

APPROVAL SHEET

Title of Thesis: Student-Driven Recommendations for AI Policy in a Design Classroom

Name of Candidate: Kaoru Seki
Master of Science, 2025

Thesis and Abstract Approved: (*Signature of Supervising Professor)
(Name of Supervising Professor – typed)
(Rank of Supervisor)
(Name of Department or Program)

Date Approved: _____

NOTE: *The Approval Sheet with the original signature must accompany the thesis or dissertation. No terminal punctuation is to be used.

Curriculum Vitae

Name: Kaoru Seki

Degree and date to be conferred: Master of Science, 2025.

Secondary education:

Ichigao High School, Kanagawa, Japan, 2020

Collegiate institutions attended:

University of Maryland, Baltimore County, Bachelor of Arts, 2024

University of Maryland, Baltimore County, Master of Science, 2025

Major: Human-Centered Computing

Professional Publications: (list publications chronologically in proper style).

Professional positions held:

- September 2024 - present
Graduate Research Assistant
Kotturi Lab, University of Maryland, Baltimore County
Baltimore, Maryland
- February 2024 - present
User Experience Researcher
Imaging Research Center, University of Maryland, Baltimore County
Baltimore, Maryland

ABSTRACT

Title of Document: *Student-Driven Recommendations for AI Policy
in a Design Classroom*

Kaoru Seki, Master of Science, 2025

Directed By: Dr. Yasmine Kotturi, Information Systems

Generative AI is rapidly reshaping education, yet most classroom policies are written without students and prioritize penalization for misuse, yielding confusion and fear-based use. In this thesis, I position students as lead users—or early adopters of generative AI—and report on a three-part, student-driven workshop series in a graduate design studio at a minority-serving public university. Through scaffolded workshop activities sans faculty, 12 students surfaced candid uses of AI, and authored, applied, iterated, and visualized ten policy recommendations compiled in a zine—a shareable, DIY booklet. Findings highlight the need for protected spaces to discuss unfiltered practice among students, and suggest that student-authored policies may foster clearer expectations and more purposeful use of AI in the classroom.

STUDENT-DRIVEN RECOMMENDATIONS FOR AI POLICY IN A DESIGN
CLASSROOM

By

Kaoru Seki

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, Baltimore County, in partial fulfillment
of the requirements for the degree of
Human-Centered Computing
2025

© Copyright by
Kaoru Seki
2025

Dedication

To my mental supporter, Hime



Acknowledgements

With deep gratitude and humility, I would like to express my sincere appreciation to everyone who has supported me throughout this master's journey. This thesis represents not only my academic growth but also a deeply personal journey of resilience, learning, and community.

First and foremost, I would like to express my heartfelt gratitude to my advisor and principal investigator, Dr. Yasmine Kotturi, for her unwavering guidance, patience, and encouragement. Her mentorship has shaped my growth as a researcher and taught me to think critically, compassionately, and creatively about the intersection of technology, community, and humanity. I am truly inspired by her dedication and support throughout this process.

I would also like to thank my research collaborator, Manisha Vijay, for her continuous support, insightful discussions, and teamwork that made this research both meaningful and enjoyable. Working alongside her has been an invaluable experience that taught me the importance of collaboration and shared vision in research.

My sincere thanks go to my committee members for their thoughtful feedback, time, and support throughout this thesis process. Their expertise and guidance have helped strengthen this work in important ways.

I am also deeply thankful to my peers, mentors, and friends at UMBC who have supported me both academically and emotionally. Their encouragement and kindness have made this journey more fulfilling. Finally, I am forever grateful to my family for

their unconditional love and belief in me, even from afar. Their support has been my foundation through every challenge and success.

To everyone who has been part of this journey—thank you for helping me grow not only as a researcher but as a person.

Table of Contents

Dedication.....	2
Acknowledgements.....	3
Table of Contents.....	5
List of Tables.....	8
List of Figures.....	9
Chapter 1: Introduction.....	1
Chapter overview.....	1
Document Organization.....	2
Motivations.....	4
Research Questions.....	7
Approach.....	7
Thesis Contributions.....	9
Chapter 2: Related Work.....	12
Chapter Overview.....	12
Technological Transformation in Pedagogy.....	12
Generative AI in the (Design) Classroom.....	14
The Participatory Turn in AI.....	16
Participatory Infrastructuring through Zine-Making.....	17
Chapter 3: Methods.....	21
Chapter Overview.....	21
University Setting.....	21
Participants and Recruitment.....	21
Three-part workshop series.....	22
Workshop 1: Policy drafting through candid conversations.....	23
Workshop 2: Policy in print through zine making.....	27
Workshop 3: Policy in practice through design activity.....	29
Publishing the zine.....	33
Open-sourcing workshop materials.....	33
Post-Workshop Interviews.....	34
Data Analysis.....	35
Chapter 4: Findings.....	37
Chapter Overview.....	37
Diverse Uses of AI in a Design Classroom (RQ1).....	37
Students are Not a Monolith.....	39
Student Uses of AI that Violated University AI Policy.....	40

10 Student-Driven AI Policy Recommendations (RQ3).....	41
Policy Recommendation #1 Instructions: Instructors should include guidelines with concrete examples of acceptable and not acceptable use of AI for each assignment..	41
Policy Recommendation #2 Ownership: We should only use AI for up to 50% of our work on any given assignment, so that the majority reflects our own ideas and effort..	
44	
Policy Recommendation #3 Divergent Thinking: When using AI for brainstorming, we should push ourselves to explore alternatives, surprising directions, or ideas that feel more personal and meaningful to us.....	46
Policy Recommendation #4 Job Skills: We should be provided opportunities to learn how to use AI in ways that reflect how AI is used in real workplaces through coursework. Instructors should stay updated on how AI is used (and regulated) in industry.....	47
Policy Recommendation #5 Bias: We should check if AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.....	49
Policy Recommendation #6: Citing AI Use (or Not): It is important for us to credit AI where credit is due. However, sharing chat logs, as many instructors currently require, is tedious and ineffective for both students and graders. Instead, we should share a 2-3 sentence summary for each submission describing how and why we used AI.....	50
Policy Recommendation #7 Hypocrisy in Faculty Use: If instructors expect us to be transparent about our use of generative AI, we expect the same transparency from them when it comes to how they use AI in teaching, grading, or creating assignments.	
51	
Policy Recommendation #8 English Learners: For those of us who are English learners, we should be encouraged to use AI to support our English proficiency in writing by asking for refinement of our text. Also, we should ask for an explanation of the refinements made to further our language proficiency.....	53
Policy Recommendation #9 Feedback: We can use AI to help us better understand and respond to peers' feedback, especially when revising our work.....	53
Policy Recommendation #10 Equity: Everyone in class should have access to the same AI tools or models for each assignment to ensure fairness.....	54
Post-workshop Reflections: Towards more Intentional AI Use (RQ2).....	55
Continued conversations beyond the workshops and across the university.....	57
Redesigned interfaces of genAI tools to support HCC629 learning objectives.....	58
P1: Claude.....	59
P2: Grammarly.....	61
P3: V0.....	64
P4: UX Pilot Figma plugin.....	66
P5: ChatGPT.....	68
P6: UIZard.....	69

P7: UX Pilot.....	71
P8: ChatGPT.....	73
Chapter 5: Discussion.....	77
Chapter Overview.....	77
Centering Students in a Shifting AI Policy Landscape.....	77
Safe Spaces as Preconditions for Honest Dialogue.....	79
Linguistic Barriers and the Role of AI in Academic Writing.....	81
Chapter 6: Limitations and Future Work.....	84
Chapter Overview.....	84
Limitations.....	84
Implications and Future Work.....	85
Conclusion.....	86
Appendices.....	89
Appendix A: Pre-Workshop Survey.....	89
Appendix B: Workshop 1 Feedback Survey.....	93
Appendix C: Workshop 2 Feedback Survey.....	94
Appendix D: Post-Workshop Survey.....	94
Appendix E: Interview Protocol.....	96
Appendix F: Think-Pair-Share Activity.....	98
Appendix G: Policy Draft Activity.....	98
Appendix H: Redesign Interface Activity Worksheet.....	99
Appendix I: A Student-Driven AI Policy Recommendations Zine Pages.....	101
Works Cited.....	112

This Table of Contents is automatically generated by MS Word, linked to the Heading formats used within the Chapter text.

List of Tables

Table 1. Ten student-driven AI policy recommendations derived from our three-part design workshop series

Table 2. Conceptual metaphor and its definition presented in Workshop 3 for students to choose for their redesigned interface activity

Table 3. Evaluation criterion used for HCI faculty to evaluate participants redesigned interface tabel

Table 4: Five expert evaluators reviewed each workshop participants' redesigned interface of generative AI tool; redesigns adhered to a conceptual model in order to better support HCC629 learning objectives. P2, P5, and P6's redesigned interfaces were rated the highest.

List of Figures

Figure 1. Students participating in Workshop 1 which focused on policy drafting through candid conversations of AI use. During the share phase of a Think–Pair–Share activity, participants exchanged reflections on their use of AI tools in HCC629 during the preceding semester.

Figure 2. Students participating in Workshop 2, where they were introduced to the zine-making process. Professor Julie Sayo provided historical context and guidance on zine-making practices, and participants reviewed facilitator-provided handouts before beginning their own policy-focused zine pages.

Figure 3. The Student-Driven AI Policy Recommendation zine displayed outside of the research team's lab, in the main hallway of the building.

Figure 4. The Student-Driven AI Policy Recommendation zine displayed outside of the research team's lab, in the main hallway of the building.

Chapter 1: Introduction

Chapter overview

This chapter introduces the motivations and context for this study by outlining the evolving landscape of generative AI in higher education and the growing need to include student perspectives in AI policy-making. As generative AI tools rapidly reshape university classrooms, institutions continue to grapple with issues of integrity, equity, and transparency, often through unclear or punitive policies that leave students uncertain about appropriate use. This study seeks to address that gap by centering students as active participants in AI governance, examining how they perceive, negotiate, and co-author classroom AI policies. To do so, I conducted a three-part participatory workshop series and semi-structured interviews, focusing on three research questions: *how students perceive AI integration and policy, what scaffolding supports student-driven policy writing, and what recommendations emerge when students are empowered to create their own policies*. The chapter concludes by positioning this work as a contribution to ongoing discussions in human-centered computing and higher education on participatory, equitable, and pedagogically grounded approaches to AI policy design.

Parts of this research have recently been submitted to *the 2026 CHI Conference on Human Factors in Computing Systems*.

Document Organization

This thesis is organized into six chapters. Chapter 1 presents an introduction to this study, beginning with the motivations underlying its conception. It outlines the two research questions that guide this work and the methodological approach taken to address them. Finally, this chapter highlights this study's three contributions to HCI: an empirical account of students' candid AI practices, a replicable peer-led method for student-driven policy design, and ten actionable policy recommendations disseminated through a printable zine.

