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UK ADVANCE

2025 Guidelines and Recommendations for Generative AI in Instructional Contexts

Executive Summary

- Since late 2022, generative artificial intelligence (AI) tools have developed from text-based chatbot websites to significantly more advanced and multimodal technologies that integrate with other software, hardware and information systems.[1] These developments have presented a range of opportunities and challenges to which higher education has sought to adapt.
- In June 2023, the University of Kentucky empaneled UK ADVANCE, a transdisciplinary committee of experts to examine and make recommendations to help the campus and community regarding the implications of generative AI for higher education, research and beyond. UK ADVANCE is taking an evidence-based approach with experts across the disciplines and ongoing monitoring of experiences among our campus, community and nationally.
- After reviewing the evidence and experiences related to generative AI in teaching and learning, UK ADVANCE offers the following guidance and recommendations for:
    - understanding capabilities and risks of generative AI for education,
    - developing and communicating course policies on generative AI,
    - responding to possible misuse of generative AI in coursework, and
    - designing assignments, curricula and learning experiences in ways that align with course policies, leverage the potential of generative AI tools and mitigate inappropriate or problematic use.
- These guidelines and recommendations may be updated to reflect the nature of the field as it continues to change.

[1] For these guidelines, "generative AI" and "generative AI tool" refer to any platform, software, model, tool, function or feature that generates novel text or other media output based on user input and behavior, using a model (or models) that have been trained on large amounts of data with machine learning and other methods to recognize patterns and produce probable output. While these guidelines focus on large language and multimodal models for language-based output (both written and spoken), they also apply to other forms of generative AI tools that produce images, audio and video. Examples of generative tools include ChatGPT (OpenAI), Copilot (Microsoft), Gemini (Google), Claude (Anthropic), Llama (Meta), Grok (xAI), Mistral (MistralAI), Perplexity (PerplexityAI) and Qwen (Alibaba). The models that these tools access are also used in other applications such as research-focused tools Scite, Elicit, Consensus, Semantic Scholar and OpenEvidence. Generative AI tools and functions are increasingly being integrated into existing software and platforms such as Microsoft 365, Google Workspace, Adobe Creative Suite, Zoom, Blackboard, Canvas and Apple iOS.

Understanding Capabilities and Risks of Generative AI for Education

Even as generative AI tools continue to advance and demonstrate new capabilities, they also continue to resemble what some researchers have called a "jagged frontier" because they can perform some tasks effectively and other tasks less effectively.[2] In addition, our understanding of the risks posed by generative AI has grown more sophisticated and is especially relevant for the legal, ethical and professional standards to which we hold ourselves in higher education. Regardless of the use case and setting, an understanding of the capabilities and risks of AI is foundational for developing technical, ethical and practical knowledge that is often described as the "AI skills" or "AI literacy" that will be essential for both instructor and student success.[3]

Authoritative frameworks and explanations for AI literacy in education include:

- Modern Language Association and Conference on College Composition and Communication (MLA-CCCC) Joint Task Force on Writing and AI, "Student Guide to AI Literacy" and "Building a Culture for Generative AI Literacy in College Language, Literature, and Writing"
- EDUCAUSE AI Literacy Programs for Faculty, Staff, and Students Working Group, "AI Literacy in Teaching and Learning: A Durable Framework for Higher Education"
- UNESCO, "AI Competency Framework for Students"
- Leo Lo, "AI Literacy for All: A Universal Framework"
- Kimberly P Becker, Jessica L Parker, and Desi Richter, "Framework for the Future: Building AI Literacy in Higher Education"
- Annette Vee, "What is Critical AI Literacy?"

