Fall 2023 Interim Report
Committee on Educational Policy & Technology

The Committee on Educational Policy and Technology (EPT) has met six times so far this year – on 19 May 2023, 23 August 2023, 15 September 2023, 20 October 2023, 17 November 2023, and December 15, 2023.

I. Background

Our aims from 2022-2023 final report:

1. Faculty request to Provost's office regarding timely release of Fall 2023 syllabus template (mid-late July), and provision of language regarding use of AI tools;
2. Provost's Office policies on Remote Accommodations/Class Recording/Medical Documentation for Fall 2023;
3. Classroom Recording policy (follow up on the Joint EPT/ASPP/PEAF report);
4. Student Success and Academic Performance;
5. Future enrollment planning, including the impact of SCOTUS decision on affirmative action on enrollment planning;
6. Shared governance (follow up on the proposed road map and its recommendations for enhanced faculty input and communication with institutional stakeholders);
7. Artificial intelligence and its impact on teaching and learning;
8. Review and input on the religious holidays calendar, with timely release to faculty (mid-late July);
9. Revival of the Alumni Audit program;
10. Banner improvements.

2023-2024 FSEC Charge:

• Continue to consider the potential impact of generative AI on learning, teaching, and academic integrity. Building on the initial university statement, consider whether additional policies and training are needed to meet this challenge;
• Evaluate the current Title IX/EEO training module, for approval or suggestions for improvement; and
• Discuss graduate enrollment trends with the Vice Provost for Enrollment and Student Success and offer possible suggestions to bolster recruitment and retention of graduate students.

II. Spring and Summer 2023

The primary focus of the first AY2023-2024 meeting on May 19, 2023, was an update on the work of the Provost's **Student Retention and Academic Performance Task Force** by Jeff Brand (Associate Provost for Undergraduate Affairs and Special Programs). The task force convened earlier in spring 2023 semester to address student performance post-pandemic and concerns noted in fall 2022, mainly within STEM courses. Problems with college readiness have been exacerbated

due to the pandemic, impacting students at the elementary and secondary levels, and thus will be long lasting. These problems are not unique to GW. The task force included EPT members (Irene Foster and Eric Grynaviski), staff from Student Success, faculty from departments teaching large introductory classes, and administration; it produced a draft report on its findings, "Retention Task Force Interim Report," which the full EPT Committee provided detailed feedback on before it was finalized. The Provost's office sent the final report to relevant stakeholders in August 2023.

As chair of the GAI subcommittee, Guy Lotrecchiano originally provided the Provost's Office with guidelines on **Generative Artificial Intelligence (GAI)** to be shared with the entire faculty on April 28, 2023. In the May meeting, Jason Torres (LAI Director of Strategic Digital Learning Initiatives**)** presented a long-term plan into Fall 2023 for a new website to be dedicated to GAI resources for the university.

The **Joint PEAF/ASPP/EPT report on classroom recording** submitted a report to the Provost's Office. The committee will follow up with the Provost's Office to see what recommendations were included, or how the work translated into policy and next steps for EPT.

The **Shared Governance Committee presented its road map** for smoother communication between all university stakeholders, including with the Provost's Office. As part of EPT's shared governance efforts, over the summer months, Irene and Sarah worked with Jenna Chaojoreon to expand EPT's webpage content including posting meeting agendas and summaries (see below)

III. EPT Fall 2023 Meeting Summaries

The fall meetings (September - December) focused on GW's response to the Supreme Court's decision on affirmative action enrollment; continuing discussion on monitoring student retention and academic performance in Fall 2023; Generative AI practice and policy; Title IX training module feedback; developing the Instructor Frequently Asked Questions resource; and implications of the Medical Faculty Associates financial status for the university's educational mission. The following summaries capture the scope of each meeting; more in-depth information on specific topics is provided below.

August 23, 2023

EPT received a presentation from Zahraa Zalzala (Assistant General Counsel) and Jay Goff (Vice Provost for Enrollment and Student Success) regarding the **SCOTUS decision on affirmative action** and its implications for the university. Charged in mid-July, the Affirmative Action Task Force met every other day during the month of August and plans to have a draft report with recommendations to present to EPT by early September. The committee asked for an update on COVID policy and campus preparedness; EPT's FSEC Liaison, Amita Vyas, later confirmed that the Provost will provide this update during the Faculty Senate meeting on September 8. The committee also discussed the issue of **retention** in response to the Student Success and Retention Task Force interim report sent out by the Provost on August 2, and the draft of which the committee reviewed in late May. Several questions arose regarding the various challenges and responses to retention issues within specific schools, including the results of this year's ALEKS math placement test. EPT will present on the results of the Student Success and Retention Task Force to the Faculty Senate in its September 8 meeting. Finally, the committee received an update from EPT's subcommittee on **Generative AI** and its work over the summer. The Provost included previous input from the subcommittee in the additional guidance issued on August 18.

September 15, 2023
EPT discussed the Provost's request to select a representative from the committee to serve on the **Task Force on Microcredentials/Badges** being established. Among the questions and points raised was the concern about the approval process being too cumbersome and the caution about further adjunctification of the faculty. EPT member Mountasser Kadrie (SMHS) volunteered to serve on the committee. Jeff Brand (Associate Provost for Undergraduate Affairs and Special Programs) presented an idea for a faculty resource, tentatively entitled the **Instructor Frequently Asked Questions**, to direct instructors to information they need at the beginning of the semester (e.g., syllabus template, instructions for Echo360, religious holiday calendar, etc.). EPT will review and provide input, with the aim of having the document ready for dissemination before the Spring 2024 semester. The committee also received updates on the **implementation of Student Retention Taskforce Recommendations** from co-chair Irene Foster on the ALEKS placement test results, and Chanté Clarkson (Executive Director, Academic Success Programs) on the Faculty Feedback system. She noted that her office received more than 6,000 reports last year, many of which were for grades. Committee members emphasized the importance of reinforcing the task force recommendation of early feedback, including spelling out where and how to use the Faculty Feedback system and what happens once a report is submitted. The Office of Student Success sent a detailed email to the faculty on September 19 covering that information. The committee also received updates from Suresh Subramaniam (Vice Provost for Graduate and Postdoctoral Affairs) on **graduate enrollment** and **graduate student travel funds**, and from Brian Ensor (Associate Vice President of Cybersecurity, Infrastructure, and Research Services) addressing reports of recent problems with **GW wireless service** and the **GW email spam filter**.

October 20, 2023
At the October meeting, the Committee members heard from Terry Murphy (Deputy Provost for Academic Affairs) regarding **student performance** in classes so far this semester. Overall, reports from departments and the First Year Experience instructors have been positive. There is some question about the effectiveness of the proctored ALEKS test, and the timing of the proctored ALEKS test. These issues have to be resolved for next year. Final exam room requests by faculty going smoothly. The new Student Success subcommittee has not met yet due to some difficulty in coordinating schedules. There was some question about the role of the committee so as to not to replicate the world of the CARD-C committee. Jamie Cohen-Cole (chair, Future Planning subcommittee), Jay Goff (Vice Provost for Enrollment and Student Success) and Ben Toll (Dean of Undergraduate Admissions) updated the committee on **admissions** to date. Kimberley Williams (Associate Vice-Provost for Student Success and Retention) and Chante Clarkson (Director for Academic Success) briefly reported on **retention**. Brian Ensor (Associate Vice President, Cybersecurity, Infrastructure, and Research Services) reported that the **wireless system** has been replaced and work on the **email spam filter** is ongoing. Rohini Ganjoo (chair, Title IX Training Review Subcommittee) asked the Committee for comments on the new **Title IX training module** developed by the university. [See Appendix C.]

November 17, 2023
The committee reviewed the "Sub Committee on **Generative Artificial Intelligence (GAI)** Stage 1 Report on General Information and Short-Term Recommendations," [Appendix A] working in breakout rooms to discuss three questions: (1) What initiatives are implied by this document and who/what units would be responsible for implementing them?; (2) How should the Code of Academic Integrity address GAI -- in terms of regular review, evolving definitions and guidance, resources provided to both students and faculty, etc.?; and (3) Are there areas that need to be

included in the document that were not? A summary of the committee discussion will be included with the interim report.

December 15, 2023
At the December meeting, the committee discussed the **"Instructor Frequently Asked Questions"** (IFAQ) document, presented by Jeff Brand, Associate Provost for Undergraduate Affairs and Special Programs. Members will provide additional feedback by January 1, so that the IFAQ can be disseminated prior to the beginning of next semester. The committee discussed the report compiled by Phil Wirtz regarding the **MFA's financial situation** and its implications for the university's short and long-term educational mission [Appendix B]. Director of the Office of Student Rights and Responsibilities, Christy Anthony presented a report on proposed **academic integrity panel mitigation strategies**, given the significant increase in academic integrity violations and cheating. EPT members will provide feedback to SRR on the potential strategies by January 15, 2024. Finally, follow up on the November 17 discussion of **GAI** will continue in the spring semester, including a report in January on an ongoing pilot study being conducted by Irene Foster and Jason Torres.

Additional information on specific topics:

Affirmative Action: Zahraa Zalzala (Associate General Counsel, GW General Counsel's office) provided a brief overview of the Supreme Court's June 28, 2023 announcement eliminating the ability to use race or ethnicity in college admissions process. Jay Goff (Vice Provost for Enrollment and Student Success) followed by presenting the work of the Provost's Affirmative Action Taskforce (co-chair Irene Foster served on this committee representing EPT) created in mid-July to examine the decision, evaluate current policies, research race-neutral strategies and provide recommendations regarding admissions policy. The Taskforce presented a draft report with recommendations to the entire EPT Committee in early September soliciting comments. This was then sent to the Provost and General Counsel.

Student Retention and Academic Performance: Students seemed to be doing well academically after proctored placement testing in early Fall 2023. There has been considerable turnover in student support services such as DSS, CAPS and Advising. There has been some discussion of whether we should be regularly measuring and tracking DFW and retention rates in the short-term but graduation rates in the long-term. Sarah Wagner and Irene Foster presented to the Faculty Senate on the work of the Taskforce, the necessity of early intervention, and the national context of what the students have experienced. A need for an EPT subcommittee around this topic was discussed at the September 15 meeting.

Enrollment: During the October 20, 2023 meeting, the committee received updates from Jay Goff (Vice Provost for Enrollment and Student Success), Ben Toll (Dean of Undergraduate Admissions), Kimberley Williams (Associate Vice-Provost for Student Success and Retention), and Chante Clarkson (Director for Academic Success), which covered, among other issues, the lingering impact of COVID educational environment on students (e.g., persisting increased DFW rates); admissions policies being updated in light of recent Supreme Court decision; new FAFSA and financial need calculation (December) may result in more Pell Grants but lower grant size; ACT testing volume not returning to pre-pandemic levels as quickly as expected; and ACT seeing three-decade low scores in math and reading.

Other enrollment and retention data included:

- Fall 2023 enrollment numbers very close to targets, undergrad retention rates returned to pre-pandemic levels, undergrad 6-year graduation rate at record;
- Number of new incoming graduate students is up; India has now overtaken China in number of new incoming graduate students;
- Financial aid will meet 95% of unmet need this year; size of merit scholarship pool will remain unchanged;
- Efforts are being made to increase the number of students doing study abroad, as well as the number of study-abroad locations; and although DFW rate is up in recent years, the increase is not large in absolute terms (e.g., Fail rate increasing to ~2% from ~1%);
- Both first-year and transfer numbers are on target; high school GPA distribution of incoming students is improving 2014-2023;
- It continues to be true that incoming students are mostly from ten states (NY, NJ, VA, CA…), and that internationally more students come from China than any other country;
- Admissions rate lowered to 43.5% from 49%;
- First-class retention rate is up; 100% retention in recent years for Summer Academic Students.

Generative AI guidance and subcommittee: The initial input that the subcommittee provided to the Provost mid-summer was included in the August 18, 2023 message sent by the Provost's Office to the GW community. The Committee developed a report (included as Appendix A) specifying:

- Definitions
- Pedagogical Matters
- General Guidelines
- Guidelines for Syllabi
- Existing and Emerging Resources
- Benchmarking Research
- Scholarly Work
- Case Examples

As noted in the summary provided above, the November 17 meeting revolved entirely around the report with breakout groups discussing three primary questions:
(1) What initiatives are implied by this document and who/what units would be responsible for implementing them?
(2) How should the Code of Academic Integrity address GAI -- in terms of regular review, evolving definitions and guidance, resources provided to both students and faculty, etc.?
(3) Are there areas that need to be included in the document that were not?

Key highlights and issues raised in the breakout rooms were recorded in this Box document. Next steps will be to create a concise summary of the report's key guidelines, resources, and next steps to present to the Provost's Office and with the aim of disseminating critical resources to relevant university stakeholders.

