6%	
Midnight – 8:00 AM	5,546	20.5%	
8:00 AM – 4:00 PM	1,996	7.4%	
4:00 PM – 8:00 PM	1,202	4.5%	

- It is available 24/7
- It can understand and respond to students in the language they prefer.
- It gives them experience in prompt engineering, a highly sought-after skill.
- It personalizes learning and career coaching at scale.

## Barriers to Adoption

- Faculty Concerns:
  - Erosion of critical thinking skills
  - Losing the student-mentor relationship to a machine.
- Student Concerns:
  - Being falsely accused of cheating, even when using AI ethically – or not at all.
  - AI taking their jobs.
- Shared Concerns:
  - Environmental harm (water and power)
  - More burdens on their time.
  - AI displacing humans
- A few loud opponents
- Funding



## Higher education needs customized tools.

- Ethical
  - Carbon neutral
  - Water neutral
  
- Help students, faculty, and administrators
  - Is engaging and easy to use
  - Discourages cheating
  - Augments faculty expertise
  - Allows faculty to maintain control over their IP
  - Saves faculty time
  - Provides administrative reporting and implementation tools
  
- Trustworthy and private
  - Ensures privacy, security, and sound content
  - Minimizes hallucinations and bad math



**CoCo Courses: Tutor**

**CoCo Careers: Career Advisor**



# CoCo AI in Nursing Care of the Childbearing Family

How I Used CoCo AI as a Professor

June 17, 2026

Jenny Allert, DNP, RN, Professor

**CHANGEMAKERS WANTED**

# What We'll Cover Today

- Why CoCo? The closed system advantage
- Use 1: CoCo as a 24/7 course assistant
- Use 2: Teaching AI literacy with the 7 Rights of AI
- Use 3: Graded case study transcripts
- Student feedback

# Why CoCo? The Closed System Advantage

## Instructor-controlled content sources

CoCo only draws from materials I uploaded — course readings, textbooks, and curated resources. No open-web hallucinations.

## Accurate and clinically scope-appropriate

Childbearing family topics require precision. A closed system keeps content evidence-based and appropriate.

## Students trust the source

Knowing the AI was grounded in their actual course materials helped students engage confidently and critically.

## A key difference from public AI tools

Unlike OpenAI platforms, CoCo's responses are predictable, bounded, and aligned with what I was teaching.

# Use 1: CoCo as Course Assistant

- Syllabus & course navigation — available 24/7
- No waiting for office hours
- AI tutoring: muddy points, practice questions, and case studies

# Use 1: CoCo as a 24/7 Course Assistant

## Syllabus and course navigation questions

Students asked CoCo about deadlines, policies, and assignments — reducing repetitive emails and wait times.

## Available evenings and weekends

Nursing students often study at non-traditional hours. CoCo removed the barrier of waiting for instructor availability.

## Consistent, accurate responses

CoCo drew from the actual syllabus and documents I uploaded — no contradictions or outdated information.

## Reduced student anxiety

An always-available resource supported students who hesitated to ask what they felt were “simple” questions.

# Use 1 (cont.): CoCo as Student-Directed Tutor

## Clarifying “muddy points” after class

Students revisited confusing lecture content on their own terms, asking follow-up questions until concepts clicked.

## Practice questions on demand

Students prompted CoCo to generate NCLEX-style questions on any topic — as many as needed, any time.

## Custom case studies for exam prep

Students asked CoCo to build clinical scenarios to practice applying content before assessments.

## Immediate, personalized correction

When students explained concepts incorrectly, CoCo identified the gap and re-taught the material differently.

# Use 2: Teaching AI Literacy in the Classroom

- In-class activity using CoCo to work through clinical scenarios
- Created the 7 Rights of AI — modeled on nursing medication rights
- Prepared students for AI-powered clinical decision support in real EHRs

# The 7 Rights of AI — AI Literacy Framework

## A parallel process students already know

Medication rights teach students to pause and verify before acting on an order. The 7 Rights of AI applies that same familiar check to AI output. The key message: the nurse is the final decision-maker, not the AI.

## Rights 1–3: Right Source – Right Accuracy – Right Patient

Is the source credible? Is the information current? Does it fit this specific patient?

## Rights 4–6: Right Context – Right Reasoning – Right Equity

Enough information given? Logic sound? Accounts for bias and underrepresented populations?

## Right 7: Right Action — Applied to CDS in the EHR

Within scope? Care team involved? Students evaluated CDS pop-ups using this framework — AI informs the decision, but the nurse owns it.

