

If Ferris Bueller Had a Bot:

AI Meeting Assistant Policy Landscape of CPED Member Institutions

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ABSTRACT

Artificial Intelligence (AI) has seen a significant rise in public use since the release of ChatGPT in November of 2022. Higher education institutions (HEI) have struggled to negotiate how best to manage AI technologies within their academic communities, acknowledging both positive and negative impacts of AI on education. Focused primarily on large language model (LLM) technologies, such as ChatGPT, HEIs are working to build policies and guidelines to regulate their use. However, within these policies, few HEIs have considered AI meeting assistants, even though these applications bring their own set of benefits and risks. This article examines the public websites of 135 CPED universities, eight of which mention AI meeting assistants in their policies. The article analyzes the risks, benefits, and use guidance provided by these policies and suggests next steps for HEIs to address the ethical, legal, and pedagogical implications of AI meeting assistants.

KEYWORDS

AI, AI meeting assistants, AI policy, higher education, higher education policy

Imagine if Ferris Bueller, from the 1986 film *Ferris Bueller's Day Off*, was a student in 2024. The elaborate plan to cut class for a funfilled day before graduation would be different. Ferris would deploy his artificial intelligence (AI) meeting assistant to attend class, and he would not miss lectures, class discussions, or debates because the AI assistant would have recorded, transcribed, summarized, and carefully analyzed every spoken word. When Ferris returned home, he would skim through the AI-generated summaries and return to plotting and convincing his best friend of another day of teen-filled adventures.

This alternate version of *Ferris Buller's Day Off* is the current reality of tech-savvy students as AI meeting assistants, such as Otter, Fireflies, and Fellow, have entered online and in-person classes. AI-powered technology has the potential to impact learners and educators by augmenting students' capacity to learn (Baidoo-Anu & Ansah, 2023; Dempere et al., 2023) and even provide accommodations for students with disabilities (Ballenger, 2022). However, with such transformative technological advancements come concerns and questions about the impact on human creativity (Baidoo-Anu & Ansah, 2023), privacy (Akgun & Greenhow, 2022; Chan, 2023), the perpetuation of systemic bias (Akgun & Greenhow, 2022), accessibility (Stanley et al., 2022), accountability (Dwivedi et al., 2023), and other topics related to academic integrity.

The researchers wanted to gain an understanding of the current landscape of the Carnegie Project on the Education Doctorate

(CPED) member institutions' stance, policy, and guidelines regarding the use of AI meeting assistants. The research question was: What are CPED member institutions' guidelines, academic integrity policies, and training materials regarding AI meeting assistants? This research adds to the conversation about developing a shared definition of AI (Krafft et al., 2020) and AI policy at the university level while addressing students' and instructors' concerns about the misuse of AI, especially as it relates to privacy (Chan, 2023).

LITERATURE REVIEW

Al, once thought to be solely contained in creative works of books, films, and television series, has manifested into reality. It may seem that Al emerged quickly, but it has a long history with researchers across various disciplines in academia and the tech industry. The first artificial intelligence conference, led by John McCarthy in the summer of 1956, is considered the founding workshop dedicated to the development of the Al field. The conference reinforced "that making machines think, designing computer programs to behave intelligently, was far harder than anyone in 1956 thought it would be" (McCorduck, 2004, p. 118). The complexities of Al have continued to elude scientists for decades. Yet, researchers persisted in working on the challenging problem of machine learning and even developing artificial intelligence in education (AIED) technologies in the early 1970s such as Merlin, an



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intelligent tutoring system developed by Newell and Moore (Doroudi, 2022). The development of AI may have started slowly, but in the past decade it has maintained a fast pace of innovation and breakthroughs in laboratories, and now in homes, K-12 schools, businesses, medical centers and universities.

Though the field of Al began in a higher education institution (HEI) nearly 70 years ago, the public arrival and increased student and faculty use of OpenAl's ChatGPT was met with mixed fanfare. As the *Chronicle of Higher Education* reported, "generative artificial intelligence presents a threat to how colleges operate and educate, will have both a positive and negative impact on teaching, and offers colleges an opportunity to improve how they are run" (Anft, 2023, p. 3).

The critical review of the discourse about AI in HEIs by Bearman et al. (2023) demonstrated that the leading higher education journals lacked in-depth discussion. What they found was that discussion about AIED was either utopian or dystopian, and even more prevalent was the debate about "human versus machine" (Bearman et al., 2023, p. 380). In addition, there were concerns about academic integrity (Wood, 2023; Yau & Chan, 2023) and, in particular, the "boundaries between plagiarism and inspiration and appropriate situations for seeking help from Al" (Chan, 2023, p. 13). Nevertheless, Chan (2023) found that faculty and students believe that universities need to provide clear AIED policies, especially addressing issues related to academic integrity and plagiarism. In contrast, Eaton (2023) argued that narrow academic integrity policies cannot be sustained in a "postplagiarism world," which she defined as "an era in human society in which advanced technologies. including artificial intelligence and neurotechnology, including braincomputer interfaces (BCIs), are a normal part of life, including how we teach, learn, and interact daily" (p. 2). Furthermore, Kramm and McKenna (2023) asserted that "surveillance of students and identification of AI usage is not only ethically troublesome but also a waste of time" (p. 2173), because the focus should be on considering new ways to educate and assess students rather than "the policecatch-punish" (p. 2175) model.