Title IX Training Module Review and Feedback: Led by chair Rohini Ganjoo, subcommittee members spent the fall semester reviewing the Anti-Discrimination & Title IX training module and

providing in-depth, concrete suggestions for its improvement. Rohini compiled the initial subcommittee member responses, reported back to the full committee in the November 17 meeting, solicited their feedback, and integrated additional comments into her report [Appendix C]. After receiving the feedback from EPT, Asha Reynolds, Director and Title IX Coordinator (Office for Diversity, Equity, and Community Engagement), confirmed that the updated Anti-Discrimination and Title IX Basics training will replace the existing vendor training in January 2024, and will be assigned to new faculty and staff during their onboarding process by Talent@GW. She also noted that the Department of Education announced in December that they will be releasing updated Title IX regulations in March of 2024, and thus the training will require another update over the summer of 2024.

Provost's Task Force on Microcredentials/Badges: Cheryl Beil (Associate Provost for Academic Planning and Assessment) presented information on the new Taskforce created by the Provost's office. EPT co-chairs requested that Mountasser Kadrie represent EPT on this Taskforce. The Taskforce has been charged with the following:

- Definitions for workshops/non-credit bearing classes.
- Establish best practices on how GW approves these programs/keep track of them.
- Agree on visual representation of the credentials.
- Update current and old guidelines about combined degrees and certificates to include alt. credentials, address issues in admissions/academic focus, and double counting of credits/stackability of credentials.

Irene and Sarah will ask Mountasser to provide an update of the task force's progress during the January or February meeting (Spring 2024).

Instructor FAQ: Jeff Brand (Associate Provost for Undergraduate Affairs and Special Programs) raised the possibility of creating an Instructor FAQ – a compilation of essential information needed by all faculty, regardless of unit, (and available at an easily accessible site), e.g., where to find the syllabus template, religious holiday calendar, withdrawal and tuition refund dates, policies regarding classroom recording, GAI, student support, etc. The idea was initially well received, and in the December 15 meeting the committee recommended that the questions and information be disseminated through at least two channels before the beginning of the Spring 2024 semester: the registrar's webpage (in coordination with its existing FAQ page); and Blackboard.

Medical Faculty Associates (MFA) and the implications of continued debt: In the December 15 meeting, the committee once again discussed the financial situation of the MFA and its impact on the university, specifically its research and educational mission. NB: The committee discussed this same issue during its Fall 2023 meetings. Prior to the meeting, EPT member Phil Wirtz circulated an updated memorandum providing context about the MFA, its relationship to the university, and its continued run of deficits. [Appendix B]

III. Subcommittees

EPT has several subcommittees working on a range of issues, including those related to the FSEC charge. Summaries of their AY2023-2024 activities will be provided in the annual report.

• *Technology and Classroom Recording:* Chair, Katrin Schultheiss, Jason Torres, Phil Wirtz, Andrew Smith, Matt Bochniak, Cody House

• *Future Enrollment Planning Committee*: Chair, Jamie Cohen-Cole, Phil Wirtz, Thomas Choate Sarah Wagner

• *Subcommittee on Generative Artificial Intelligence*: Chair, Gaetano Lotrecchiano, Eyal Aviv, Ben Bronner, Scott Quinlan, Sue Bhati, Margaret (Meg) Ulfers, Jared Johnson, Dan Jaqua, Crystal DeVoss Mahany, Brooke McDonough, Jason Torres, Andrew Smith, Cody House

• *Student Success*: Chair, Irene Foster, Kevin Knudsen, Ben Bronner, Phil Wirtz, Sameh Badie, Jamie Jeune

• *Title IX module review*: Chair, Rohini Ganjoo, Brooke McDonough, Jamie Jeune, Sarah Wagner

• *Shared Governance*: Chair, Mountasser Kadrie, Sarah Wagner

Respectfully submitted,
Sarah Wagner and Irene Foster
Co-Chairs, EPT
January 4, 2024

Education Policy and Technology Committee (EPT)
Sub Committee on Generative Artificial Intelligence (GAI)
Stage 1 Report on General Information and Short-Term Recommendations
Prepared August 2023

Sub-Committee Membership

Kelly Bishop, Associate Vice Provost for Career Services (Administration)
Faith Bradley, Teaching Assistant Professor of Information Systems and Technology Management (SOB)
Robin Juni, Associate Professor of Fundamentals of Lawyering (LAW)
Joyce Knestrick, Visiting Professor (SON)
Gaetano R. Lotrecchiano (Chair), Associate Professor of Clinical Research and Leadership and of Pediatrics (SMHS)
Laurie Lyons, Assistant Dean, Academic Planning and Curriculum Management (SMHS)
Brooke McDonough, Associate Professor of Fundamentals of Lawyering (LAW)
Michael Meadows,
Natalie Milman, Professor, Educational Technology (GSEHD)
Scott Pagel, Associate Dean for Information Services; Director of the Law Library; Professor of Law (LAW)
Katrin Schultheiss, Associate Professor of History (CCAS)
Andrew Smith, Associate Professor of Classical and Ancient Near Eastern Studies and of History (CCAS)
Jason Torres, Director of Strategic and Digital Learning Initiatives (LAI)
Ryan Watkins, Professor and Director, Educational Technology Leadership Program (GSEHD)

Goals of the Report

- To Provide helpful guidance to the EPT, provost and academic leaders to share in with instructors and staff of the university.
- To provide benchmark definitions of important language so that instructors can easily navigate the GAI landscape.
- To provide factors that impact pedagogy in the classroom related to key concerns and valuable guidance about pros and cons to GAI. including trust, practice, academic integrity and assessment, etc.
- To describe and identify existing and emerging resources in the form of online, training, and human resources so that instructors, staff and students can access assistance and development when needed.
- To identify existing and emerging initiatives, programs, and policies at other universities (mainly witin the GWU market basket).
- To provide recommendation to support University Culture, Faculty/Instructor Development, Classroom Environment, Ethics and Integrity with regards to GAI at GW.

Important Definitions:

- **Artificial Intelligence**
    - ***Artificial intelligence (AI)*** refers to the simulation of human intelligence in machines that are programmed to perform tasks that would typically require human intelligence. It involves the development of computer systems or software capable of performing tasks such as reasoning, learning, problem-solving, perception, understanding natural language, and making decisions.

- AI can be broadly categorized into two types: ***Narrow AI and General AI***. Narrow AI, also known as weak AI, is designed to perform specific tasks and has a focused scope of application, such as speech recognition, image recognition, or autonomous driving systems. General AI, also known as strong AI or human-level AI, refers to AI systems that possess the ability to understand, learn, and apply knowledge across a wide range of tasks that a human being can perform.

- AI algorithms often rely on techniques such as ***machine learning***, which involves training models on large amounts of data to enable them to make predictions or perform specific tasks. ***Deep learning***, a subset of machine learning, utilizes artificial neural networks inspired by the structure and function of the human brain, allowing AI systems to learn and adapt from vast amounts of data.

- Artificial intelligence has found applications in various fields, including healthcare, finance, transportation, manufacturing, entertainment, and many others. It ***continues to advance rapidly, with ongoing research and development aiming to enhance AI capabilities and make it more sophisticated, efficient, and beneficial to society.***

- **Generative Artificial Intelligence**

    - ***Generative Artificial Intelligence (GAI)*** refers to a subset of AI techniques that focus on creating or generating new content, such as images, text, audio, or even video, using algorithms and models. Unlike traditional AI systems that are designed for specific tasks, generative AI aims to produce novel and creative outputs that resemble human-generated content.

    - Generative AI models are typically trained on large datasets and learn to capture patterns and relationships within the data. They can then generate new content by extrapolating from the learned patterns. One popular technique used in generative ***AI is Generative Adversarial Networks (GANs)***, which consist of two neural networks: ***a generator network and a discriminator network.*** The generator network generates new content, while the discriminator network assesses the authenticity of the generated content. Both networks are trained together in a competitive manner, with the goal of improving the quality and realism of the generated outputs over time.

    - Generative AI has shown remarkable capabilities in various domains. For example, in ***image generation***, GANs can generate realistic images of objects, scenes, or even people that do not exist in reality. In natural language processing, ***generative models can be used to generate coherent and contextually relevant text***, such as writing stories, generating code, or even mimicking human-like conversations.

    - Generative AI has significant potential in creative industries, such as art, design, and entertainment, where it can assist artists, designers, and creators in generating new and inspiring content. However, it also ***raises ethical concerns, such as the potential for misuse or the creation of deepfake content that can be misleading or used for malicious purposes***. As with any AI technology, responsible development, regulation, and ethical considerations are crucial to ensure the beneficial and ethical use of generative AI.

- **Machine Learning**

    - Machine learning is a ***subset of artificial intelligence (AI)*** that focuses on the development of algorithms and models that enable computers to learn and make predictions or decisions without being explicitly programmed. It involves the construction of mathematical models and algorithms that can analyze and interpret large amounts of data, extract meaningful patterns or insights, and use that knowledge to make informed predictions or take specific actions.

    - In machine learning, ***the learning process occurs through the iterative analysis of data***. The algorithm or model is initially trained on a labeled dataset, where it learns from the patterns and relationships within the data. The training involves adjusting the model's parameters or weights based on the input data and desired output, enabling it to generalize and make accurate predictions on new, unseen data.

    - Machine learning techniques can be broadly categorized into three main types: supervised learning, unsupervised learning, and reinforcement learning.

- **Supervised Learning:** In supervised learning, the algorithm ***learns from labeled examples***, where the input data is paired with corresponding target labels or outputs. The model learns to map the input data to the correct output based on the provided examples. Examples of supervised learning tasks include image classification, speech recognition, and regression analysis.

- **Unsupervised Learning:** Unsupervised learning involves ***training the model on unlabeled data, where the algorithm seeks to discover hidden patterns, structures, or relationships within the data***. The model learns to identify clusters, anomalies, or other intrinsic properties of the data. Clustering, dimensionality reduction, and generative models are common applications of unsupervised learning.

- **Reinforcement Learning:** Reinforcement learning ***involves training an agent to make sequential decisions in an environment to maximize a cumulative reward***. The agent learns through trial and error, receiving feedback in the form of rewards or penalties based on its actions. Reinforcement learning has been successful in areas such as game playing, robotics, and optimization.

- Machine learning has a wide range of applications across various fields, including natural language processing, computer vision, finance, healthcare, recommendation systems, and many others. It has the potential to automate complex tasks, make predictions, and uncover valuable insights from large datasets, contributing to advancements in technology, research, and decision-making processes.

- **Bias in GAI**

  - Bias in Generative Artificial Intelligence (GAI) refers to the ***systematic and unfair favoritism or discrimination exhibited by generative AI models in the content they generate***. It arises when the model produces outputs that disproportionately favor or disfavor certain groups, characteristics, or attributes.

  - Bias in GAI can occur due to several reasons:
    - **Biased Training Data:** If the training data used to train the generative AI model is biased, meaning it contains unequal representation or skewed distributions of certain groups or characteristics, the model can learn and replicate those biases in the generated content.
    - **Pre-existing Social Biases:** Generative AI models may capture and reflect the biases that exist in society. If the training data reflects societal biases, such as gender stereotypes or racial biases, the generative AI model might generate content that perpetuates those biases.
    - **Algorithmic Biases:** The algorithms and techniques used in generative AI may introduce biases or reinforce existing biases. For example, the objective or loss function used during training might inadvertently penalize or favor certain attributes, leading to biased outputs.
    - **Lack of Diversity in Training Data**: If the training data used for generative AI models lacks diversity and does not adequately represent the full range of human characteristics,

preferences, or experiences, the model may generate content that is biased towards the data it was trained on.

- Bias in generative AI can have ethical implications and impact various domains, including art, media, and communication. Biased generated content can perpetuate stereotypes, marginalize certain groups, or reinforce discriminatory practices. It is crucial to address and mitigate biases in generative AI through careful dataset curation, algorithmic fairness considerations, and ongoing evaluation of the generated outputs to ensure they are inclusive, unbiased, and aligned with ethical standards.

- **Ethical Standards in GAI**

  - Ethical standards in Generative Artificial Intelligence (AI) refer to ***guidelines and principles that aim to ensure the responsible and ethical development, deployment, and use of generative AI technologies***. These standards seek to address the potential societal, cultural, and ethical implications of generative AI, while promoting fairness, transparency, accountability, and the protection of individuals' rights and well-being.

Ethical standards that are relevant to generative AI:

- **Fairness and Non-Discrimination:** Generative AI systems should be designed and trained to avoid bias, discrimination, and unfairness. Developers should ensure that the generated content does not favor or disfavor specific groups based on characteristics such as race, gender, religion, or any other protected attributes.
- **Transparency and Explainability:** Generative AI systems should strive to be transparent and provide explanations for their decisions and outputs. Users and stakeholders should have a clear understanding of how the generative AI system works and the factors influencing its generated content.
- **Informed Consent and User Privacy:** Privacy considerations should be prioritized, and users should be provided with clear information and control over the collection, use, and sharing of their data. Informed consent should be obtained when collecting user-generated content or utilizing personal data for training generative AI models.
- **Accountability and Responsibility:** Organizations and individuals involved in the development and deployment of generative AI should take responsibility for the outcomes and impacts of their systems. Mechanisms for accountability, including robust testing, validation, and regular audits, should be established to identify and address any issues or biases.
- **Cultural Sensitivity and Social Impact:** Generative AI should respect cultural diversity and avoid generating content that may be offensive, disrespectful, or harmful to specific cultural or social groups. Developers should be aware of the potential impact of the generated content on individuals and communities and strive to ensure cultural sensitivity.
- **Human Oversight and Control:** Generative AI systems should be designed to work in collaboration with human users and stakeholders. Human oversight and control should be maintained to ensure that the generated content aligns with ethical standards, addresses user needs, and respects societal values.
- **Ethical Review and Regulation:** Governments, industry organizations, and research communities should establish guidelines, standards, and frameworks for the ethical use of

generative AI. Ethical review boards and regulatory bodies can help ensure compliance with ethical standards and address potential risks and concerns.

