

From AI Detection to AI Literacy-Rethinking Academic Integrity in Higher Education

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Abstract: *The growing use of generative artificial intelligence (AI) in higher education has raised concerns about academic integrity, institutional policies, and the reliability of AI detection tools. This paper examines the limitations of detection-based enforcement and argues for an approach centered on AI literacy, ethical responsibility, and critical thinking. Drawing on published studies, institutional surveys, and research findings, it discusses the widespread adoption of AI among students and educators, the risk of false accusations from detection systems, inconsistent university policies, and gaps in faculty preparedness. Particular attention is given to the challenges faced by non-native English speakers and students with limited access to digital resources. The discussion emphasizes the need to teach students how to verify AI-generated information, acknowledge AI assistance, recognize bias, and make responsible academic decisions. It also highlights the importance of faculty training, clear institutional guidelines, and assessment practices that encourage independent reasoning. The paper concludes that integrating AI literacy into higher education offers a more equitable and practical approach to maintaining academic integrity while preparing students for an increasingly AI-enabled workplace.*

Keywords: Generative Artificial Intelligence, AI Literacy, Academic Integrity, Higher Education, AI Detection Tools, verability and clarity

Rethinking Academic Integrity in Higher Education

Generative artificial intelligence has rapidly progressed from being an intriguing novelty to becoming a regular feature of the academic process within only four years. Usage of AI among students to help with their homework rose from 48 percent in May 2025 to 62 percent in December 2025 (World Economic Forum, 2026). In this paper, it will be argued that detection-centered enforcement of rules should be abandoned in favor of AI literacy-based policies in higher education. The reasons for this position will include the fact that present practices are unjust and leave students without the skills needed in the AI-enabled workplace. Only 28% of the students felt that most of many of their assessments were in accordance with the skills and judgment they would need in an AI-enabled workplace (Digital Education Council, 2026).

Analyzing adoption data, detection rates, policy failures, and faculty preparedness, this paper demonstrates that the instruction of verification, attribution, and ethical reasoning presents a more viable and justifiable approach compared to surveillance.

Core Reasons Detection Lags Behind

AI technology is well-established within the realm of higher education, making it difficult for universities to maintain academic integrity by monitoring. In a global 86% of students admitted to utilizing AI on a regular basis, with 54% using it weekly (Digital Education Council, 2026). Despite this prevalence of AI utilization, students have failed to equip themselves with the proper amount of knowledge and skills necessary to work with the technology. According to the same survey, 58% of students feel insufficiently knowledgeable about AI, and 48% are unprepared for an AI-powered workplace (Digital Education Council, 2026). The information shows that

universities need to separate the use of AI from cases of academic misconduct. While students are now using AI in the process of studying, most of them do not have enough knowledge to understand what the technology can or cannot do.

The pervasive adoption of generative AI can also be seen in institutional and faculty behavior. UNESCO's global survey showed that nine out of ten interviewees indicated that they used AI-based systems in their profession, especially for researching and writing purposes (UNESCO, 2025). The statistics prove that AI is not only a tool for students but also one that institutions have to deal with by using surveillance. If educators use AI, while students are supposed to either not use or hide their use of AI, it becomes impossible for universities to give the same expectations. Adoption among students also indicates why universities have to ensure that students know how to critically engage with AI technologies instead of trying to curb the problem through prohibitions. The Digital Education Council found out that 66% of students used ChatGPT, and more than two-thirds used AI for searches (Digital Education Council, 2024). In addition to the widespread adoption, half of all students felt unprepared for critical engagement with AI. Students who use AI tools and cannot verify the validity of the generated content might propagate false information, overlook possible bias, and even claim that the content was developed by them. Thus, the major institutional challenge is not about how one can shield students from AI, but how one can enable them to use it ethically. The teaching of verification and attribution deals with the dangers that will arise when this technology becomes widespread.

The Detection Failure

Use of AI-based large language models (LLMs), including

the Chat Generative Pre-trained Transformer (ChatGPT), has led to a major change in how academics prepare their content for scholarly manuscripts. In a study where researchers tested the accuracy of 16 open-source AI detectors, accuracy was found to vary between 63-100%, while false negatives reached up to 36% (Cheng et al., 2025). In analyzing essays written by eighth-grade American students, they found that over 60% of TOEFL essays (61.22%) written by non-native English students were AI-written (Myers, 2023). Detection tools have proven to yield disproportionately high false positive rates in relation to students who do not speak English natively. The meaning is that their writing is not aligned with the statistical norm that detection algorithms use to determine whether a text was written by humans or by machines.