As of mid-2023, 8% of the 600 HEI leaders who responded to the Western Interstate Commission for Higher Education Cooperative for Educational Technologies survey about AI policy indicated that they had implemented AI policies, most of which were on academic integrity (Davis, 2023). Fifty-seven percent of the respondents were planning on or in the process of developing policies, and 70% of those revealed that the policies were going to be on academic integrity (Davis, 2023). While policies are in development, few HEIs have formalized and distributed them to their academic communities, as shown by Primary Resource Group's 2023 survey of approximately 1,000 HEI faculty regarding their familiarity with generative AI tools, such as ChatGPT. When asked whether they were aware of guidelines developed by their administrations about using AI tools in classes, fewer than 14% of faculty answered affirmatively.

Conversations and policies related to academic integrity are important, but these discussions pertain to a small portion of Alpowered technology, such as LLMs that are capable of understanding and generating human-like text across a wide range of topics. However, Al technologies go beyond text analysis and generation. As Schmidt et al. (2023) point out, Al has "amplified the impact of digitalization on platforms and created a new dimension of functionality and user interaction" (p. 59). Al-powered assistants are developed to interpret the users' inputs, even when the inputs are conversational language with multiple people (Schmidt et al., 2023). Natural language understanding provides AI with the ability to decode spoken and written language; natural language generation "empowers assistants to generate human-like text, facilitating responses to users that feel natural and are easy to understand" (Schmidt et al., 2023, p. 4).

Al meeting assistants, such as Otter.ai and Zoom Al Companion, are based on natural language understanding but are specifically designed to record, transcribe, capture screenshots, summarize, provide keywords, and note and interpret information about live meetings into which they are deployed. The user does not have to attend the meeting for the Al meeting assistant to attend. If the Al assistant is plugged into the user's calendar, it recognizes video conference meetings and automatically joins and records the meeting.

Little is known about the impact AI meeting assistants have in work, education, or personal settings. However, the researchers drew from research on intelligent personal assistants (IPAs), "defined as an agent that uses artificial intelligence and can interact with user(s) via natural and/or artificial language by combining one or more communicative and sensory modalities to assist and collaborate with them" (Shaikh, 2023, p. 783). Myers et al. (2007) studied an IPA, the Project Execution Assistant (PExA), specifically designed to support the productivity and time management of knowledge workers by performing tasks such as scheduling meetings, arranging stakeholder visits, prioritizing tasks, managing information, and assisting in meeting by tracking topics. This early model sought to address the overload of knowledge workers by completing routine tasks and had promising results. As IPAs have become available to the average consumer, de Barcelos Silva et al. (2020) found in their in-depth literature review about IPAs that most users interact with IPAs in private contexts and for simple tasks such as weather, music, and web searches. However, at work, users employ the technology differently (Maedche et al., 2019). IPAs support employees on time management (Berry et al., 2011), project planning, and task prioritization (Kimani et al., 2019), similar to the earlier models (Myers et al., 2007). Even though consumers use IPAs at home and in the workplace, de Barcelos Silva et al. (2020) highlighted that users were concerned about privacy and data security issues.

Although IPAs differ from AI meeting assistants, both use similar technology and raise concerns about privacy, security, and intellectual property rights. As of the conducting of this study, the researchers found a dearth of research or commentary about the use of AI meeting assistants in HEIs, and few policies about AI meeting assistants or their impact on teaching and learning. This research seeks to address some of the gaps by understanding and evaluating the landscape of CPED members' AI-powered meeting assistant policies.

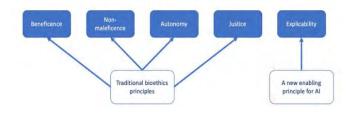
CONCEPTUAL FRAMEWORK

At the center of this study is the question of value. Value is a loaded word. It can be used in various contexts and have different meanings. Zeithaml (1998) described value in business as the perceived benefits of a product or service in comparison with the sacrifices (costs) of obtaining it. Though HEIs are not the same as businesses, there are similarities in that HEIs provide services that have a cost, whether financial or of time, to students that in the long

term can impact an HEI's reputation (Woodall et al., 2014). As institutions consider the implications of incorporating and developing new policies about AI technology, these AI policies may have an impact on how the university is valued by students and other stakeholders. Järvi et al. (2018) explored how misalignments and failures in service delivery can lead to value co-destruction and negative outcomes. Their research emphasized that value codestruction occurs when there is insufficient trust or unclear expectations. Canhoto and Clear (2020) take the work of Järvi et al. (2018) further by focusing on the risks AI pose in business environments and construct a diagnostic framework to identify potential value destruction in business applications of AI technologies, emphasizing the importance of managing AI systems' integrity regarding inputs, processes, and outcomes to prevent value destruction.