These ethical standards serve as a foundation for responsible development, deployment, and utilization of generative AI, aiming to minimize the negative impact and maximize the benefits of these technologies for society as a whole.

General Background (and GW response to date)

Throughout history, humans have developed communication technologies that have facilitated building and integrating our communities. Developments such as the introduction of writing and alphabets and the invention of the printing press have enhanced human capabilities through the artificial extension of memory and the democratization of knowledge and information sharing. Today, GAI tools (such as ChatGPT) constitute a new kind of communication technology, enabling the creation of text, images, and even multimedia content. Just as writing extended human memory and the printing press accelerated knowledge dissemination, GAI has the potential to augment human creativity and ingenuity. But, as with any new technology, the long-term impact of GAI remains unknown.

ChatGPT exploded onto the public scene in November 2022. Up to that point, most of us had placidly and often unwittingly been incorporating artificial intelligence into our work and daily life in the form of Google searches, auto-complete texts, Alexa and Siri "assistants," Roombas, online shopping, and social media. But with ChatGPT, we were confronted by a technology that, at least to those of us outside technology fields, seemed radically different. Here was a tool, available for free (at least temporarily) to everyone, that could answer almost any question or prompt in grammatically correct, informative, plausible-sounding paragraphs. Some of the material generated could easily receive a passing grade if submitted for certain kinds of common class assignments.

The reaction inside and outside the academy over the ensuing months has been impassioned and extremely varied. On one end of the spectrum, hundreds of essays, op-eds, and think pieces have predicted and continue to warn of a deluge of cheating, the death of the high school and college essay, the demise of original writing, and the outsourcing of critical thinking to any of a number of new generative artificial intelligence tools. Sounding the alarm of an impending crisis that reaches far beyond the academy, political scientists and journalists warn of a new torrent of disinformation that will further distort political systems throughout the world. Some critics invoke dystopias where humans become so dependent on machines that they can no longer do or think for themselves. At the very far end of this part of the spectrum, doomsayers conjure up a future in which AI breaks free of its human trainers, takes over the world, and destroys humanity.

At the same time, enthusiasts at universities argue that these new GAI tools (of which ChatGPT is just one example) will force instructors to be more creative in their teaching. They note that productivity levels will rise dramatically as mundane, time-consuming tasks, memos, first drafts, outlines, agendas, and reports are executed in mere seconds by GAI. Students, they predict, will productively engage with GAI tools by devising prompts that elicit detailed – even if admittedly unreliably accurate – responses, and then working collaboratively with GAI to efficiently generate not just more but better work. At the university-wide level, GAI-based counseling interfaces have the potential to provide a solution to the current crisis in student mental health by expanding access to services that are in desperately short supply on college campuses. However far apart their imagining of an AI-infused future, skeptics, doomsayers, enthusiasts, and everyone in between agree on one thing: GAI technology is developing far more quickly than experts anticipated even a few years ago, and it is not going away.

What are colleges and universities to do? Initial administrative responses – including GW's – focused on adapting academic integrity codes to forbid unauthorized machine-assistance and identify ways to catch students who used ChatGPT to cheat on assignments. These defensive reactions have, in many cases, now given way to a more balanced, less negative approach. Statements by university administrators – including GW's – issued in Spring 2023 typically recognize the many potentially positive pedagogical uses of AI and empower –

or even encourage -- faculty members to integrate GAI tools into their courses. While unauthorized or unacknowledged use of AI is still explicitly prohibited in academic integrity codes almost everywhere, many administrations have shifted from a largely negative to a tentatively positive approach to the use of generative AI on campus.

That shift reflects several factors. First, the passage of time – even just a few months – has meant that what in January seemed like an alien new technology requiring a hasty lowering of the academic portcullis has become more familiar and thus less threatening. Second, as administrators, faculty, and staff on campuses learn more about the many potentially positive capabilities of GAI, their reaction to the technology has become more nuanced. And third, administrators, faculty, and others understand that college students will be entering a job market in which the ability to work with GAI is likely to be an asset, if not a requirement. To fail to integrate A.I. into the college experience, they suggest, is to do a disservice to students who expect their degrees to make them more employable. But, of course, predicting what skills students will need after college is always a tricky business especially when the capabilities of A.I. are expanding dramatically with every passing month. Any pronouncements on its role in future employment risk obsolescence within a single semester. (To invoke an example from just a few years ago, administrative exhortations that all students should learn to code make less sense in a world where ChatGPT can write code in response to a verbal command and the job market for coders has declined significantly.)

Universities now find themselves faced with the difficult task of formulating policies about the use of technologies whose general, long-term effects may or may not turn out to be paradigm-shifting but whose short-term impacts, especially in the classroom, are undeniably significant. Reassurance from GW's "Guide to Responding to Generative Artificial Intelligence (A.I.) Tools" that "It is okay not to make any adjustments at all" to their teaching seems inadequate, especially in fields that are based on writing and the analysis of texts. It *may* be true, as the GW Guide notes, that "Eventually, higher education's relationship to AI tools like ChatGPT might look more like the relationship to Wikipedia: something to consider and set parameters around, but not necessarily a fundamental threat to what we do." But at the present moment, many faculty are confronting the prospect of rethinking their entire approach to teaching their fields. Recent articles (including this piece from the Post) note the deep concerns (alarm, panic) expressed by instructors at the prospect of entering the fall term without firm (or in many cases, any) guidance from administration. It seems naive to trust that a heartfelt discussion with students about the uses and abuses of GAI – such as many articles have recommended – will lead anxious or time-pressed students to forgo tools that would save them (though not their instructors) time and effort in the interest of gaining abstract skills such as "critical thinking." At the same time, though, it seems equally misguided to believe that strict policing on the part of faculty will thwart student use of GAI or that ignoring GAI altogether will lessen its impact – for better or worse – on the learning environment.

A productive approach to the use of GAI tools on a university campus like GW must start with the recognition that generative A.I. tools affect different disciplines in very different ways. Guidelines designed to address the impact of G.A.I. in the humanities and social sciences, for example, may be entirely inappropriate for the natural sciences or the visual arts. In order to be useful, guidelines must be tailored to the various fields and must emerge from informed discussions taking place within those fields. Faculty, staff, and students alike must become familiar with the range of GAI tools available even if they choose not to use them in their coursework. Instructional technology experts at the university should work closely with departments to develop workshops that introduce faculty to these newer tools. Informed faculty will then be in a better position to develop approaches to the technology that are appropriate to their particular fields. The university should focus intensely this fall on providing discipline-specific workshops on many ways that GAI tools could affect their

pedagogy and thereby empower faculty to develop appropriate strategies for addressing GAI's potentially transformative impact in the classroom.

Pedagogical Matters

GAI has ushered in a new era of academic support, with both advantages and concerns to consider. On the positive side, GAI offers instant feedback on assignments, quizzes, and practice questions, helping students identify areas for improvement and address misconceptions promptly. This efficiency fosters a sense of progress and accomplishment, boosting learners' confidence in their abilities.

GAI can provide personalized learning experiences tailored to individual student needs, promoting inclusivity and support. For example, GAI can assist students by rapidly converting materials into more accessible formats, providing multiple alternate explanations for a given concept, or customizing an assignment to cater to a student's particular interests. This ensures that students can access course content in a variety of ways, while at the same time maintaining higher levels of engagement.

- However, there are potential downsides. Some students may over-rely on GAI as a crutch, seeking answers without fully understanding underlying concepts. This hampers their learning process and undermines trust between students and professors, as it becomes challenging to assess genuine comprehension.

- Moreover, heavy dependence on AI-generated content may hinder critical thinking, independent analysis, and problem-solving skills, replacing human exploration with ready-made solutions.

- Lastly, an overemphasis on correct answers may lead to rote learning, where memorization overshadows genuine comprehension.

- Finding the right balance between harnessing the benefits of GAI and preserving essential human intellect is crucial. Educators must navigate these challenges to ensure that academic support remains effective, empowering students to thrive in a rapidly evolving educational landscape.

Academic Support Pro-Con Table

This table provides the pros and cons of using GAI in providing academic support to students. Academic support stands as an umbrella term to cover more detailed sub-topics such as feedback, personalized learning experiences, critical thinking, rote learning, and memorization, though this list is not exhaustive. The table is also generally focused on formative experiences, saving a discussion of summative assessments for later.

Academic Support - Formative experiences		
Pros	Cons	Recommendations
Instant Feedback and Improvement Opportunities	**Potential for Unreliable Academic Support**	**Use GAI as a Supplement**
GAI offers instant feedback on assignments, quizzes, and practice questions, helping students identify areas for improvement and address misconceptions promptly.	Some students may over-rely on GAI as a crutch, seeking answers without fully understanding underlying concepts.	Use GAI as a supplementary tool to aid students' learning process, encouraging them to seek further explanations and engage in discussions to enhance comprehension.
Personalized Learning Experiences	**Reduced Critical Thinking Skills**	**Encourage Critical Thinking**
GAI tailors learning experiences and resources to individual student needs, fostering inclusivity and a sense of support.	Heavy dependence on AI-generated content may hinder students' ability to think critically, independently analyze information, and develop problem-solving skills.	Encourage students to critically engage with AI-generated content, stimulating deeper analysis and exploration beyond the ready-made solutions.
Trust in Faculty Commitment	**Overemphasis on Rote Learning**	**Promote Understanding Over Memorization**
GAI's personalized feedback builds trust in faculty's commitment to student success.	AI tools primarily providing correct answers might lead to prioritizing memorization over critical comprehension.	Ensure that GAI encourages understanding and conceptual learning rather than focusing solely on providing correct answers. Emphasize the value of grasping underlying concepts.
		Ethical Implementation
		Address ethical concerns related to AI usage, ensuring data privacy, and promoting transparency in AI algorithms.
		Balance Technology and Human Interaction

		Strike a balance between using GAI and preserving essential human guidance and mentorship. Provide opportunities for human interaction to complement GAI's benefits.

Case Study: Personalized Learning Experiences

John is a first-year computer science student at the university. In his introductory programming course, the professor uses GAI tools to provide instant feedback on coding assignments. John appreciates the quick feedback as it helps him identify mistakes and areas for improvement. He also notices that the AI-generated feedback includes personalized tips based on his past coding patterns. This encourages John to put in more effort and engage in critical thinking to improve his coding skills. As a result, John gains confidence in his abilities and becomes an active participant in class discussions. However, John's friend Sarah, also a student in the same course, starts relying heavily on the AI-generated feedback without fully understanding the concepts. This leads to her submitting code that works but lacks a deeper understanding of programming principles. Sarah's reliance on AI-support hinders her learning process and impacts her overall performance.

Progression of GAI Uses for Academic Support

Ranging from level 1 to 5, this table offers a progressive insight into the diverse approaches of using GAI to personalize academic support. Level 1 embodies the simplest and most accessible deployment of GAI, while level 5 delves into intricate and advanced methodologies, exemplifying the multifaceted landscape of personalized learning in higher education.

Rank	Level of Complexity	Description
1	**Basic Personalized Feedback**	Professors utilize GAI tools to analyze students' quiz results and assignments, generating personalized feedback based on their performance. This approach involves basic data analysis and pattern recognition to offer targeted guidance for improvement.
2	**Content Customization**	Professors from different fields collaborate with data analysts to create adaptive content modules. GAI tailors learning materials based on students' strengths and weaknesses, adjusting the difficulty and format of content to match individual learning preferences.
3	**Adaptive Assessment Strategies**	Professors incorporate advanced GAI algorithms to design adaptive quizzes and exams. These assessments dynamically adjust question difficulty based on students' prior performance, providing challenging questions to high achievers and additional support for struggling students.
4	**Cross-Disciplinary Collaboration**	Professors and data analysts work together across disciplines to develop a comprehensive AI-driven platform. GAI tools merge insights from various fields to create a holistic learning experience that adapts content and assessments according to each student's multidisciplinary learning journey.
5	**Cognitive Model Integration**	Professors, data analysts, and AI researchers collaborate to integrate cognitive models into GAI systems. These models map individual students' cognitive processes and adapt learning experiences not only based on performance but also on their learning styles, cognitive strengths, and weaknesses. This approach provides highly tailored and nuanced adaptive learning pathways.

Collaboration

Collaborative learning has long been heralded as a powerful educational approach that fosters teamwork, shared insights, and a sense of community among students. The advent of GAI has brought a new dimension to collaborative learning, presenting both opportunities and challenges in modern education.

One significant advantage of integrating GAI in collaborative learning is the increased opportunities it offers students. With the help of AI-facilitated collaborative platforms and online discussions, students can easily work together on projects, share their unique perspectives, and engage in meaningful interactions. GAI jumpstarts and scaffolds the exchange of ideas, creating a virtual space where groups of students can rapidly process, analyze, and evaluate new knowledge.