# Use 3: Graded Case Study Transcripts

- Students prompted CoCo to work through cases on 4 critical topics
- Used the nursing process as the clinical framework
- Submitted their full conversation transcript for grading

# Use 3: Four Graded Case Study Topics

## **Prenatal Care**

Assessment, risk identification, and patient education. Students were prompted through the full nursing process step-by-step.

## **Labor and Delivery**

Fetal monitoring, positioning, comfort measures, and intrapartum nursing priorities.

## **Postpartum & Newborn Care**

Maternal recovery, newborn assessment, breastfeeding support, and discharge teaching.

## **Hypertensive Disorders in Pregnancy**

Preeclampsia and eclampsia — highest-acuity topic. Transcripts submitted showing full clinical reasoning.

# What Students Said (1 of 2)

**“I don’t think I would have been as successful in this class if I didn’t use this tool.”**

It allowed me to ask specific questions and to be corrected if I was explaining something wrong.

**“Its ability to create and work through course-related adaptive case studies is truly an asset.”**

I wish we had this for every course!

**“The best part was having that comfort knowing it was only pulling from the sources provided by our professor.”**

I wish I could take it along with me for all my courses.

**“I found it sooooo helpful... ask questions, ask for scenarios, ask it to help make test questions. KEEP IT!!!”**

# What Students Said (2 of 2)

**“I chose to do a case study with the Gray AI chatbot... I will definitely be doing this more going forward.”**

**“I find myself gravitating towards it when I have questions about content and want to reach greater depth.”**

**“Working through a case study is so helpful to not just check my learning but to reason through questions I am not anticipating.”**

**“When I felt like I understood the content, I could plug in sections, and it would make me dive deeper with questions I wouldn’t have thought to ask myself.”**

# In-Class Integration & Preliminary Outcomes

## Mirroring AI strategies in class

Small groups worked through unfolding clinical scenarios, shared reasoning, and compared approaches — the same active learning students valued in CoCo.

## AI as a scaffold, not a replacement

The combination of in-class case discussion and CoCo-supported exploration appeared to deepen engagement and strengthen clinical thinking.

## HESI exam observation

Students who reported using Gray AI more frequently scored very high on the HESI exit exam — a preliminary signal that AI supported deeper learning, not shortcut thinking.

## Overall finding

When used intentionally, AI functions as a scaffold for clinical reasoning — additional practice, not a substitute for independent thought.

# Key Takeaways

## **The closed system is the differentiator**

Instructor control over sources builds student trust and ensures clinical accuracy.

## **AI becomes a 24/7 learning partner**

CoCo removed barriers by being available when students needed help most.

## **AI literacy is a clinical skill**

The 7 Rights of AI prepares students to evaluate CDS tools they will encounter in practice.

## **Students asked for more — across every section of feedback**

The most consistent theme: “I wish I could take this to all my courses.”



MSU<sup>SM</sup>  
DENVER

**Thank you!**

**CHANGEMAKERS WANTED**

Dr. Susan Citrak  
Department of Chemistry  
and Biochemistry

AI as a Learning Companion in  
General Chemistry



**YOUNGSTOWN  
STATE  
UNIVERSITY**

# General Chemistry II

- **Class size:** 100 – 130 typically
- **Class breakdown:** All majors in the natural sciences and engineering
  - Most of my students are *not* chemistry majors
- **No Teaching Assistants:** students must come to office hours to get instructor help outside of class
- **Large Lecture Hall:** an amphitheater type set-up, not conducive to group work



# Who Does YSU Serve?



## University Information

- Regional university
- Approximately 12,000 students
- Roughly 38% of our students are first generation
- Commuter school

# General Chemistry II: The Gateway

**HIGH SCHOOL THINKING**  
Building a foundation

**COLLEGE THINKING**  
Expanding ideas. Solving problems. Making an impact.

**Remember**  
Recall facts and basic concepts.

**Understand**  
Explain ideas or concepts.

**Apply**  
Use knowledge in new situations.

**Analyze**  
Examine information, identify patterns, draw conclusions.

**Evaluate**  
Judge information, assess evidence, make decisions.

**Create**  
Generate new ideas, design solutions, build something original.

**From learning about chemistry to thinking like a chemist.**

Illustration created with ChatGPT image generation (OpenAI), June 2026.