Similar to businesses, HEIs need to consider the potential value-added and the value co-destructions of AI technologies. The conceptual framework of Schön et al. (2023) characterized Al assistants as disruptors to higher education, in particular as they relate to the instructor, student, learning, assessments, and policies and regulations. Schön et al. (2023) posit that AI technologies like ChatGPT are "value-added services," (p. 6) such as enhancing the learning, automating routine tasks, and improving administrative efficiency. Though the framework by Schön et al. (2023) addressed the regulatory disruption, there was limited examination of the ethical, data security, privacy, and confidentiality concerns that such disruptive technologies raise. As a result, we looked to Floridi and Cowls (2019), who conducted a comprehensive analysis of various high-profile ethical frameworks and synthesized a unified set of five principles that could guide ethical AI development universally. Though this framework, depicted in Figure 1, was not developed for higher education, it does propose a comprehensive framework that consists of the principles of beneficence, non-maleficence, autonomy, justice, and explicability. Beneficence calls for AI technologies that promote and preserve the well-being and dignity of humans and the environment, while non-maleficence is the principle of do no harm. Autonomy advocates for human agency and AI as an assistant to humans. Justice emphasizes the importance of equity and equality principles in AI. Finally, explicability ensures that AI is understood and accountable to stakeholders. We argue that these principles can help manage the ethical challenges of AI and ensure its beneficial integration, while also recognizing the need to evaluate the framework continuously as AI evolves.

Figure 1. Ethical Framework of Five Overarching Principles for Al by Floridi and Cowls



Note. (Floridi & Cowls, 2019, p. 8) CC-BY 4.0

METHOD

The main objective of this study was to understand CPED member institutions' policies and/or guidelines regarding the use of AI meeting assistants. Using Krippendorff's (2019) definition of content analysis, the researchers systematically analyzed member institutions' publicly available policies on AI meeting assistants. Since the time of this research, there has been little research on AI meeting assistants and HEIs' policies on the technology; as a result, the researchers opted to use inductive content analysis (Hsieh & Shannon, 2005; Vears & Gillam, 2022).

In March 2024, using the member list on the CPED's website (https://www.cpedinitiative.org/current-members), the researchers searched and collected AI policy data from all 135 member institutions' websites. Of the 135 institutions, 122 had AI policies and/or guidelines publicly available on their websites. Next, the researchers further searched for policies or guidelines specific to AI meeting assistants, which often were buried within other pages or hyperlinks. They included institutions in the study if their websites explicitly described, provided resources, or offered guidelines or policies about AI meeting assistants. Of the 122 with AI policies, eight member institutions discussed AI meeting assistants or had specific policies (see Figure 2).

The researchers copied the policies from the webpages to separate documents and analyzed the data by first reading the policies and guidelines for familiarity (Veras & Gilliam, 2022). The first round of coding identified, as Veras and Gilliam (2022) described, "big-picture meaning" (p. 117). Another round of coding was conducted to support the researchers in refining and revising categories (Saldaña, 2021). Finally, the researchers quantified the qualitative data by counting common policies and guidelines about AI meeting assistants as related to risks, benefits, specific guidance, and approval of the technology. The researchers independently coded the data, each memoing themes and keywords to glean insights from the data, and frequently met to discuss and evaluate their analysis process by code-checking (Saldaña, 2021). This process ensured trustworthiness (Elo & Kyngäs, 2008).

Figure 2. Universities with AI Meeting Assistant Policies and/or Guidelines

HEI	U.S. Region	Size	Research Classification	Public or Private
HEI 1	Southwest	Large	R1	Public
HEI 2	West	Medium	-	Public
HEI 3	Northeast	Large	R2	Private
HEI 4	Northeast	Large	R1	Private
HEI 5	Midwest	Large	R1	Public
HEI 6	West	Large	-	Public
HEI 7	West	Large	R1	Public
HEI 8	South	Large	R1	Public

Note. Carnegie classification of colleges and universities considers small HEIs to have fewer 5,000 students; mediumsized to have between 5,000 to 15,000 students; and large to have more than 15,000 students (American Council on Education, n.d.).