An additional advantage of using GAI in collaborative learning is its potential to level the playing field between collaborators. Traditional collaborative environments might inadvertently favor certain students over others, based on factors such as communication skills, social dynamics, or prior experiences. However, GAI can mitigate these biases by providing an unbiased and equitable platform for all learners to participate. By doing so, it empowers students from diverse backgrounds and skill levels to contribute effectively, promoting inclusivity and equity in the collaborative process.

Despite these benefits, the integration of GAI in collaborative learning also presents challenges. One notable concern is the potential loss of human interaction and guidance. If professors heavily rely on GAI tools to provide course materials without sufficient personal engagement, it can create a sense of detachment among students. Without the human touch of faculty mentorship, students may feel neglected or undervalued, leading to a breakdown in the bonds of trust between students and educators.

The consequences of this loss of human interaction can be far-reaching. Students may experience reduced motivation to actively participate in the learning process, leading to a decline in overall engagement and academic performance. The absence of direct guidance and feedback from professors may hinder students' ability to develop critical thinking and problem-solving skills, which are nurtured through human interaction and mentorship.

Collaboration Pro-Con Table

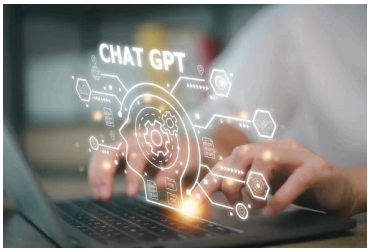
This table provides the pros and cons of using GAI to promote collaboration. Here, we present a more detailed discussion of sub-topics such as human-interaction, student engagement, critical thinking, inclusivity, equity, and more, though this list is not exhaustive. The table returns to some topics previously mentioned under academic support, but with sharper focus on how they relate to collaboration.

Collaboration		
Pros	Cons	Recommendations
Increased Opportunities for Collaboration	**Loss of Human Interaction**	**Strike a Balance**
Outside of the classroom, GAI can facilitate productive and respectful online discussions by acting as a discussion moderator. It can identify and flag inappropriate or off-topic content, helping to maintain a positive and inclusive environment. enabling seamless teamwork on projects and meaningful interactions beyond the time and space limitations of the live classroom.	Over Reliance on GAI may lead to a sense of detachment among students, potentially hindering motivation and trust-building between students and educators.	Ensure a healthy balance between GAI-driven collaboration and traditional human interaction to foster an inclusive and engaging learning environment.
Enhanced Student Engagement	**Reduced Critical Thinking Development**	**Foster Critical Thinking**
AI-facilitated collaboration encourages active participation and knowledge sharing, promoting a dynamic and engaging learning experience.	Heavy dependence on AI-generated content may limit opportunities for students to develop critical thinking, analysis, and problem-solving skills.	Encourage students to think critically, independently analyze information, and solve problems beyond AI-generated content. Incorporate activities that require human exploration and decision-making.
Inclusivity and Equity	**Potential for Superficial Learning**	**Blend AI and Human Guidance**
GAI levels the playing field between collaborators, empowering students from diverse backgrounds and skill levels to contribute effectively.	GAI-driven collaboration might lead to superficial understanding, prioritizing correctness over in-depth comprehension.	Supplement GAI with personalized faculty mentorship and guidance. GAI enables students to prepare for discussions through simulation before coming to class to interact with the professor and classmates. Because students have had a "dry run" with GAI, they are more prepared to have in-person discussions for clarifications, to identify bias, to make corrections, to challenge computer and human assumptions, etc.allowing students to receive both instant feedback and constructive human support.
Personalized Learning Experiences	**Ethical and Privacy Concerns**	**Emphasize Deep Comprehension**
GAI tailors content and interactions to individual student needs, promoting inclusivity and support for diverse learning styles.	Integrating AI in collaborative learning raises ethical questions about data privacy, algorithm biases, and reliance on technology.	Encourage educators to use GAI to stimulate discussions and deeper understanding, moving beyond rote learning to promote genuine comprehension.
Efficient Knowledge Construction	**Dependence on Technology**	**Address Ethical Concerns**

Collaborative knowledge construction is accelerated through GAI, allowing for a more comprehensive understanding of complex concepts.	Relying heavily on GAI for collaboration may reduce opportunities for face-to-face interactions and limit essential social skills development.	Educators should address data privacy and algorithm biases when implementing GAI in collaborative learning, ensuring student trust and confidentiality.
		Encourage Face-to-Face Interactions
		Create opportunities for students to interact in-person, fostering essential social skills and interpersonal relationships.

Case Study: Collaborative Learning with AI

In a seminar, the professor encourages students to use GAI tools for collaborative research projects. GAI can help students in the following ways:



***1. Topic Selection**. The students form teams and brainstorm potential research topics. They input their ideas into ChatGPT, which generates a list of possible research questions based on their input. Teams can divide up research questions for members to follow-up on and report back to each other. **2. Project Planning:** Students can collaborate on project planning and organization. They can use ChatGPT to outline project tasks, set milestones, and allocate responsibilities within a team. 3. **Virtual Debates:** Before class, professors can ask students to simulate debates by inputting arguments and counterarguments into ChatGPT. The AI can provide responses, allowing students to refine their debating skills and explore different perspectives. This preparation will enable students to better engage in productive debates with their peers during live class time.*

Progression of GAI Uses for Collaboration

This chart categorizes five distinct levels of complexity, each showing how professors can harness GAI to facilitate and enhance student collaboration. Moving from level 1 to level 5, the examples escalate in intricacy, providing a roadmap for educators seeking to integrate GAI into their teaching methodologies, fostering collaborative learning experiences at varying degrees of sophistication.

Rank	Level of Complexity	Description
1	**Minimal Intervention**	Professors use a basic chatbot to facilitate Q&A and group discussion among students.
2	**Guided Interaction**	Professors employ a GAI-driven platform that suggests discussion topics based on students' interests, fostering targeted collaboration.
3	**Adaptive Group Formation**	GAI assists professors in forming diverse student groups by analyzing individual strengths, encouraging varied perspectives on assignments.
4	**Contextual Feedback Loop**	Professors integrate GAI to monitor ongoing group projects, providing real-time feedback and suggesting relevant resources to enhance collaboration dynamics.
5	**Intelligent Ecosystem**	Professors orchestrate a comprehensive GAI ecosystem where virtual and in-person interactions blend seamlessly, creating dynamic collaborative experiences powered by AI-driven insights.

Assessments

- GAI offers a promising advantage in the academic realm by providing more opportunities for personalized feedback and summative assessment. With the assistance of AI, faculty members can deliver timely and targeted feedback to students, pinpointing areas for improvement and offering tailored guidance. This increased feedback not only satisfies students' craving for constructive input but also fosters trust in the faculty's dedication to their individual growth and development. Unlike traditional courses with a final "one and done" paper, the incorporation of AI-generated feedback allows for ongoing assessment, giving faculty greater confidence in tracking students' progress over time.

- However, despite the benefits, there are potential drawbacks to relying on AI-generated feedback. One concern is the potential for unreliable academic support if the feedback provided by GAI is inconsistent, lacks depth, or fails to address specific student concerns. When students perceive the feedback as impersonal or inaccurate, it hampers their ability to improve and develop their skills, eroding the trust they have in the feedback process.

- Another issue lies in the AI's inability to account for the emotional investment students have in their work, which professors typically consider when providing personalized feedback. Human instructors often nurture students' skills in a compassionate manner, a nuance that might be missed by AI, potentially leading to a disconnection between students and their work.

- Moreover, automated grading solely relying on GAI without transparent criteria can create frustration and mistrust among students. Without clear and transparent grading guidelines, students may question the fairness and accuracy of the grading process, feeling that their work is not adequately evaluated by human judgment.

Assessment Pro-Con Table

This table provides the pros and cons of using GAI to develop and evaluate assessments. Here, we present a more detailed discussion of sub-topics such as assessment frequency, summative vs. formative, emotional investment, grading efficiency, and more, though this list is not exhaustive. The table returns to some topics previously mentioned under academic support and collaboration, but with sharper focus on how they relate to assessment.

Assessment - Summative experiences		
Pros	Cons	Recommendations
More Opportunities for Personalized Feedback and Summative Assessment	**Potential for Unreliable Academic Support through GAI-Generated Feedback**	**Combine AI-Generated and Human Feedback**
GAI assists faculty in providing timely and targeted feedback to students, fostering trust in their individual growth and development.	If GAI feedback is inconsistent, lacks depth, or fails to address specific student concerns, it can erode trust and hinder student improvement.	Combine AI-generated feedback with personalized human engagement to deliver comprehensive and accurate assessments.
Efficient and Ongoing Assessment	**Potential for GAI Feedback to Fail to Account for Student Emotional Investment**	**Incorporate Human Nurturing in Feedback**
The use of AI allows for ongoing assessment, enabling continuous improvement tracking.	GAI may miss the nuances of emotional investment in students' work, potentially leading to a disconnection between students and their assignments.	Educators should consider the emotional aspects of students' work and provide nurturing feedback to encourage growth and development.
Enhanced Grading Efficiency	**Automated Grading without Transparency**	**Transparent Grading Criteria**
Automated grading by GAI streamlines the grading process, saving time for faculty and students.	Relying solely on GAI for grading without transparent criteria may lead to frustration and mistrust.	Ensure clear and transparent grading criteria are provided to students, making the grading process fair and understandable
Consistency in Feedback Delivery	**Dependence on Technology for Assessment**	**Establish Redundancy and Quality Assurance**
GAI provides consistency in feedback delivery, minimizing potential biases and ensuring all students receive equitable assessment.	Over-reliance on technology for assessment may lead to technical issues and disruptions in the evaluation process.	Establish redundancy measures and quality assurance protocols to ensure the reliability and accuracy of GAI-generated assessments.

Case Study: The AI-Driven Assessment Dilemma

University administrators decide to implement GAI tools to streamline the assessment process in a large lecture-based course. The goal is to enhance grading efficiency, provide timely feedback, and offer personalized assessment to a diverse group of students. In this course, the GAI system was utilized to automatically grade multiple-choice quizzes and short-answer questions. The AI-driven assessment allowed for rapid processing of a significant number of student submissions within minutes, significantly reducing the faculty's grading workload. Students appreciated the immediate feedback, enabling them to gauge their performance and identify areas for improvement. However, as the semester progressed, concerns emerged regarding the effectiveness of AI-driven assessment. While the automated system offered efficiency and consistency, some students questioned the fairness and transparency of the grading process. They found it challenging to comprehend how the AI assigned scores and sought clarity on the evaluation criteria. One student encountered an issue when their short-answer response was marked differently by the GAI tool compared to their expectations. They believed the AI failed to recognize the nuances in their argument, leading to inaccurate grading. The lack of human judgment in evaluating the depth and complexity of their answer left them frustrated and uncertain about the assessment's accuracy. Furthermore, as students became increasingly reliant on AI-generated feedback, there was a noticeable decline in their critical thinking and problem-solving skills. The convenience of instant feedback sometimes led to a superficial understanding of course materials, with some students prioritizing correctness over comprehending underlying concepts.

Progression of GAI Uses for Assessments

Through five distinct levels of complexity, this chart explores the evolving integration of AI-powered tools in the realm of assessments. From level 1 to 5, there is a spectrum of approaches that empower professors to leverage GAI, from streamlined automated grading to sophisticated cognitive assessment analytics, in order to enhance the assessment experience and gain deeper insights into student learning.

Rank	Level of Complexity	Description
1	**Automated Grading**	Professors use basic AI tools to automate multiple-choice and simple short-answer question grading.
2	**Structured Feedback**	GAI provides detailed feedback on assignments, highlighting areas of improvement based on predefined criteria.
3	**Adaptive Questioning**	Professors employ GAI to generate personalized questions for each student based on their learning progress and strengths.
4	**Dynamic Assessment Pathways**	GAI designs assessments that adapt in real-time based on individual responses, tailoring the assessment path to each student.
5	**Cognitive Assessment Analytics**	Professors utilize a comprehensive AI system that analyzes not only responses but also critical thinking processes, providing deep insights into student cognition.

Academic Integrity

Academic integrity concerns arise from the integration of GAI in the educational landscape. These concerns encompass various challenges that impact the trust relationship in the classroom and the authenticity of students' work.

One significant concern revolves around the ***erosion of the trust relationship between professors and students***. If faculty members suspect that students heavily rely on GAI tools, it may create a sense of detachment and hinder genuine human interaction. As a result, the interpersonal bond between educators and learners may weaken, leading to a breakdown in trust and diminishing the overall learning experience.

Another pressing issue is ***plagiarism***. GAI models have the capability to generate human-like text, making it easier for students to plagiarize content without proper attribution. Professors may find it challenging to trust the authenticity of students' work, leading to increased scrutiny and skepticism when evaluating assignments and essays.

Misuse of AI-generated content poses an additional integrity concern. Professors may question the authenticity of discussions and contributions made by students in online forums or collaborative platforms. GAI can be employed to generate responses, blurring the lines between genuine student engagement and automated or AI-generated content. This challenge makes it harder to distinguish between original student work and content produced by GAI.

