# Generative AI in Universities: Practices at UCL and Other Institutions, and the Path Forward

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## Abstract

The integration of generative AI (GenAI) in higher education is transforming teaching, learning, and research, offering opportunities for innovation and efficiency. However, its widespread adoption faces challenges related to ethical considerations, data privacy, intellectual property, and compliance with evolving legal frameworks. Universities are cautiously adopting GenAI, focusing on maintaining academic integrity while exploring new ways to integrate AI into assessments and student learning. This article focuses on University College London's (UCL) approach to GenAI and offers insights from the practices of other universities. The article emphasizes the need for secure environments in GenAI integration and outlines steps to accelerate the process, such as acquiring licenses, forming working groups at faculty and institutional levels, and sharing best practices through standardized templates. It highlights the importance of cross-institutional collaboration, including libraries, and adaptable policies for the responsible use of GenAI, ensuring ethical practices and innovation. Recommendations focus on balancing innovation with responsibility in higher education's adoption of GenAI.

**Keywords:** Generative Artificial Intelligence; GenAI; academic integrity; higher education, libraries; responsible AI use.

## Introduction

The emergence of Generative AI (GenAI) in higher education presents both exciting possibilities and significant challenges. As universities seek to leverage AI technologies to enhance teaching, learning, and research, they must confront the ethical concerns that accompany their adoption. Key issues such as academic integrity, data privacy, and intellectual

property rights (IPR) are central to the ongoing debate around the responsible use of GenAI tools (Cotton et al., 2023; Dwivedi et al., 2023; Kizilcec et al., 2024; Law, 2024; Lee et al., 2024; Rasul et al., 2024; Wang et al., 2024).

The adoption of GenAI signifies a broader recognition within universities that technology will continue to evolve and play a vital role in preparing students for the workforce. As industries increasingly value digital skills, universities see the potential of AI in equipping students with the tools to thrive in an AI-driven world. However, the challenge lies in carefully balancing the opportunities that GenAI presents with the ethical implications it raises. As institutions embrace this technology, they must thoughtfully assess its integration to ensure it contributes positively to education while maintaining academic integrity, safeguarding sensitive data, ensuring compliance with legal frameworks, and fostering an ethical environment for experimentations with these technologies.

While the integration of GenAI offers opportunities to enhance student learning experiences and promote higher-order skills such as critical thinking (Wang et al., 2023; Kizilcec et al., 2024), its application within universities is not without risks. Concerns over the potential for AI-generated content to be presented as original student work raise questions about the preservation of academic integrity. To ensure academic integrity, assessment briefs must be redesigned to help students develop new skills with GenAI, evaluate new learning objectives, and guarantee that final submissions are AI-proof (Gupta and Gupta, 2024; Gruenhagen et al., 2024). Universities must, therefore, adopt a cautious yet innovative approach, where they can experiment with GenAI while ensuring that ethical boundaries are respected.

This paper explores how universities are navigating the challenges of integrating GenAI, balancing innovation with responsibility. By examining the approaches of leading institutions such as University College London (UCL) in the United Kingdom, Harvard University in the United States, and Gisma University of Applied Sciences in Germany, the paper provides insights into how academic institutions can move forward in fostering an AI-driven environment while upholding the ethical standards fundamental to higher education. The results of this investigation will offer valuable perspectives for universities of all sizes as they explore the responsible adoption of GenAI, informed by the experiences of three universities across different countries and institutional scales.

## Research Methodology

This study adopted a case study approach, employing qualitative methods for data collection and analysis. The methods included face-to-face interviews, online interviews conducted via Microsoft Teams, and analysis of publicly available information on the UCL website, particularly the Generative AI Hub.

Informed consent was obtained from all participants prior to the interviews. The collected data, including shared materials and responses, were analyzed using thematic analysis to identify patterns and themes. During the analysis, certain clarifications were required, and follow-up questions were asked to some participants. These follow-ups were conducted via email to address specific gaps and gather additional insights. Participants were drawn from diverse groups within UCL to provide a comprehensive understanding of GenAI practices. These included (a) members of the Higher Education Development & Support Institute – Arena, which offers services to those teaching and assisting UCL students, including the use of GenAI in education, (b) one of the directors of a study program, (c) one representative from UCL's AI group (academic skills group), and (d) faculty members responsible for designing assignments in accordance with UCL's AI guidelines and determining the integration of GenAI into their courses. As part of ethical research practices, the final analysis was shared with a subset of participants. Specifically, it was shared only with those who contributed specific information not publicly available, ensuring alignment with the data they provided. The analysis was not shared with all participants, as the findings showed similarity across certain themes, reducing the necessity for broader sharing. Additionally, publicly available information was excluded from this step.