An inverse correlation between higher AI-aware assessment policy index scores and AI detector flagging rate without any evidence of increased misconduct (Spearman $\rho = -0.42$, $p < .01$) (Sangwa & Mutabazi, 2025). The finding implies that the institutions that focus on assessment redesign and AI literacy, rather than on Detection and surveillance, have better integrity results. The study pointed out the dangers of AI-biased text detection systems that pose threats to students with multiple languages and limited internet bandwidth. AI detection tools cannot be considered neutral tools since they inherently discriminate against marginalized students.

The true interpretation of the facts available would be not to deny that Detection is possible, but rather to accept that no one accuracy level applies universally. False positives change drastically from one tool to another, from one sample to another, and from one set of conditions to another (Giray, 2024). In particular, they are highest when applied to texts written by students who learned English later. An instrument with uncertain levels of errors cannot be a solid evidentiary basis. A total of 113 institutions in the southern region of the USA provide 193 undergraduate and graduate degrees in artificial intelligence. Online delivery of AI bachelor's degrees was 26% in 2025 in Western universities and 22% in Midwestern universities (MastersInAI.org, 2026). Schools have realized that AI expertise is an essential aspect of management education

Where Institutions Actually Stand

The quick embrace of generative AI tools has been faster than institutional rules about their application. Only 19% of global higher education institutions had an AI policy in place, meaning that users have to rely on their personal experience with freely available consumer AI tools (Media & Learning Association, 2026). Universities need to have policies defining when and how to use the tool and whose responsibility it is to validate the contributions made by AI, instead of focusing on enforcement after submission of the assignment. Such guidance within institutions would thus make academic integrity expectations clearer and easier to follow. The lack of policy communication is important since students are actively using AI technology, but many of them are still unsure of the responsible use of AI (Schiff, 2022). A global alliance of universities and industry representatives focused on education innovation found that Already 86% of Students Are Using AI in their studies

(Kelly, 2024). Moreover, in another study, only 54% of those who answered were aware that there are policies and guidelines for this type of use (Robert, 2026). Using the results, we can conclude that there is no effective policy communication happening together with the active use of AI. This will lead to an increase in the risk of misusing AI in an inappropriate way, without proper verification, and even misattribution. The universities should react by providing students with AI policies that will be easy to understand and by educating them on how to use these policies in practical academic situations.

The fragmented approach to AI governance also raises concerns, as the varying expectations may occur between courses and teachers. The variation is highlighted by the findings of UNESCO, which indicate the uneven progress of institutions regarding guidance in AI governance. In the study, 70% of institutions in Europe and North America have such guidance in place or are in development, versus 45% in Latin America and the Caribbean (UNESCO, 2026). In another study, less than 40% of institutions surveyed have AI acceptable-use policies developed by 2025, and it is yet another piece of evidence of the lack of guidance from institutions (Brandon et al., 2025). Inconsistency may result in an inconsistent experience for students if individual teachers set up different expectations for the use of AI in their classes. A consistent framework will allow faculty to modify the use of AI in their classes without compromising the standards for academic integrity in the institution.

What Students Actually Need

The facts support a move away from the Detection of AI usage after assignment submission towards building the capacity of the students to utilize AI critically and responsibly. Literacy in AI involves students being able to analyze the veracity of information produced by the AI (Kaur, 2024). In such a way, academic integrity will be taught as a skillset instead of an oversight mechanism. Students are required to know not just whether AI is capable of doing their work for them, but also whether the information generated by it is accurate, relevant, and meets the academic criteria expected of them. Institutions should incorporate knowledge on AI into coursework and examinations instead of treating it as an independent technical knowledge (George, 2023). The knowledge will prepare students to make informed choices regarding AI and enhance their skills of critical thinking and analysis necessary for credible academic work.

Researchers put forward a scaffolded model that is composed of foundational awareness, application of problem-solving skills, critical evaluation, and ethical advocacy (Zhou et al., 2026). The reason why this sequence is important is that being able to use an AI technology does not always entail knowing when and how it should be used. Students need to know how AI technologies work, apply them to academic tasks, evaluate the results critically, and think about issues like bias, fairness, and transparency (Memarian & Doleck, 2023). In short, this model views AI literacy as a technical as well as an ethical competence. Through this kind of model, students can have chances to learn these skills one after another, instead of learning about AI practices on their own.