Recommendation. AI presents unique capabilities and risks for different professions and disciplines. Regardless of context, however, instructors and students should consider the following when using any generative AI tool:

- **Data Privacy.** Data privacy remains a major concern and caution. Many generative AI tools do not guarantee the protections for private, confidential or sensitive data that may be required (or desired) for certain information. For example, student education records (as defined by FERPA) and protected research data should not be provided to generative AI tools unless/until they have been vetted for data privacy and other governance issues and approved by the University for the proposed use.[4] Additionally, it is important to review any terms of use and privacy policies before registering a user account with any AI service. As generative AI tools integrate with other hardware and software interfaces, awareness of when and how generative AI and/or third-party providers are implicated in information sharing (e.g., text and file inputs, permissions to access data, account information and software) becomes central to data privacy and digital hygiene.

[2] Dell'Acqua, et al. 2023
[3] McMurtrie 2025 ("College Graduates"); Rismanchian, Babar, and Doroudi 2025.
[4] Huang 2023. Full-time faculty and staff at UK currently can purchase individual licenses to Microsoft Copilot, a generative AI tool based on OpenAI's models. This UK-specific Copilot license is compliant with FERPA and research integrity requirements. Interested faculty and staff should work with their unit leadership and business officer to arrange for a paid license. Additionally, open-source AI models may be installed on protected servers, but these should also be carefully reviewed for privacy and governance issues.

- **Accuracy.** Language-based generative AI tools rely on a method of predicting strings of text based on user input and behavior. Since the initial release of AI tools in late 2022 and early 2023, some have gained the ability to search and retrieve information from the web as well as retrieve information from specific files or databases. Despite the advancements in both features and capabilities, AI tools may produce "hallucinations" or "confabulations": fabricated, incorrect or misleading information. Hallucinations may also be described as a forecasting error similar to other predictive technologies. Hallucinations implicate a range of information such as facts, concepts, theories, claims, summaries, evidence, attribution, sources and citations.[5] In addition, hallucinations may involve information "drift" whereby subtle shifts in language or understanding result in larger inaccuracies or misconceptions.[6] If instructors or students use generative AI tools, verification and evaluation of the output will be a critical component of informed use.[7]
- **Learning and Agency.** Generative AI offers a growing range of possibilities to enhance institutional and instructor efficacy as well as student learning.[8] Use cases include coaching or tutoring, facilitating personalized learning, simulating interactions, augmenting research and writing, designing curricula and lessons, reviewing and editing drafts, creating content and instructional media and analyzing data. Some researchers and educators, however, warn that an overreliance on AI tools may bypass opportunities for meaningful learning and the development of students' skills and agency.[9] Pedagogically effective use of generative AI varies by activity, course, program and discipline, but it consistently relies on active engagement, reflective and self-regulated learning, transparency and accountability. Instructors are encouraged to have open conversations with students about appropriate and effective use of AI in the context of essential learning effort for the activity or course.
- **Ethics, Bias and Access.** There is an ongoing conversation about the ethics of how generative AI models have been trained on large datasets including openly available data in terms of any biases that the models might inherit and propagate from the datasets or underlying protocols,[10] as well as issues of intellectual property in both the training data and output[11] and impact on the environment.[12] Generative AI technologies continue to evolve at a rapid pace, as do the ways in which we can access and use them. The performance, use