# Chemistry in the Age of AI

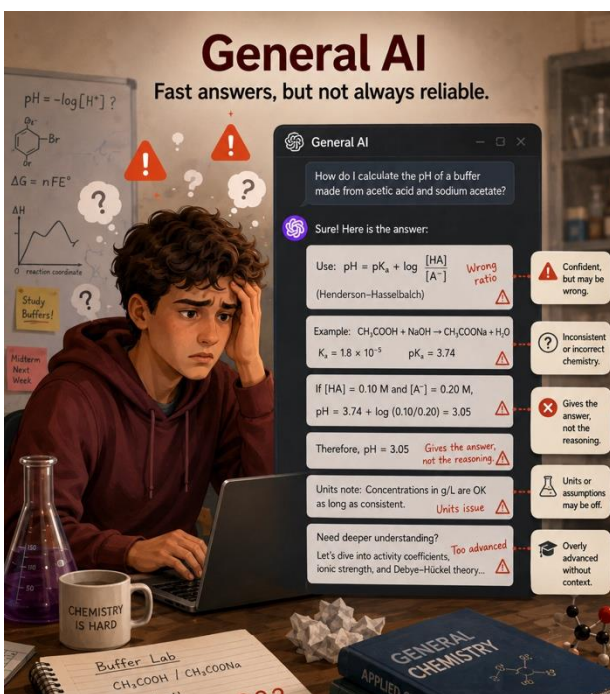


Illustration created with ChatGPT image generation (OpenAI), June 2026.

- More and more students using AI to solve homework problems and to act as a tutor.
  - Novice learners often cannot yet tell when an AI response is incomplete, over-advanced, or wrong.
- I wanted students to have access to AI support that was course-aligned, concept-focused, and designed not to simply hand them answers.

# Using CoCo Courses (CoCo)

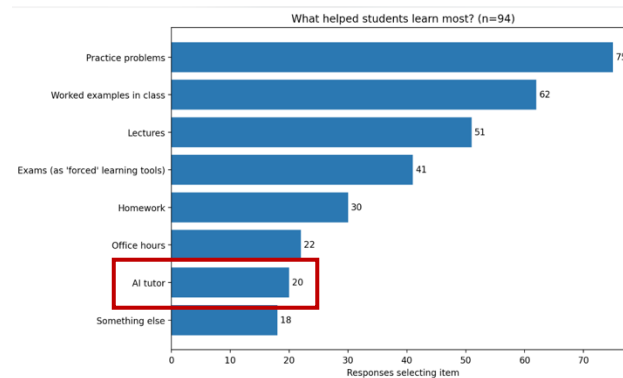
CoCo is a course-specific AI learning assistant built around course materials, instructor expectations, and guardrails for student learning.



- Offered Fall 2025 and Spring 2026
  - Focusing on Spring 2026 for this talk
- Major CoCo update spring semester
  - Interface updates
  - Student analytics for faculty
- Use not mandatory, but highly encouraged

# General Stats of Use: Spring 2026

- 51 out of 105 students engaged with the tool
  - Approximately 49% of the class.
- Frequent users were primarily students seeking additional academic support



## AI-related use themes

Themes coded from student open responses. Categories are not mutually exclusive.



# Sample Student Conversations

**Student**  
FeS is a fairly insoluble compound. given the following info, if you mixed 250mL of 0.25M Na2S with 300mL of a 0.45M Fe(NO3)2 would a precipitate form?  
 $\text{FeS}(s) + 2e^- = \text{Fe}(s) + \text{S}^{2-}(aq)$  Estandard = -1.01V  
 $\text{Fe}^{2+}(aq) + 2e^- = \text{Fe}(s)$  Estandard = -0.44V  
3:29 PM

**Assistant**  
That's a great question that combines concepts of electrochemistry and solubility! To determine if a precipitate of FeS will form, we need to compare the ion product ( $Q_{sp}$ ) with the solubility product constant ( $K_{sp}$ ) for FeS.  
You've provided the overall reaction  
3:30 PM

**Student**  
Do you have content for Exam 1?  
5:16 PM

**Assistant**  
Yes, I certainly do! Based on the course materials, there are resources available to help you prepare for Exam 1.  
I see that there's a "Practice Exam 1.pdf" [USSWZxc5eSd8r6gD1hcA] and its corresponding "Practice Exam 1 KEY.pdf" [QZD2LCNEYTlkmKW6ZlQr] in the course library.  
The syllabus also indicates that Exam 1 covers Chapters 12, 13, 14, and 16 [vOZU6dLlhjqDC4cDXZ21]. It also mentions that midterm exams will assess material similar to homework problems (long-answer format) and recitation quizzes (multiple-choice format) [YNc4Hsh9heT6JZ1jcPvT].  
What specific aspect of Exam 1 are you looking for help with? Are you interested in reviewing the topics, understanding the format, or perhaps working through some practice problems?  
5:16 PM

**Student**  
Can we review topics and then go into practice problems that will help prepare me overall for questions I could see on the final exam for chapters 12, 13, 14, and 16?  
5:17 PM

**Assistant**  
That's an excellent plan for preparing for Exam 1! We can definitely review the topics for Chapters 12, 13, 14, and 16, and then work through some practice problems.  
Based on the course materials, here's a breakdown of the key topics for each chapter:



# From Student Questions to Teaching Insight

---

## Student Success Tools

### Safety Alerts

Active safety concerns flagged by the Guardian system.