The data collection about GenAI approaches at Harvard was conducted through secondary research, utilizing publicly accessible information available on the university's official website. Insights into Gisma University of Applied Sciences (Germany) are drawn from the researcher's firsthand experiences as a professor teaching courses and serving as the director of the Multidisciplinary Research Centre for Innovations in SMEs (MrciS) At MrciS, applied research is conducted from a multidisciplinary perspective, and includes investigations into the integration of emerging technologies in education. These efforts aim to enhance students' learning and skills, supporting their entrepreneurial ventures while also strengthening SMEs seeking innovative solutions.

## Research Findings

## Insights gathered from discussions with UCL experts and publicly available data reveal the following intriguing findings

(a) **AI Working Groups:** UCL embraced GenAI by promoting its ethical and responsible use, forming a cross-institutional AI Scoping Group with senior leaders, academic experts, and supporting professional services staff to guide the initiative (Young et al., 2023). UCL's AI working groups form subgroups to address these areas. The Academic Skills AI group aimed to build confidence among staff and students in understanding and discussing GenAI. The group consisted of experts from the Academic Communication Centre, digital skills, library services, and AI in education, as well as academics. They developed several key initiatives to achieve this goal. These included guidance on acknowledging use of AI, a Moodle course on academic skills, and a teaching toolkit designed to help teaching staff discuss the appropriate use of GenAI with their students.

(b) **UCL AI Guidance:** UCL's GenAI guidance, integrated into the academic manual, offers faculty flexibility in determining AI use in assessments. This approach allows adaptability as technology evolves and avoids rigid policies, ensuring academic integrity and effective evaluation of learning outcomes. It also addresses the challenges of creating a one-size-fits-all policy for a diverse university. The guidance introduces a three-tiered AI categorization for assessments: Category 1 prohibits AI use entirely *(except a few minor usages like grammar corrections and others)*, ensuring students meet learning objectives independently.

Category 2 allows the use of AI as an assistive tool, where its usage is not included in the learning outcomes or assessment criteria. The purpose of such assessments is not to develop skills in using GenAI and the students may choose to use or not use AI in their work. The assessment is challenging in the sense that a given problem could not be directly solved using technology. For instance, the assessments could involve the evaluation of the solution to the problem proposed by the students, including their ability to justify decisions in the process of generating it and its optimality. Students can utilize GenAI to aid in generating optimal solutions by automating specific tasks or suggesting approaches. However, while technology provides guidance and suggestions, it does not deliver the final answer.

Students must synthesize multiple concepts and insights to arrive at a solution and justify it with rational reasoning.

Category 3 integrates AI use into the assessment, evaluating students' ability to critically and creatively leverage the technology. For example, students may generate outcomes using AI, compare them with other methods, and critically reflect on the technology's accuracy and limitations. The use of GenAI is integrated into the assignment, making it a key component of the learning outcomes and assessment criteria. This ensures that students not only develop proficiency in using the technology but also critically evaluate its role and limitations in solving complex problems.

The use of GenAI requires students to comply with UCL's guidance on acknowledging the use of and referencing GenAI (https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-genAI). UCL's AI guidance offers three customizable categories for assessments, allowing module leaders to choose the most appropriate one for their context. This decision is clearly communicated to students through assessment briefs, aligned with UCL's Feedback and Assessment guidelines.

(c) **No Use of AI Detector software:** UCL uses Turnitin to detect plagiarism but does not rely on software to detect the amount of AI-generated content. This decision is based on concerns about the accuracy of such software, potential IPR issues with student submissions, and the handling of sensitive data, including students' personal information. The Student Academic Misconduct Procedure is outlined in Chapter 9 of the academic manual (https://www.ucl.ac.uk/academic-manual/chapters/chapter-6-student-casework-framework/section-9-student-academic-misconduct-procedure). Since UCL does not use AI detection software, it relies on the expertise of the course faculty to determine if a student has used GenAI in a manner not permitted by the assessment brief, thereby violating academic integrity. In such cases, students may be required to attend an investigatory viva, and participate in investigation, with outcomes ranging from no penalty to "Academic Misconduct beyond Adjudication", as per the UCL Adjudication Framework.

(d) **Generative AI Hub:** UCL has a dedicated space on their website called Generative AI Hub, which serves as a central resource for information about GenAI. The hub provides details on the technology itself, and provides guidelines for the acceptable use of GenAI in UCL assessments, and its role in maintaining academic integrity. It also offers materials

for teaching staff, including a teaching toolkit, case studies, and information about events such as workshops.