Even though the researchers sourced publicly available data on AI meeting assistants, they used HEI pseudonyms in the study. When describing the policies of each institution, no substantial direct quotes that could be easily found on the Internet were used. This decision for anonymity was made for several reasons. First, the purpose of the research is to understand the landscape of CPED member institutions' policies, not to single out specific HEIs. The naming of HEIs with or without policies could distract from the findings of the study. Additionally, AI technology and policies are changing quickly, and by the time this article is published, CPED's list of universities and their specific AI policies may have changed. Finally, public opinion and experiences with AI continue to transform and evolve; therefore, the anonymity of the institutions serves to protect universities from any potential negative backlash or publicity.

RESULTS

Given Al's rapid adoption since November 2022, HEIs have had to address the appropriate utilization of AI tools in academia. Of the 135 CPED members, 61 (45%) have one or more official policies regarding AI. Forty-four (33%) incorporate AI into their academic integrity, student code of conduct, honor code, academic dishonesty, or community standards policies, and/or mandate specific language be included in course syllabi. Nineteen (14%) regulate Al-use through their information technology (IT) security, data governance, or technology approval guidelines. Nine HEIs, four of which have another policy guiding the application of AI tools, prescribe appropriate handling of AI in their research policies. Two CPED universities offer AI policies at the graduate school level, and one defines the appropriate use of AI in their education department handbook. Another provides guidance only in their employment policies. Nine additional universities (7%) do not have guidance formally stated in a policy, but a memo, website, or publication put out by an AI task force or an administrative leader, such as the chancellor, provost, or university president, advises about the acceptable application of AI at the HEI. All but 13 HEIs, or approximately 90% of the 135 institutions, have either guidance or easily accessible resources for faculty and/or students about AI. Library guides, webinars, conferences, online trainings, and information sites offer support about this new and powerful technology.

However, even with supports in place, CPED-affiliated HEIs either leave it up to the instructor to determine proper application of AI tools within courses or simply suggest that utilizing AI-generated text or images without proper attribution is considered a violation of academic honesty. None of the HEIs overtly prohibit generative AI. For the most part, faculty have the discretion to define acceptable generative AI use on a course-by-course basis.

The 19 university IT and data policies, however, tend to be more prescriptive, prohibiting the inclusion of confidential and legally protected data, such as the Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA), in unsecured open AI environments. These policies outline the risks associated with using AI such as data privacy issues, algorithmic bias, cybersecurity concerns, copyright violations, and incorrect information or AI hallucinations. Some mandate that instructors use only specifically permitted AI tools, such as Microsoft Copilot, or that university IT departments vet AI tools prior to their incorporation into classwork. Some CPED-affiliated universities, such as two large midwestern universities and one smaller Southern university, classify data into categories and guide students and employees on what types of data are and are not appropriate to input into AI tools. These policies highlight the privacy and data security risks associated with AI-powered technology.

Despite the increased attention to AI in HEIs, few mention AI meeting assistants. Eight CPED-affiliated organizations, all of which are either public universities or well-funded private institutions (as shown in Figure 2), reference AI meeting assistants in their guidance and/or training materials. These policies vary in their messaging but group into benefit statements, risk statements, and appropriate use guidance about AI assistants.

Benefits of AI Meeting Assistants

For the eight universities that include information about AI meeting assistants in their publicly available materials, the increased efficiency and productivity enabled by these tools stands out as their most valuable feature. Figure 3 highlights the uses and benefits of AI meeting bots noted in the HEI documentation.

Figure 3. Uses and Benefits	Mentioned	in HEI	Materials	About Al
Meeting Assistants				

Uses & Benefits	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8
Enhanced Productivity & Efficiency	•	•	•	•				
Accessibility							•	
Notetaking/ Outlining		•	•	•	•	•		
Automated Summaries		•		•	•		•	
Action Item Production/ Meeting Tasks		•		•				
Meeting Recording & Transcription	•	•		•		•	•	

HEIs 1, 2, 3, and 4 explicitly call out that AI meeting assistants improve efficiency and boost productivity. HEI 1's digital guidelines state that employing the university's approved AI assistant, Zoom's AI Companion, can "save time," enrich virtual collaborations, and "enhance overall productivity." HEI 2's site mentions that these bots "offer promise for streamlined" augmentations of virtual learning. HEI 3's policies indicate that these note-taker tools "enhance productivity." HEI 4's documentation claims that Zoom's AI Companion helps users "manage information, increase efficiency, and generate insights."

Even the websites that do not explicitly call out efficiency and productivity refer to AI meeting assistants' ability to record and transcribe meetings, take comprehensive notes, generate outlines, summarize information and salient themes, and drive follow-up actions during and after meetings. In fact, seven of the eight sites reference at least one of these capabilities, as shown in Figure 3. It should be noted that HEI 2 and HEI 6 do not describe these features as benefits; rather, they acknowledge the AI tools' ability to complete various functions. HEI 8's very brief mention of AI meeting assistants does not include any descriptive information about their functionality.