[5] Athaluri, e tal. 2023; Alkaissi and McFarlane 2023; Broad 2024; Elliott 2025; Hosseini, Rasmussen, and Resnik 2023; Jaźwińska and Chandrasekar 2025; Kim, et al. 2025; Metz 2023; Mills and Angell 2025; Schwarcz, et al. 2025; Stening 2023; Weise and Metz 2023; Zhao, et al. 2024.
[6] Parker and Becker 2024.
[7] While hallucinations are almost always invoked as a caution, some researchers have suggested that they may offer a unique affordance for scientific discovery when used under the right conditions, e.g., Broad 2024.
[8] Deng, et al. 2025; Kestin and Miller, et al. 2024; Lira, et al. 2025; Palmer 2024; Suriano, Plebe, Acciai, and Fabio 2025.
[9] Abbas, Jam, and Khan 2024; Anderson and Rainie 2025; Bastani, et al. 2024; Fan, et al. 2024; Gerlich 2025; Harvey, Koenecke, and Kizilcec 2025; Heying and Chiu 2025; Jošt, Taneski, and Karakatič 2024; Kane 2025; Kumar, et al. 2023; Lee, et al. 2025; Lehmann, Cornelius, and Sting 2025; McMurtrie 2025 ("Teaching"); Miller 2025; Nguyen, Hong, Dang, and Huang 2024; Pearson 2025; Rosenzweig 2022; Underwood 2025; Wang, et al. 2024; Ward, Bhati, Neha, and Guercio 2024; Zhai, Wibowo, and Li 2024. See also Handa and Bent 2025 for student use of Claude. Researchers suggest that users may overestimate the accuracy and authority of generative AI output, e.g., Steyvers, et al. 2025. Other researchers similarly suggest that "people with lower AI literacy are typically more receptive to AI," especially when perceived as "magical," cf. Tully, Longoni, and Appel 2025.
[10] Bender, Gebru, McMillam-Major, and Shmitchell 2021; Bianchi, et al. 2023; Caliskan, Bryson, and Narayanan 2023; Fleisig 2024; Georgiou 2025; Greenblatt, et al. 2024; Hickerson and Perkins 2025; Horowitz and Plonksy 2025; Hosseini and Horbach 2023; Hovy and Prabhumoye 2023; Huang, et al. 2025; Kaplan, et al. 2024; Kheya, Bouadjenek, Aryal 2024; Kidd and Birhane 2023; Li, Chen, Namkoong, and Peng 2025; Malmqvist 2024; Nazer, et al. 2023; Nicoletti and Bass 2023; Omiye, et al. 2023; Pacheco, Cavalini, and Comarela 2025; Sandoval-Martin and Martínez-Sanzo 2024; Schwartz, et al. 2022; Sharma, et al. 2023; Small 2023; Turk 2023; Urbina, Vu, and Nguyen 2025; Wan, et al. 2023; Warr and Heath 2025; Wei, Kumar, and Zhang 2025; Whittaker, et al. 2019; Zhou, et al. 2024.
[11] Lucchi 2023; Sobel 2018; Reisner 2025; Saveri and Butterick 2025; Scwartz and Rogers 2022; Strowel 2023; US Copyright Office 2025; Zirpoli 2023.
[12] Berthelot,Caron, Jay, and Lefèvre 2024; Crawford 2024; Ippolito 2025; Khan, et al. 2025; Wang, Li, and Li 2024; Zewe 2025.

conditions and features of generative AI tools may change over time and without warning. Freely accessible AI tools have grown more sophisticated and useful, but there may also be cost barriers to accessing features, capabilities and allowances in more powerful models and subscription-based accounts.

Open-Source Models. Open-source models such as Google's Gemma 3, Meta's Llama 3.3 and Mistral Small 3.1 have become more competitive with proprietary models while allowing further customization with potentially less demand on computational resources.[13] Open-source models may be downloaded onto local devices and protected servers to mitigate data privacy concerns; however, any use of generative AI (whether open-source or proprietary) requires attention to accuracy, agency, ethics, bias and impact of use.[14] Before downloading an open-source model or software for AI models, instructors should assess possible risks and consult with UK Information Technology Services (UK ITS).[15]

Developing and Communicating Course Policies on Generative AI

Clarity around expectations for student use of generative AI is essential for student success because students are likely navigating different policies, requirements and approaches to the use of generative AI in their courses.[16] Students therefore may be unsure about generative AI, especially whether it can or should be used for their coursework.[17] Students may even be reluctant to ask about expectations in the face of ambiguity or uncertainty.[18]

While instructors will adopt a range of policies and approaches for students' use of generative AI in courses, they should be made clear for students both verbally and on syllabi and other locations where students regularly interact with information about the course (e.g., Canvas).

The Office of the Provost maintains syllabus guidance, including required and optional syllabus components, drawn from Administrative Regulations—Academic and Student Affairs 6.1.2. The UK Center for the Enhancement of Learning and Teaching (CELT) maintains a range of example AI course policies using different rationales for instructors to adapt to their courses.