The ***integrity of assessments and feedback also comes under scrutiny***. Online exams or tests may be susceptible to students attempting to use GAI to obtain answers or cheat, undermining the fairness and integrity of the assessment process. This creates a dilemma for professors, as they may find it challenging to trust the results and accurately evaluate student performance.

Lastly, the use of GAI for completing assignments or ***writing essays raises concerns about the quality and authenticity of students' work***. Professors may face difficulty in assessing the genuine effort and comprehension of students when AI is involved in the creation process. This uncertainty makes it harder to determine whether the work truly represents the student's abilities and knowledge.

Bias

The integration of GAI in the pedagogical landscape has opened up new possibilities for enhancing learning experiences. However, it also brings to the forefront the issue of bias and its potential impact on students' educational journey.

One of the primary concerns is the existence of ***inherent biases in the data used to train AI models***. If the training data is biased, the AI system may inadvertently perpetuate those biases when generating content or providing feedback. For example, biased data might lead to AI-generated materials that favor certain perspectives or exclude diverse voices, potentially limiting students' exposure to a comprehensive range of ideas and viewpoints.

Bias in AI-generated content ***can also affect the inclusivity and representation of underrepresented groups***. If the AI system is trained on data that predominantly represents certain demographics, it may inadvertently

reinforce stereotypes or exclude diverse perspectives. This can have a detrimental impact on students from marginalized backgrounds, who may feel their identities and experiences are not adequately acknowledged or valued in the learning process.

Moreover, the bias in GAI can extend to ***the assessment and grading of students' work***. If the AI system is not properly calibrated to recognize the unique strengths and cultural backgrounds of individual students, it may inadvertently penalize students who do not conform to mainstream standards. This can create a sense of unfairness and inequity in the assessment process, undermining students' confidence and motivation.

The issue of bias in GAI raises ***critical questions about the role of educators*** in monitoring and mitigating potential biases. While AI can be a valuable tool in pedagogy, it is essential for educators to remain vigilant and critically examine the output of AI-generated content. They should be proactive in addressing biases and actively seek to diversify training data to ensure that AI-generated materials are inclusive and representative of diverse perspectives.

To address bias in GAI, i***nstitutions can prioritize transparency and accountability in AI algorithms***. By making AI-generated content and feedback more transparent to students, educators can foster a greater understanding of the technology's limitations and potential biases. Additionally, involving students in the process of evaluating and providing feedback on AI-generated content can empower them to play an active role in shaping their learning experiences.

Educators can also take a ***human-centered approach to pedagogy, combining AI tools with personalized instruction*** to provide a balanced learning environment. By blending AI-driven content with direct engagement and discussions with students, educators can address potential biases and ensure a more inclusive and well-rounded learning experience.

Although GAI engenders a sense of apprehension and ambiguity, with thoughtful integration into classroom pedagogy it can be a powerful learning tool. AI's capabilities will only increase with time. Therefore, this report focuses on transcending strategies to curtail academic integrity concerns and suggests ways that the University can use AI to optimize learning for students, while minimizing the potential for negative outcomes.

Guidelines for language to include in syllabi

Given the diversity of viewpoints that individual faculty members are expected to hold with respect to use of generative AI, syllabus language options should be flexible, though all syllabi should clearly explain to students what use of generative AI is permitted in the course. To that end, three basic approaches are suggested: general permission, general prohibition, and selective permission. These approaches mirror those provided in University guidance promulgated in April 2023, https://provost.gwu.edu/sites/g/files/zaxdzs5926/files/2023-04/generative-artificial-intelligence-guidelines-april-2023.pdf, as well as at other universities. For example, a Cornell University committee recently articulated the same three general approaches:

Consistent with the general approach an individual faculty member adopts for use of generative AI, both in a course syllabus and with respect to individual assignments, additional syllabus language may be necessary to provide further guidance to students on, for example, how students should attribute use of generative AI via appropriate citation; how students might suffer from inappropriate use of generative AI because generative AI fundamentally undercuts learning goals like critical thinking and analysis; and how students may successfully use generative AI for some course tasks. Language with respect to these issues is suggested in the April 2023

GWU guidance and in the GWU *In-depth Guide on Responding to Generative Artificial Intelligence (AI) Tools*, https://libguides.gwu.edu/c.php?g=1294883 (Some Example Language, linking to materials from the University of Iowa, https://teach.its.uiowa.edu/artificial-intelligence-tools-and-teaching#collapse-nid7546).

Existing and Emerging Resources:

Training

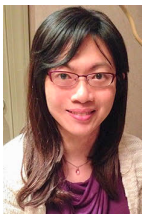
- [Upcoming] GAI focused webpages on the LAI website:
  These pages will communicate the various efforts we are taking and the resources and products that come out of those efforts.
- [Working] Two GAI micro-learning series:
  A lower-level series that focuses on a single topic to build familiarity and knowledge that enables the audience to confidently know what a topic related to GAI means. A high-lever series that connects multiple concepts around a single GAI topic, giving the audience a broader perspective of what the challenge/problem means.
- [Up-coming] Case study interviews:
  These will highlight and draw attention to GW community members who are applying GAI in some element of their work. These individuals may serve as exemplars in teaching, research, and ethical use in learning. We want to inspire folks in responsible ways to use GAI and the outcomes they get from this.
- [Working] GAI workshop series:
  Developed within LAI and with faculty partners, these workshops focus on demonstrating how GAI tools can be used as a partner in pursuit of doing more. Workshops will be hands-on and provide participants both knowledge and skills for responsibly applying GAI in their teaching and daily work.
- [Up-coming] GAI resources:
  GW internal and curated external resources will be hosted on the GAI focused webpages on the LAI website. To date, we have listed external resources, but would like to produce, collect, and share to the GW community resources from GW staff and faculty.
- [Working] GAI symposiums
  Currently we have 2 events posted to the LAI website – January 2023 and April 2023. We are interested in arranging more of these discussions for the community.
- [Working] Staff seminars
  Address the interest and needs of staff across GW who would like to know how to begin using GAI tools both in terms of possibilities and functionality. Use of GAI tools may pertain to their work and/or engagements with clients. Seminars would be a mix of presentation and discussion. From here, participants would be guided towards workshops and/or consultations.

Faculty experts

Ryan Watkins (GSEHD), professor and director of the Educational Technology Leadership Program, is an author of eleven books and more than 95 articles. His websites include www.ryanrwatkins.com and www.WeShareScience.com. His publications are frequently cited in the performance improvement literature, making him the 4th most cited author of journal articles in the field. Ryan is an active member of the International Society for Performance Improvement (ISPI), the American Evaluation Association (AEA), and has served a vice president of the Inter-American Distance Education Consortium (CREAD). In 2005 Ryan was a visiting scientist with the National Science Foundation, and he routinely works on projects with the World Bank on applying needs assessment, instructional design, and performance improvement to international assistance programs (including work in China, Laos, Kenya, and Tunisia). Dr. Watkins has created two free tools related to AI for instructors:

- A survey tool for starting conversations about the ethical uses of AI in an instructor's course
- A beta for helping instructors communicate what specific uses of AI are permitted for a particular assignment

John Helveston (SEAS) Professor Helveston is interested in understanding the factors that shape technological change, with a particular focus on transitioning to more sustainable and energy-saving technologies. Within this broader category, he studies consumer preferences and market demand for new technologies as well as relationships between innovation, industry structure, and technology policy. He has explored these themes in the context of China's rapidly developing electric vehicle industry. He applies an interdisciplinary approach to research, with expertise in discrete choice modeling and conjoint analysis as well as interview-based case studies. Software: logitr: https://github.com/jhelvy/logitr. Professor Helveston has written the logitr package to support flexible estimation of multinomial logit models with preference space and willingness-to-pay (WTP) space utility specifications. The package supports homogeneous multinomial logit (MNL) and heterogeneous mixed logit (MXL) models, including support for normal and log-normal parameter distributions. Since MXL models and models with WTP space utility specifications are non-convex, an option is included to run a multi-start optimization loop with random starting points in each iteration. The package also includes a simulation function to estimate the expected market shares of a set of alternatives based on an estimated model.



Alexa Alice Joubin (CCAS). Alexa teaches in the English department, is an affiliated faculty in Women's, Gender, and Sexuality Studies, and co-founded the GW Digital Humanities Institute. She directed the Dean's Scholars in Shakespeare (a signature program of GW's Columbian College of Arts and Sciences). At MIT, she is co-founder and co-director of the open access Global Shakespeares digital performance archive. Her publications can be accessed on ResearchGate. Her teaching and publications are unified by a commitment to understanding the mobility of early modern and postmodern cultures in their literary, performative, and digital forms of expression. Her research has been funded by the Fulbright, National Endowment for the Humanities, American Council of Learned Societies, Chiang Ching-kuo Foundation, International Shakespeare Association, Folger Institute, and other agencies. Her latest books include Race (co-authored; Routledge New Critical Idiom series), Local and Global Myths in Shakespearean Performance (co-edited; Palgrave), and Shakespeare and the Ethics of Appropriation (co-edited; Palgrave). She is co-general editor of The Shakespearean International Yearbook, and has guest-edited special issues of the journals Shakespeare: Journal of the British Shakespeare Association, Asian Theatre Journal, and Borrowers and Lenders: The Journal of Shakespeare and Appropriation. She received the MLA's Aldo and Jeanne Scaglione Prize, an honorable mention of NYU's Joe A. Callaway Prize for the Best Book on Drama or Theatre, and the International Convention of Asian Scholars (ICAS) Colleagues' Choice Award. She

chaired the MLA committee on the New Variorum Edition of Shakespeare and edits the Palgrave-Macmillan book series on “Global Shakespeares”. She has taught at Lincoln College, Oxford, as an early modern studies faculty of the Middlebury College Bread Loaf School of English (a summer graduate program) and in South Korea as distinguished visiting professor at Seoul National University.

LinkedIn Learning Courses

- Introduction to Artificial Intelligence
- What is Generative AI?
- Introduction to Prompt Engineering for Generative AI
- How to Research and Write Using Generative AI Tools
- Ethics in the Age of Generative AI

Style Guides

- Artificial Intelligence Tools & Citations – video from GW's Himmelfarb Health Sciences Library
- APA Style: How to cite ChatGPT
- Flanagin A, Bibbins-Domingo K, Berkwits M, Christiansen SL. Nonhuman "Authors" and Implications for the Integrity of Scientific Publication and Medical Knowledge. *JAMA.* 2023;329(8):637–639. doi:10.1001/jama.2023.1344 [AMA Style]
- How do I cite generative AI in MLA style?
- How do you recommend citing content developed or generated by artificial intelligence, such as ChatGPT? [The Chicago Manual of Style]

Benchmarking Research

Policy & Guidance Documents from Selected Institutions Policies

Boston University Faculty of Computer & Data Sciences	Using Generative AI in Coursework | Faculty of Computing & Data Sciences (bu.edu)
University of Southern California Academic Senate Committee on Information Services	CIS-Generative-AI-Guidelines-20230214.pdf (usc.edu)
New York University Provost	Chat GPT- Spring 2023.pdf (nyu.edu)
Tufts University Provost	Artificial Intelligence Resources for Tufts Faculty and Staff - Center for the Enhancement of Learning and Teaching
University of Missouri Office of Academic Integrity	ChatGPT, Artificial Intelligence, and Academic Integrity // Office of Academic Integrity (missouri.edu)
Harvard University Summer 2023 Student Handbook	Academic Integrity | HSS 2023 Student Handbook (harvard.edu)
Santa Clara University Provost	AI in the Classroom (and what about Academic Integrity?) - Santa Clara University (scu.edu)

Teaching & Learning Guidance

Georgetown University Center for New Designs in Learning & Scholarship	ChatGPT and Artificial Intelligence Tools - cndls website (georgetown.edu)
Vanderbilt University Center for Teaching	Teaching in the Age of AI | Center for Teaching | Vanderbilt University
New York University Teaching & Learning Resources	Teaching and Learning with AI (nyu.edu)
University of Rochester College of Arts, Sciences & Engineering	AS&E Instructors' Guide to using ChatGPT/AI in the Classroom (rochester.edu)

Northeastern University Center for Advanced Teaching & Learning through Research	Teaching in an Era of ChatGPT | Center for Advancing Teaching and Learning Through Research (northeastern.edu)
Syracuse University Libraries	Home - ChatGPT - Research Guides at Syracuse University Libraries
University of Maryland Teaching & Learning Center	Artificial Intelligence (AI) (umd.edu)
Colorado State University Institute for Learning & Teaching	Artificial Intelligence and Academic Integrity | The Institute for Learning and Teaching | Colorado State University (colostate.edu)
Ohio State University Teaching & Learning Resource Center	AI: Considerations for Teaching and Learning | Teaching and Learning Resource Center (osu.edu)
Washington University in St. Louis Center for Teaching & Learning	ChatGPT and AI Composition Tools - Center for Teaching and Learning (wustl.edu)
University of Pittsburgh Center for Teaching & Learning	ChatGPT Resources for Faculty – University Center for Teaching and Learning (pitt.edu)
Yale University Center for Teaching & Learning	AI Guidance | Poorvu Center for Teaching and Learning (yale.edu)
American University Center for Teaching, Research & Learning	AI-Generated Writing Models | CTRL Faculty Resources (american.edu)
Duke University Learning Innovation	AI and Teaching at Duke - Duke Learning Innovation
University of Pennsylvania Center for Teaching & Learning	ChatGPT and Its Implications for Your Teaching – Center for Teaching and Learning (upenn.edu)