Although HEI 7's primary documentation on Zoom's AI assistant discourages its use, the university suggests AI note-taking apps, like Otter.ai, as assistive technologies for students with documented learning disabilities. Students who have information processing challenges, hearing loss, or speak English as a second language can benefit from information summaries, searchable transcription, and task management that Otter.ai can provide. These students can obtain the software through the university's student disability center.

Risks Associated with AI Meeting Assistants

The universities that include meeting assistant technologies in their AI policies and guidance acknowledge their benefits, but they also recognize the risks associated with these apps. As explained in the literature review, discussions about the use of generative AI in higher education often center on ethical concerns like plagiarism and cheating. This is true for nearly all the 135 CPED institutions, and certainly for the 35 HEIs that have specific mentions of AI in their academic integrity or student conduct policies. While fraudulent copying of AI-generated writing is a significant misuse of tools like ChatGPT, it is not the primary risk associated with AI meeting assistants. AI meeting assistants pose a different set of threats. The most common risks mentioned by the eight CPED institutions are related to privacy and data security, cyber safety, automation, and user ignorance. Figure 4 provides the risks outlined within the various policies.

Privacy, confidentiality, and data security concerns are mentioned in all eight of the sites referencing AI meeting assistants. Because HEIs manage a significant amount of sensitive information, including student and employee records (e.g., personally identifiable information or PII), research materials, intellectual property, and financial data, institutions must protect this data from misappropriation. The right to privacy and confidentiality in academic settings is essential to safeguard students and university personnel, maintain the integrity of the educational process, and fulfill the legal and ethical obligations of the university. AI meeting bots that record or transcribe conversations might inadvertently record sensitive information, some of which may be protected in the United States under privacy laws such as FERPA and HIPAA, and distribute notes about these conversations, at times without the knowledge or consent of participants.

HEI 1 suggests that AI automated meeting tools can be used to "capture discussions." In their AI guidelines, this university offers a brief policy statement on AI meeting assistants, highlighting that human attendees should be careful to safeguard sensitive data defined as "personal, confidential, financial, intellectual property, and proprietary." HEI 2's site asserts that these assistants create a "privacy and security problem" because data from recorded meetings will be "sent to the cloud," where it can be accessed by unauthorized parties. HEI 2 personifies AI bots by describing them as "making their way into video conference meetings" and entering the meetings that they will record "without permission."

Privacy and data security are concerns for HEI 3 as well, and the university's IT department reminds users to verify that these AI note-takers are not exposing "sensitive information to unauthorized parties." HEI 4's materials assert that some of these bots "do not meet the university's security requirements." In fact, this HEI mentions FERPA and HIPAA in their publications five times, explaining that automated meeting note-takers that record identifiable student participation in classes are in violation of FERPA, unless these meeting notes are shared through secure means with proper user authentication. This university also warns that some meeting assistant applications "encourage people to sign up for the service" without providing adequate information about what they do and, therefore, are misused.

HEI 5's documentation stresses that AI meeting assistants "do not always get things correct" and warns about the discussion of "confidential or sensitive topics." HEI 6 points out that meeting assistant bots may expose protected and sensitive data and that use of them in classes are "almost certainly a FERPA violation" and a breach of student privacy. The guidance materials describe thirdparty meeting assistants as a service that "watches" for scheduled

Figure 4. Risks	Addressed in I	HEI Materials	About AI Mee	eting Assistants

Risks	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8
Privacy (HIPAA; FERPA)	•	•	•	•		•	•	
Legal Complications (FOIA)	•			•	•			
Security (Cyber & Data)		•	•	•		•		•
Ignorant Use (Lack of Consent)		•						
Incorrect Information					•			
Observation of Attendee Behavior and Engagement	•				•			
Intellectual Property / Copyright					•			
Automatically Joins Meetings		•				•		
Ill-informed Registration for Tool				•		•		
Automated Distribution of Transcripts and Notes		•				•		



meetings and joins them. It further explains that these apps get more users to sign up for them by requiring human attendees to register for the AI service before they can access recorded meeting materials. HEI 7 does not specifically state that AI meeting assistants can intrude on privacy, but the documentation implies that confidential information is at risk by stating that human participants should be careful not to share protected data. Similarly, HEI 8 suggests that data privacy and security are concerns by mentioning that it is investigating the "security implications" associated with AI meeting assistants.

Furthermore, HEIs 1, 4, and 5 mention how the data risks associated with auto-generated bot notes can lead to legal issues, since the recordings may be subject to the Freedom of Information Act (FOIA). If private and sensitive data are made part of the public record when recorded by AI assistants, it could complicate the transparency and accountability obligations of the university and heighten the risk that sensitive information will be disclosed inappropriately.