Recommendation. We recommend that course policies exhibit four key characteristics:

- **People-centered:** policies are student- and instructor-centered
- **Adaptability:** policies are adapted to the needs and circumstances of the course
- **Effectiveness:** policies demonstrate characteristics of an effective course policy
- **Awareness:** policies promote awareness and understanding of generative AI[19]

[13] Manchanda, Boettcher, Westphalen, and Jasser 2025.
[14] For example, see Ying, et al. 2025.
[15] For example, open-source repositories may distribute malware through AI tools, e.g., Landymore 2025. In addition, open-source models may be compromised and execute malicious code or transmit data to a third party, e.g., Shah 2024.
[16] Luo 2024.
[17] Amigud and Pell 2021; Baek, Tate, and Warschauer 2024; Bens 2022; Eaton 2023; Kumar 2025; Rienties, et al. 2025.
[18] Ryan, Gheen, and Midgley 1998; Ryan, Pintrich, and Midgley 2001; Sheu, Cong, and Dawes 2022.
[19] Byrd, et al. 2023.

People-centered. AI is a tool that instructors and students can use to enhance education, but it should be used with human oversight and an awareness of its strengths and limitations. Students and instructors should exercise judgment and control over the use of generative AI so that it is used to augment — rather than replace — instructor decision-making and student learning. The U.S. Department of Education's Office of Educational Technology describes this as keeping "humans in the loop," whereby "the human is fully aware and fully in control, but their burden is less, and their effort is multiplied by a complementary technological enhancement."[20]

Adaptability. Course policies regarding the use of generative AI are best adapted to the local context of the course, including the instructor's expertise and perspectives; the course learning goals; the nature of the coursework, discipline and/or profession; and the learning needs of the students. While generative AI may not be as useful for one course, it may also present an opportunity to enhance learning in another course. Moreover, different modalities and tools for generative AI may be more or less desirable for a course. While instructors may adopt a range of course policies regarding the use of generative AI, those policies likely will fall within one of four areas on a spectrum:

- No use
- Use only when/as directed
- Use freely in certain cases
- Use freely in all cases[21]

For more restrictive course policies, an instructor may need to consider measures to ensure that the policy is followed appropriately. This may involve adapting assignments and holding certain activities during class meetings. Additionally, for more restrictive course policies, it is important to understand the limitations of AI detectors as described in the section of these guidelines on responding to possible misuse.

For more permissive course policies, an instructor may need to consider measures to ensure transparency and appropriate documentation of the use of generative AI. Documentation of AI use may range from a brief statement to a detailed explanation of how AI tools were used to accomplish specific tasks for an assignment, along with media (e.g., screenshots) or links to other files, webpages or chatbot conversations.

Any questions or requests from students related to the use of generative AI as learning accommodations should be referred to the UK Disability Resource Center.

Effectiveness. An effective course policy generally includes the following information:[22]

- A definition of generative AI. For example, "Generative AI refers to a range of tools and software features that draw from training on large datasets to generate new content in

[20] US Department of Education Office of Educational Technology 2023.
[21] For more on frameworks for AI use in course policies, see work on the AI Assessment Scale, e.g., Perkins, Furze, Roe, and MacVaugh 2024; Perkins, Roe, and Furze 2024. See also Corbin, Dawson, Nicola-Richmond, and Partridge 2025, especially for their analysis of AI assessment policies and recommendation of "three critical dimensions: the feasibility of enforcement, the preservation of authentic learning, and the emotional wellbeing of teachers and students."
[22] Foltynek, et al. 2023.

written, visual and other forms based on user interactions." This definition may be expanded or revised to include information that is relevant to the course and discipline.