(e) **IPR related Guidance:** GenAI raises significant concerns beyond academic integrity and meeting students' learning outcomes, particularly in regard to IPR and copyright issues. A primary concern is that GenAI models may be trained on copyrighted materials without obtaining permission from copyright holders. Additionally, inputs provided by users, such as students, might be protected under copyright, while the ownership and copyright status of GenAI outputs remain unclear. The black-box nature of GenAI further complicates matters, as it offers outputs based on prompts without explaining the underlying processes or revealing the training datasets, which are typically kept confidential. These factors contribute to potential legal risks when using GenAI for creating, sharing, or leveraging information. In response, UCL Library has analyzed these issues and developed resources to support users. These resources cover the fundamentals of copyright in relation to GenAI and provide an overview of relevant UK regulations and ongoing court cases. They also explore ownership concerns related to GenAI outputs and the reuse of publications, especially open-access ones, for model training. The library has also developed a checklist to guide users in navigating interactions with GenAI amidst these copyright complexities (https://library-guides.ucl.ac.uk/generative-ai/copyright-genai-checklist). UCL's Information Management Policy categorizes data into public, confidential, and highly confidential (https://www.ucl.ac.uk/isd/understand-highly-confidential-information). With a Microsoft Copilot license, prompts, questions, and results accessed via UCL logins are secure, not saved, and excluded from AI model training. Students are advised against sharing sensitive, personal, or copyrighted data on unlicensed tools like ChatGPT (https://www.ucl.ac.uk/teaching-learning/generative-ai-hub/safeguarding-your-data-genai).

(f) **Assessment Design Guidelines for Assessment Integrity**

The assessments need to be designed in a way that ensures academic integrity. UCL introduced "A Refreshed Approach to Feedback and Assessment," which emphasizes that assessments should support timely and informative feedback to enhance student learning. The assessment design must align with the learning outcomes students are expected to achieve, ensure academic integrity, and could incorporate various types of assessments,

including projects, invigilated closed-book exams, and more. The different components of the assessments could involve presentations, viva exams, and practicals. It is up to the faculty to determine the type of assessment and its components, ensuring that a significant portion of the assessment is resistant to AI misuse or any other academic misconduct like contract cheating. For example, the assessment could require a written submission with a deadline for online submission, followed by a presentation. Since courses differ, some may involve challenging problems, such as open-ended problems without a single solution, where students are evaluated based on the optimality and feasibility of their solutions, as well as the justification of the decisions they made to arrive at the solution.

The guidelines ensure that students receive meaningful feedback for their work while also emphasizing that a significant portion of the student submissions must genuinely reflect their own efforts. For instance, a written exam followed by a presentation can effectively verify that the student has completed the work independently, rather than relying on GenAI or engaging in contract cheating. This dual-layered approach not only reinforces academic integrity but also provides an opportunity for students to articulate and defend their work, further demonstrating their understanding and engagement with the subject matter. The new approach is an effective way to consolidate existing policies on feedback and assessment design, particularly in addressing challenges posed by GenAI.

(g) **GenAI acknowledgement**

The use of GenAI tools by students must be acknowledged to maintain transparency and fairness, which are core elements of academic integrity. Failing to disclose the use of such tools violates these principles and constitutes academic misconduct under the UCL Academic Manual, Chapter 9 (Section 9.2, 5(a)). Students must ensure proper attribution when using GenAI in their academic work to comply with institutional policies and uphold ethical standards. The “template student-facing slide deck” of the teaching toolkit designed by the UCL Academic Skills AI group introduces GenAI and includes materials that teaching staff can use to engage students in discussions about its use. These materials cover key topics such as UCL’s policy on GenAI, guidelines for acknowledging the use of GenAI in assignments (when permitted by the module assessment brief), and the potential applications of the technology. The accompanying teaching toolkit strongly encourages staff to align their decisions on GenAI use in assessments with the module’s intended

learning outcomes. While the final decision about the assessment brief and use of GenAI rests with the teaching staff, the toolkit emphasizes creating briefs that enable students to effectively meet these outcomes.

## GenAI approaches and practices at Havard University

Harvard University issued initial guidelines to the entire university for the use of GenAI I tools, such as ChatGPT. The guidelines allow the students to experiment with technology while ensuring critical considerations are met. These include safeguarding information security and data privacy by avoiding the input of confidential information into publicly available AI tools. Harvard classifies data into five levels, ranging from L1 to L5, and prohibits sharing Level L2 and above information with GenAI tools (https://privsec.harvard.edu/data-classification-table). This ensures compliance with legal and copyright requirements by verifying AI-generated content for accuracy and addressing ownership concerns. Academic integrity is maintained by adhering to school-specific policies and properly citing AI tools used in academic work. Faculty members have the discretion to decide if AI tools are allowed in their courses, and if permitted, they must specify the extent of usage in their syllabi through a policy statement (https://oue.fas.harvard.edu/ai-guidance). The Faculty of Arts and Sciences (FAS), through Office of Undergraduate Education, proposes three possible approaches: a maximally restrictive policy, where AI tools are prohibited throughout the course; a fully permissive AI policy, allowing unrestricted use of AI tools throughout the course; or a mixed policy, permitting the use of AI tools only for specific assignments of the course. However, some institutions, such as Harvard Graduate School of Education, restrict the use of GenAI by students. Permissible uses include activities such as seeking clarification on concepts, brainstorming ideas, refining thoughts, conducting web searches, and drafting non-coursework emails (https://registrar.gse.harvard.edu/AI-policy).