Another consideration associated with the privacy and security risks of AI meeting assistants is confidentiality. In academic settings, the privacy of thought and freedom of expression are critical to open intellectual debate among students and faculty. Both HEI 1 and HEI 5 mention meeting bots' ability to provide insights into participant behaviors and even "measure attendee engagement." Employees and students may consider the bots' monitoring of performance invasive or unethical. Fear of surveillance could inhibit academic freedom and stifle innovation and expression, especially if the

automatically generated materials are not accurate as HEI 5 indicates may be the case. Therefore, these bot-generated notes may not only heighten concerns about protecting community members' PII, but also participants' social and academic reputations.

Cybersecurity is another concern. Universities are targets of cyberattacks due to the valuable data that they obtain and store. Al bots that are not secure can provide additional vectors for attacks, potentially leading to data breaches. HEIs 4 and 6 explain that users sometimes register for these AI tools without understanding their function or the implication of doing so. HEIs 2 and 6 further highlight that registering for the tool gives meeting assistants the right to access meetings just because the bot-owner is invited, even when the human does not attend the meeting and without the knowledge or consent of participants. With the automation of meeting access and unintentional and unregulated distribution of transcripts and notes that may contain protected data, hackers can exploit security loopholes within these tools to attend meetings and perhaps even infiltrate university systems. While none of these eight CPED HEIs specifically mention the word "cyberattack" in the documentation, security itself is mentioned in five of them.

Strategies for Managing AI Meeting Assistants

Given the potential benefits and risks associated with AI meeting assistants, seven of the eight CPED universities provide strategies for managing these tools within the academic community. Figure 5 outlines appropriate use and restricted use guidelines. HEIs

Figure 5. Appropriate Use and Restricted Use Guidance for AI Meeting Assistants

Appropriate Use Guidance	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8
Inform	•	•	•	•	•			
Gain Formal Consent	•	•	•	•	•			
Review Notes for Accuracy & Relevance before Distributing			•	•	•			
Understand Data Regulations			•	•				
Use Judicially; Determine Appropriate Use			•	•	•			
Store Recorded Content Securely; Delete When Possible			•	•				
Educate Stakeholders; Increase Awareness		•	•					
Use Passcodes for Meeting Entrance		•						
Require Meeting Attendee Authentication		•				•		
Enable Waiting Rooms		•				•		
Restricted Use Guidance	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8
Remove Bots from Meetings (as needed)		•		•		•		
Ask Hosts to Remove Bots or Leave Meetings Using Them	•	•					•	
Don't Use; Disable & Delete Accounts				•		•	•	
Use Only Institutionally Approved Tool	•	•	•	•				
Institutional Block of Unapproved Tools				•				

1, 2, 3, and 5 acknowledge that AI meeting assistants have a place in higher education, and rather than restrict tool use, their appropriate use guidelines leave it to the faculty and students to determine how best to handle AI meeting assistants in academic settings. These four universities present recommendations and reminders to guide the handling of AI bots so that sensitive information is shielded from mismanagement.

HEI 1 strongly recommends that meeting hosts "discuss the appropriateness" of using AI technology, that meeting participants "be cognizant" and inquisitive about the inclusion of AI bots in meetings, and that attendees "decline participation" if hosts "insist" on using the AI tools. The university suggests utilizing Zoom's "FERPA-compliant AI Companion" over other AI meeting assistants.

HEI 2 stresses that users should be more cautious. The documentation discourages the use of AI meeting assistants but admits that transparency can mitigate some of the potential risks associated with these tools. The university offers guidance on how to manage unwanted AI bots and encourages experimentation with AI assistant tools "in low-stakes settings" prior to deploying them in formal academic environments. The materials further stress that, when meetings include AI assistants, hosts are obligated to "respect" the rights of participants in meetings by communicating why the tool is being used and obtaining permission to use it, and participants must express their own preferences about the recording of meetings they are attending.

Similarly, HEI 3's materials remind meeting assistant users to "be aware of privacy regulations" when hosting meetings with bots and to store private information securely so that only authorized individuals have access to it. While HEI 3 acknowledges the potential benefits of AI meeting assistants, the documentation stresses that users should use them "thoughtfully" by following proper "etiquette guidelines." This university suggests that clear communication and transparency are key to effective use of the AI note-taking tools. The IT documentation also recommends that hosts gain formal consent from meeting attendees to use AI assistants, review auto-generated documentation for accuracy before distributing it, and delete recordings that are not needed.

Transparency and trust likewise are key in HEI 5's resources, which are specifically tied to the use of generative AI tools in marketing and communication. These materials advise that virtual conference hosts avoid using AI assistants in meetings that include confidential or sensitive topics since "building trust" is critical within the academic community. The IT security information at this university further stresses the importance of data stewardship. This university suggests people should use their "best judgement" about which AI tools are appropriate to attend meetings.

