AI INTEGRATION · JAN–MAY 2026

Student Perceptions of AI Before & After Course Integration

A combined analysis of pre- and post-survey data tracking how intentional AI integration across five courses shifted student confidence, usage habits, ethical reasoning, and concerns.

Pre-survey: 155 respondents · 8 courses | Post-survey: 99 respondents · 5 courses | Jan–May 2026

SNAPSHOT: BEFORE THE COURSES BEGAN

Had previously used AI tools
97%
151 of 155 students

Self-rated as "somewhat confident"
61%
Most common confidence level

Rated AI literacy as very/extremely important
55%
For future career or academics

Reported "extremely confident"
0%
A key skills gap despite high use

SNAPSHOT: AFTER COURSE INTEGRATION

Reported increased confidence
81%
After intentional AI coursework

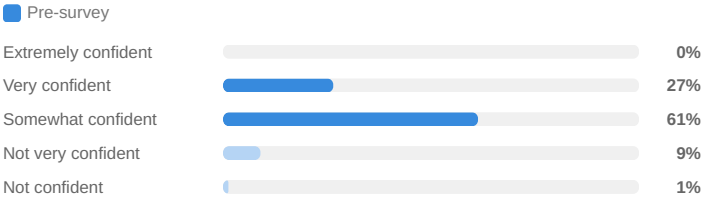
Significant confidence increase
23%
Up from a near-zero baseline

Course helped with ethical reasoning
59%
"A lot" or "a great deal"

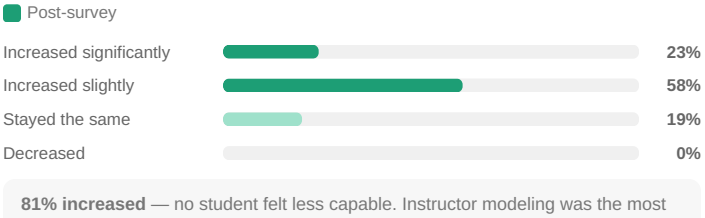
Reported a decrease in confidence
0%
No student felt less capable

CONFIDENCE: PRE VS. POST

Pre-survey: Self-reported confidence level



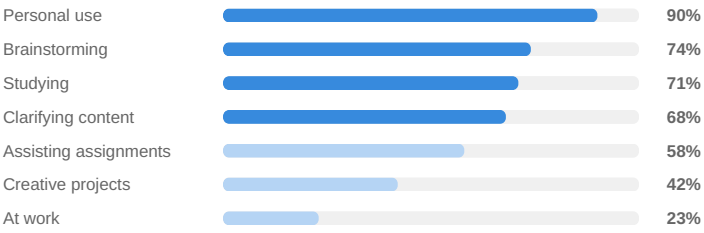
Post-survey: Confidence change after coursework



81% increased — no student felt less capable. Instructor modeling was the most cited factor.

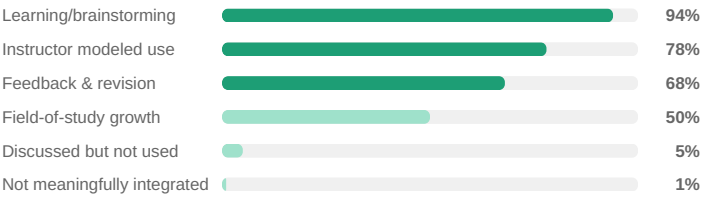
HOW STUDENTS USED AI: PRE VS. POST

Pre-survey: Contexts of use (multi-select)



Primarily informal and self-directed — personal, studying, ideation.

Post-survey: Integration modes in courses (multi-select)



Structured, scaffolded, instructor-led — a significant shift toward intentional use.

PRE- & POST-PERCEPTION COMPARISON

DIMENSION	BEFORE COURSES	AFTER COURSES	SHIFT
Confidence	61% "somewhat confident"; 0% "extremely confident." Exposure without deep skill.	81% increased confidence; 23% significantly. No one felt less capable.	↑ Strong
Ethical thinking	Top concerns: job displacement, over-reliance, environment. Anxiety-driven.	59% said course deepened ethical reasoning "a lot" or "a great deal." Concern evolved into framework.	↑ Strong
Mode of use	Informal — personal tasks, studying, ad-hoc brainstorming. Self-taught.	Structured — feedback loops, instructor modeling, field applications, comparison activities.	↑ Strong
Accuracy concern	Strong worry about hallucination; confusion about why AI makes errors.	Students describe gaining prompting and verification skills — concern partially addressed.	↑ Partial
Over-reliance	Fear of losing critical thinking; concern AI replaces genuine effort.	Some students self-report over-relying on AI during difficulty; desire for more independence.	⚠ Persists
Environment	~13% cited water, energy, and data center concerns — specific and widespread.	Concern persists post-course; students request dedicated curricular coverage.	⚠ Persists
Academic integrity	Concern about peers misusing AI; confusion about citation and attribution.	Transparency disclosure policies praised; ethical framing internalized by many.	↑ Partial