Themes of Peer Institutions' AI Policies and Implications for Teaching
Based on information gleaned from peer institutions' websites (above) and summarized with the aid of ChatGPT

Common GAI Policies at Peer Institutions

- Fairness and Transparency
- Responsible and Ethical Use of AI Tools
- Academic Integrity and Plagiarism

1. **Fairness and Transparency**
   a. Recommend transparency around use of AI tools in academic practices and grading
   b. Students are expected to give credit to AI tools, provide detailed information about their usage, and employ AI detection tools to ensure their work is not mistakenly flagged
   c. Instructors are encouraged to understand the strengths and weaknesses of AI tools, consider treating work by students who declare AI tool usage differently in grading, and use AI detection tools to evaluate potential AI usage
2. **Responsible and Ethical Use of AI Tools**
   a. Students should be encouraged to use AI tools responsibly and intelligently, aiming to enhance their learning and understanding of subject matter
   b. Students should be taught to recognize the limitations and strengths of AI tools, how to use them ethically, and provide proper attribution when using AI-generated content
   c. Instructors must also educate themselves about AI tools and their applications to optimize their value for student learning [which implies that ignoring AI tools may be irresponsible]
3. **Academic Integrity and Plagiarism**
   a. Using AI tools without permission* or using AI to produce work without proper acknowledgment constitutes academic dishonesty and plagiarism
   b. Students should be reminded of expectations around academic integrity and the proper citation of sources
   c. Instructors should set clear expectations and communicate their policies regarding the use of AI tools to avoid potential misconduct

**For example, if explicitly stated in a syllabus as permitted or not permitted*

Recommendations from Peer Institutions for Teaching in the Context of AI

- Effective, authentic, transparent course/assignment design
- Enhance teaching with AI
- Minimize AI reliance
- Use AI tools as a pedagogical framework and encourage students to use AI productively in their learning

1. **Effective Course/Assignment Design**
   a. Develop assignments that require students to engage actively, think critically, and demonstrate their understanding and originality
   b. Design writing prompts that reference material specific to class; link asynchronous assignments to class sessions
   c. Create "authentic assignments" that require higher order thinking and address implications in "real world" settings and current events

d. Communicate clearly about the use of AI in the course and involve students in the decision making process
e. Provide a primer on AI: how it functions, so that students understand its capabilities and limitations

2. **Enhance Teaching with AI**
   a. Teach students to ask good questions of AI and critically evaluate responses
   b. Assign students a process statement, and/or incorporate AI into the drafting process
   c. Create opportunities for students to reflect on their use of AI and explain how it impacted their learning

3. **Minimize AI Reliance**
   a. Create assignments that cannot be completed solely by AI tools; avoid generic assignments that are easy to create with AI
   b. Have students articulate their learning in multiple mediums which helps them reframe and develop rhetorical flexibility
   c. Emphasize originality; vary deliverable formats (e.g., posters or short videos rather than term papers)
   d. Scaffold assignments that allow assessment of the process of learning rather just the product
   e. Take stock of course workload to mitigate pressure; misuse of AI tools is more tempting when assignments/deadlines feel unmanageable

4. **Use AI tools as a Pedagogical Framework**
   a. Help students develop skills using AI productively; e.g., encourage use of ChatGPT to generate writing, which is then critiqued through a disciplinary lens
   b. Consider shifting the evidence of learning: center on personalized learning, collaborative work, self-reflection and real-world application
   c. Initiate a direct conversation about the use of AI as it relates to the impact of the course on students' intellectual development

Recommendations for GWU

University Culture

1. GW would be wise to **adopt an open minded, informed, but cautious approach** to the integration of new GAI tools into the university's instructional and research missions.
2. Overall, supporters insist, the widespread use of GAI at universities is poised to improve staff efficiency, expand faculty and student research horizons, and eventually lead to exciting new partnerships between humans and machines. In this view, **the limitless positive potential of GAI far outweighs the largely hypothetical dangers it poses.**
3. A productive approach to the use of GAI tools on a university campus like GW must start with the recognition that GAI tools affect different disciplines in very different ways thus r**equiring discussions about how GAI fits with scholarly goals**
4. To address the academic support issue posed by GAI, **the university should adopt a balanced approach that maximizes the benefits while mitigating potential downsides.**
5. The University can harness the potential of AI-driven collaboration effectively, ensuring that students engage meaningfully, develop critical skills, and thrive in a supportive and dynamic learning environment.
6. Striking a balance between **efficiency and personalization ensures** that students receive fair, comprehensive, and supportive assessment, fostering their growth and success in the learning process.
7. **Encourage Collaboration and Support:** Create a supportive learning environment that encourages students to collaborate and seek help from peers and faculty. Emphasize the value of academic growth and learning from mistakes, rather than focusing solely on grades.

Faculty/Instructor Development

1. **Promote GAI as a supplementary tool:** Emphasize that GAI is intended to complement traditional teaching methods, not replace them. Encourage students to use GAI for feedback and support while still engaging in active learning and critical thinking exercises.
2. **Encourage faculty engagement:** Faculty members should actively participate in guiding students' use of GAI tools. Professors can provide context and guidance on when and how to use GAI effectively, ensuring that students comprehend concepts and avoid rote memorization.
3. Our core recommendations to faculty are that they reconsider their learning objectives in light of GAI tools, and incorporate explicit directions regarding use of GAI into their syllabi and assignments. We recommend that faculty formally adopt one of the three different approaches, depending on the learning objectives of the course or assignment.
4. Prohibit use of GAI where its use would substitute for or interfere with core learning objectives, particularly in courses where students are developing foundational knowledge or skills.
5. Allow with attribution the use of GAI where it can serve as a useful resource to support higher level thinking or skill development.
6. Encourage use of GAI in courses or assignments where it can be used as a tool to allow exploration and creative thinking, or level the playing field for students with disparate abilities and needs.
7. *CU Committee Report: Generative Artificial Intelligence for Education and Pedagogy* ("Section 5: Conclusions"), https://teaching.cornell.edu/generative-artificial-intelligence/cu-committee-report-generative-artificial-intelligence-education.

Classroom Environments

1. **Incorporate critical thinking exercises:** Integrate critical thinking exercises and problem-solving tasks into the curriculum. Encourage students to apply the knowledge gained from GAI tools to real-world scenarios, fostering their ability to analyze and synthesize information independently.
2. **Implement assessments that measure understanding:** Design assessments that gauge students' understanding of concepts rather than just their ability to reproduce correct answers. This approach will encourage deeper comprehension and discourage surface-level learning.
3. **Promote self-awareness and reflection**: Encourage students to reflect on their learning journey regularly. This practice can help them identify areas where they might be over-relying on GAI and motivate them to proactively seek a balance between AI support and personal academic growth.
4. **Promote a Balanced Approach:** Educators should emphasize the importance of using GAI as a supplementary tool rather than a crutch. Encourage students to engage in critical thinking and problem-solving, utilizing AI-generated feedback as a guide to improve their understanding.
5. **Facilitate Peer-to-Peer Interaction:** Foster a collaborative and inclusive learning environment by creating opportunities for face-to-face interactions. Encourage students to actively discuss and share ideas, promoting meaningful engagement beyond the virtual space.
6. **Incorporate Group Projects:** Assign challenging group projects that require students to collaborate and communicate effectively. This approach encourages teamwork and communication skills while leveraging GAI as a supportive resource.
7. **Encourage Peer Mentorship:** Facilitate peer mentorship among students with varying levels of experience. Encourage more experienced students to guide and support their peers, reinforcing collaboration and building a sense of community.
8. **Promote Reflective Learning:** Encourage students to reflect on their experiences and learning process. Provide opportunities for self-assessment and encourage them to seek feedback from both peers and educators.

Ethical Concerns

1. **Address Ethical Concerns:** Ensure that GAI tools used for collaborative learning prioritize student privacy and data security. Transparently communicate the use of AI to students and address any ethical concerns they may have.
2. **Combine AI-Generated and Human Feedback:** Adopt a hybrid approach to address the AI-driven assessment dilemma. Faculty members should review and verify the automated grades, providing additional insights and personalized comments for the students. This approach instills trust in the assessment process and ensures students receive both efficient feedback and valuable human evaluation.
3. **Incorporate Human Nurturing in Feedback:** To promote critical thinking and deeper understanding, professors should incorporate open-ended questions that require students to engage in more extensive analysis and synthesis. Encourage discussions and debates in the classroom to foster a learning environment that values thoughtful inquiry beyond the realm of automated grading.
4. **Educate Students on Academic Integrity:** Universities should implement comprehensive programs to educate students on academic integrity and the ethical use of AI tools. Students must understand the consequences of plagiarism and the importance of maintaining integrity in their academic pursuits.
5. **Promote Ethical Use of AI Tools:** Faculty members should actively discuss the use of AI tools in the classroom and promote responsible usage among students. Emphasize that AI-generated feedback should complement students' learning process rather than serve as a substitute for their own efforts.
6. Promote Ethical Use of AI: Educational institutions must establish guidelines and protocols for the ethical use of AI tools in pedagogy. Educators should continually assess the impact of AI on learning experiences, ensuring it aligns with principles of inclusivity, fairness, and unbiased representation.

Assessment

8. **Transparent Grading Criteria**: Ensure clear and transparent grading criteria are provided to students, making the grading process fair and understandable. This practice addresses concerns related to the fairness and accuracy of AI-generated assessments.
9. **Establish Redundancy and Quality Assurance:** Implement quality assurance protocols to monitor the AI's performance and identify potential biases. Conduct regular assessments to ensure the GAI system maintains its accuracy and fairness. Faculty members should receive training on the ethical use of AI in assessment to address concerns related to data privacy and algorithmic transparency.
10. **Introduce Authentic Assessments:** Incorporate authentic assessments that require critical thinking, analysis, and creative problem-solving. Design assessments that challenge students to apply their knowledge in unique ways, reducing the potential for plagiarism and reliance on AI-generated content.
11. **Provide Clear Guidelines:** Offer clear guidelines on the acceptable use of AI tools in assignments and assessments. Clarify which tasks must be completed independently and which aspects can benefit from AI-generated feedback.
12. Evaluate Output Critically: Educators should critically evaluate the output of AI-generated content and feedback. Regularly reviewing and verifying the material helps identify potential biases and inaccuracies, enabling faculty to make necessary adjustments to improve the quality and inclusivity of the AI-generated content.

Integrity

1. **Implement Integrity Protocols:** Educational institutions should establish integrity protocols to monitor the use of GAI tools and detect potential instances of academic dishonesty. Regularly review AI-generated content for biases and plagiarism, ensuring that the system is aligned with ethical standards.
2. the University can effectively address academic integrity concerns related to the use of GAI in pedagogy. Striking a balance between leveraging AI's benefits and upholding academic honesty will promote a supportive and equitable learning environment, empowering students to thrive in their educational journey while maintaining the principles of integrity and authenticity.
3. Diversify Training Data: To address biases in AI-generated content, educational institutions must ensure that the training data includes a diverse range of perspectives and experiences. By incorporating content from various cultural backgrounds and underrepresented groups, the AI model can produce more inclusive and representative materials.
13. Involve Students in the Process: Inviting students to provide feedback and insights on AI-generated content can be valuable. By involving students in the evaluation process, educators gain important perspectives on whether the materials resonate with their diverse backgrounds and foster a more inclusive learning environment.
14. Address Nuanced Concepts: While AI can offer efficient and personalized content, it may struggle with the complexities of nuanced concepts within certain disciplines. To mitigate this limitation, educators should complement AI-generated content with personalized instruction that delves into intricate subject matter and encourages critical thinking.
15. By adhering to these recommendations, the University can navigate the issue of bias in AI-driven pedagogy, fostering a more inclusive and equitable learning environment. By leveraging AI tools responsibly and critically, educators can enhance the educational journey for all students, recognizing and celebrating diverse perspectives and experiences.
16. To fully embrace the potential of AI, the University should consider providing education and training for faculty and students in the ethical and responsible use of AI. Moreover, because GAI often draws from diverse fields like computer science, linguistics, and psychology, the University should consider ways to

promote interdisciplinary collaboration. Encouraging students and researchers to work together across disciplines will lead to innovative and more well-rounded AI solutions. In sum, thoughtful integration of AI into the classroom has the potential to augment the human-centered classroom experience.

Hitchhiker's Guide to the GW Medical Faculty Associates (MFA)[1]
November 17, 2023
Executive Summary

- The Medical Faculty Associates ("MFA") is comprised of the physicians who service the GW Hospital. It is structured as an independent 501(c)(3) entity, although the University has considerable oversight authority. It employs over 2,150 employees[2]. The MFA Board of Trustees is chaired by former GWU Board Vice Chair Ellen Zane, and includes two members (Chichester, Lawrence) of the GW Board of Trustees, GW President Granberg, and GW Vice President/CFO/Treasurer Fernandes. The MFA CEO is GW VP for Health Affairs and GW Medical School Dean Barbara Bass.