Active

Reviewed


2 Active Alerts

CONCERN

4/30

The student has repeatedly switched topics, particularly after encountering a problem they described as 'harder than the ones we do in class.' This pattern of avoidance and rapid topic changes could indicate academic frustration or feeling overwhelmed, warranting monitoring for potential distress.

 View Conversation


 Mark as Reviewed

CONCERN

4/30

The student expresses a desire to stop the current activity, indicating potential frustration, overwhelm, or disengagement. This personal and abrupt statement, while not a direct crisis, suggests a need for monitoring.

 View Conversation

 Mark as Reviewed

# From Student Questions to Teaching Insight

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## Faculty Success Tools

Generate exam questions on solid state material properties. this should be a 4-answer multiple choice question that is based on categorizing different types of solids. I want it to be challenging, but I do not want it to sound like an intermolecular forces problem (which was an issue in the past)

Here is a challenging multiple-choice question focusing on solid categorization, designed to avoid sounding like an intermolecular forces problem:

**Question:** A newly discovered solid material exhibits the following characteristics: it is exceptionally hard, has an extremely high melting point (above 2000°C), and does not conduct electricity in either its solid or molten state. It is also insoluble in most common solvents.

Which type of solid best describes this material?

A) Metallic solid B) Ionic solid C) Covalent network solid D) Molecular solid

# Where Are Students Stuck?

**⚠ Risk Assessment** 🔍 Stuck

The student is currently working on two main topics: Brønsted-Lowry acid-base chemistry (proton donation/acceptance, identification of acids and bases) and electrochemistry (galvanic cells, redox reactions, cell notation).

**🔍 Stuck Evidence**  
can you give me examples of bases and acids so i can determine whether they are a base or an acid

D	██████████	Stuck	👤-
R	██████████	Stuck	👤-
E	██████████	Breakthrough	👤-
A	██████████	Breakthrough	👤-
A	██████████	Breakthrough	👤-



# Conclusion



**What worked well:** CoCo Courses gave students another place to ask questions, especially outside office hours, and helped them work through concepts at their own pace.



**What surprised me:** seeing the patterns in what students were asking. Their questions revealed where they were stuck before those struggles showed up on exams.



**What the future holds:** in-class activities, required low-stakes interactions, and targeted review based on analytics.

# Prompt Example (Fall 2026 Planning)

- I am studying weak acid-strong base titration curves and want to practice connecting conceptual understanding to pH calculations.
- Please create a complete titration scenario using acetic acid ( $\text{HC}_2\text{H}_3\text{O}_2$ ) titrated with sodium hydroxide ( $\text{NaOH}$ ). Choose realistic concentrations and volumes and provide all necessary information, including the  $K_a$  of acetic acid.
- Guide me through six locations on the titration curve: Initial pH, A point before the half-equivalence point, The half-equivalence point, A point after the half-equivalence point but before equivalence, The equivalence point, A point after the equivalence point with excess  $\text{NaOH}$  present
- For EACH point, do NOT immediately explain the answer.
- Instead, follow this sequence:
  - Step 1: Ask me where I am on the titration curve and what species are present in solution.
  - Step 2: Ask me what type of chemical situation exists (weak acid, buffer, equivalence point, excess strong base, etc.).
  - Step 3: Ask me which pH calculation method I should use and why.
  - Step 4: Wait for my response.
  - Step 5: Evaluate my reasoning. Tell me what I got correct and what misconceptions I have.
  - Step 6: Ask me to perform the numerical pH calculation.
  - Step 7: Check my math and provide feedback.
  - Step 8: Before moving to the next point on the curve, ask me to summarize the key conceptual takeaway from that region of the titration.
- Do not reveal answers until I attempt each step.
- Your goal is to help me build a decision-making process that allows me to solve unfamiliar titration problems, not simply memorize equations.