Assessments must be redesigned to ensure academic integrity in the era of GenAI (Gruenhagen et al., 2024; Lee et al., 2024). This includes clearly identifying learning goals, articulating specific grading criteria, and designing realistic, collaborative, student-led assignments. These assignments should relate to students' personal experiences and real-world contexts, making them difficult for AI to generate (https://dyzz9obi78pm5.cloudfront.net/app/image/id/64f2117411b2bc558f4d31b4/n/.pdf). By

focusing on originality and meaningful engagement, faculty can encourage students to demonstrate their understanding in ways that AI tools cannot replicate. Additionally, institutions like Harvard's FAS have decided not to procure licenses for GenAI text detection tools for individual courses due to concerns over the accuracy of these tools (https://oue.fas.harvard.edu/ai-guidance). This decision reflects a cautious approach, acknowledging the limitations of current technology in reliably detecting AI-generated text.

When AI tools are allowed in courses, students are responsible for the content they submit and must provide proper acknowledgment of the tools they have used. These guidelines aim to balance the innovative exploration of AI technologies with the need to uphold academic and ethical standards. Harvard has formed three university-wide groups to guide the use of GenAI tools. The Generative AI Teaching and Learning Group focuses on sharing resources, identifying best practices, and addressing implementation challenges in education while fostering communication across schools and with university leadership. The Generative AI Research and Scholarship Group aims to uphold the integrity of scholarly activities by ensuring data security, intellectual property protection, and accurate use of AI tools in research proposals and communication (https://www.harvard.edu/ai/working-groups/). Harvard's Generative AI Administration and Operations Group focuses on enhancing organizational efficiency through responsible AI use. It addresses critical issues, including information security, data privacy, procurement processes, and administrative practices, to ensure compliance and safeguard institutional integrity. The Generative AI Faculty Advisory Committee at Harvard's FAS, including the John A. Paulson School of Engineering and Applied Sciences (SEAS), explores the opportunities and challenges of GenAI in teaching and research. It advises the Dean's Senior Advisor on AI to ensure informed and responsible implementation, positioning FAS as a leader in AI applications within higher education. This indicates that while university-wide working groups exist at Harvard to address overarching GenAI challenges, individual faculties can establish their own expert committees. These committees can focus on tailoring GenAI policies and practices to their specific teaching and research contexts, ensuring that unique needs and priorities are effectively addressed.

Harvard University provides an AI Sandbox, a unified platform offering access to cutting-edge large language models (LLMs) from OpenAI, Anthropic, Google, and Meta (https://huit.harvard.edu/ai-sandbox). This tool allows students and other users to explore and

experiment with these models whilst enabling uploads of data classified from Level 1 up to Level 3, which would otherwise be prohibited under the institute's information security policies. The sandbox is designed to minimize security and privacy risks by ensuring that uploaded data is not used for training any vendor's LLMs. Harvard University also provides access to other AI tools, such as OpenAI ChatGPT Edu, through the licenses procured by the university. These licenses allow users to utilize the tool while sharing information classified from Level 1 up to Level 3, ensuring compliance with security and privacy protocols. This secure and controlled environment promotes responsible experimentation and innovation with AI technologies.

Harvard provides GenAI resources, including guidance and faculty experiences, on platforms such as GenAI @ Harvard (https://www.harvard.edu/ai/), the AI Guidance page from the Office of Undergraduate Education (https://oue.fas.harvard.edu/ai-guidance), the Harvard University Information Technology website (https://huit.harvard.edu/ai), and FAS webpage (https://www.fas.harvard.edu/initiatives/generative-artificial-intelligence/). An engaging feature on the GenAI @ Harvard webpage is the "Faculty Voices" section, where educators share insights from their experiments with GenAI tools in teaching. Through short videos (3 to 7 minutes), faculty members outline the challenges they addressed using GenAI, the innovative approaches they implemented, and the valuable lessons learned (https://www.harvard.edu/ai/category/faculty-voices/).

## GenAI approaches and practices at Gisma University of Applied Sciences

At Gisma University of Applied Sciences, the AI guidelines, similar to those of UCL and Harvard, positions faculty as the primary decision-makers regarding the use of GenAI in assessments. The university recognizes the dual nature of GenAI as both transformative and disruptive, emphasizing its relevance in academic and professional settings. Rather than prohibiting its use, the university aims to support students in using GenAI effectively, ethically, and transparently. By default, the use of GenAI in assessments is considered academic misconduct unless explicitly permitted. Faculty members permitting the use of GenAI must explicitly define its boundaries in the assessment briefs ensuring that academic integrity is ensured. The university states that "*by submitting a piece of work for summative assessment,*

*students are representing that work as their own and not the product of generative AI use*". Detecting the use of AI-generated text in assessments is a challenging task. At Gisma, Turnitin is used to generate similarity and AI text scores, but these scores alone are not sufficient to issue academic misconduct letters. The use of Turnitin also varies across different courses and departments. In accordance with the assessment policy, if a tutor suspects that a piece of work was produced by GenAI, it may be reported as academic misconduct. The outcomes vary depending on the severity of the case. Minor cases are treated as Poor Academic Practice (PAP), resulting in deduction of marks. In major cases, the tutor can either discuss the matter with the student to decide whether to drop the allegation or forward it to the Exam Board (EB), or directly escalate it to the EB. The Exam Board may also seek advice from the Academic Integrity Committee (AIC) before making a final decision. The university established working groups to develop guidelines for the use of GenAI.

