Students' Perception, Trust, and Ethical Awareness of AI Tools in Education

The study examines **students' perception, trust, and ethical awareness of AI tools in education**, focusing on usage patterns, trust levels, ethical concerns, verification behaviors, and future outlook on AI skills across diverse degree programs and year levels.

Methodology

Simple Random Sampling ensured equal selection probability, minimizing bias across year levels (1-5) and 20+ degree programs. **41 responses** collected Nov 23-24, 2025 via **Google Forms** (ease of distribution, multi-device access, automatic recording, anonymity). Analysis used Python (pandas, matplotlib, seaborn) for quantitative analysis and theme extraction from open-ended questions.

Limitations:

- **Nonresponse Bias:** Only internet-accessible, willing participants responded.
- **Response Quality:** ~15% vague entries ("NA," "Idk").
- **Sample Size:** n=41, limited statistical power.
- **Discipline Bias:** Majority CS students.
- **Cross-Sectional:** Snapshot; no causality/longitudinal tracking.
- **Self-Reported:** No objective verification.

Despite limitations, data shows **100% alignment** between methodology themes, computational analysis, and quantitative findings.

Key Findings

Adoption: 80% very/extremely familiar; 60% use often/daily; ChatGPT 85%, Gemini 44%, Copilot 22%; 73% used 1+ year.

Value: 75% very/extremely helpful; 70% agree AI improves learning; valued for understanding complex concepts, 24/7 access.

Trust: 76% rate "moderately accurate"; 73% always/often verify; 85% concerned about misinformation; **source transparency #1 factor** (19 mentions).

Ethics: 78% worry plagiarism; 80% want school guidelines; concerns: over-reliance→critical thinking (7), privacy/data (13), plagiarism (4).

Future: 75% AI skills career-critical; 91% interested in courses; want: prompt engineering (6), responsible use (5), data analysis (5), ML (4).

Open-Ended Themes: *Learning*—easier understanding (14), quick info (9), faster (13). *Trust*—sources (19), reliable (6), consistency (7). *Improvements*—citations (11), accuracy (19), clarity (4), privacy (3).

Results and Discussion

Institutions: (1) Clear AI policies (80% request), (2) AI literacy curriculum—prompt engineering/verification, (3) Anti-over-reliance assignments, (4) Responsible use training.

Developers: (1) Source transparency—citations/confidence levels (most requested), (2) Accuracy—reduce hallucinations, (3) Educational features—"Study Buddy" modes, (4) Privacy protections.

Researchers: (1) Diverse samples beyond CS, (2) Longitudinal studies—AI impact over time, (3) Test interventions (literacy programs/policies), (4) Cross-institutional validation.

Critical Insight

Students show **sophisticated AI literacy**—high use (60% often/daily) + **healthy skepticism** (73% verify, 85% concerned). They recognize value but demand **accountability, transparency, guidelines**. Overwhelming citation requests (19) signal desire to learn *with* AI, not just *from* it. Institutions should formalize integration with policies, literacy training, and verification-promoting tools.