In Chapter 2, I present the related literature that grounds this study. I begin with an overview of technological transformations in pedagogy, tracing how technology—from calculators to MOOCs—have reshaped teaching and learning in over time. I then examine how generative AI is influencing design classrooms specifically, highlighting both its opportunities and risks. Next, I discuss the participatory turn in AI governance, emphasizing the importance of including impacted stakeholders such as students in decision-making processes. Finally, I introduce the concept of participatory infrastructuring through zine-making, a low-barrier, student-centered medium for surfacing lived experiences and shaping policy discourse.

In Chapter 3, I¹ detail the methods used to conduct this study. I begin by outlining the participatory design approach that frames this work and describing the university setting in which it was situated. I then explain the participant recruitment process and provide an overview of the three-part, student-led workshop series—including policy drafting, zine making, and design activities—along with post-workshop interviews. Finally, I describe the grounded theory approach used for qualitative data analysis to identify key themes and insights.

In Chapter 4, I present findings extracted from the workshops, semi-structured interview and other data. The findings are divided into four sections, answering Research Question 1, 2, and 3, and presenting participants redesigned generative AI interfaces. First, I showcase findings related to Research Question 1, which reveal the diverse ways participants use generative AI and their varying perspectives on AI integration in classroom settings. Next, I outline ten student-driven AI policy recommendations, corresponding to Research Question 3, that reflect students' values, concerns, and aspirations for equitable AI use. Following that, I address Research Question 2, illustrating how zine-making and workshop scaffolds supported students in developing more intentional and reflective AI practices. Participants described shifts in mindset, viewing AI as a collaborative thought partner and engaging with it more deliberately in their learning. Finally, I illustrate participants' generative AI redesigned interface.

¹ This master's thesis is part of a highly collaborative research project conducted in Dr. Kotturi's lab [more detail?] In addition, due to the participatory design methodology used, there were many contributors and stakeholders involved. Throughout this document, I use "I" to emphasize my role in the project and the writing of this thesis and also use "we" to emphasize the projects' inherently collaborative nature.

In Chapter 5, I discuss how students' diverse perspectives reveal the instability and complexity of generative AI policies in higher education. I analyze how rapidly evolving technologies, ambiguous institutional norms, and inconsistent enforcement shape students' experiences, concerns, and expectations around generative AI use. I also highlight how creating safe, student-centered spaces enabled candid dialogue and surfaced nuanced policy gray areas that are often overlooked in top-down approaches. Finally, I reflect on the experiences of English as a Second Language (ESL) and English as a Foreign Language (EFL) students, emphasizing their reliance on generative AI tools to engage academically and the need for institutional and faculty awareness of the unintended consequences of restricting AI use for these learners.

In Chapter 6, I address the limitations of this study, and direction for future research, such as adapting and evaluating the student-driven AI policy model across diverse disciplines and institutional contexts. Then, I conclude with a summary of the contribution of this study.

Motivations

"If instructors expect us to be transparent about our use of generative AI, we expect the same transparency from them when it comes to how they use AI in teaching, grading, or creating assignments." —Student-driven policy recommendation #7

Generative artificial intelligence (AI) is rapidly reshaping university classrooms. While not the first technology to disrupt pedagogy in higher education (Marshall et al., 2024), generative AI—systems capable of producing text, images, and other

media (Sengar et al., 2024)—has gripped administrators, faculty, and students alike, all racing to manage its challenges and opportunities (Smolansky et al., 2023). Chief among these challenges are questions of academic integrity: fears that students will use AI to complete coursework with little personal input (Birks and Clare, 2023). Institutions' early response to these challenges led to policies that emphasized misconduct and plagiarism prevention (Alshareefen and Al Sayari, 2025), often framed in punitive terms rather than pedagogical support (Francis et al., 2025; Luo, 2024). More recently, policies at top institutions have shifted from prohibition to conditional acceptance, requiring students to disclose use (e.g., by submitting chat logs). For instance, in an analysis of 116 U.S. R1 universities, McDonald et al. found that 63% encourage AI use and provide classroom guidance (McDonald et al., 2025). This shift toward permitted use, however, has not resolved the ambiguity students face. Even when policies allow generative AI, they often remain unclear in scope and tone, as illustrated by one such policy from a graduate-level design studio course:

“The use of language models such as ChatGPT and other AI-based text, image, or video generation tools for assignments will be strictly regulated. . . AI tools can be lightly used; however, they must be limited to a small part of any solution and must not contribute to the substance of your answer.”

This policy, pulled from one of the required design courses at the authors' institution, highlights the simultaneously vague and punitive rhetoric that many AI policies use (Petricini et al., 2025). In addition, there are missed opportunities to connect policies to pedagogical grounding, such as by emphasizing how generative AI technologies can support learning goals, especially in open-ended disciplines. Students are left to

navigate this new terrain in an environment marked by fear-mongering around AI use (Stone, 2022), false accusations of AI plagiarism (Giray, 2024), and a lack of clear guidance—prompting calls for more transparent and consistent policies (Johnston et al., 2024).

Across all such audits and studies, there is one consistent and alarming theme: student voice is largely absent (Bowen and Watson, 2024, p.134). Yet, students are the primarily stakeholders of generative AI policies in the classroom (Pu et al., 2025; Zheng et al., 2024). Students are left to navigate this new terrain in a punitive environment where there is fear-mongering around using this technology. Students also are incorrectly accused of AI plagiarism, creating paranoia among students who are not interested in using AI (Giray, 2024). Studies that capture students' perspectives on generative AI in the classroom highlight both concerns and opportunities—such as reduced learner autonomy, decreased interaction with educators, improved self-reflection, and personalized learning (Han et al., 2025). These accounts also suggest that students perceive AI as reshaping classroom power dynamics, often exacerbating existing hierarchies: they describe AI as an extension of teacher authority, where algorithmic monitoring reinforces bias, fuels surveillance, and leads to self-censorship. In addition, an international large-scale survey with 1,153 participants to compare educator and student perspectives on generative AI in the classroom, educators remain skeptical of the AI pointing to fears around plagiarism and fairness, whereas students' perspectives prioritize opportunities for improved learning and more efficient workflows (Kizilcec et al., 2024). However,

there is little evidence for how these perspectives are then taken into account when deriving generative AI policy (Weichert et al., 2025).

Research Questions

RQ1: How do students perceive AI policies and AI integration in a design course?

RQ2: How might we support students to author student-driven AI policies in a design classroom? In other words, what scaffolding is required to assist students to write effective policies in a design classroom?

RQ3: When given the opportunity and support to self-author AI policies, what are student-driven AI policy recommendations in a design classroom?

Approach

In this thesis, I take up calls to incorporate student perspectives in AI policies Bowen and Watson, 2024; Chan, 2023; Han et al., 2025; Kizilcec et al., 2024; Pu et al., 2025). While such calls emphasize that doing so can work towards students' improved understanding of policies and why academic integrity is important, and how AI use can affect learning outcomes, I take this one step further to frame students as "lead users" (von Hippel, 2006), or early adopters of AI technologies (Smith et al., 2024). In other words, I position students as experts in their own lived experiences with generative AI—offering insights that faculty and administrators can ultimately learn from when determining how (and how not) to integrate these technologies into the classroom. In doing so, I work towards student-driven policy recommendations, where all stakeholders' perspectives, especially those most affected by the policies should have the ability to mold such policies (Kuo et al., 2025).

I draw on HCI scholarship which emphasizes a participatory turn in AI governance, and I conduct a three-part design workshop series with follow-up interviews with 12 students (including two student leaders who ran the workshops and led the research project) from a graduate-level design studio course at a minority-serving public institution in the mid-Atlantic region of the United States. To leverage student expertise and recent experience, I focus on one specific domain: design education, and one specific course: a graduate-level design studio course that all students had just completed the semester prior. This is because, in part, domain-agnostic policy recommendations are less valuable (Matthews, 2018; Satyanarayan and Jones, 2024), but also to support students in the process of policy articulation: they had just taken the same class and could ground discussions and recommendations in recent experience (Kuo et al., 2025).

Student-led workshop activities (sans faculty) emphasized creating safe spaces for candid conversations among students, to detail their current AI use and practices. Through scaffolded exercises, participants brainstormed policy recommendations for a design classroom, building on established AI policy topics such as ethics and bias, but also design-specific topics such as divergent thinking and design critique as well as student-contributed topics such as hypocrisy in faculty use of AI and preparing for AI use in industry. After an interactive design cycle brainstorming, applying, and refining policies, I report 10 resulting policies (See Table 1). To support policy-making and student-driven discourse, students authored a zine—a DIY artifact, zines are self-published printed materials (such as a booklet or pamphlet - (Duncombe, 1997; Licona, 2012) used as an artifact and method to promulgate

information (See Appendix I for full zine). The zine was then circulated across campus, to support a larger-scale student discourse on the importance of student-driven perspectives in AI policies in higher education.

Follow up interviews with students who participated in the workshops—as well as students who did not want to participate in workshops but did want to participate in these post-hoc interviews—captured ricocheting effects from workshops, such as conversations sparked among peers and between faculty and students in the human-computer interaction (HCI) program. Through collaborative, student-led analysis of workshop dialogue, interviews, and artifacts (e.g., zines, design activities), I observed how participants—when provided the environment to speak candidly—gradually disclosed more layered accounts of AI use. Zine-making served as a low-stakes, student-controlled medium. Importantly, the process itself shifted practice: students shared more intentional, reflective AI use (framing AI as a collaborator rather than a shortcut) and the zine catalyzed follow-on discussions of student perspectives in courses and program governance across the department and college.

Thesis Contributions

This paper makes three contributions. First, I contribute an empirical account of students' candid AI practices in a graduate design studio—including mis/use, policy gray areas and uneven enforcement, and tensions around policy topics such as ownership, equity, critique, and even faculty transparency (RQ1). Second, I contribute a replicable, peer-led method for student-driven policy

design—faculty-free workshops and zine-based participatory infrastructuring—that details concrete facilitation moves for building protected spaces (RQ2). Third, I contribute ten actionable, design-oriented policy recommendations, packaged as a printable zine that was adopted in a concurrent course and circulated across UMBC campus (RQ3).