Due to data security concerns, HEIs 4, 6, and 7 prefer a more restrictive management approach. HEI 4 requires that these bots are disabled to "protect" the university community's "privacy and security." HEI 6 points out that AI assistants should never be used because protected and sensitive data cannot be safeguarded. HEI 7 does not allow meeting assistants and stresses that meeting participants should "be aware" in non-university affiliated meetings and are "urged to leave" meetings if meeting hosts are unwilling to disable AI meeting apps. Their documentation warns users in bold text not to share "personal, confidential or privileged information" in any environment that can be recorded. These universities make it very clear that community members should not use the tools at all or only if explicitly approved by the university. From the language used within the materials studied, the researchers were able to glean whether university stakeholders were told to utilize AI bots responsibly, to avoid using them entirely, or to adopt only approved technologies within the university environment. Figure 6 shows the approval levels for AI meeting assistants at each of the universities. It should be noted that HEI 4 is reviewing the inclusion of Microsoft's Copilot as an approved tool, that HEI 8 is considering Zoom AI Companion, and that HEI 7 restricts all tools for the general population but allows students, faculty, and staff with documented disabilities to deploy Otter.ai in appropriate academic settings.

Figure 6. Al Meeting Assistant Tool Use Approval Level at Each University

Approval Level	HEI 1	HEI 2	HEI 3	HEI 4	HEI 5	HEI 6	HEI 7	HEI 8
All Tools		•	•		•			
No Tools						•	•	•
Specific Tool: Zoom	•			•				
Specific Tool:Otter.ai (for accessible only)							•	
Specific Tool: Microsoft (Copilot)								

LIMITATIONS

While the findings of this study provided useful information about HEI's guidelines regarding AI meeting assistants, there were multiple limitations in the gathering of the data. First, access to HEI websites was limited due to firewalls and password-protected information. Second, information about AI meeting assistants on university websites was often difficult to find. Because materials on Al were not centralized within any of the institutions' websites, the researchers had to search deeply into the sites and follow link after link to find relevant materials. Sometimes searches for information required looking up specific software, such as Zoom Companion and Otter.ai, not just general policies. Thus, it is possible that the researchers overlooked materials that referenced AI tools not searched. It should also be noted that Microsoft Copilot can serve as a meeting assistant but has numerous other abilities; thus, it was challenging to determine when universities were using it as a meeting assistant. Given these first two limitations, the researchers could locate just eight CPED HEIs that included documentation about AI meeting assistants on their websites. Though the researchers purposefully limited the data collection to CPED member institutions, which represents the diversity of HEIs, future researchers should include non-CPED institutions to increase their data set. Additionally, because AI technologies advance rapidly and HEI policies about them change regularly, researchers should not assume that data collected for this article is current.



DISCUSSION OF FINDINGS

While HEIs are behind in developing policies to manage the use of generative AI LLMs (Anft, 2023; D'Agostino, 2023; Dolan & Yasin, 2023; Primary Research Group, 2023; UNESCO, 2023), they are even further behind in establishing guidelines to regulate the use of AI meeting assistants in academic settings. As described earlier, the majority of CPED members have some documentation about conversational AI, but only eight have published information about AI meeting assistants. Existing academic, research, human resources (HR), and IT policies, even those that have been revised to include reference to AI, are inadequate to regulate or guide the use of AI note-taking bots because these tools introduce new challenges within educational settings.

The materials reviewed in this study highlight many of the ways that AI meeting assistants can increase efficiency, enhance productivity, enrich student learning, and foster more effective collaboration (as shown in Figure 3). While only one CPED university mentions how these bots can support students with learning and physical disabilities, some universities are exploring AI meeting assistants' effectiveness in providing accommodations (Ballenger, 2022; Otter.ai, 2020). Furthermore, because these bots can attend meetings even when the person who deployed them is not present, AI meeting assistants allow users to be in two places or more at once or, like Ferris Bueller, to call in sick without worrying that important information will be missed. Instructors might benefit from their use too, as AI meeting assistants can help them assess student engagement and participation in group settings and class discussion.

Indeed, meeting bots are powerful tools with potentially substantial impacts on learning and productivity, but they are also prone to uneducated or irresponsible use, which makes them risky to deploy within academic environments. In addition to the many risks listed in Figure 4, the researchers' own experiences with these tools have exposed gender and racial bias inherent within the bots' notes. as well as the proclivity for users to over-rely on the bots to "pay attention" in meetings or classes while human attendees multitask. Some universities mitigate risks by opposing AI meeting assistants' use. While deactivating AI features in virtual conference tools and blocking third party AI meeting assistant applications from university systems deprives the bots access to meetings and classes, doing so would be extremely limiting to those who would benefit from the services these bots provide. Instead of imposing strict bans, HEIs need to regulate AI meeting bot use, adopt vetted and trusted tools for use within the university ecosystem, and educate users.

