Indicators of Generative AI Content in Student Work

As part of a holistic evaluation of submitted student work, these indicators of AI-generated content may be beneficial if an instructor suspects generative AI use. The indicators below are followed by practical ideas for minimizing generative AI use and a list of resources consulted for this document.

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Pattern of formulaic or repetitive language structures.
> Generative AI tends to reuse similar sentence constructions and transitions throughout a piece, particularly when connecting ideas or starting paragraphs. This creates a mechanical rhythm that differs from natural writing variation.

Inconsistent knowledge depth across sections.
> Students using AI may demonstrate sophisticated understanding in some paragraphs while showing basic comprehension in others, especially when they have modified only portions of AI-generated text. This creates noticeable fluctuations in expertise level.

Context-inappropriate vocabulary or jargon.
> AI systems sometimes employ specialized terminology or advanced vocabulary that seems out of place given the students' demonstrated language proficiency in other work or class discussions. This mismatch in language sophistication can be particularly noticeable.

Lack of personal voice and/or experience integration.
> When students use AI, their writing often lacks authentic personal examples, unique perspectives, or reference to class discussions. The content may be technically sound but feel detached from the student's known experiences and viewpoints.

Time-frozen or outdated references.
> AI systems may reference events or sources only up to their training cutoff date, creating temporal inconsistencies. Students might submit work containing obviously outdated information or failing to incorporate recent developments discussed in class.

Perfect citation formats with inaccessible sources.
> AI tends to generate plausible-looking citations that follow style guides precisely but may reference non-existent or inaccessible sources. When checked, these citations often lead nowhere or contain subtle errors in dates or publication details.

Misaligned prompt responses.

AI-generated content sometimes includes phrases that seem to respond to an input prompt rather than the actual assignment question. Look for sentences that appear to answer questions that were not asked or address requirements not included in the assignment.

Generic or vague examples.

When providing examples or evidence, AI often defaults to general, non-specific illustrations rather than detailed, concrete instances. This creates a pattern of shallow support for arguments that lack the specificity typically found in researched work.

Inconsistent regional language patterns.

Generative AI may mix American, British, and other English variants within the same document, creating inconsistencies in spelling, terminology, and idioms that would be unusual in authentic student writing.

Smooth transitions between unrelated ideas.

While good transitions are valuable, AI sometimes creates unnaturally fluid connections between disparate concepts that do not actually relate logically, prioritizing smooth flow over meaningful relationships between ideas.

Perfect paragraph proportions.

AI tends to generate very regular paragraph lengths and structures, creating an unnaturally balanced appearance. Human writing typically shows more variation in paragraph length based on content needs.

Absence of course-specific content.

AI-generated work often fails to incorporate specific course materials, discussions, or insights that were emphasized in class. Watch for papers that seem comprehensive but do not reference any unique course content.

Mishandled nuanced topics.

When addressing complex or controversial subjects, AI often presents oversimplified or artificially balanced perspectives that do not engage meaningfully with the nuances discussed in class. This can result in sophisticated sounding, but superficial analysis.

Template-like argument structures.

AI frequently follows predictable patterns in argument construction, such as consistently using three supporting points or following rigid "however, therefore, moreover" sequences that feel mechanical rather than organic.

Error patterns that defy typical student mistakes.
   While AI can make mistakes, these errors often differ from typical student writing issues. Look for unusual error patterns like consistently perfect grammar alongside fundamental conceptual misunderstandings.

Practical Approaches for Faculty to Detecting Generative AI Use:

✓ **Provide a clear statement about AI use on your syllabus**: For ideas, visit the FDIC AI Toolkit. If you allow the use of AI in your courses, be clear and explicit about what is and is not allowed.

✓ **Repeat your AI policy for each learning assessment and project**: include it clearly in assignment guidelines and directions and consider including a statement on your D2L course site.

✓ **Discuss information literacy and critical thinking about AI with your learners:** Booth Library has a page on Information Literacy Instruction to support faculty across campus.