- A statement on whether the use of generative AI will be permitted for coursework and, if so, how and to what degree it will be permitted.
- A specific description of what constitutes inappropriate use of generative AI in the course as well as the consequences for inappropriate use.
- A process for students to document the use of generative AI for assignments and other course activities (if it is permitted). Documentation may involve only a brief statement or it may involve a more detailed explanation of tools, tasks and outcomes that highlights the student's agency and decision-making process. It is good practice to include the website or software that was used, the name of the AI model(s) and the date(s) of use and the purposes or tasks for which AI was used.[23]
- A rationale for the policy grounded in the context of the discipline or profession, the learning goals of the course, the skills assessed and/or ethics and academic integrity.
- Links to resources for understanding and using generative AI ethically and effectively. (See the short list of resources later in this document as well as the literacy resources earlier.)
- A learner-centered and student-friendly tone that builds understanding and motivation for students in the course.
- An invitation for students to discuss any questions or concerns with the instructor.

For assistance in discussing generative AI with students, designing and communicating course policies and better understanding generative AI in the context of teaching and learning, instructors can work with the UK Center for the Enhancement of Learning and Teaching (CELT).

Responding to Misuse of Generative AI in Coursework

With the proliferation and advancement of generative AI tools over the past two years, there may be occasions when an instructor suspects that AI has been used inappropriately for an activity or assignment. Because generative AI is different from many other technologies to which higher education has adapted, it is important to recognize that there is a wider range of possible misuse of generative AI tools depending on the course policy:

- Copying significant or entire portions of text from generative AI with little or no editing
- Relying on generative AI output as an initial draft that is subsequently refined
- Using ideas, approaches or plans that generative AI tools have suggested
- Asking generative AI tools for help with assignments and activities
- Reusing information, calculations or solutions provided by a generative AI tool

[23] Hosseini, Resnik, and Holmes 2023; Perkins 2023.

- Integrating small portions of text generated by an AI tool
- Revising or copyediting text with a generative AI tool

Additionally, even if a student attributes their use of generative AI, it may still be "misuse" if course policy prohibits it in that scenario. Clear policies will help students and instructors navigate the range of possible misuse cases and understand what to expect if an instructor determines that misuse has occurred.[24]

The UK Administrative Regulations—Academic and Student Affairs 6.3.2 defines plagiarism and cheating. The UK Ombud website maintains definitions of plagiarism and cheating drawn from the Administrative Regulations. The Ombud website also provides information about the procedure for processing academic offenses.

It's important to note that because generative AI's language models draw from a variety of sources (including openly available text on the world wide web), it is possible that writing, ideas and other output produced by generative AI may themselves lack proper attribution of source material and may imitate or reproduce copyrighted material on which they were trained.[25]

Detectors. Over the past two years, different approaches to detecting AI-written text have been developed in both research and commercial contexts. The majority of AI detection tools analyze a body of text for patterns that may approximate those of generative AI text output.[26] AI detection has become a contentious topic, and research has shown mixed initial findings regarding the tools' efficacy and potential for false negatives/positives and bias.[27] Research and practice have found detectors to be ineffective for the following reasons:

- They can be prone to false positives, i.e., indicating that all or part of a student's work is likely AI-generated when it is not.[28] Relying on these percentages may introduce bias in the assessment process and demoralize students if further action is taken.

- They can be evaded with a combination of prompt manipulation (e.g., iterating a prompt to receive ideal output) and hand-editing the output.[29] Some AI tools are marketed with claims of "humanizing" AI output to evade detection.[30]

- They cannot be verified with matching sources (as opposed to similarity detectors that link to matching sources, e.g., on webpages).

- They do not guarantee the protection, privacy and confidentiality of any information, data or

[24] Council of Writing Program Administrators 2019
[25] Appel, Neelbauer, and Schweidel 2023; Dobrin 2023; Small 2023; Smits and Borhuis 2022; Thorpe 2023.
[26] Emerging methods such as process tracking and watermarking are being explored. For more, see MLA-CCCC Joint Task Force on Writing and AI 2024; Dathathri 2024; OpenAI 2024.
[27] Bellini, et al. 2024; Cingillioglu 2023; Chaka 2024; Crockett and Howe 2024; Dugan, et al. 2024; Elkhatat, Elsaid, and Saeed Almeer 2023; Fowler 2023; Gegg-Harrison and Quarterman 2024; Giray, Sevnarayan, and Madiseh 2025; Krishna, et al. 2023; Malik and Amjad 2025; Pan, et al. 2024; Paustian and Slinger 2024; Popkov and Barrett 2024; Rafiq, Ain, and Afzal 2025; Salem, et al. 2023; Weber-Wulff, et al. 2023.
[28] D'Agostino 2023; Dalalah and Dalalah 2023; Flitcroft, et al. 2024; Giray 2024; Jiang, Hao, Fauss, and Li 2024; Liang, et al. 2023.
[29] Anderson, et al. 2023; Perkins, et al. 2024; Thompson and Hsu 2023; Sadisivian, et al. 2025; Weber-Wulff, et al. 2023.
[30] Watkins 2024 ("AI Influencers").