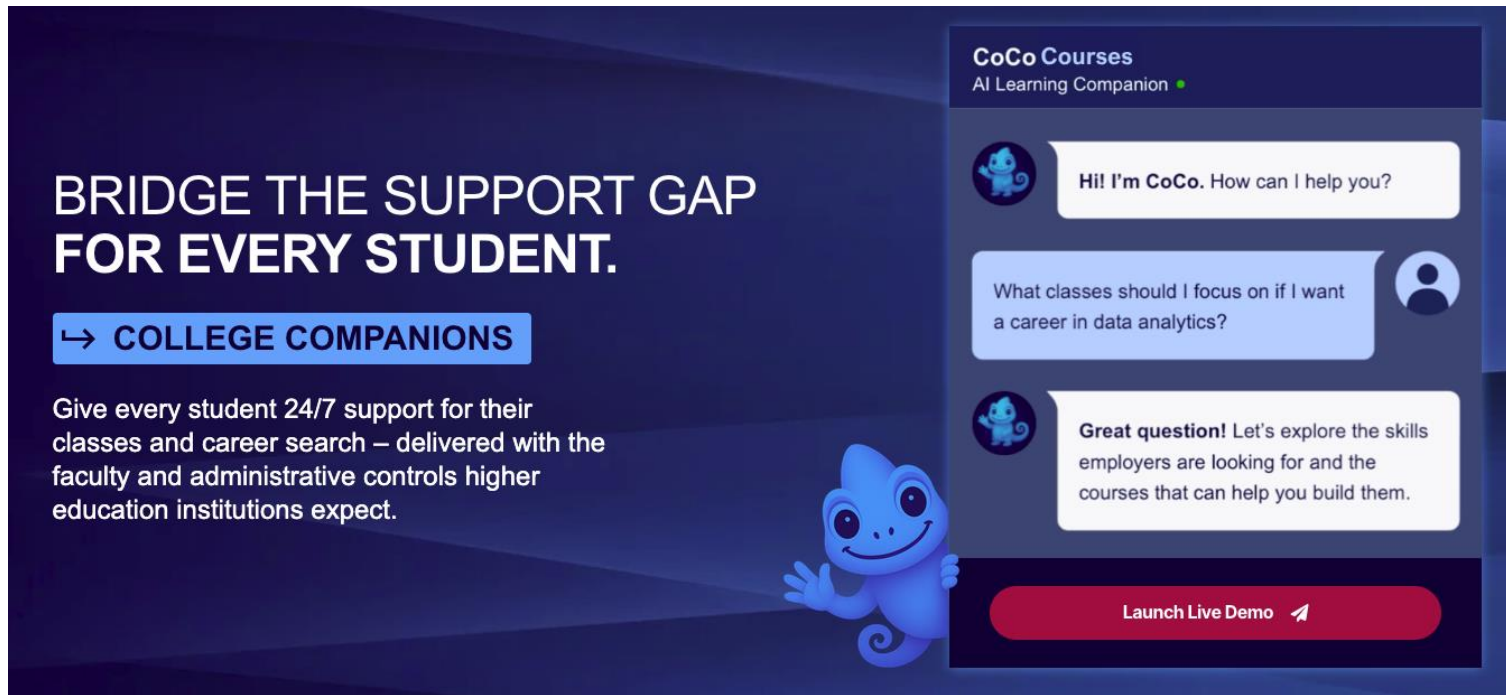
## It worked!

### The AI tutor helped students learn.

- Small trials were successful for both students and instructors.
- Successful trials may not be enough: some of the institutions are starting to scale up, others are not.
- It will be critical to identify barriers and systematically lower them.
  - Conduct interviews, meetings, and surveys to understand perceptions of AI on campus
  - Select and modify AI to address concerns
  - Develop broad participation: willing instructors, large courses are needed to build momentum
  - Leadership is essential:
    - Establish direction and priority
    - Clarify benefits to students, faculty, and finances
    - Ensure funding
- It is not just a software purchase, it is journey. Pick a partner who will listen, adapt, and support you.

## You can now try CoCo yourself!

Go to our website: <https://www.graydi.us/ai-companions>



**BRIDGE THE SUPPORT GAP FOR EVERY STUDENT.**

↳ COLLEGE COMPANIONS

Give every student 24/7 support for their classes and career search – delivered with the faculty and administrative controls higher education institutions expect.

**CoCo Courses**  
AI Learning Companion

Hi! I'm CoCo. How can I help you?

What classes should I focus on if I want a career in data analytics?

**Great question!** Let's explore the skills employers are looking for and the courses that can help you build them.

Launch Live Demo ↗

Attend our Monthly Webinar!

June 25<sup>th</sup>  
2 PM ET