Table 1: Ten student-driven AI policy recommendations derived from our three-part design workshop series

Instructions: Instructors should include guidelines with concrete examples of acceptable and not acceptable use of AI for each assignment.	Citing AI Use (or Not): It is important for us to credit AI where credit is due. However, sharing chat logs, as many instructors currently require, is tedious and ineffective for both students and graders. Instead, we should share a 2–3 sentence summary for each submission describing how and why we used AI.
Ownership: We should only use AI for up to 50% of our work on any given assignment, so that the majority reflects our own ideas and effort.	Hypocrisy In Faculty Use: If instructors expect us to be transparent about our use of generative AI, we expect the same transparency from them when it comes to how they use AI in teaching, grading, or creating assignments.
Divergent Thinking: When using AI for brainstorming, we should push ourselves to explore alternatives, surprising directions, or ideas that feel more personal and meaningful to us.	English Learners: For those of us who are English learners, we should be encouraged to use AI to support our English proficiency in writing by asking for refinement of our text. Also, we should ask for an explanation of the refinements made to further our language proficiency.
Job Skills: We should be provided opportunities to use AI in ways that reflect how AI is used in real workplaces through coursework. Instructors should stay updated on how AI is used (and regulated) in industry.	Feedback: We can use AI to help us better understand and respond to peers' feedback, especially when revising our work.
Bias: We should check if AI-generated	Equity: Everyone in class should have

ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.

access to and use the same AI tools or models for each assignment to ensure fairness.

Chapter 2: Related Work

Chapter Overview

I draw on four bodies of scholarship to inform this work: how technology—from calculators to MOOCs—has historically impacted on pedagogy, how now generative AI is (and is not (Pang and Wei, 2025)) reshaping the classroom in higher education institutions, the participatory turn in AI governance to include all stakeholders impacted by AI policies (such as students), and participatory infrastructuring—such as zine-making and distribution—that offer both material and relational mechanisms for centering the perspectives of those historically excluded from technology design and decision-making.

Technological Transformation in Pedagogy

Since the early 19th century, education has been repeatedly reshaped by technological innovations. For example, the arrival of handheld electronic calculators in the early 1970s marked a major shift in mathematics education—not only for engineering and business fields, but across classrooms more broadly (Dessart, 1986; Guzmán & Trilling, 1989). Following the introduction of calculators, the 1980s and 1990s saw the rise of desktop computers, which brought drill-and-practice programs, educational games, and digital assessments into everyday learning environments. This was soon followed by the widespread use of laptops and the internet in the early 1990s, enabling students to access information online, learn through e-learning platforms, and collaborate with peers and instructors in real time via email and other

communication tools (Silverman & Iasevoli, 2024). In the 2000s and 2010s, the emergence of Massive Open Online Courses (MOOCs) such as Coursera and edX further democratized access to education (ColorWhistle, 2025). However, each wave of technological integration also introduced new pedagogical concerns and anxieties among faculty and students. For instance, calculators sparked fears among educators that students would become overly reliant on machines, lose estimation and mental arithmetic skills, and weaken their conceptual understanding of mathematics (Watters, 2015). The emergence of the internet raised concerns over plagiarism, digital literacy, and the authenticity of student work—issues that remain difficult to address (Ardid et al., 2015; Usoof, Hudson, & Lindgren, 2014). In response, universities which offer online and hybrid courses began using digital identities systems to ensure authentication of student work and reduce academic malpractice (Ardid et al., 2015; Chew, Ding, & Rowell, 2013).

The release of ChatGPT, in November 2022, marked the beginning of a new technological shift. Generative AI can produce novel content—including text, images, and video—by analyzing patterns in the data on which it is trained (Giannakos et al., 2024). Many students see the potential of generative AI to provide personalized learning experiences through adaptive algorithms (Jauhainen and Guerra, 2024; Merino-Campos, 2025). Yet, these tools also have notable limitations: unlike human instructors, they do not truly understand content, and their personalization capabilities may be imprecise. Moreover, their use may reduce opportunities for developing foundational skills and deep conceptual understanding (Zhai et al., 2024; Kalniņa et al., 2024).

Generative AI in the (Design) Classroom

Generative AI has quickly become a visible and contested presence in higher education, continuing a long lineage of digital technologies—from calculators in the 1970s to MOOCs in the 2010s—that have disrupted teaching practice and assessment (Kasneci et al., 2023). Like these earlier technologies, generative AI unsettles assumptions about what counts as “original” student work and how learning should be evaluated, but it differs in scale and scope by automating not only calculation or content delivery but also idea generation and expression, making its implications for pedagogy both broader and less predictable (Luo, 2024).

Early university responses to generative AI emphasized risks of use—plagiarism, assessment validity, and integrity—often resulting in bans or strict guidance (Petricini et al., 2024). Many institutions warned against the use of AI detectors, or pushed responsibility down to individual instructors to set course-level rules, producing a patchwork of policies that emphasized restriction over pedagogy (Luo, 2024; McDonald et al., 2025). More recently, however, with the rapidly changing tide associated with the rapid pace of generative AI innovation, reviews show instructors in the U.S. and worldwide adopting a more nuanced position—encouraging responsible use, embedding sample syllabus language, and supporting faculty with classroom activities and training—marking a move away from purely punitive approaches (An et al., 2025; McDonald et al., 2025).

While generative AI is reshaping higher education broadly, this paper focuses on its impact on design pedagogy. Design studios are a salient site for study because they

rely on open-ended inquiry, multimodal production, and iterative critique (Li et al., 2024)—all practices permeable to AI’s multimodal capabilities. Empirical studies paint a complex picture of AI in design: both opportunity and risk. On the opportunity side, generative AI scaffolds early phases of conceptual design—problem framing and ideation—while humans retain judgment in selection and evaluation (Chen et al., 2025). Chen et al. found novice designers used AI most in problem definition and ideation, less in evaluation. Students describe LLMs as a “second mind” for externalizing and iterating ideas (Wan et al., 2024), aligning with views of AI as collaborator rather than tool (Sarkar, 2023). Hybrid systems that merge physical prototyping with AI open new avenues for low-fidelity exploration beyond 2D screens (Zhang et al., 2024), and case studies in architecture report AI images supporting both divergent and convergent thinking (Tan and Luhrs, 2024). Some work even uses “imperfect” or antagonistic AI to provoke divergence rather than premature convergence (Cai et al., 2024; Liu et al., 2024). Risks are equally noted. AI-assisted ideation can reduce variety by amplifying fixation (Wadinambiarachchi et al., 2024). Prompting, framed as a creative skill, can also homogenize outputs when users converge on popular modifiers (Oppenlaender et al., 2025). At a higher level, issues of consent, credit, and compensation remain unresolved: AI models are trained on creatives’ works without consent (Kyi et al., 2025), spurring calls for alternative paradigms of ownership (Polimetla and Gero, 2025). In sum, generative AI can accelerate or constrain brainstorming, visualization, and prototyping. Our study contributes by examining how students themselves articulate these tensions and propose ways to mitigate risks and pursue opportunities in design

classrooms—linking everyday practices to questions of who drives AI governance in education.

The Participatory Turn in AI

Recent HCI scholarship has focused on the “participatory turn” in AI, where decision-making is not the sole purview of experts but a site of shared responsibility and situated negotiation. In the context of AI governance, this turn emphasizes involving impacted stakeholders not only in giving feedback but in co-setting agendas, shaping rules, and sharing decision rights and accountability. The need is amplified as end-user AI tools diffuse to broader—and often more vulnerable—populations who are least likely to be included in governance decisions. Still, critiques caution that participatory AI can slide into tokenism if power and agenda-setting remain unchanged (Birhane et al., 2022). Mapping the field, Delgado et al. show most efforts remain consultative rather than empowering (Delgado et al., 2023). In other words, “participation” is frequently defined as being heard (surveys, workshops) rather than being heeded (co-authoring rules, holding authority to modify them). Pushing past tokenism requires moving participation upstream (agendasetting), sharing decision authority, creating safe conditions for dissent, and resourcing participation (capacity, time, compensation), alongside transparency and contestability. Against this backdrop, PolicyCraft (Kuo et al., 2025) responds with “case-grounded deliberation,” integrating perspective-sharing and collaborative drafting. By structuring discussion and voting around concrete scenarios, it helps participants disambiguate wording disagreements from deeper value conflicts and

iteratively ground policy text in case-level consensus. Complementary lines develop process guidance and institutional exemplars—co-developing context-specific stakeholder engagement strategies (Park et al., 2024) and experimenting with citizen-inclusive, city-level deployments (Saxena et al., 2025).

Our work carries this participatory turn into higher education, where AI policies are often abstract or top-down (Bond, 2023; Kezar, 2020). I center students—early adopters and directly impacted stakeholders—through faculty-free, student-led workshops and a zine-based medium that lowers barriers to candid expression and resists tokenistic or superficial consultation. Crucially, rather than deliberating only on facilitator-seeded scenarios (as in most platforms), I first surface emergent, student-generated cases—including sensitive or policy-violating practices often kept invisible by fear of punishment—broadening the policy design space before deliberation and positioning students as policy authors. Taken together, I answer calls for empowering, contextually embedded governance by foregrounding student perspectives as a critical yet underrepresented locus of participation (Kuo et al., 2025).

Participatory Infrastructuring through Zine-Making

While the participatory turn in AI emphasizes expanded participation in critical decision-making, how participation is structured—what mediums are used, what relationships are formed—shapes whose perspectives are surfaced and legitimized (Delgado et al., 2023). In this thesis, I draw on the theoretical lens of participatory infrastructuring to foreground these design choices. Participatory infrastructuring

emphasizes the creation of sociotechnical conditions that allow publics to form—not pre-defined stakeholder groups, but emergent collectives constituted through shared concern and active engagement (Le Dantec and DiSalvo, 2013). These publics participate not merely as respondents, but as co-constructors of the problem space itself (Asad and Le Dantec, 2017; Le Dantec and DiSalvo, 2013). This means creating mechanisms not only for input but for issue articulation, mutual recognition, and iterative reflection. Unlike extractive methods that treat opinions as raw materials for expert synthesis, participatory infrastructuring invites community members to make their own values, tensions, and imaginaries legible on their own terms (De Angeli et al., 2014). In this work, I frame zines—small, self-published booklets (Atton, 1999; Duncombe, 1997)—as infrastructure: not only as material media that circulate student perspectives across classrooms and institutions, but as catalysts for building social formations and shared knowledge. Zines, which originate from fanzines (Wertham, 1973), are typically made from inexpensive, accessible materials making them easy to reproduce and distribute widely (such as collage materials). Their low-cost, DIY format positions them as alternative media for sharing ideas, connecting communities, and enabling broad, grassroots circulation (McNutt, 2021). This low-fi, low-barrier format is amenable to candid authorship and to resisting polish and performativity. As such, zine-making and sharing has played a critical role feminist, punk, and activist communities to amplify marginalized voices, reject institutional gatekeeping, and foster counterpublics (Duncombe, 1997; Licona, 2012). In contrast to institutional tools, such as topdown policy memos, that often disseminate finalized decisions and reduce student agency to checkbox compliance (Ghimire and Edwards, 2024), zines

can allow students to narrate their own experiences, reflect on trade-offs, and suggest alternatives.

Crucially in the context of AI policy articulation in high-education, zine-making lowers stakes, legitimizes situated accounts, and keeps disagreement usable as data that formal deliberation can suppress. In addition, the ability to rapidly share zines and circulate ideas at low cost—printed and distributed as physical pamphlets without the need for institutional approval, intermediary publishers, or formal distribution channels—makes them a uniquely accessible and grassroots medium for peer-to-peer policy discourse.