These guidelines and policies were developed or revised through a collaborative process. This process involved the expertise of the working group, input from faculty members, and feedback from higher management. Discussions took place during several weekly faculty meetings, where the topic was deliberated, solutions were proposed, and final guidelines were agreed upon. Consultations with external experts also contributed to the development of these guidelines.

Individual course module leaders have the autonomy to decide whether to integrate GenAI into their courses. If they choose to allow its use, they must establish clear boundaries, which are explicitly outlined in the assessment briefs. Faculty members also have the flexibility to determine how GenAI is utilized within their course delivery. For example, the Multidisciplinary Research Centre for Innovations in SMEs (MrciS) implemented an AI course policy that defines GenAI as a "knowledge collaborator". To ensure accountability, MrciS introduced an AI Contribution Form and an AI Contribution Assessment Form, which students must complete and submit alongside their assessments. Additionally, course handbooks and delivery plan incorporate tasks requiring interaction with GenAI, as well as sessions for reflecting on the outputs generated by technology. Course tasks are structured to teach students about the ethical use of technology, its limitations, IPR considerations, and data protection issues. Dedicated sessions are conducted to review assessment briefs. These sessions explore the potential use of GenAI in various activities, highlighting its benefits and addressing

challenges related to data, IPR, and ethical concerns. In the module, students engage in challenging tasks designed to deepen their understanding of GenAI usage and its limitations while developing essential skills, such as literacy skills. These experiences and skills become instrumental in addressing the open problems outlined in the assessment briefs. Thus, achieving the right balance between course design, assessment briefs, and the intended learning outcomes is crucial in the era of GenAI.

The integration of GenAI is continually refined based on lessons learned from course evaluations. Each course involving GenAI undergoes rigorous Monitoring & Evaluation (M&E) to assess both short-term and medium-term outcomes, ensuring ongoing improvement and effective use of the technology in education. The lessons learned from the integration of GenAI are disseminated through evaluation reports, research papers, and discussions with peers during weekly faculty meetings. A key takeaway is that in smaller universities, where there is greater interaction among peers and higher management, it is easier to align experiments with existing policies. This collaborative environment not only facilitates innovation but also provides valuable insights for policymakers to refine and adapt guidelines in response to emerging technologies. Regular interactions also help peers across various domains understand what approaches are effective and which may not work in their courses, fostering collective growth and adaptation.

In larger universities, having specialized working groups for specific issues, like assessment design, within each institution can be effective. These groups, aligned with university policies, can address their institution specific needs (rather finding solution for entire university with multiple and diverse institutions) while sharing insights across institutions, ensuring consistency and adaptability.

## Comparative Analysis of GenAI Approaches and Practices Across the Three Universities

All the universities analyzed in this research decentralize the decision-making on AI use in assignments, ensuring clear communication with students. Wang et al. (2024) noted that many educators feel anxious and hesitant about incorporating GenAI into their teaching practices, highlighting the need for universities to offer clear guidance and support. The generic guidelines rather detailed directives from higher management, combined with the flexibility

for individual faculties to tailor guidelines, reflects a cautious and decentralized approach for integrating the technology into academia. This flexibility will encourage educators to explore innovative ways of integrating GenAI into their courses.

These Universities focus on ethical use, academic integrity, data security, IPR, and the acknowledgment of GenAI, and promoting innovation through dedicated working groups. They have formed AI advisory groups to address challenges and opportunities. Additionally, none of the institutions relies on AI text detection software, trusting faculty expertise to ensure proper usage. At Gisma, Turnitin is used not only for plagiarism detection but also to provide AI generated text scores (*called AI score)*. While the AI score serves as a small indicator, it is not solely relied upon; rather, it acts as a helpful pointer for faculty in assessing submissions.

A key difference lies in citation practices: Harvard advises students to cite any text generated by GenAI that is used in assignments, whereas UCL does not require such citations unless appropriate and necessary. UCL further specifies that "*GenAI systems should not be cited as an author nor included as a source in the reference list*" (https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-genAI). At Gisma, in courses taught by one of the authors of this paper, citing text generated by GenAI is not permitted, except when students are required to challenge the AI-generated output. Acknowledgement of GenAI usage is not included in the assignment itself, but rather in a separate document called the AI Contribution Form.