The researchers of this article recommend that HEIs should update existing rules on research safety and ethics, video and audio recording, and data security to refer specifically to AI, including AI meeting assistants. Research ethics regulations should be adjusted to incorporate how using AI responsibly in research means adhering to the principles of data stewardship and the respect for individual privacy. For instance, active researchers could be taught to seek Institutional Review Board (IRB) approval and to gain formal participant consent if AI meeting assistants are being used to transcribe, summarize, and code qualitative research interviews. Strong research habits like this will help to safeguard research subjects' confidentiality, even when meeting bots are involved. Similarly, video and audio recording policies provide ample guidance on privacy protection; they could be modified to include AI meeting assistants. For example, one CPED institution's video and audio recording policy discusses how taping and distributing recordings of

class sessions that include international students living under oppressive regimes could pose threats to those students. Similarly, Al policies should address the dangerous implication of Al bots recording, summarizing, and distributing meeting notes or class discussions without the careful review and redaction of content. Most video and audio taping policies require options for participants to opt into being recorded, and Al meeting assistant policies should mandate the same authorization. Finally, with growth of Al, especially meeting assistants, IT policies should be revised to address how Al increases the potential for cybersecurity breaches and unsafe and illegal data distribution. Updating these types of preexisting university policies can help to make Al meeting assistant usage manageable and safe.

Yet just changing the policies is not enough. If community members do not know about them, these policies are useless. As previously discussed, some faculty and students are unaware of their universities' guidance on the appropriate use of AI (Primary Research Group, 2023). Most of the institutions investigated in this study, however, have at least one publicly available resource about AI use at the university. Leaders in higher education must communicate more effectively about the importance of staying informed on AI policies at their institutions and should insist that AI resources and regularly updated trainings, including those on AI meeting assistants, are centralized so that they are easily accessible by all students, faculty, and staff.

Furthermore, Floridi and Cowls' (2019) unified ethical framework of five principles for AI in society (Figure 1) could offer guidelines in the development and implementation of AI policies, particularly with regard to AI meeting assistants. Using the five ethical principles, HEIs could develop a detailed set of research, IT, HR, and student conduct policies that explicitly address AI use. The framework would prompt university leaders to engage with ethical questions during guideline development and to consider the entire community in their policy implementation. Risks could be mitigated and benefits maximized through practical guidelines that promote exploration, effective communication, and safety.

While Floridi and Cowls' (2019) framework could help influence Al policies in higher education, this framework does not address the critical role of training and communication in realizing the five principles. Without the proper education about these principles and the clear communication of expectations surrounding them, academic communities will continue to struggle with the operationalization of institutional policies. Thus, this research highlights the importance of informed communication, which focuses on helping the academic community understand the five principles of Al use and the policies that emerge from them. Ample and regularly updated trainings and easily accessible resources about data privacy and Al security measures are critical for ensuring that academic community members are aware of their responsibilities in protecting sensitive data from invasive and irresponsible Al use.

Future research should focus on rigorously evaluating the policies derived from these ethical principles. Use cases for students and faculty should be developed to test AI policies against realistic and complex scenarios. For instance, AI meeting assistants could be trialed as educational tools in both virtual and physical classrooms to assess their effectiveness and ethical compliance. Other studies could evaluate whether training on principles such as non-maleficence and data stewardship lead to more responsible AI usage. As AI technology evolves in higher education, ongoing



research will be essential to continually refine policies that foster innovation while protecting the community.

CONCLUSION

Like the eight universities analyzed closely in this study, all HEIs may want to consider the benefits and drawbacks of standalone meeting assistant apps like Otter.ai and integrated tools like Zoom AI Companion and Microsoft Copilot. AI meeting assistants offer significant benefits to university students, faculty, and staff. Their ability to take notes, summarize information, provide insights on participation, and establish action steps based on virtual or live meetings or classes could provide valuable assistance to those who need it, especially with regard to efficiency, focus, study aids, and follow-up. However, without proper policies and training in place to regulate them, AI meeting assistants pose data security and privacy risks that may surpass those of many other generative AI tools, as they have the potential to impact unsuspecting participants in virtual and even live environments. Given their power, it is critical to specify appropriate use within each academic community. Guided by Floridi and Cowls' (2019) unified ethical framework, HEIs should: (a) establish clear IT, research, HR, and student use policies around AI meeting assistants; (b) ensure that robust security and compliance measures are in place at the university; and (c) educate users on the risks and responsibilities associated with the use of AI meeting assistants. Like other AI tools, AI meeting assistants are helpful when used well, but improper use can pose personal risk to participants and legal risk to universities. Prioritizing clear and transparent communication that gives users agency to utilize the tools effectively and safely is a necessary next step for higher education.

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