The need for accessible, student-centered approaches to policy articulation matters especially in the context of higher education, where authority in the classroom is traditionally asymmetrical. As scholars of critical pedagogy have long argued, shifting power dynamics to put students in the driver seat of their own learning—through collaborative course design (Hess, 2007), power-sharing classrooms (Moreno-Lopez, 2005), or democratic negotiation of authority (Shor, 1996)—can improve learning outcomes and foster civic capacities. My approach aligns with these values: by positioning students not just as participants but as infrastructurers of policy discourse, I invite deeper ownership and more authentic engagement.

Indeed, student-driven policies may be more likely to be respected and internalized by students themselves (Bowen and Watson, 2024), particularly when they reflect the lived realities and nuanced judgment calls students face in everyday AI use. For instance, recent work shows co-design for AI policy among high school students: Pu

et al. ran participatory workshops where high-school students articulated generative AI risks and uses, then co-produced school usage guidelines grounded in their lived concerns (Pu et al., 2025). Bringing in the lens of participatory infrastructuring enables us to frame student-led zine-making not simply as self-expression or critique, but as a form of collective world-building. Students may begin as a fixed stakeholder group, but through zine-making they constitute themselves as a public: a reflexive, relational formation grounded in shared experience and capable of intervening in institutional discourse. This framing makes visible the infrastructural labor required to create conditions for meaningful student voice—foregrounding not just what students say, but how their ways of saying it can scaffold more just and grounded approaches to AI governance.

Chapter 3: Methods

Chapter Overview

As reflective design reminds us, methods are never neutral: they carry embedded values and shape what gets seen as legitimate knowledge (Sengers et al., 2005). I center students as a key stakeholder that has been largely overlooked in AI policy decision making in higher education. To do so, I draw on community-based participatory design approach (Harrington et al., 2019), and conducted a three-part, in-person design workshop series to facilitate policy articulation, application, and iteration in a zine-making process. This workshop series was run by myself and my co-author, Manisha Vijay.

University Setting

This study was conducted at a minority-serving, public research university in the U.S. mid-Atlantic. A campus survey indicated slightly slower AI uptake relative to national reports: 37% reported using AI in coursework (vs. 42% in a national study (Tyton Partners, 2025)); 73% had not taken a formal AI course; usage skewed toward STEM (Financial Times, 2024; McDonald et al., 2025). This context provided a vantage point where institutional scaffolding was nascent.

Participants and Recruitment

Participants were recruited from HCC629: Fundamentals of Human Centered Computing, taught by Dr. Yasmine Kotturi in Fall 2024. This is a required course for

the master's and Ph.D. students in the department's HCI specialization, and focuses on fundamental design principles and human factor concepts to guide effective user interface design such as affordances and mental models. Of 21 enrolled students, 10 completed a screener; 8 were selected to vary course performance (Johnston et al., 2024), AI use, schedules, and degrees. For example: "Describe how you've used genAI in HCC629?" "At University of Maryland, Baltimore County, how do existing AI policies support your learning?," or "At University of Maryland, Baltimore County, how do existing AI policies hinder your learning?" (See Appendix A for more details.). Workshop participants were compensated \$20/hour (11 hours; \$220). Two additional students—who declined workshops due to dissenting views and scheduling—completed follow-up interviews and were compensated \$20 each—described in detail in Post-Interview section. In total, 12 students contributed: 2 student leaders, 8 workshop participants, and 2 non-participant interviewees (degrees: 9 HCI, 2 Information Systems, 1 Software Engineering; 11 master's, 1 Ph.D.). To protect identities given public zine authorship, I report only high-level demographics.

Three-part workshop series

Prior to the workshop series, participants completed a pre-workshop survey to capture their initial opinions, skills, and uses of generative AI in the graduate design studio course (and beyond). A total of three workshops were held on Fridays March 28, April 11, and April 25, 2025, from 12-3:00p; lunch was provided at each. Each workshop was held in a design studio classroom with modular tables, chairs, and

whiteboards in order to support collaborative workshop activities and social interaction. The top two reasons participants' reported wanting to participate included wanting to learn how to use AI more ethically, and to have their perspectives taken into more consideration in AI policy creation.

Workshop 1: Policy drafting through candid conversations.

Workshop 1 focused on supporting candid discussions among students, as a launching point to then discuss and brainstorm policy recommendations. Given the penalizing environment surrounding generative AI, we took a few steps to create an environment where students felt comfortable to disclose use, voice concerns, and share guidance with each other. First, to ensure that the participants had a safe space to converse frankly and honestly, these conversations were driven by the two student leaders without the presence of faculty. Second, the raw audio files and transcripts were not shared with the faculty PI. In other words, the faculty PI did not have access to the recordings nor the raw transcript, and only could view a de-identified version of the transcripts (this was explained thoroughly to students in the first workshop, and revisited in the second workshop). Finally, throughout workshops, workshop leaders reminded students they are the experts, and the study aimed to learn from them (See Appendix for workshop slides).

During the first workshop, participants engaged in a “Think-Pair-Share” (Lyman, 1981) activity to shape their discussion on AI use (See Appendix F). The “Think” phase had students reflect on their use of AI independently by completing the following questions within worksheets: “What are two ways you used GenAI for a class assignment that felt “gray area” (neither fully allowed or disallowed)?”, “What’s

one way you used GenAI for a class assignment that was not allowed? Why?"

Students then discussed their responses with a tablemate during the "Pair" phase of the activity, and were prompted to reflect on how their experience was similar and different to their peers'. Finally, a group-wide share of elevated key themes as well as highlighted unique experiences when using AI in design classrooms. To ground reflections in recent experience, students were prompted to ground reflections in previous course experience.

To help students situate their personal experiences with generative AI within a broader campus context, the students leaders welcomed a guest speaker from the university's AI Committee to provide a brief presentation (See Appendix for presentation slides). This speaker shared findings from a recent university-wide survey at University of Maryland, Baltimore County conducted with 200 students across disciplines, offering participants a sense of how generative AI was (or was not) being used beyond their immediate peer networks. The presentation included summary data on faculty adoption, environmental concerns related to AI use, and early signs of dissent—such as a case in which arts students publicly opposed classroom AI integration, later covered by a local media outlet (<https://www.insidehighered.com/news/students/academics/2025/02/10/making-space-student-sorrow-over-ai>). Survey data also revealed that while some faculty were beginning to integrate AI into their teaching, many were still uncertain about how to address its impact on student skills such as critical thinking and writing.

After the guest speaker departed, the two student leaders facilitated a discussion among workshop participants (See Appendix for slides). This debrief created space

for critical reflection on the survey results and their limitations. Some students noted that the data felt disconnected from their lived experiences—particularly the claim that most students reported only moderate use of generative AI. Participants expressed skepticism about the accuracy of those responses, raising concerns about whether students answering the survey may have feared surveillance or academic consequences. From here, student leaders introduced participants to the policy drafting activity. Because students have limited to no experience writing policies, steps were taken in order to support them through a scaffolded activity (See Appendix for slides representing this structure). Participants were presented with 24 policy topics derived from related literature (such as agency (Kotturi et al., 2024), critical thinking (Satyanarayan and Jones, 2024), accountability and equity (Kotturi et al., 2024), ownership (Bowen and Watson, 2024), group work (Bowen and Watson, 2024), and social support (Bowen and Watson, 2024), conversations of AI occurring within the UMBC community (e.g. AI literacy, grading/rubrics, academic integrity), and contributed by student leads based on their experiences (e.g. hypocrisy in faculty use, English learner considerations). Participants were also encouraged to contribute their own topics. Then they were asked to pick five to draft policy recommendations for. There was overlap, but all policies were selected at least once. This approach also ensured that there was a diversity of topics covered in resulting policies.

To scaffold the drafting process, participants were given structured prompts on an activity worksheet that guided both brainstorming and policy formulation (See Appendix G). Each worksheet introduced a topical theme—such as “Divergent Thinking” or “Hypocrisy in Faculty Use”—along with a guiding question (e.g., “How

can generative AI encourage you to explore diverse ideas and inspire creative approaches to problem-solving?”). For each theme, students were asked to identify a core challenge or tension, describe a relevant learning outcome or classroom scenario, and finally draft a concise policy statement using conditional phrasing and action verbs. This policy drafting activity resulted in 40 initial recommendations (8 participants, 5 prompts each).

In between Workshop 1 and Workshop 2, all authors read through the participants’ drafted recommendations and met three times to reflect on their responses. Overlapping policies were grouped and consolidated, and some participants’ drafts were combined into shared statements to reduce redundancy; however, the research team ensured that each student had their ideas represented in the final set. Choosing evidence-based policies was also a factor in finalizing the recommendations. For instance, a participant made a recommendation that “students should only use genAI at later stages of the design process to ensure ideas are their own.” However, generative AI shows great potential for supporting the ideation phase (Hsiao and Tang, 2024). The research team worked to select recommendations that pushed the boundaries of AI policy discussions, rather than repeating common rhetoric that is typically ambiguous. This synthesis process ultimately resulted in a curated set of 10 student-authored policies, which were then shared back with participants for feedback (See Table 1 for this list of final policy recommendations).

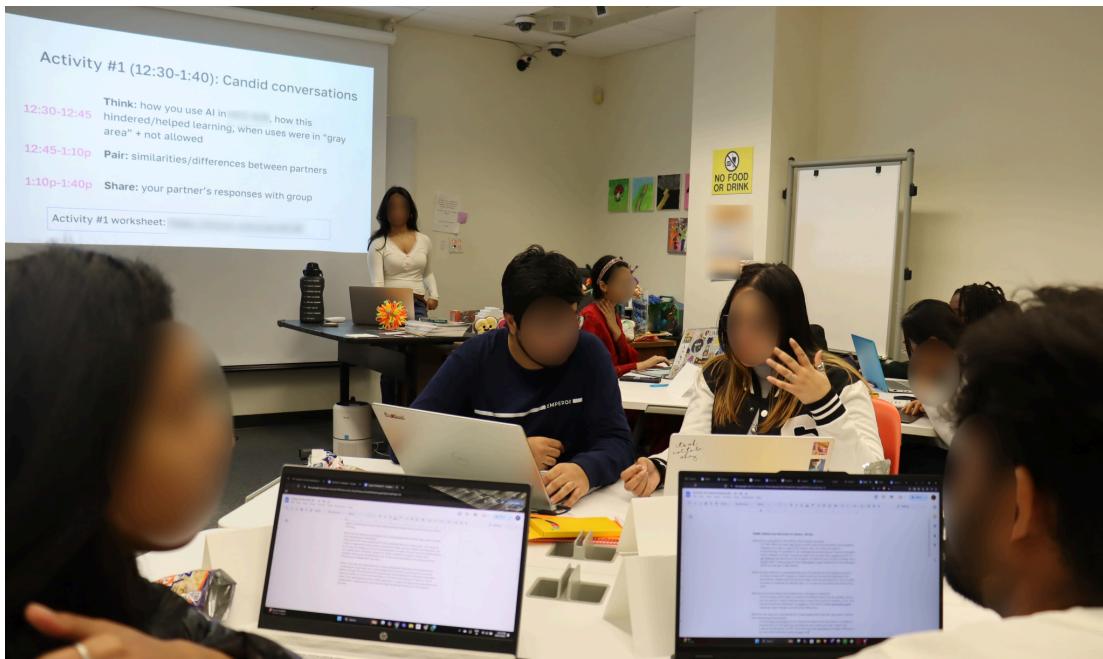


Figure 2: Students participating in Workshop 1 which focused on policy drafting through candid conversations of AI use. During the share phase of a Think–Pair–Share activity, participants exchanged reflections on their use of AI tools in HCC629 during the preceding semester.