Another key difference is that UCL has not procured any GenAI tools, except for Microsoft Copilot. This may be because GenAI technology is still in its early stages, and UCL is taking a cautious approach. As the community gains more experience with technology or as new tools emerge, UCL may make a more informed, rational decision about broader adoption at a later stage. Harvard on the other hand, has procured licenses of some AI tools, including AI sandbox, and OpenAI ChatGPT Edu.

Finally, all three universities allow faculty to determine the extent of AI usage in their courses, but their approaches differ in structure. UCL employs a three-tiered policy—restricting, permitting in assistive role, or permitting in integral role—tailored to assessment types.

Unlike UCL's defined categories, Harvard's FAS policy focuses on the number of individual course assessments that permit or restrict GenAI usage. Harvard does not appear to

have a university-wide policy categorizing assessments based on GenAI usage, unlike UCL's three-tiered approach. Instead, it allows individual faculties or institutions to establish their own categories, as demonstrated by FAS. Course instructors are then responsible for determining the appropriate level of AI use in their assessments, aligning with any existing faculty or institutional GenAI assessment categories. To ensure clarity, instructors must explicitly define the policy in their course statements. In the case of Gisma, there is no formal classification system for assessments. Instead, assessments are categorized based on whether GenAI usage is permitted or not. When permitted, the course module leader defines the extent of GenAI usage and communicates it clearly to students through the assessment briefs.

## Discussion

The above comparative analysis highlights that universities recognize GenAI technologies as an evolving opportunity rather than a passing trend. These technologies are being leveraged to help students develop skills while understanding their limitations, all within the framework of academic integrity, data security, and legal considerations such as IPR. Addressing these issues is essential, as highlighted by several studies. Universities integrating GenAI tools are facing a range of ethical challenges. These include academic integrity, safeguarding data privacy, and addressing other significant concerns (Cotton et al., 2023; Dwivedi et al., 2023; Kizilcec et al., 2024; Law, 2024; Lee et al., 2024; Wang et al., 2024; Rasul et al., 2024). Proactively tackling these challenges is essential to ensure responsible and effective implementation of GenAI within higher education institutions.

Academic assessments are a key area of concern, requiring redesigns that enable students to demonstrate new competencies while ensuring submissions reflect original work. The responsibility for maintaining academic standards rests on faculty, who must ensure that students meet expected quality benchmarks, and academic integrity is ensured. Rather than adopting rigid, universal policies, universities are increasingly opting for adaptable guidelines. These guidelines can be tailored and implemented by individual faculties at the course level, recognizing the diverse needs of academic disciplines and institutions. This flexibility also reflects the rapidly evolving nature of AI technologies and their potential applications in education.

The market is filled with AI detection tools, each promoting high accuracy and distinct advantages. However, research indicates that these tools frequently fall short of their promises, lacking the precision and dependability they advertise (Elkhatat et al., 2023; Weber-Wulff et al., 2023; Perkins et al., 2024). Determining the most reliable tool for identifying AI-generated content in student-modified assignments remains a significant challenge. For instance, the effectiveness of Turnitin in detecting AI-generated content within paraphrased and subsequently altered assignments remains uncertain (Gupta and Gupta, 2024).

Both UCL and Harvard appear cautious about relying on AI text detection tools due to concerns over accuracy and potential IPR issues. Instead, they emphasize designing assessments that minimize reliance on AI-generated content while fostering originality.

Harvard, for example, has acquired licenses for a range of GenAI tools and established secure environments, such as the AI Sandbox, for experimentation. In contrast, UCL has licensed Microsoft Copilot. According to the researcher's interpretation, UCL may, in the future, invest in additional GenAI tools and this cautious approach reflects a strategy of waiting to observe the applications, outcomes across UCL departments, and any data privacy concerns, before making further investments once sufficient evidence is available.

Working groups comprising experts from diverse fields play a crucial role in shaping and evolving AI-related policies. As knowledge grows, these groups adapt to existing regulations and propose new measures. Universities are also enhancing accessibility to AI resources through online platforms, ensuring stakeholders stay informed and equipped to navigate this transformative landscape.

The following suggestions could help accelerate the integration of GenAI in academia:

- Purchase licenses for key GenAI tools that address ethical and legal concerns. This would enable the university community to experiment with technology in a controlled and secure environment, minimizing risks related to data privacy and security.
- Establish working groups across institutions to develop AI policies and protocols. Since the responsibility for defining AI policies often falls to individual institutions or course faculties, collaboration between institutions can help create standardized guidelines that can be fully or partially applied universally. The creation of such groups at the institute level will ensure that recommendations are more aligned with their unique context and

needs. Individual institution recommendations or policies can then be shared and adopted across other institutions of the university and later at the wider academic community.