intellectual property that a student or instructor inputs.[31]

- They risk creating a surveillance-based or adversarial learning environment that can negatively affect student motivation, learning and belonging.[32]

Data on detectors will continue to emerge and require ongoing reassessment, which may result in updated guidelines.[33]

Data Privacy. Student education records should not be input into third-party generative AI detection tools or systems unless and until the tools/systems have been vetted for data privacy and other AI governance issues and approved by the university for use. This includes generative AI systems and other software or applications that include detection tools. The Family Educational Rights and Privacy Act (FERPA) applies to all student education records, i.e., "records that are directly related to a student and that are maintained by an educational agency or institution or a party acting for or on behalf of the agency or institution."[34]

Responding. Should an instructor suspect that a student has used generative AI inappropriately to complete all or part of an activity or assignment, we suggest consultation with the department chair or school director and the Academic Ombud.

Recommendation. Because of these issues and concerns, we recommend against the use of generative AI detectors for determining academic offenses. UK ADVANCE will continue to monitor the landscape and update the guidelines as appropriate.

Designing Assignments, Curricula and Learning Experiences

The public release of generative AI tools has prompted a robust inquiry around how we design assignments, curricula and learning experiences that leverage the affordances of AI in ways that are ethical and appropriate for different educational contexts. The impact and opportunities of this technology vary by industry, profession, discipline, program, course and instructor, but the overall principles of assessment and learning design are important guides.

Principles of Assessment Design. The design of assessments is driven by many context-specific considerations, most importantly:

- Course and program learning outcomes
- Competencies and skills in the discipline or profession
- Scaffolding along the course curriculum
- Authentic and engaging learning experiences
- Clarity, structure and transparency

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[31] See, for example, GPTZero's privacy policy at https://gptzero.me/privacy-policy.html.
[32] Acevedo 2023; CCCC-IP Caucus; Cullen 2022; Lang 2013.
[33] Initial findings are also mixed for human ability to distinguish AI-written content from human-written content, e.g., Casal and Kessler 2023; Fleckenstein, et al. 2024; Jones and Bergen 2024; Kofinas, Tsay, and Pike 2025; Liu, et al. 2024; Stadler, et al. 2024; Waltzer, Pilegard, and Heyman 2024. Some research has suggested that particular methods and tools may accurately detect AI-generated text, but these often are restricted to a very specific kind of text, e.g., Desaire, Chua, Kim, and Hua 2023, or are contested by independent reviewers, e.g., McCrosky 2024.
[34] US Department of Education Student Privacy Policy Office.

- Opportunities to practice and improve
- Iterative feedback on performance
- Reflection on progress and learning

Effective, learning-centered assessments follow from these principles whether they seek to avoid the use of generative AI or engage students in it.

Design Strategies to Enhance Learning and Mitigate Misuse of Generative AI.
Strategies that mitigate conditions that may lead to misuse of generative AI also draw from principles of strong teaching and learning design. Instructors may consider how assessments, curricula and activities can draw from any of the following strategies as is appropriate for the course, students and other factors. None of these strategies are foolproof ways to ensure that generative AI is not used in inappropriate ways, but they do refine instructional approaches in ways that can better incentivize and motivate authentic and engaged learning.