Workshop 2: Policy in print through zine making

First, the research team went through the resulting 10 policy recommendations—discussed each in length, debated, refined as a group. After this iterative step to improve policies and sign off as a group, participants started the zine making process during workshop 2. To begin, participants each chose two of the 10 policies that they would each create a visual representation of for the zine. Given that most participants had never made a zine before, the student leaders welcomed a visual arts professor at the university who leverages zines as research (Hay, 2022) and who has made countless zines before. The professor reviewed the history of zines such as the origin, coming from fanzines and the punk movement (Pink, 2016), as well as early LGBT works (Queer Music Heritage, n.d.). After this historical analysis, the professor opened up for a group discussion on the relevance of zine making in this specific

research project: why not just write a typical policy document outlining findings? Why take the time to create a visual representation of a policy? What legacy of zine making is relevant, given the student-driven nature of this workshop series? Students were challenged to think about what it means to present policies in the form of zine, rather than typical policy formatting. To support both digital and analog making, in case participants had particular preferences or strengths in either, participants were each tasked to make one visual representation of each policy in Figma, and one physically on paper, both with provided templates (See Appendix for template). Students were also provided additional physical materials such as markers, tape, scrapbooking and magazine cut outs, scissors, and glue sticks to complete their physical copy. Digital tools such as ASCII art generator, Iconify Figma plugin, and generative AI tools such as DALL-E were provided to complete their digital copy.

Between workshops 2 and 3, the research team met five times to review zine iterations and work on refinements. The student leads held office hours to support participants; the research team worked with students to iterate on visual representations of zines. One student, who was a graphic designer and had made zines before, helped to refine graphics and create a consistent aesthetic across zines (See Appendix for first draft of zines)—they ultimately took on a leadership role to facilitate the refinements of zine for camera ready. In these refinements and revisions, we ensured that all students had a substantial portion of their original visual design in the final version (and at least one of their policies). I also conducted member check with students to get their feedback before sending to print (Charmaz, 2006, Ch. 4).



Figure 2: Students participating in Workshop 2, where they were introduced to the zine-making process. Professor Julie Sayo provided historical context and guidance on zine-making practices, and participants reviewed facilitator-provided handouts before beginning their own policy-focused zine pages.

Workshop 3: Policy in practice through design activity

In the final workshop, students applied their policies to complete a design activity that resembled the same assignments in the design studio course (See Appendix). In particular, participants were asked to apply their policy recommendations to redesign generative AI interfaces to better support the design studio course's learning objectives. Students selected a tool (image/UI-based: V0, UX Pilot Figma Plug-in, and UIizard, and text-based: ChatGPT, Claude, and Grammarly), ensuring that all the tools were picked by at least one participant. Participants completed their redesign on Figma (Figma, Inc., 2025), with as many screens as they desired, aiming for higher fidelity redesigns.

The redesign activity gave participants a prompt to guide their design, having them

Table 2: Conceptual metaphor and its definition presented in Workshop 3 for students to choose for their redesigned interface activity

Metaphor	Definition
AI as a Tool	AI extends your abilities—like a calculator or spell-checker. It doesn't act on its own, but helps you do something faster or better.
AI as a Co-Agent	AI is a creative partner that shares control. It actively helps you make decisions, generate ideas, and adapt to changes in your process.
AI as a Coach	AI observes your work and offers tips or encouragement to help you improve. Like a sports coach, it gives advice—but doesn't do the work for you.
AI as a Personal Tutor	AI delivers structured lessons and adapts based on your strengths and weaknesses. It's like having a private teacher guiding your progress.
AI as a Feedback Generator	AI helps you reflect by giving critique, suggestions, or alternatives—like a peer or TA during a studio critique.
AI as a Sensor (Not a Solution)	AI detects patterns, surfaces insights, or shares data—but doesn't tell you what to do. It supports your judgment without replacing it.
AI as a Critic or Provocateur:	AI challenges your assumptions, asks hard questions, or shows unexpected results to spark new thinking.
AI as a Teammate	AI works with you on shared tasks—like a group project partner. It needs to be responsive, predictable, and aware of your goals.
AI as a Mirror	AI reflects your inputs, behaviors, or biases back to you—helping you notice things about your work or thinking that

	you might miss.
AI as Infrastructure	AI shapes what's possible behind the scenes. It may not be visible in the interface, but it influences who can access what, and how.

choose from a list of HCC629 objectives to support in their design, and a conceptual metaphor informed by related work such as: AI as a co-agent (Satyanarayan and Jones, 2024), AI as a sensor not a solution (Satyanarayan and Jones, 2024), AI as Feedback Generator, Personal Tutor, Learner, and Team Coach (Mollick and Mollick, 2023) (See table2 for a list of conceptual metaphors and its definition). Participants used the following sentence to guide their redesign: "I am going to redesign the interface of [GenAI tool] by using the conceptual model of [Conceptual Model] in order to strengthen [HCC 629's learning objective]." Students were asked to adhere to their AI policies while completing this activity. To support this reflection on policies in practice, participants completed a reflection worksheet, which included opportunities to revise policies (See Appendix H). Students pointed out certain issues that had not come up in earlier discussions of AI policy.

The participants' redesigned interfaces (included in Appendix) were then assessed by five senior human-computer interaction faculty at the university, all of whom had taught the design studio course previously and were familiar with the course's learning objectives. I and research team created the evaluation criterion (See Table 3 and Appendix) and presented each participants' redesigned interfaces with their rationale completed in the redesign activity worksheet (Appendix H). Interfaces were evaluated on a Likert scale of 1-3 (1-needs improvement, 2-adequate, 3-strong) with

four criteria: learning objective, conceptual model, usability, and overall design quality. Each evaluation score was ranked and will help contribute to the future steps of the project, where the best interfaces could be built out and used in future offerings of HCC629.

Table 3: Evaluation criterion used for HCI faculty to evaluate participants redesigned interface

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.

Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.
---------	--	--	--

Publishing the zine

The refining stages to produce a camera-ready zine extended well beyond the third workshop, until July when the zines were printed at a student-run printing service on the university's campus. All students involved were invited to celebrate the completion of the zine to a “zine party” in October 2025, where they will receive copies. Given the high demand across the university, a less expensive version is now being created to be able to more widely disseminate to diverse stakeholders, including university administrators, HCI faculty, and beyond.

Open-sourcing workshop materials

We will open source these workshop materials so that other faculty and students can run these activities in different departments (across UMBC but also in other institutions). This will support the making of student-driven AI policy zines across different disciplines beyond design, capturing student attitudes from various kinds of institutions.

Post-Workshop Interviews

After the workshop series, the authors conducted follow up interviews with the workshop participants to understand their developed thinking on topics discussed since the workshop took place. In addition, I also conducted two interviews with students who were enrolled in the design studio course but opted not to participate in the workshop series (due to dissenting views on AI and busy schedules). This provided another opportunity to ensure more well rounded perspectives towards generative AI use in a design classroom. I followed a semi-structured interview protocol: differing questions for the workshop participants and non-workshop participants. Workshop participants were asked questions such as: “How do you anticipate your approach to using AI in coursework will stay the same or change after participating in this workshop series?”, “How would you explain AI policy to your peers or classmates?”, “Have you had any conversations about the workshops, zine, policies, etc since the conclusion?” Those who did not participate in the workshops were asked questions such as: “What were your concerns with participation in the workshop?”, “How can we ensure students with dissenting views of AI are heard at the policy level?” (See Appendix E for more details.). Interviews were conducted in person or online via WebEx, at a maximum of one hour, and participants were compensated \$20 for their time.

Data Analysis

Audio recordings from each workshop were transcribed with Otter.AI (Otter.ai, Inc., 2025) and then manually checked for errors. The joint first authors corrected transcripts and de-identified all materials before sharing them with the faculty PI. We followed Charmaz's constructivist grounded theory (Charmaz, 2006). First, we conducted initial, line-by-line coding using gerunds to stay close to participants' actions and meanings. Across the three workshops and follow up interviews, this produced 1,051 codes. To establish common grounding, all authors collaboratively coded the first workshop transcript and created a living codebook (code names, definitions, exemplar quotes). Workshop 2 and Workshop 3 were then coded independently by the two joint first authors, followed by negotiated-agreement sessions where the team compared code applications, discussed discrepancies, and revised the codebook. These calibration meetings occurred weekly during data collection and continued for three months afterward. Disagreements were resolved through constant comparison, returning to de-identified excerpts, and privileging participants' phrasing in final code and category names. We did not compute inter-rater reliability, consistent with constructivist approaches that emphasize reflexive consensus over coefficient agreement (McDonald et al., 2019).

Next, we engaged in focused coding, identifying 23 inductively derived categories that captured recurring patterns (e.g., refusal of AI, concerns about AI use, emotions about AI use, policy-based concerns). Within these, we developed subcategories (e.g., gray areas, citing/logging requirements, constraints on creativity, policy violations). To refine the structure, the full research team—the two student leaders and the faculty

PI who taught the course from which participants were recruited—constructed an affinity diagram in Miro. Each focused code was represented as a card and clustered collaboratively; cluster boundaries, labels, and merges/splits were negotiated in group meetings. This visual step served as a middle layer linking granular codes to higher-level categories and provided an auditable trail of category decisions. Throughout analysis, we maintained an analytic memo corpus (19,408 words) to deepen and narrate each focused code cluster within the affinity diagram. Memos were reviewed in weekly meetings to iteratively revisit the data, stabilize shared interpretations, and connect insights across workshops and interviews. Finally, we remained reflexive about positionality. The two student co-authors who facilitated workshops contributed insider perspectives as peers, enriching interpretations of how policies were articulated and received. The faculty PI intentionally remained distanced from raw, identifiable transcripts to reduce the influence of faculty authority; their analytic role focused on reviewing de-identified excerpts, participating in consensus meetings, and helping name and relate categories. This insider–outsider pairing supported proximity to student voice while preserving critical distance.