- Develop a simple framework to share lessons learned from GenAI integration across faculty, students, and researchers. This framework could include:
    - Identification of the issues or problems that existed before the integration of technology. The integration of GenAI will help to overcome these issues, helping students to leverage the technology, understanding it capabilities and limitations.
    - Solution and value (after technology adoption)
    - Integration methods (how technology is incorporated into courses)
    - Lessons learned
    - Implications for other courses and institutions. This will allow the broader academic community to benefit from collective experiences and ensure efficient knowledge transfer.

  This could involve simple videos, for instance Faculty Voices on the GenAI @ Harvard webpage.

  Another way is to use the standardized template for faculty to report their experiences with GenAI and evaluate the outcomes of its use in teaching and assessments. This template could be used to document successes, challenges, and key lessons learned, enabling the sharing of valuable insights across departments and institutions. By consolidating these reports in a central GenAI platform, universities can create a dynamic platform for peer sharing and continuous improvement. The Template will serve as a tool for faculty to systematically report their findings, encouraging a culture of collaborative knowledge exchange and refinement of AI integration strategies.

  Law (2024) emphasized the importance of expanding empirical research to better understand the short- and long-term impacts and effectiveness of GenAI tools. As the field evolves, it will take time to deepen understanding and explore the full potential of GenAI in academia driven by literature. Therefore, it is important for the academic community — both within institutions and across universities to share their valuable lessons learned with each other, helping others looking to adapt and implement these technologies integration in their academic practices. Such contributions will address the issue of limited empirical

studies which could otherwise have benefitted the academic community through more applied learning.

- Instruction Guides along with Course Assessment Briefs could be valuable for the students. For students to effectively utilize GenAI in assessments, it is essential to provide them with clear and detailed instruction guides alongside specific assessment briefs. The guides should provide clear examples of how AI can be effectively applied to research. They should highlight potential areas of misuse and offer clear instructions on proper acknowledgment practices. All guidance should align closely with the specific objectives and requirements of the assessment task. This will help students understand the ethical implications and proper usage of AI tools, fostering academic integrity in their work.
- While universities have data classification and information management policies in place, students often find it challenging to understand the classification and implications of sharing sensitive data with GenAI. This highlights the need for more detailed policies or guidelines on the ethical use of GenAI, such as clearly mapping data classifications and outlining their appropriate use with third-party technologies.

  Information management policies could be put into practice in two different ways. First, assessment briefs could be redesigned to include clear, detailed instruction guides that incorporate elements of data classification and align with information management policies. This would ensure students understand how to handle sensitive data appropriately during assessments involving GenAI. Second, the universities can adopt a framework that enables ethical experimentation with AI technologies, focusing on data privacy and compliance. This framework categorizes user tasks based on frequency and data-sharing requirements, resulting in four AI experimentation strategies: Proactive Optimization, Controlled Experimentation, Opportunistic Experimentation, and Conservative Approach. The Controlled Experimentation strategy should be applied only to interactions with GenAI involving sensitive data. Separate policies and guidelines can be provided for such interactions, in line with the university's data classification standards.

## Path Forward

The path ahead for GenAI in higher education requires a careful balance between innovation and responsibility. While universities are committed to advancing AI technologies to address

global challenges, concerns around ethics, data privacy, and intellectual property continue to shape its adoption. As institutions gather more evidence and refine their understanding of GenAI's potential, its applications in education will expand, enhancing teaching, learning, and research. However, the need for robust frameworks, responsible experimentation, and collaborative efforts across sectors remains essential for ensuring the safe and ethical integration of AI technologies. The future path the researchers see for GenAI in higher education is explained below.

- Uncertainty surrounding GenAI continues to challenge its widespread adoption, as concerns about ethical and responsible use remain unresolved. These challenges extend to data security, IPR, and ensuring compliance with legal frameworks. The recently conducted Data Protection Impact Assessment (DIPA) on Microsoft 365 Copilot by SURF in the Netherlands highlights the complexity of addressing these issues (https://www.surf.nl/en/news/surf-advises-not-to-use-microsoft-365-copilot-for-the-time-being-due-to-privacy-risks). It emphasizes that owing to the concerns about privacy risks, it advised not to use this technology for the time being. This may compel universities to purchase licenses or enterprise versions of GenAI tools, ensuring that data shared with these tools remains within the institution and is not accessible to the technology provider. Without such licenses, the ability of faculty to integrate GenAI into their courses and students to experiment with the technology will be restricted. Additionally, universities will need to establish clear policies on data classification, specifying which types of data can be used with GenAI tools. It will also be crucial to raise awareness among users about these policies and provide training to help them properly categorize data. This signifies the need for more detailed policies or guidelines on the ethical use of GenAI, such as mapping data classifications and defining their appropriate use with third-party technologies. This aligns with the findings of Gruenhagen et al. (2024), which highlight that the higher education sector must tackle the challenge of establishing clear policies for the ethical use of GenAI in education and assessments.
- The adoption of GenAI technologies presents a complex landscape that extends beyond the boundaries of individual institutions, impacting the entire education sector and wider society. The challenges surrounding GenAI, including ethical considerations, data privacy, intellectual property, and compliance with evolving legal standards, require collective

efforts and solutions. Higher education institutions face a unique responsibility to balance innovation with caution, ensuring that their practices uphold ethical standards and protect stakeholders' interests.