The information on the existing knowledge of students concerning AI shows the necessity of providing structured lessons on this topic. Students who had moderate or high levels of knowledge in this sphere demonstrated higher satisfaction with generative AI (Medina Merodio et al., 2025). Additionally, majority of students learned how to work with these technologies independently, which proves that many students are using AI independently of institutions. The practice may result in an inconsistent level of skills since, along with learning useful practices, students may have misconceptions concerning the capabilities of AI and its proper application in education. Therefore, universities cannot expect that students will form correct approaches to this matter independently. Through formalized training, learners may be provided with reliable guidelines on how to evaluate outcomes, ensure academic integrity, and when AI involvement needs to be revealed.

In addition, the pedagogical case for AI literacy is reinforced by the scholarly literature regarding experiential and reflective learning. The effect of various dimensions, where autonomy was found to have a more significant effect on metacognitive knowledge ($\beta = 0.232$) and motivational beliefs ($\beta = 0.224$) (Wang, Cui & Yuan, 2025). The results indicate that the development of AI literacy is promoted when students engage with the AI and think critically about the process, rather than merely being told about the limitations of their actions. Reflective learning activities allow students to critically challenge the AI output and explain their actions related to the application of technology to complete an academic task (Yuan & Hu, 2025). The learning allows the process of reasoning regarding academic integrity to be made visible. Educators can evaluate students' ability to demonstrate responsible decision-making through the process of learning. The educators can do that instead of trying to discover whether the AI was used during the completion of a given assignment. AI literacy thus offers an innovative way of linking technology usage with critical thinking and ethical responsibility.

Confidence and Capability

Faculty preparedness will also be essential when moving from AI detection to AI literacy.

Only 27 percent believed that they could recognize AI-produced material, while 71 percent of professors indicated that they used AI tools frequently in their teaching (MacGregor, 2026). Such a decrease in faculty confidence in detecting the difference between human-generated content and AI-generated content is crucial as policies centered around academic integrity require instructors to be able to make such a differentiation. The institution cannot count on AI detection as the main way of safeguarding academic integrity when this confidence is decreasing.

Instructors instead need to receive professional training on what the capabilities of AI tools are, how AI should be used in education, and what assessment activities should look like to encourage authentic learning experiences. Improving AI literacy will enhance not only the technological skills of

faculty but also their mentoring practices.

Faculty adoption trends continue to highlight the importance of institutional support. The perceptions held by teachers regarding ET significantly played as an intermediary factor in the relationship, and those that used AI for different periods of time also significantly impacted teaching effectiveness ($p < 0.01$) (Abdelaal & Al Sawi, 2024). Clearly, usage alone is not enough for acquiring competency with AI. Faculty can engage in the use of AI, but may lack the confidence in judging the outputs of AI, using it pedagogically, or setting proper limits in relation to its use by the students. This is a problem for any institution that expects its faculty to implement more and more sophisticated AI policies. The professional development of faculty should move from demonstrating AI tools to developing judgment, assessment, verification, and attribution skills. Those faculty members who gain these competencies are better prepared to teach students about these skills.

Institutional training is no less crucial because the behaviors of students toward AI depend on the amount of support they have. According to a survey, 58% of the students feel unprepared to manage AI in academia, while 80% believe that their institutions have not met their expectations (Metzgar, 2026). Students who have opportunities for learning AI in a structured manner are more inclined to try it since they know when and how it should be used properly. Lack of such support from the institution does not mean that students do not use AI. Universities, therefore, need to incorporate AI education into academic preparation to ensure that students and teachers have the necessary knowledge regarding the evaluation and proper usage of AI.

In conclusion, it is possible to conclude that higher education cannot deal with academic integrity in the age of generative AI through Detection. There is widespread use of AI by students, unreliable detection tools, inconsistent policies at institutions, and low confidence among faculty members. All this indicates the necessity for an entirely different approach. That can be achieved through AI literacy, which will teach students and educators how to critically assess the outputs generated by algorithms, verify the information received, credit the assistance provided by AI, and make ethical decisions related to it. The importance of AI literacy lies in the fact that academic integrity is not only concerned with the Detection of misconduct but also with creating the necessary skills and knowledge to prevent it. Therefore, institutions should create clear AI policies, develop faculty members, change their assessment practices where needed, and introduce AI literacy for their students.

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