PRE-SURVEY: TOP STUDENT CONCERNS & VOICES

Themes in open-ended responses

Job market / career displacement	18%
Over-reliance / loss of critical thinking	17%
Environmental impact (water, energy)	13%
Accuracy / reliability of AI outputs	10%
Academic integrity / cheating	8%
Privacy and data concerns	5%
Creative industry impact	5%
No concerns / positive outlook	22%

Student voices (pre-survey)

> *"It is a hurricane coming. We can see it coming, so I think the institution should give us the preparation for the impending hurricane."*
> — Teacher Education student

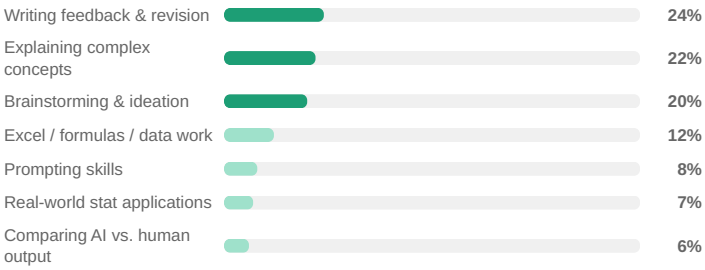
> *"I am concerned about the water use and the overall effect on the environment. They are talking about building data centers near my town."*
> — Business student

> *"I thoroughly believe that I should create from my own brain. I use AI to further understanding, not to create things for me."*
> — Sociology student

> *"I believe it's important I know how to use it… working professionals have told me they are using it all the time."*
> — Business student

POST-SURVEY: HOW AI SUPPORTED LEARNING & STUDENT VOICES

Top learning applications



Student voices (post-survey)

> *"Using AI allowed me to see the true difference between my work with AI versus completely original work. I found it illuminating."*
> — Business student

> *"Having a transparency policy and modeling acceptable use allows me to use it as an aid for my learning rather than a shortcut."*
> — Sociology student

> *"This course did more for me with AI than every other class. I was able to prompt more confidently and ethically."*
> — Business student

> *"Sometimes I overly relied on it when I ran into issues instead of trying to figure it out by myself."*
> — Math student

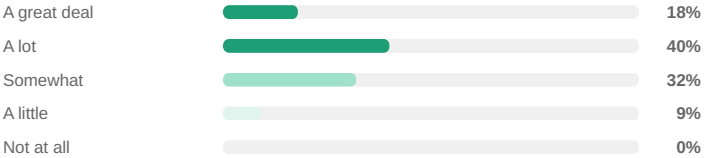
POST-SURVEY: IMPROVEMENT REQUESTS & ETHICAL REFLECTION

What students want improved

Satisfied / no changes needed	40%
Explore multiple AI tools (not just ChatGPT)	7%
Reduce AI use / protect critical thinking	6%
Address environmental impacts more explicitly	5%
Teach AI limitations & failure modes	4%
More hands-on / direct AI modeling	4%
Clearer guidelines on appropriate use	4%

Ethical reflection depth

How much did the course help you think about responsible AI use?



58% "a lot" or "a great deal" — ethical reasoning deepened not just as anxiety, but as practical framework.

KEY IMPLICATIONS FOR AI-INTEGRATED INSTRUCTION

✓ **Sustain instructor modeling.** The most praised integration element — signals AI is a serious professional tool, not a shortcut.

↔ **Build comparative activities.** Having students compare AI vs. their own work is consistently the most powerful pedagogical approach.

✓ **Formalize transparency policies.** Disclosure requirements transformed AI from a covert shortcut into an accountable learning tool.

\+ **Expand to multiple tools.** Students want to move beyond ChatGPT — comparative platform exposure builds real AI literacy.

! **Teach AI failure modes.** Structured activities surfacing errors and hallucinations are both highly requested and pedagogically valuable.

↺ **Address environmental costs directly.** This concern persists from pre- to post-survey and warrants dedicated curricular time.

◎ **Protect independent thinking.** In quantitative courses especially, require students to work through problems before consulting AI.

→ **Maintain opt-out pathways.** Optional AI use and alternative assignments build trust and respect student values.

Bottom line: Students who entered courses uncertain and largely self-taught emerged with greater confidence, refined skills, clearer ethical frameworks, and a more nuanced sense of what AI can and cannot do. The concerns that arrived in January — job displacement, environmental harm, intellectual over-reliance — did not disappear by May. They evolved. Effective AI literacy instruction must address not just *how* to use AI, but *when not to*, and *at what cost*.