Chapter 4: Findings

Chapter Overview

This chapter is divided into four major parts. First, I illustrate the diverse ways students currently use generative AI in their coursework, addressing Research Question 1. Next, I detail the 10 student-authored AI policy recommendations that emerged from the workshops, reflecting Research Question 3. I then present the participants' redesigned interfaces and finally, I conclude with details on how student practices and perspectives evolved through the zine-making process and beyond, answering Research Question 2.

Diverse Uses of AI in a Design Classroom (RQ1)

To address Research Question 1 “*How do students perceive AI policies and AI integration in a design course?*”, I found that there were many discussions over the different ways students use AI throughout the workshop series. Even among the relatively small group of eight participants, there were 16 functionally distinct ways students used AI, and several tools used (ChatGPT, Grammarly, LoveableAI, Perplexity, BlackBox.Ai, Gemini, Claude, Midjourney, DALL-E, Meta AI, Grammarly, Asana, Microsoft Copilot, GitHub Co-Pilot.) Uses pertained to the different phases of the design process, such as brainstorming ideas for course assignments [P1, P3, P4, P5, P6, P7, P8], asking AI systems for design feedback [P1, P3, P6, P7, P8], or generating high fidelity outputs such as icons and images to include in design submissions [P7]. Participants also found ways to use AI to support

their understanding of course concepts [P3, P5, P6, P8], translate design terminology to more understandable language [P8], summarize readings they would not otherwise have any time for [P8], retrieve additional background information of course materials [P5, P6, P8], and obtain examples for how to integrate core design concepts into their assignments [P1, P2, P4]. Other uses included: creating personas to role-play AI as a peer to brainstorm ideas together [P1, P3, P7, P8], improving English skills and fixing grammatical errors [P1, P5, P8], and synthesizing multiple resources [P3], updating design résumés [P5], and learning how to use design tools like Figma [P6]. Finally, P1, P3, and P6 reported value in using gen AI systems to support perspective-taking, especially when peers were not available to provide feedback or exchange ideas.

While these uses of generative AI are well documented within design classes and beyond, the workshops uniquely provided the opportunity to present use and discuss openly with peers (as P1, P2, P6, and P8 all noted). For instance, P6 shared:

“It’s not common to talk about what we’re all using and doing with AI. This is a nice opportunity to hear those perspectives.”

P8 chimed in, to point out how discussion of AI use can be seen as controversial, and how workshops provided a space to “discuss openly and freely”: “I think AI is controversial for some part, but it’s very essential these days, many companies and many students and many people are using it.”

Students are Not a Monolith

Participants noted how policies inherently forced homogeneous behavior. But, as made clear throughout the workshops, students are not a monolith (even in the context of their use in just one class.) Some participants found great value in using AI systems [P1,P2,P3,P4,P5,P6,P7,P8], others strongly disliked it [P9, P10] or had strong concerns regarding use [P1,P2,P3,P4,P5,P6,P7,P8,P9, P10] Some participants worried about being overreliant, and others worried they were not using it enough and they would be ill prepared on the job market. For instance, at either end of these high-level preferences existed P10 and P7. P7 strongly insisted that AI use should be mandatory in the classroom, in order to prepare students for the workforce, while P10 felt that AI should not be made a requirement in classrooms—that students should be given a choice (and that they could choose not to use it, as they believe AI use is unethical in any form). In the context of design pedagogy, as P2 and P7 debated in the Pair phase of Workshop 1’s Think-Pair-Share activity on candid conversations: P7 shared how they used AI to generate ideas to complete the design assignments (and even goes so far as to say that they are “dependent” on it) and while P2 felt “held back” by using AI in the initial stage of a design cycle. In the Share stage, after hearing their peers discuss various approaches, P1 summarized:

“Every [student] has a different approach to AI and everybody has a different perspective. Some [students] don’t like it at all. Some [students] really want to use it. Striking that kind of balance in class will be a key challenge.”

P1 points out here that finding a balance between students' preferences for use or nonuse (which currently are rarely, if at all, taken into account in university AI policies) is important.

Student Uses of AI that Violated University AI Policy

There were instances where participants reflected on how they used AI in ways that they knew clearly violated their course's AI policy [P1, P3, P5, P7]. Some described relying almost entirely on ChatGPT (e.g., "80-90%", P7) to complete assignments with little personal contribution, while others shared how they incorporated AI-generated outputs without citation despite clear prohibitions, because they either used in ways that were not allowed, were not sure if their use was or was not allowed [P5, P1], or did not want to admit to use because of guilt felt by not being able to complete the assignment on their own [P1, P7, P5]. One participant noted that even in an assignment designed to critique AI's perspective, classmates turned to GPT to write their critiques of AI [P3]. P5 described a specific instance where they used AI in a way that was disallowed:

"I used [AI] to write a discussion [post]. And that day...I just wasn't feeling it, and it didn't involve any sources at all. I just said [to the AI tool], 'Answer this for me.' I just pasted it. And I know some professors have AI detectors, so they probably just put it through there. I was like, 'Yeah, you know what, I'll take the L that day.' So that's what happened...they just put in the comments, 'I could just tell this wasn't you...' Instead of 100, they gave me an 80."

While this incident did not occur in HCC629, it provides an interesting example: P5 still received a 80% on an assignment that was entirely AI generated and in clear violation of their course's AI policy. In this way, this mismatch between the rules and application of penalties may be contributing to the confusion and disarray, and warrants specific attention, as we delve into in the discussion section.

10 Student-Driven AI Policy Recommendations (RQ3)

In this section, I overview the 10 AI policy recommendations which resulted from the three-part workshop series, addressing Research Question 3—*”When given the opportunity and support to self-author AI policies, what are student-driven AI policy recommendations in a design classroom?”* While we define each policy and provide details, we also share other discussions that were captured that were related to each policy, such as disagreement among participants, or challenges students experienced when applying their policies for the interface redesign activity in the final workshop.

Policy Recommendation #1 Instructions: *Instructors should include guidelines with concrete examples of acceptable and not acceptable use of AI for each assignment.*

Participants felt frustrated and overwhelmed by the lack of clear guidelines on acceptable AI use, often wary and coming up with strategies to avoid falling into the gray area. As detailed in Section 1, the AI policy in HCC629 allowed students to use AI “lightly”, but required students to always cite their use by including chat logs. But students were still uncertain of what that exactly meant. After reading this policy P3 still wondered: “how much can we use AI? What does ‘light use’ mean?” As P1 and

P2 emphasized, sometimes their AI tool would alter or generate too much, taking their use into a gray area without their approval, making it hard to “undo.” P2 shared:

“It expands or elongates my content which I don’t want, I just want some rephrasing and content refinement. I felt like this comes in the grey area.”

P2 echoed this:

“when I try to refine my presentations I allow grammar checks, and it’s unclear whether I was relying on it for content structuring.”

This gray area of acceptable and nonacceptable use worsened when enforcement did not align with the policy, as P5 shared above when they received 80% for a submission entirely generated by AI in a way that went against their instructor’s AI policy. Similarly, P10 reflected on when their instructor did not allow use of AI to create videos for an assignment, but their peers who ended up using AI were left unscathed by any retribution (likely either because the instructor did not know, or did not know how to enforce the policy, have the time to enforce, etc). From this experience, P10 walked away with the following lesson:

“...So what [did] we learn, that they can use AI in the video, even though they were told not to use it, and they can still pass the class. So in the next semester, if someone says, ‘Hey, don’t use AI for this assignment, otherwise you won’t pass the class.’ And if they still use AI for the assignment, they’re expecting to pass that class.”

This disconnect from policy to enforcement seemed to make AI policies even more tenuous.

After candid conversations around existing challenges with current AI policies participants had navigated, participants circled around a policy which could address this. P1 suggested that showing examples of AI policy implementation to students is helpful:

“We can provide acceptable and unacceptable use of AI. The examples can be provided in the starting of the class. You can run through a presentation and tell them to read on acceptable and unacceptable AI examples.”

P1 extrapolated how this could also help when working in group settings or teams, where examples of acceptable and nonacceptable use can strengthen group dynamics:

“I feel like it should be done because it makes life easier. If you leave it on students on their own, they probably will be confused.” Part of the motivation for this was to reduce the amount of fear that students shared about their use of AI, as P6 shared, providing examples would decrease the amount of gray area:

“But if someone is using a lot of AI and they fear not citing it, in order to remove that fear, like P1 said, I guess a brief example would do it”.

When thinking through the efficacy on examples, participants emphasized how course-specific policies often failed to provide the level of granularity needed to navigate AI use across different types of assignments. As P3 noted, a single blanket policy applied to both factual and open-ended assignments could hinder creative processes. Students also pointed out that tool-specific policies—such as banning ChatGPT but allowing Grammarly—were quickly becoming outdated, as more platforms quietly integrated generative AI features. These observations reinforced the

need for clearer, assignment-level instructions that accounts for both the evolving tool landscape and the diverse demands of design-coursework.

Policy Recommendation #2 Ownership: *We should only use AI for up to 50% of our work on any given assignment, so that the majority reflects our own ideas and effort.*

The policy topic of ownership—a central discussion and concern in the related literature (Bowen and Watson, 2024)—(also interchangeably referred to “authorship”, and “accountability” throughout the course of the workshops) was a generator of rich, sometimes contentious discussion among workshop participants and student leaders. When thinking about ownership, it was natural for students to think this through in the context of the percentage they created versus their AI—in other words, how much could be generated with AI, but still be considered their work. There was disagreement on this percentage though. Where P4 thought that, at most, 30% of an assignment should be generated with AI, P1, P6, and P9 argued that no more than 50% should be AI generated, as they were concerned that this technology would be exploited by students to complete the whole assignment. P7 and P3 then argued that the percentage is irrelevant (it could be 80%), as long as the original content comes from the student. In the end, 50% was the agreed upon halfway point and this seemed to build consensus during the workshop discussion. However, any consensus quickly dissolved (or was truly never there to begin with) when students applied this policy in the design activity. For instance, P3 shared in their post-workshop reflection, that this policy in particular felt too rigid:

“Honestly, the biggest issue is that [the policy] feels a bit rigid, especially when you’re not using AI to do the thinking for you, but just to move faster. Like in my case, I had a clear mental model, and the AI tool just helped me skip the dragging-and-dropping part. But if we follow the current rules strictly, that might still count as ‘more than half AI-generated,’ even though the actual decisions came from me. That’s where it gets tricky.”

Another form of push back came from P1 who noted that as heavy AI use becomes normal in the future in industry and maybe academia so that such thresholds (less than 50% of AI contribution into assignments) may need reevaluation to support students’ future employability. In addition to P1 and P3, P6 and P7 also reported difficulties adhering to this policy in the design activity. For instance, P6 pointed to the additional labor required of students when AI suggestions took over student voice:

“I had to consciously revise and rewrite AI-generated text to make sure it reflected my own thinking. Balancing usefulness with ownership required effort, especially when the AI suggestions were strong.” While many participants said they were open to following this policy, they also admitted that compliance would depend on the situation. Finally, one of the challenges that surfaced multiple times amongst the participants was how to effectively measure and permit the amount of AI a student can use in their work. P7 questioned how one can calculate the percentage of AI use when there are multiple phases in the design process as well.