For now, this duty to act responsibly imposes limitations on the extent to which universities can fully integrate third-party GenAI tools into their operations, particularly outside the controlled environment of research projects. While research initiatives may serve as testing grounds for exploring the potential of GenAI, broader implementation in teaching and administrative contexts remain constrained. Institutions must prioritize risk management, safeguard data integrity, and navigate uncertainties around the long-term implications of AI adoption.

Ultimately, the resolution of these challenges demands a coordinated effort across sectors, fostering collaboration among policymakers, technology providers, educators, and society at large. Until more comprehensive frameworks and safeguards are established, higher education will likely continue to approach GenAI with measured caution, focusing on responsible experimentation rather than full-scale deployment. This careful approach aims to strike a balance between leveraging the opportunities offered by GenAI and addressing the associated risks.

- The rapid growth of AI is prompting universities to intensify their focus on leveraging AI technologies to address a wide range of challenges, including societal and global issues. For example, UCL is committed to advancing the AI agenda far beyond GenAI, as reflected in its AI for People and Planet vision (https://www.ucl.ac.uk/artificial-intelligence/). This vision emphasizes that the purpose of AI research and innovation is to benefit people and societies worldwide while contributing positively to the planet. UCL drives this vision through initiatives like the Grand Challenge of Data-Empowered Societies, which explores how data and technology can tackle pressing global issues while ensuring fairness, inclusion, and societal benefit (https://www.ucl.ac.uk/grand-challenges/themes/data-empowered-societies). This aligns with a broader goal of harnessing AI to promote equitable and sustainable development. To support these ambitions, UCL is also strengthening its local infrastructure. The Advanced Research Computing Centre exemplifies this effort by serving as a hub for research, innovation, and services (https://www.ucl.ac.uk/advanced-research-computing/). The center focuses on providing

cutting-edge tools, practices, and systems that enable computational science and digital scholarships. By fostering interdisciplinary collaboration and innovation, universities like UCL aim to position themselves at the forefront of AI's transformative potential while ensuring its applications remain ethical, inclusive, and impactful.

- As universities continue to gather evidence and deepen their understanding of GenAI, its scope of application in education is expected to expand significantly. Future use cases could include leveraging GenAI to create personalized teaching materials, enhancing teacher-student interactions beyond traditional office hours, designing innovative assessments, and even conducting interactive viva examinations. With increased adoption, the limitations of GenAI are likely to be addressed through ongoing technological advancements and tailored solutions, further refining its utility. As these challenges are overcome, the uncertainty surrounding GenAI could diminish, fostering greater trust and acceptance among educators and students. This, in turn, will enhance its perceived value and accelerate the integration of GenAI into teaching and learning processes. The evolving nature of GenAI has the potential to transform education by making it more dynamic, accessible, and responsive to individual needs. As confidence in technology grows, universities will likely explore deeper and more impactful applications, driving innovation at an unprecedented scale and pace.

## Concluding remarks.

GenAI technologies present both vast opportunities and significant challenges for higher education institutions. As universities explore the potential of GenAI, they are taking careful steps to ensure that its adoption aligns with academic integrity, data privacy, and legal frameworks. The evolving nature of GenAI requires a flexible, adaptable approach to policymaking, one that allows individual faculties to tailor guidelines to their specific needs while fostering responsible use. Institutions like Harvard and UCL have demonstrated the importance of controlled experimentation and collaboration in shaping effective AI policies. The future of GenAI in academia will depend on continued collaboration across institutions, policymakers, and technology providers to create standardized practices that can mitigate risks and promote ethical usage. By embracing GenAI cautiously and responsibly, universities can unlock its transformative potential while ensuring that its integration enhances educational

outcomes, research, and global societal impact. This article highlights the importance of strong collaboration between various institutions within the university, such as libraries, in the integration and responsible adoption of emerging technologies like GenAI. Libraries play a vital role by providing resources, guiding ethical practices, and supporting academic research while ensuring compliance with intellectual property, data privacy, and legal standards. Through such collaborative efforts, universities can navigate the complexities of GenAI and foster an environment of responsible innovation and academic integrity.

The path forward for the adoption of GenAI in higher education must address concerns related to ethical use, data privacy, intellectual property, and compliance with legal frameworks. Universities need to invest in secure environments, such as licensed tools, and establish clear data classification policies to safeguard stakeholders' interests. As universities gain confidence in the responsible use of GenAI, its role in higher education will continue to grow, paving the way for more innovative and dynamic educational experiences.

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