- Segment larger assessments with checkpoints and/or multiple deliverables that value iterative processes along with final products.
    - This strategy helps students to organize and plan their efforts, make steady progress toward a larger goal, increase their self-efficacy and reflect on their decision-making by documenting their process. Process documentation can take many forms and, if AI is allowed, can include artifacts attesting to students' engagement with AI tools.
- Integrate work toward assessments into class meetings and other planned interactions.
    - This strategy ensures that opportunities to study, practice, plan, research, draft, revise, etc., are embedded in the culture of the course, and students are held accountable for doing the work in ways that are constructive for learning.
- Ground assessments in the unique context of the course and draw from embedded, real-world scenarios.
    - This strategy asks instructors to integrate unique aspects of the course, whether particular readings, concepts, methods, discussions, cases, workforce issues, etc., rather than assigning abstracted or generic tasks. While generative AI is capable of responding to intricate instructions, authentic assessments can engage and motivate students.
- Incorporate opportunities to receive feedback on learning and performance via drafts and revisions, development phases, interactive practice, observations, etc.
    - This strategy leverages frequent, formative assessment as a way to lower the stakes, engage and motivate students and focus on opportunities for growth.
- Ask students to contribute original insights, analyses and other perspectives.
    - This strategy incentivizes students to add their own informed contributions to the issues at hand, which frames learning as more than merely reproducing extant knowledge.
- Include moments when students need to be conversant about the content, nature and progress of their own work.
    - This strategy engages students in multiple modes and contexts for communicating about their learning and emphasizes the importance of reflecting on their efforts in addition to "proving" that they have engaged in the activity at hand.

- Ask students to express their learning in different genres, formats and modalities.
    - This strategy engages students in different modes and genres of communication in preparation for careers that will require them to engage with different stakeholders in a variety of rhetorical and strategic situations.
- Examine assignments for their validity to what they're attempting to assess.[35]
    - This strategy ensures that assessments are best aligned with the knowledge, skills, competencies, values and other targets for the course and/or program. For example, an exam that covers cognitive outcomes based on knowledge retention would not be valid if the desired outcome were more concerned with a competency-based framework.

These design strategies are equally important for courses with significant asynchronous aspects, whether online, hybrid or in-person. Regardless of a course's form and setting, students benefit from meaningful interactions with peers and instructors, intentional and structured approaches, authentic and productively challenging learning activities and transparency around expectations.

Student Use of Generative AI. While some situations may not call for the use of generative AI, others may be enhanced when it is used strategically. If an instructor integrates generative AI into an assignment or learning activity, it is important that all students are supported in the use of digital technologies rather than relying on extant, uneven literacies and comfort levels with generative AI tools.[36] This might mean walking students through the process of using AI for a particular task, providing tips for effective use of AI for that task, connecting students to resources and tutorials, addressing the AI tool during office hours, etc. Generative AI has shown potential to be effective for learning when used in an assistive capacity while:

- Brainstorming or discovering ideas and approaches
- Organizing projects or planning efforts
- Summarizing, synthesizing or transforming information and other content
- Interpreting, analyzing and strategizing with data
- Designing, implementing and reviewing research or scholarly projects
- Offering different or divergent possibilities for approaches to a task
- Giving formative feedback on ideas, drafts or other material
- Coaching, tutoring or supporting students' learning, studying and practice in the course
- Creating material for demonstrations, case studies, simulations and experiential activities
- Personalizing or adapting learning activities or course content

To ensure that students learn to become strategic and ethical users of generative AI, it will be important to emphasize that students should review all AI output for accuracy, appropriateness and quality, and to understand that the output represents only one possibility for understanding and responding to an issue among many others. In many cases, it will be important for students to document their use of generative AI. This documentation may involve only a brief statement or it may involve a more detailed explanation of tools, tasks and outcomes that highlights the student's agency and decision-making process (similar to a methods section). It is good practice to include the website or software that was used, the name of the AI model(s) and the date(s) of use and the purposes or tasks for which AI was used.

[35] Dawson, Bearman, Dollinger, and Boud 2024.
[36] Zamfirescu-Pereira, Wong, Hartmann, and Yang 2023.