Policy Recommendation #3 Divergent Thinking: *When using AI for brainstorming, we should push ourselves to explore alternatives, surprising directions, or ideas that feel more personal and meaningful to us.*

When considering the unique role that AI might play in a design classroom, participants gravitated towards one policy topic: divergent thinking—the essential stage in any successful design process that focuses on developing many, divergent or separate ideas before ultimately converging on a subset of ideas to move forward with in a design cycle (Tohidi et al., 2006). At a high level, participants considered how use of AI hinders other aspects of design assignments such as limitations to their self-expression [P5, P7, P8] and creativity [P1, P3, P8]. However, the same students pointed to benefits of using AI for creativity. These benefits seemed context-dependent—especially in cases where deadlines, workload, or unclear expectations would otherwise block deeper engagement with course materials. Typically, with deadline-oriented schedules and over-scheduled instructors, this critical skill is often underdeveloped in design students (Yu, 2025).

When participants applied the divergent thinking policy to complete the design assignment, this sparked several participants to reflect on thinking about using AI to support their ideation processes. In their post-workshop reflections, P1, P2, and P5 mentioned that the divergent thinking policy encouraged them to prompt AI to branch ideas, making it easy to brainstorm, explore alternatives, and resist shallow or default responses. For instance, P2 shared:

“I used GenAI primarily as a creative amplifier, especially in the ideation phase...My approach remained iterative. I would prompt the model, reflect on its output, and then

reframe or refine ideas to suit my intended direction. The back-and-forth helped me stretch my thinking without losing authorship over the outcome."

In addition, P8 felt that AI in theory could help as a creativity support tool, especially when peers are not available to provide feedback. However, this fell flat in practice as the AI outputs were generic:

"If I don't have any peers to brainstorm together, [then] I could ask [AI]. [But] I feel like it gave me too broad, too general viewpoints."

P10 contributed a dissenting perspective of using AI to support divergent thinking, and emphasized the importance of gaining fundamental design skills to develop one's tastemaking abilities, sans AI.

Policy Recommendation #4 Job Skills: *We should be provided opportunities to learn how to use AI in ways that reflect how AI is used in real workplaces through coursework. Instructors should stay updated on how AI is used (and regulated) in industry.*

Across the workshops, participants were surprised how other students used these tools within their classroom (and across the university as described by the survey in Section 3.3.1), because most learned on their own how to use AI, rather than learning from one another or from the university. This meant that there were large knowledge gaps for how to use these tools successfully: P7 was concerned whether they would be able to identify bias generated from AI; P1 felt unprepared to write sufficient prompts; P3 expressed that students were concerned about academic integrity due to

the lack of formal training. To address this, participants like P7 felt that it would be of more value to have structured lessons of how to use AI. Currently at [UNIVERSITY], as with many other higher education institutions, AI training is not provided to students, so students must learn independently [P1, P7].

P1, P6, and P7 discussed how any training provided should center employability given that now certain and evolving AI skills are necessary to land a job after graduating. P1, shared an anecdote with the group about how their roommate just got a job, and upon starting the job the roommate's employer expected all employees to use AI. P6 reflected on how, for UX jobs (which the majority of workshop participants intended to pursue after graduation), AI skills were now a required part of a job application. P7 added that AI literacy was also important for future careers in research, such as going for Ph.D. programs.

During the design activity, P5 pointed out in their reflection that this policy should have an important caveat: in some jobs such as government jobs, use of AI systems is strictly prohibited. Given the number of alumni from the university who pursue jobs in government (due to geographic proximity), this policy was less pertinent to them, or needed to respond to this unique constraint as well. Taken together, preparation for using AI in future jobs was important for students, but any training or guidance should also keep in mind nuances around job restrictions of AI use.

Policy Recommendation #5 Bias: *We should check if AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.*

One of the 40 policy topics participants did not gravitate towards when selecting which topics they wanted to work with was “bias,” where workshop leads emphasized how bias, broadly construed, continues to be an ongoing issue with generative AI systems due to biased training data, lack of guardrails, and homogeneous developer identities. It seemed this hesitation was due to a lack of practical support, rather than a lack of interest. For instance, when reflecting on putting this policy into practice, P1 struggled with the work entailed to ensure outputs were not biased, noting that there are no tools commercially available to support a user in this way. Instead, checking for bias required a lot of “manual labor”, as P1 described:

“I had to carefully go through the content, analyze language and representation, and possibly cross-check against standards or guidelines of the work to ensure that no biased assumptions or stereotypes were present, which was time consuming.”

Other participants found this policy easy to adhere to. For instance, P2 shared:

“I stayed away from anything that felt biased or vague if something felt off or too generic, I just changed it.”

Interestingly, P4 relied on their generative AI tool to decipher if there was any biased content:

“I always ask AI if there is any bias and it is usually quick to detect that, so that’s why I like adhering to this policy.”

Overall, while participants differed in their comfort and strategies for addressing bias, the reflections point to a broader need for more accessible, reliable tools that can help students identify and critically assess biased content in AI outputs.

Policy Recommendation #6: Citing AI Use (or Not): *It is important for us to credit AI where credit is due. However, sharing chat logs, as many instructors currently require, is tedious and ineffective for both students and graders. Instead, we should share a 2-3 sentence summary for each submission describing how and why we used AI.*

Citing AI use, such as by including chat logs, came up as a frequent point during workshops and post-workshop reflection activities.

Almost all participants recognized citing logs was tedious work. P5 argued that asking to cite AI usage is a big ask for students, and P7 believed that AI use should not be cited at all. P4 even shared how they circumvented AI policy required chat logs by using AI to cite itself, stating:

“One of the policies is basically, ‘[cite] everything everywhere we use it.’ So basically, if you tell GenAI ‘Consider the policy and then cite yourself appropriately wherever you are.’ So it does that whether it’s citing or paraphrasing or putting the references that will cite itself.”

In their experience, this approach satiated the policy requirement and P4 could avoid the tedium of manually citing their use of AI.

P5 and P7 shared a different concern regarding citing AI use: how if they cited AI, this would equate to owning up to the fact that very little of their assignment was completed independently. Thus, they were concerned about their grade because it would imply that they do not contribute enough on the assignments:

“Is there such a thing as being too transparent? Because if the professor is asking [you] to cite the use of AI, and you have AI do the whole project for you, and you cite that, then you’re cooked...But versus, if you use AI to edit a line of your paragraph, or a line of code, and you still cite it, you get points taken off.” [P5]

On the one hand, P5 pointed out the obvious in that citing overuse will lead to negative consequences (i.e. “cooked”). On the other hand, they also shared what seems to be a mismatch between policy and enforcement, where even when abiding by citation rules, points are still deducted when AI is used.

Based on these impassioned discussions, P1, P2 and P6 proposed an alternative to chat logs: a short summary describing how the student used AI per assignment may be enough. To capture the dissenting views throughout the workshops, the corresponding zine page included digital Post-It notes with various perspectives (See Appendix I).

Policy Recommendation #7 Hypocrisy in Faculty Use: *If instructors expect us to be transparent about our use of generative AI, we expect the same*

transparency from them when it comes to how they use AI in teaching, grading, or creating assignments.

Students discussed what they perceived to be a double-standard: while their use of generative AI in the classroom is highly regulated, those who dictated the policy did not have to abide by similar rules. P4 argued that transparency should be at the same level amongst both students and faculty, adhering to the golden rule. Not only did this connect to a desire for more equitable treatment, but it also touched on students' concerns to understand how their instructors' approach may or may not be changing in response to AI, and by extension their own learning. For instance, one of the student leads reflected on how if faculty free up their time by using AI tools to help with rote tasks, they should be able to spend more time one-on-one with students, and spend more time dedicated to teaching.

P9 argued that faculty should demonstrate their expertise by producing teaching and grading materials themselves, rather than "cheating" with AI. They felt that if professors rely on AI to generate teaching content, it undermines their credibility and calls into question whether they actually know the material:

"If you're using [AI] to teach, get your Ph.D. revoked honestly. You should know how to teach the content that you wrote a dissertation on. I don't think that would be in any way acceptable."

While they were fine with faculties' minor uses, like grammar or formatting, they emphasized that students are paying tuition (\$13,000 a semester) for professors' knowledge—not AI's output.

Policy Recommendation #8 English Learners: *For those of us who are English learners, we should be encouraged to use AI to support our English proficiency in writing by asking for refinement of our text. Also, we should ask for an explanation of the refinements made to further our language proficiency.*

P1, P8, P7, and P2 expressed difficulties in conveying their thoughts in English, given that English was not their primary language. Given limited vocabulary and grammatical structures, they discussed how their writing in English can be overly simple, and expressed frustration when they were unable to convey their thoughts clearly as desired. AI tools, in this case, were almost necessary to support writing at the academic level. Participants therefore emphasized that policies should explicitly recognize AI's role in helping them understand context and fully express ideas—including emotional nuance—without penalizing them. P2 pointed out that level of fluency should also be factored into their policy. One of the student leads, who is also an English learner, reflected on this point, and echoed that any distinction that a policy makes should focus on the level of English proficiency.

Policy Recommendation #9 Feedback: *We can use AI to help us better understand and respond to peers' feedback, especially when revising our work.*

During the initial policy review in the second workshop, there was unanimous agreement for this recommendation. Because participants did not get a chance to provide feedback on each other's design assignment in the third workshop, they were unable to put this policy into practice, so there was less discussion overall to capture. One challenge with this policy was determining how to visually represent this policy

on the zine: student leads and the graphic design lead brainstormed back and forth different ideas to show the idea of students using AI to make feedback sound nicer/constructive and how to implement.

Students proposed AI as a “shield” for feedback—first a Captain America–style shield, then a filter that softens harmful comments and turns vague critiques into actionable guidance. The metaphor framed AI as a mediator that scaffolds emotionally intelligent exchanges and reflection, addressing discomfort with critique, unclear peer-review norms, and the emotional labor of giving/receiving feedback. In this view, AI complements—not replaces—peer insight by making feedback more digestible, equitable, and growth-oriented, especially where social dynamics inhibit candor.

Policy Recommendation #10 Equity: *Everyone in class should have access to the same AI tools or models for each assignment to ensure fairness.*

This policy intended to address potential inequities of access to AI tools, as some students may have resources to pay for more powerful tiers of the latest models. To address this issue, the original version of the policy was more heavy handed: “the same AI tool and model should be used by all students for each assignment.” However, students ended up disagreeing, listing possible loopholes and pointing out how this may be too patronizing. For example, P4 brought up a hypothetical saying that some students might be able to create their own AI tools (which may not be available to all to use), and that this creativity should not be penalized.