✓ **Use Baseline Writing Samples**: Compare suspected work with in-class writing samples or earlier assignments.

✓ **Beware of AI Detection Tools**: Do **not** rely on AI detection software; these are not foolproof and can regularly produce false positives or negatives.

✓ **Have A Conversation**: Ask students to explain or expand on their written work in a live discussion. Be sure to discuss their writing process to see if it includes potential generative AI use.

✓ **Use Plagiarism Checks**: Cross-check the content with known databases and AI output sources in Turnitin.

✓ **Design with a Focus on Process**: Redesign assignments to require drafts, notes, and evidence of revision to ensure students are engaged in the writing process.

Evidence Guidelines for Academic Dishonesty Cases Involving AI

Prevention through Course Design

Establish Clear AI Policies
- Include explicit AI usage policies in your syllabus
- Provide specific AI guidelines for each assignment
- Define which AI tools (if any) are permitted and how they may be used
- Document these policies as they will be crucial in University Student Standards Board hearings

Design AI-Resistant Assignments
- Require progressive drafts to track writing development
- Incorporate in-class writing components
- Include reflection assignments where students document their writing process and tools used
- Consider oral examinations or presentations to verify student understanding
- Implement peer review sessions to track work development

Documenting Potential AI Use

Writing Style Analysis
- Compare the suspected assignment with previous work samples from the same student
- Document specific examples of style inconsistencies
- Save copies of earlier assignments for comparison
- Note any sudden changes in vocabulary level or writing sophistication

Technical Indicators
- Document unusual citation patterns or non-existent sources
- Record instances of atypical formatting or punctuation
- Note any inconsistencies in reference styles
- Preserve screenshots or copies of suspicious passages

Conduct Board Process
Evidence Standard
- Remember that the standard is "preponderance of proof" (more likely than not)
- Prepare a detailed written analysis explaining why you believe AI was used
- Include specific examples and documentation supporting your assessment (see above)

Hearing Participation
- Attend all conduct board hearings in person
- Be prepared to answer questions about your AI policies and assignment requirements
- Bring copies of your syllabus, assignment instructions, and relevant student work samples
- Be ready to explain how you detected potential AI use

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Documentation Checklist for University Student Standards Board (AI Cases)
- ✓ Syllabus with AI policy
- ✓ Assignment instructions with specific AI guidelines
- ✓ Student work samples (including earlier assignments)
- ✓ Detailed analysis of suspected AI use
- ✓ Any relevant communication with the student
- ✓ Course materials showing how AI policies were communicated

Resources Consulted

Baule, S. M. (2023, September 5). *6 tips to detect AI-generated student work*. ECampus News: Innovations in Education and AI. https://www.ecampusnews.com/ai-in-education/2023/09/05/detect-ai-generated-text/

Code.org, CoSN, Digital Promise, European EdTech Alliance, Larimore, J., & PACE. (2024). *AI Guidance for Schools Toolkit*. https://www.teachai.org/toolkit

D'Agostino, S. (2023, January 11). *ChatGPT Advice Academics Can Use Now*. Inside Higher Ed. https://www.insidehighered.com/news/2023/01/12/academic-experts-offer-advice-chatgpt

Fleckenstein, J., Meyer, J., Jansen, T., Keller, S. D., Köller, O., & Möller, J. (2024). Do teachers spot AI? Evaluating the detectability of AI-generated texts among student essays. *Computers and Education: Artificial Intelligence*, *6*, 100209. https://doi.org/10.1016/j.caeai.2024.100209

Open AI. (2023). *Teaching with AI*. https://openai.com/blog/teaching-with-ai?utm_source=tldrai

Schneiderman, B. (2022). *Human-centered AI*. Oxford University Press.

Western Washington University. (n/d). *Evaluating Student Work when AI is Suspected*. https://atus.wwu.edu/evaluating-student-work-when-ai-suspected

White, J. (2023, November 6). *Academic Integrity in the Age of AI*. EDUCAUSE Review. https://er.educause.edu/articles/sponsored/2023/11/academic-integrity-in-the-age-of-ai