- Over the past 4 fiscal years, the MFA expenses exceeded revenues by ($43M + $48M + $78M + $79M =) $248M. *You read that correctly: the MFA has lost a quarter BILLION dollars over the past four years alone, and is seriously in debt, both to the University and to private creditors.* The GW VP/Treasurer projects an additional deficit in the current fiscal year in the range of $30M-$50M.

- To cover these losses, the University has loaned the MFA a great deal of money (some of which has been "forgiven") over the years, and the University has underwritten some major loans from private creditors.

    - The amount of MFA debt to the University is at least $235M;
    - In the current fiscal year (2023-2024,) GW has already loaned the MFA an *additional* $35M; in FY2022-2023, GW loaned the MFA an *additional* $80M. That $115M was therefore unavailable for the pursuit of the GW academic mission. The University is continuing to pump tens of millions of dollars each year into an enterprise that hasn't come close to breaking even for at least four years (and projected for a fifth year);
    - The amount of MFA debt to private creditors appears to be in excess of $115M, of which at least $85M (and possibly all) is guaranteed by the University;
    - Therefore, the total MFA debt exceeds $350M, with University exposure of at least $320M;

- Administrators have emphasized that the MFA annually pays back all interest due on loans from the University. Importantly, the MFA is able o pay back this interest only because the University loaning the MFA additional money each year. In effect, the MFA is using the additional money that the University loans it each year to pay interest on the University's loans to it;

- A MFA departmental website posting has, for over a year, suggested that physician shortages may be leading to the inability to take new patients, raising concerns about maintaining current revenues.

- The University administration has repeatedly offered inaccurately positive assurances about the financial health of the MFA, and has, to date, declined to provide the Faculty Senate with a MFA Business Plan showing how they are going to recover from this situation. GW VP Hernandes has agreed to provide the Faculty Senate's Committee on Fiscal Planning and Budgeting with periodic updates. The full Senate received an update on the University's Fiscal Health on October 23, 2023.

This is a serious problem, with the potential to have major long-lasting effects if not addressed immediately. What is needed is complete transparency, including immediately providing the Senate with a credible and auditable short- and long-term MFA-specific Business Plan, quarterly MFA revenue and expenditure forecasts that are consistent with the Business Plan, and quarterly MFA Financial Statements that demonstrate successful execution of the MFA

[1] This document draws heavily on the presentation by Professors Joseph Cordes and Susan Kulp to the May, 2022, meeting of the GWU Faculty Senate: https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/0/196/files/2022/06/5-2022-minutes-attachments.pdf. Those numbers, in turn, are drawn from the University's published audited financial statements, provided at https://finance.gwu.edu/reports. In addition, this document draws from subsequent financial statements and from the Minutes of the Faculty Senate meeting on October 23, 2023, https://bpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/0/196/files/2023/10/10-2023-minutes-attachments.pdf .
If there are any errors contained in the current document, they are exclusively attributable to this document's author, Professor Philip Wirtz (pww@gwu.edu).

[2] https://gwdocs.com/about-gw-medical-faculty-associates/history

Business Plan. Deferring, yet again, to the end of the fiscal year to see if the MFA has turned around without a Business Plan would be extremely risky.

1. **What is the "Medical Faculty Associates" (MFA)?**
   The Medical Faculty Associates, Inc. ("MFA") is an independent 501(c)(3) (nonprofit) corporation. The MFA operates exclusively for the benefit of the University. Although the MFA exists as a separate non-profit, the University is the sole corporate member and as such has greater control (and responsibility) over the medical enterprise.

2. **Who are the employees of the MFA?**
   According to GWToday[3], the "Medical Faculty Associates is the largest academic physician practice in the metro D.C. area, with 800 physicians who provide comprehensive patient care in 51 medical and surgical specialties. As faculty members in the GW School of Medicine and Health Sciences, the GW MFA physicians serve as teachers and mentors for medical students, residents and researchers."

3. **What function does the MFA serve?**
   The MFA
   - provides certain clinical, teaching, research and administrative services to the University;
   - provides professional physician services and related health care services, including diagnostic and therapeutic procedures and services, to patients in the greater Washington, DC community and other areas, including those unable to pay for such care;
   - Furthers the advancement of medical knowledge through basic and applied research in medicine, lectures, consulting, publishing information and teaching, particularly regarding medical and health care issues prevalent in urban communities;
   - Undertakes teaching the diagnosis and treatment of medical conditions to medical students, interns, residents, fellows and other professionals in connection with the University;
   - Employs physicians duly licensed to practice medicine, who hold a faculty appointment at the University, and other qualified personnel and makes the service of such personnel available to indigent and other persons requiring such care; and
   - Performs the other necessary or appropriate functions and services in connection with the above purposes.

4. **How is the MFA structured?**
   - The GWU Medical School Dean is the CEO of the MFA.
   - The MFA has its own Board of Trustees who are appointed by the GWU Board of Trustees. Those trustees include several GW Trustees (currently Chichester, Lawrence), the GW President (Granberg), and the GW Vice President/Treasurer (Fernandes) .
   - The Board Chairman of the MFA is former GW Trustee (Zane).
   - The University has considerable oversight authority over the MFA as set forth in the "Amended and Re-stated By-Laws of the MFA".
   - MFA physicians:
     i. Salaries and benefits of MFA are paid by the MFA.
     ii. MFA physicians are clinical faculty in the GWU School of Medicine.
     iii. MFA physicians are represented in the GWU Faculty Senate.
     iv. Dependents of MFA clinical faculty qualify for GWU tuition benefits.

5. **What is the financial relationship between the MFA and GWU?**
   - Although the MFA and the University are two separate financial entities, the University has loaned the MFA over $235M (in the form of structured loans and lines of credit) and is a guarantor of many of the existing private loans to the MFA.
   - The University and the MFA each file separate IRS 990 informational tax returns to the IRS and prepare separate audited financial statements.
   - Starting in 2020, consolidated financial statements have been prepared.
   - As a result of a December 2018 restructuring of the GW-MFA relationship, although the MFA is still a separate non-profit, the University is the sole corporate member and as such has greater control (and responsibility) over the medical enterprise.

[3] https://gwtoday.gwu.edu/george-washington-university-and-gw-medical-faculty-associates-restructure-relationship

- There are numerous transactions between GW and MFA, including
    i. Guarantee of debt
    ii. Loans / lines of credit
    iii. Debt forgiveness
    iv. Contractual relationships (e.g., faculty)

6. What is the financial situation of the MFA?

Based on published University financial statements::

- In FY2022-2023, MFA *operating expenses exceeded operating revenue* by $78.841M (i.e., approximately $80M). That operating deficit was nearly identical to the deficit in the prior fiscal year. Over the past 4 fiscal years, the MFA expenses exceeded revenues by ($43M + $48M + $78M + $79M =) $248M (i.e., approximately a quarter of a BILLION dollars). The corresponding number at the end of the previous fiscal year was ($43M + $48M + $78M=) $168M. The MFA is showing no signs of recovery: the VP/Treasurer has projected a current-year deficit of between $30M and $50M;
- In FY2022-2023, the MFA's liabilities exceeded its assets by $237M. That deficit increased by approximately $80M. Because a large portion of the liabilities is in the form of loans to the MFA that GW has either made directly or has underwritten, this means that if all activity of the MFA had stopped on June 30 2023, the University would be "on the hook" to cover approximately $237M. Some of this $237M would be in the form of "bad debt" that would no longer be available as assets to pursue the academic mission of the University; the remainder would be additional debt owed to creditors, reducing even further the University's ability to fulfill its academic mission;
- The MFA has covered these huge annual losses through a series of loans/lines of credit, many of which are directly provided or guaranteed by GW. As of June 30 2023, GW had loaned the MFA at least $200M, including an additional $80M in FY2022-2023. As of November of 2024, the University has loaned the MFA at least an *additional* $35M;
- In 2019, the University forgave $17.5M of the MFA's debt to it[4];
- It would appear that the MFA has spent nearly all of its available cash, and is in a serious cash flow crisis. If the MFA continues to run a deficit this year (as it is projected to do), it will need to find the cash to fund that deficit. One source is the possible sale of the M Street building, although this one-time sale (1) would likely not fully offset the historical annual deficit and (2) would not address the fact that the MFA is running a major deficit each year. It is also not clear that the value of this property significantly exceeds the $32.7M secured loan that the MFA has on the property. Another possible source is a possible additional loan from GW, which would drain those funds from pursuit of the academic mission, directing them instead into an enterprise which has consistently shown an inability to cover its expenses.

7. Is the University's stake in the Hospital directly related to the MFA?

Not in any direct sense. Until 2022, the University owned a 20% stake in the GW Hospital. In the summer of 2022, the University sold its 20% share for $54M. Former Interim President Wrighton announced at the September 2022 Faculty Senate meeting that (without any apparent Faculty consultation) the $54M would be invested in 14 endowed Faculty positions, including nine in the School of Medical and Health Sciences. *This has no direct bearing on the financial operation or circumstances of the MFA. The $54M went into the University quasi-endowment, and has zero relationship with the MFA's operations.* It has been noted, however, that Interim President Wrighton chose (again, without any apparent Faculty consultation) to delegate a significant portion of the $54M to endowed Faculty positions in the School of Medical and Health Sciences at the same time that the MFA has been running a significant deficit each year and has had to borrow heavily to cover its expenses. In addition to this $54M, it is reasonable to presume that there are additional provisions associated with the sale of GW's stake that have not yet been shared with the Faculty.

[4] This number differs from the value presented in the report to the Faculty Senate. It is drawn from Page 22 of the GWU Financial Report 2018-2019, https://finance.gwu.edu/sites/g/files/zaxdzs4696/files/2022-06/evpt_financialreport2018-19.pdf

8. **What role did COVID-19 play in the MFA's financial situation?**
COVID-19 related variants, most notably Omicron, had an adverse impact on MFA volumes, particularly in the months of December 2021 and January 2022. As of June 30 2022, while the number of people commuting into DC for work had increased, it was reportedly still far below pre-pandemic levels, which continued to have an adverse impact. To help mitigate the adverse impact of COVID-19, the MFA received federal Coronavirus Aid, Relief and Economic Security Act (CARES Act) grants of $15.6 million and $4.8 million for the years ended June 30, 2022 and 2021, respectively. In addition, during the year ending June 30, 2021, the MFA received $9.9 million in grants from the Washington, D.C. government to help to mitigate the adverse financial impacts of COVID-19. In the absence of a MFA Business Plan or associated earnings forecasts, it is not currently possible to estimate any continued drag of COVID-19 on MFA revenues in FY2023-2024.

9. **Have the MFA deficits impacted the operations of the University's academic units?**
    - As previously noted, in 2019, the University forgave $17.5M of the MFA's debt to it. That is $17.5M that was not, therefore, available to fulfill other aspects of the University's academic mission;
    - In order to cover the losses incurred annually by the MFA, the University has chosen to loan the MFA significant amounts of money and provide a line of credit which has been largely drawn upon. In the past fiscal year alone, the University loaned the MFA an additional $80M; in the current fiscal year, the University has already loaned the MFA at least an additional $35M. These are funds which could otherwise have been used to fulfill other aspects of the University's academic mission. Even though the University has no ongoing significant construction projects, on June 30, 2023, the University had $56M of cash on hand. On June 30, 2022, the University had $123M of cash. The amount of cash on hand in June 2023 is the lowest it has been since the end of the 2013-2014 fiscal year. **There is absolutely no basis in fact for the assertion that the MFA's failure to generate revenue to cover its expenses "has no effect on the University."** The University continues to pour tens of millions of dollars each year into the MFA; this is money which is not available to fulfill the academic mission of the University and which may never find its way back to the University's budget;
    - Given the significant deficits incurred by the MFA operations in the past several years, there is basis for concern that the University might choose to loan the MFA more money, to forgive additional MFA indebtedness, and/or to act as guarantor of additional private loans. This, again, potentially depletes funds which would otherwise be available to fulfill other aspects of the University's academic mission.

10. **What assurance has the University administration provided to the community that the MFA financial situation is improving?**
    - At the October 2020 Faculty Senate meeting, President LeBlanc was asked "how the MFA is performing this year, financially, and how it is anticipated to perform next year."[5] President LeBlanc replied that "the MFA is geared back up now and working hard to recover some of its lost patient care revenue. MFA leadership is optimistic that the MFA has the opportunity to break even this year, which would be a sizable accomplishment in face of the pandemic." He noted that "Dean Bass and the MFA Chief Operating Officer are working hard to make this happen, noting that increased efficiency in scheduling allowing for more appointments and telemedicine are helping to keep revenue flowing into the MFA."[5]. That was the fiscal year in which the MFA closed out with a $43M loss.
    - At the May 2022 Faculty Senate meeting, Dean Bass asserted that "[s]he anticipated that, in short order, the MFA's accounts payable to the university will be reconciled."[6] Dean Bass' presentation to the Senate failed to disclose that, in less than 2 months, the MFA would close out the fiscal year with a $78M loss and $250M in debt. The disparity between Dean Bass' remarks to the Senate and the reality are, charitably, disconcerting.
    - At his October 2022 presentation to the Faculty Senate, VP Fernandes stated "that the current plan, reflecting a break-even year, assumed an earlier start to the agreement. instead, the

[5] https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/0/196/files/2020/11/October-2020-minutes-attachments.pdf
[6] https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/0/196/files/2022/06/5-2022-minutes-attachments.pdf

MFA and university operated for the first two months of FY23 under the old arrangement. Based on some early trends, he expected that the MFA will most likely require some additional liquidity before stabilization occurs from the new agreement along with some of the other operational and financial incentives that are now being fully implemented. He expected that stabilization will probably occur around the fourth quarter of FY23, with eventual profitability at some point late in FY24" (Faculty Senate Minutes: emphasis added).