Instructor Use of Generative AI. Instructors may use generative AI tools to enhance their efforts to support student learning and success. Similar to students, instructors should review all AI output for accuracy, appropriateness and quality, and understand that AI output represents only one possibility for approaching a particular instructional task or situation. Generative AI has shown potential to be effective for instructors when used in an assistive capacity while:

- Brainstorming or discovering ideas and approaches to teaching and curricular design
- Considering concepts, information, examples, practices and discourses in other fields
- Designing or getting feedback on instructional artifacts such as handouts, rubrics, lesson plans, instructions, notes, slide presentations and other media
- Customizing or considering alternative approaches to teaching, curricula and materials
- Implementing AI-driven course assistants, tutors or support agents
- Identifying information, material and ideas to support student learning or projects
- Composing effective feedback on student work
- Generating a variety of questions, prompts, scenarios and tasks for students to engage
- Reviewing courses, modules or lessons against specific criteria or frameworks
- Simulating or anticipating learners' reception of activities or course material
- Considering evidence-based practices and frameworks for teaching and curricular design

A recommended practice for instructors is maintaining transparency around how they are using generative AI in ways that align with expectations for students in the class.[37] Instructors should not use generative AI in place of their own judgment to determine numerical or letter grades.[38] In addition, student work and other intellectual property should not be shared with third-party AI tools without student permission.

Resources for Instructors and Students. Resources for instructors and students have proliferated since the introduction of ChatGPT in late 2022. UK ADVANCE offers the following short list of curated resources as a starting place for instructors and students who are eager to learn more about how generative AI works as well as how generative AI can support teaching and learning with practical examples of application in learning environments.

- *Text Gen Ed: Teaching with Text Generation Technologies*, edited by Tim Laquintano, Carly Schnitzler and Annette Vee, WAC Clearinghouse, 2023
- *Text Gen Ed: Continuing Experiments* January 2024 and August 2024, edited by Carly Schnitzler, Annette Vee and Tim Laquintano, WAC Clearinghouse, 2024
- Teaching Repository for AI-Infused Learning, University of Central Florida, 2024-2025
- The AI Pedagogy Project, metaLAB at Harvard, 2023-2025
- "Thinking Like an AI," Ethan Mollick, 20 Oct 2024
- *Inside Higher Ed* and *Chronicle of Higher Education* coverage of AI

[37] Watkins 2024 ("Open Disclosure").
[38] Research and expert perspectives on the accuracy, fairness and appropriateness of generative AI based grading are conflicted and cautious, especially regarding more complex assessments, e.g., Chai, et al. 2024; Flodén 2025; Furze 2024; Grévisse 2024; Jonäll 2024; Kooli and Yusuf 2023; Kortemeyer 2023; Kostic, Witschel, Hinkelmann, and Spahic-Bogdanovic 2024; Li, et al. 2023; Najafi, Pabba, Subramanian, and Vidals 2025; Pack, Barrett, and Escalante 2024; Seßler, Fürstenberg, Bühler, and Kasneci 2025; Taylor 2024; The Learning Network 2024; Wu, et al. 2025; Xie, Niu, Xue, and Guan 2024; Yavuz, Çelik, and Çelik 2025; Zhang, Boey, Tan, and Jia 2024. This recommendation does not apply to software or digital platforms that have been approved for use in determining grades, nor does it apply to automated scoring of closed-ended questions and similar assessments, e.g., via Canvas.

Support for Instructors at CELT. For support with teaching and learning with generative AI (as well as developing generative AI literacies and skills), instructors are encouraged to work with the UK Center for the Enhancement of Learning and Teaching (CELT), which provides programs, workshops and resources on generative AI and consults with instructors and the UK community on up-to-date issues, information, strategies, practices and skills for generative AI.

Support for the UK Community. Contact UKADVANCE@uky.edu with questions, ideas and recommendations as well as feedback regarding AI-related efforts underway on campus. The UK ADVANCE webpage can be viewed at advance.uky.edu.

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