- At that same Senate meeting, Dean Bass noted that she was "optimistic that, with [cited] operational, funds flow, and structural changes, the MFA will have a net zero balance sheet a year from now" (i.e., October 2023). [According to VP/T Fernandes' October 2023 report to the Senate, the MFA is projected to run a $30M-$50M deficit, and as of June 30 2023, the MFA's liabilities exceeded its assets by $237M.];
- At the January 2023 Senate meeting, VP Fernandes stated that "for FY23, a loss of between $55-65 million on revenue of $375-400 million is expected. He noted that the run rate will start to decline substantially in the next few months, as most of the loss for FY23 is front-loaded to the beginning part of the fiscal year." [As previously noted in this Report, the FY2022-2023 MFA loss was $79M – nearly identical to the previous year – and the revenues totaled $370M.];
- At that same meeting, Interim President Wrighton noted that he "believes that the MFA will be at break-even by the end of FY24". He also noted that "the new partnership with Universal Health Services (UHS) only came into effect on August 22, 2022. By end of this fiscal year, this partnership will still be less than a year old. He anticipated better times ahead fiscally as a result of the renegotiated partnership." [Again, according to VP/T Fernandes' October 2023 report to the Senate, the MFA is projected to run a $30M-$50M deficit.];
- At the March 2023 Senate meeting, VP Fernandes noted that "those projections have not changed";
- At the October 2023 Senate meeting, VP Fernandes emphasized that the MFA is paying back all annual interest due on loans from the University. It should be noted, however, that the MFA would be unable to pay back this interest if the University wasn't loaning the MFA additional money each year. In effect, the MFA is using the additional money that the University loans it each year to pay interest on the University's loans to it;
- A recent GWU medical department posting suggests physician shortages may result in the inability to take new patients, raising questions about ongoing financial viability (see Appendix A);
- Notably, President Granberg has repeatedly declined when explicitly asked to provide the Senate with the MFA financial experience for the first quarter (July 1-September 30) of 2023, despite the availability of those results to the administration at the time of VP/T Fernandes' presentation to the Senate on October 20, 2023. This lack of transparency is both curious and disappointing.

11. Does the MFA have a business model and revenue/cost forecasts?

If there are such documents, they are unknown to (and have not been shared with) the Faculty Senate. Professor Yezer made precisely this point at the May 2022 Faculty Senate meeting.

12. How could the situation have gotten this out of hand without anyone noticing?

- As cited in this document, the Faculty Senate has been pressing the administration heavily on this issue;
- Former Interim President Wrighton and VP Fernandes seem to have been candid, although their projections have been significantly off;
- President Granberg has assured the Senate that she is carefully monitoring the MFA situation;
- Dean Bass appears to have been either far less candid or seriously off in her projections;
- The "missing link" is the GW Board of Trustees, who seem to have let this situation get way too far out of hand.

13. Where do we go from here?

The absence of a Business Plan, including credible and auditable quarterly revenue/cost forecasts, which demonstrate that the MFA has structured a way to return to solvency, is *very* concerning. It would appear that the MFA is spiraling financially downward at high velocity with no end in sight, taking its primary creditor -- the University -- with it. The rest of the University is paying a very high price, with University funds which would otherwise be invested in key academic initiatives flowing instead to the MFA to cover its spiraling debts. And if the excessive losses continue, the very existence of the University becomes imperiled.

The time has come for the central GW administration and the MFA leadership to prepare and share with the Faculty Senate a fiscally responsible MFA Business Plan, including credible, <u>defended</u> quarterly estimates of (among other details) revenues, expenses, cash flows, assets, liabilities (including debts), profits, and losses, in order to demonstrate that the MFA is returning to fiscal health. It would not be sufficient to provide generic undefended "we plan to be at $X by quarter Y" without providing full documentation supporting such assertions.

The problem is *not* that the University and the MFA have a symbiotic relationship: the MFA has played a critical role in the provision of medical education at GW. The problem *is* that the MFA's fiscal performance has continued to deteriorate ever since the University assumed more direct control over it in December 2018. Prior to this, the University was not responsible for the MFA losses, which were significantly less. The MFA's fiscal performance is undermining the University's capacity to perform its overall education and research mission, and rosy claims that the problems were addressed have repeatedly been undermined by the audited year-end reports released by the University.

In order to restore the faith of the GW community that the MFA is truly on the path to fiscal recovery, it is critical that the University share the business plan that will guide the MFA in the years ahead and that MFA quarterly performance be shared with those who have been trying to ring the alarm bell for several years.

Appendix A
Department of Gastroenterology & Liver Diseases Notice to Patients

- Department of Gastroenterology & Liver Diseases
  https://gwdocs.com/specialties/gastroenterology-liver-diseases
  Accessed on October 3, 2022 and November 16, 2023
  "Dear Patients,

  The GW MFA Division of Gastroenterology is undergoing a transformation, and as always, we remain committed to delivering the best possible care for our patients. With this in mind, our goal is to enhance access and continue to deliver high-quality care for our current patients at our 2150 Pennsylvania Ave., NW, location.

  Like so many academic medical centers around the country in the aftermath of the pandemic, we are rebuilding our physician and advanced practitioner teams and are excited for our new colleagues to start this fall. As we grow, we expect to be able to welcome new patients to our practice again soon. Thank you so much for entrusting the GW MFA with your care. If you have any questions, please don't hesitate to contact our offices.

  Thank you very much for your patience and understanding during this time."

Title IX training Review

EPT Title IV review subcommittee (Rohini Ganjoo, Jamie Jeune, Brooke McDonough, Sarah Wagner)

General

1. This training is a much-improved version but seems still haphazard.
2. With each slide from a different narrator (all female), the collection of slides seems poorly-integrated and boring. It will be hard to keep people's attention.
3. The slides seem focused on "catching miscreants". It seems to be heavily biased in the direction of every male is obviously violating something (discrimination, harassment, etc.), and you should watch the video that instructs you about what you are doing wrong.
4. Many slides contain long pauses between the end of narrated content and the transition to the next slide. For eg:
    - GW Anti-Discrimination slide: (with list of policies) had several seconds of lag time (no audio, just the slide); can the transition be sped up?
    - To Report or Not to Report slide: A lot of lag time. Is this slide a preface to the quiz slides?
    - Retaliation
5. Anti-Discrimination & Title IX seem to be distinctly different topics. Why are they in the same training? Also, due to the breadth of content covered, this seemed to be more of a GW policy training
6. Review typos in closed captioning. For eg:
    - In the "Welcome Video" slide there is a typo in the closed captioning at 1:00 minute: "powerq"
    - On the "What is Sexual Harassment" slide, there is no closed captioning for the narrative in the "Stalking" link.
    - On the "Social Media" slide, the Twitter icon may need to be changed to "X."
7. Impact vs. Intent slide, type is too small.
8. Audio could be edited to even out sound and quality. For eg: Welcome video: the audio on is fainter than the previous two: can it be elevated (or music lowered?)
9. Disability Policy slide: The audio volume is lower than previous section.
10. Long pause in the middle of "Policies" slide.
11. The overall flow of content may need to be reviewed to follow a pattern that the user can anticipate. It may be helpful to have all of the policies organized on one screen with clickable tabs, for example. It is hard to see the overall progression of content in a logical order, without being contextualized within a visual on-screen. The general flow seems to be Policy > Definitions > Quiz > Examples, but it would be helpful to have that presented on-screen. After getting deep into the content on Supportive Measures, the policy on prohibited minors felt abrupt/out of nowhere.
12. It may be helpful to remind viewers that they can access all the relevant policies from the "resources" tab in the upper right corner. While the recording tells readers about the "resources"

tab at the start of the training, viewers are getting a lot of information at once so a reminder may be useful. After providing that it's important for employees to familiarize themselves with the policies, consider adding something along the lines of, "these policies are available under the 'resources' tab in the upper right-hand corner."

13. Instructions for when to click an item to hear the related content (e.g. definition) or a highlight when the mouse hovers over a clickable object would be helpful. Otherwise, users have to guess what to do
14. Some screens allow for fast forwarding using a progress bar, while others do not. The formatting should be consistent across the training

Content

15. How to Navigate slide: should there be a space between Resources and Settings (or delete the one after Navigation)? And period missing after "…screen to the left"
16. Welcome video: harmonize — "How to" appears first, then followed by the list below it, while "Not Tolerated" appears after list below.
17. May be helpful to inform viewers that if they take a break from the training, their progress will not be lost.
    - No clarity on how, if at all, progress in and completion of the training is recorded.
18. Title IX - It's Not Just About Athletics slide: About (in title) shouldn't be capitalized; same for Federal
19. The training states that Title IX exists to ensure equal access to educational opportunities. But designated reporters are also required to report on employee—employee conduct that raises Title IX concerns, which is not intuitive. Overall, viewers would benefit from more specificity and clarity here.
    - Viewers will benefit from more detail regarding who qualifies as a designated reporter. The recording says that "most staff" are designated reporters. It also says individuals are designated reporters "unless identified and acting as a confidential resource." This is potentially confusing. Is it possible to give more specific info here? Also, it may be helpful to specify that part-time/adjunct faculty are designated reporters.
    - Are graduate student Teaching Assistants or instructors designated reporters? If so, they should be added to the list.
    - Some Faculty members are exempt as carefully crafted by Professor Marotta-Walters as Chair of the Faculty Senate Executive Committee. These exemptions, primarily for clinically-positioned Faculty, must be included in this slide. Otherwise, it is factually incorrect.
20. The slide says that an "outreach email" is sent after a report. It may help to clarify whether the name of the person making the report is kept confidential or is disclosed to the complainant. Important to clarify to whom the email/report is sent.
21. What Happens When Title IX Report Received slide: include the Title IX office email on the actual slide.

22. Unlawful Discrimination slide
    - The tree image for protected characteristics seems reminiscent of the eugenics tree. Is there another image that could work instead?
    - The type is too small to be able to be read. Not sure what the point is of this slide. It seems to suggest that as long as a person is not listed in one of the "bubbles", it is okay to discriminate.
    - This seems like a useless slide, in terms of conveying information. A long pause after only a short verbal presentation.
    - Reporting Unlawful Discrimination at GW". The last line can be corrected for grammar and comprehension.
23. Types of discrimination slide: Narrative says to click on the item "below". There are no items "below". It is not clear why the viewer should need to click on anything; why isn't this part of the continuous narrative? Also, when clicking on the top three buttons, about 2/3 of the way through the narrative, the slide cut off and moved on to the next slide.
24. Slide: What is Sexual Harassment
    - It would be helpful to place the definitions in the context of the university environment. How does stalking- for example-show up? If the target audience is faculty and staff, this connection should be made clear. Is the intention for faculty to recognize this behavior among students and to report it? Examples are needed for each item. A good example of this are the quiz questions regarding whether or not to report.
    - Viewers might benefit from more detail during the discussion of the Title IX Sexual Harassment Policies (there are two relevant slides). For example, the training says jurisdiction extends to off-campus and online conduct "so long as there is close proximity between the reported conduct and the University Community." Consider whether it would be helpful to tell designated reporters to err on the side of reporting even if they are not sure whether "close proximity" exists.
    - Should dating violence come after domestic violence (because it refers to domestic violence)?
    - Conduct on the basis of sex that constitutes" — confusing phrasing
25. During the discussion of sexual harassment, the training says it will cover "consent and incapacitation" later in the presentation, but it does not seem to be there.
26. Academic Support Measures: the third example of providing alternative assignment should also be listed.

Quiz Questions

27. Quiz 1 and 2: Not at all clear why this quiz is necessary since the point was to make sure that everyone knows what constitutes harassment & discrimination. Being able to properly NAME the form of discrimination is not necessary? It seems to be consistent with the objective if the reader knows what constitutes discrimination & harassment without being required to provide an exact name for the form.

28. Should there be feedback? Or just advance to next question? Provide some guidance as to what to expect.
29. Quiz questions on types of unlawful discrimination could be more specific to the university environment and with more nuance- for example, one may not experience being made fun of for a religion, but may not be granted time off for religious holidays, or be expected to attend events which coincide with religious observations.
30. Great quiz questions regarding reporting! These specific and nuanced scenarios would really help tailor the content to the specific audience. After assessing basic understanding of definitions, a scenario exercise for each concept could be helpful.
31. Quiz #2 on reporting: first year should be hyphenated (first-year).
32. Training would benefit from additional quiz questions after the “Impact vs. Intent,” “Social Media,” and “Disability Policy” slides (before the discussion of Title IX).