P7 emphasized the importance of standardizing AI tool usage—by having the same tools be available to all students—among students to ensure fairness in completing

assignments. Providing a list and access to a baseline set of tools would have the added benefit of helping students learn about the never-ending list of AI tools popping up now. But keeping this list updated would be a challenge, as P3 articulated: “There are a lot of AI tools right now. People don’t even know the existence of them”. P10 questioned whether students would receive an AI subscription and what ethical standard should guide the selection of an institution-wide subscription. P9, for instance, who does not use any AI tools, argued it would unfair for them to have to pay for a subscription fee for access to tools that they do not use, similarly to the gym fee the university charges them.

Post-workshop Reflections: Towards more Intentional AI

Use (RQ2)

Reflecting Research Question 2 —“*How might we support students to author student-driven AI policies in a design classroom? In other words, what scaffolding is required to assist students to write effective policies in a design classroom?*”— participants shared that the zine-making process gave them permission to question and debate classroom AI policies. One of the most notable shifts after the workshop series was participants’ increased intentionality in how they used AI. Many described changes in their practices, often referencing the conceptual metaphors assigned during the redesign activity. Strategies included moving from passive to reflective AI use [P1], using AI to deepen insight [P2], and engaging AI iteratively rather than with one-off prompts [P6].

During the redesign activity in Workshop 3, participants used AI guided by their policies and metaphors to shape their approaches [P2, P3, P7]. Metaphors included “AI as a reflective or critical design partner” [P1, P7], “AI as a feedback generator” [P1], and most commonly, “AI as a collaborator” [P1, P2, P6]. Participants emphasized using AI more deliberately, describing it as a tool to challenge assumptions and guide thinking. P2 shared: “This time, I used [AI] more intentionally and strategically. I treated GenAI as a collaborative thought partner to question my assumptions, reframe ideas, and push past obvious solutions.”

P6 echoed this: “GenAI served as a thinking partner helping to speed up decision-making without doing the thinking for me.” Rather than outsourcing work, participants collaborated with AI to build and refine their redesigns. P7 suggested institutional AI policies should go beyond punishment to encourage awareness and reflection:

“...students are not aware how they’re using AI, how much they want to use, and how they can use Gen AI [tools]. Having such policies, guidance, and instructions will help students to be aware of future opportunities, future challenges and risks.”

Overall, participants came away with new strategies for using AI more effectively and deliberately in their learning. Involving students in policy-making helped them reimagine how AI could support—not undermine—their educational goals. The workshop series created space to unpack the nuances of AI use and encouraged students to engage more actively with their learning processes.

Continued conversations beyond the workshops and across the university.

The zine, policy recommendations, and core ethos to center student perspectives circulated beyond the workshop context and became a catalyst for continued conversation among both faculty and students, as well as senior administrators at the university. Faculty members across disciplines drew on it as a prompt for their classroom practices. For instance, two HCI faculty guided discussions on their course's AI policies with their students. In addition, a computer science professor decided to co-design their AI policy during the first week of classes in their AI ethics course, and brought the zine as a starting point. Other faculty walked by the zine hanging outside the research team's lab (See Figure 4). The project also seeded new lines of research and collaboration: one participant began working with faculty on a related project. In addition, the two student leaders engaged in informal conversations with peers about AI policies at the university.



Figure 4. The Student-Driven AI Policy Recommendation zine displayed outside of the research team's lab, in the main hallway of the building.

Redesigned interfaces of genAI tools to support HCC629 learning objectives

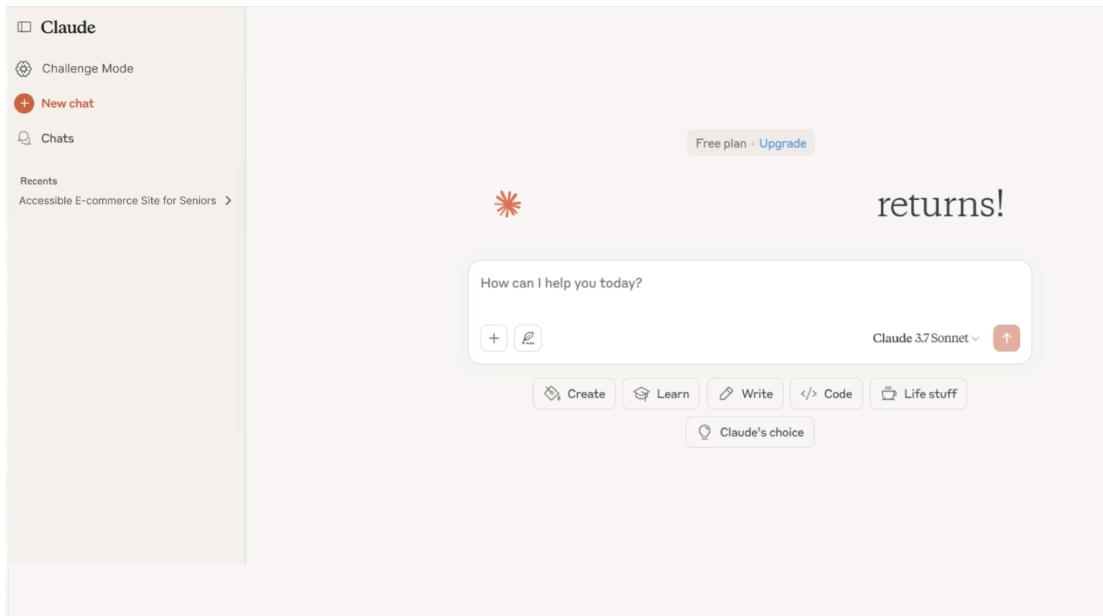
Having described the redesign activity in Workshop 3 section, I now present the resulting interface redesigns produced by participants. As a reminder, the purpose of this redesigned interface activity was to provide an opportunity to participants to put the policies in practice. The redesign activity was modeled after HCC 629 weekly redesign assignments where students are presented with an existing web interface, and are asked to re-design the interface to adhere to design principles. In the context

of this workshop series, participants were asked to redesign a genAI tool of their choosing to better support learning objectives of HCC 629. To support this redesign process, students chose a metaphor to implement in their redesign. As outlined earlier, each redesign was guided by the prompt: “I am going to redesign the interface of [GenAI tool] by using the conceptual model of [Conceptual Model] in order to strengthen [HCC629’s learning objective].” For each participant, I include their guiding sentence, followed by their design rationale as articulated in the redesign interface activity worksheet (see Appendix H). The scores for each participant are summarized in table X.

P1: Claude

P1’s guiding sentence was:

I am going to redesign the interface of Claude by using the conceptual model of AI as a Critic or Provocateur in order to Facilitate feedback on students’ in-progress work in HCC629.



This screenshot shows the same Claude interface. The sidebar now highlights 'Challenge Mode'. In the main area, there's a 'Bias detector' panel with the following text:
LP To design an e-commerce site for seniors -a emphasizes its usability, and accessibility for older adults. Including simple navigation, large text, and voice search, and use some.
Q 1. Why assume that older adults will prefer simple navigation? Research might reveal diverse preferences.
2. Are you considering voices of seniors with disabilities? The design should also accommodate their needs.
3. What if large text leads to information overload? Have you tested this assumption with users?
Bias detector: Focusing on seniors as a homogeneous group risks reinforcing ageist stereotypes.

At the bottom is a text input field 'Reply to Claude...' with a placeholder 'Type your message here...', a button bar with '+', a document icon, and a 'Claude 3.7 Sonnet' dropdown. There's also a 'Share' button and a 'Show desktop' link.

P1 highlighted that Claude was repositioned from a passive support tool to an active critical reviewer. The new “Challenge Mode” feature enables Claude to ask targeted, thought-provoking questions, critique the coherence of arguments, point out potential blind spots, and present alternative perspectives. In addition, a bias detector panel highlights limited or unbalanced reasoning, encouraging students to revisit their assumptions and make more deliberate design decisions. By adopting the

Critic/Provocateur metaphor, this redesign mirrors a peer-critique environment, prompting students to justify their design rationale and engage more deeply with formative feedback.

Faculty appreciated the concept of an active feedback mechanism, particularly the way Claude could challenge students' reasoning in real time. Some evaluators noted that while the idea was strong, the interface itself changed minimally, focusing more on AI behavior than UI structure. Suggestions included making feedback more specific (e.g., pointing to the exact part of the assignment needing revision) and clarifying the scope of input modalities (e.g., text vs. image prompts). Overall, P1's redesign was recognized as conceptually strong, with opportunities to further enhance usability and feedback precision.

P2: Grammarly

P2's guiding sentence was:

I am going to redesign the interface of Grammarly by using the conceptual model of AI as a Mirror in order to bolster students' divergent thinking in HCC629.

Untitled Document Goals 89 Overall Score Echo Panel

I am one of those who say that I am more fantasy-inclined than science fiction. Yet, when I read the excerpt of 'Make It So', I understood that sci-fi was inherently in all the media I have consumed since a young age. From the multitude of gadgets in Doraemon's pockets to the steampunk-themed world of Arcane integrating magic with science, the book guides one to think of the possibilities in the physical world through a study that connects design to science fiction media.

Reflect this

With technology evolving through leaps and bounds, what remains to invent? To inspire? The book aspires to do just that. To look beyond the obvious and think of something that doesn't exist in the world yet. It suggests that fictional technology seen in sci-fi sets audience expectations for what the future might hold. Motorola's example gives us a concrete example of this. The creators utilized Star Trek's popularity and brought something into the world that was not only new but also something that adhered to people's mental model.

This book is filled with such relatable examples. Be it a novice, a design enthusiast, or a fiction connoisseur, the book has something to strike anyone's fancy. I for one, could connect to the example of Georges Méliès' 'A Trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

B I U | H1 H2 | ⌂ | ⌓ ⌔ | ⌕

315 words ▲

Untitled Document Goals 89 Overall Score Echo Panel What am I writing about today?

I am one of those who say that I am more fantasy-inclined than science fiction. Yet, when I read I understood that sci-fi was inherently consumed since a young age. From Doraemon's pockets to the steam integrating magic with science, the possibilities in the physical w connects design to science fiction

With technology evolving through remains to invent? To inspire? Th To look beyond the obvious and exist in the world yet. It suggests in sci-fi sets audience expectation hold. Motorola's example gives u The creators utilized Star Trek's s something into the world that wa something that adhered to people

This book is filled with such relat design enthusiast, or a fiction co something to strike anyone's fan the example of Georges Méliès' 'A trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

Set My Goals
Get tailored writing suggestions based on your goals and audience.

Tonal Lenses How do I want my readers to feel?
Conversational Ease

Style Intent What kind of impact do I want to have?
Inspire new thinking Explain with clarity Spark curiosity
Persuade Boldly Invite Reflection

Audience Who am I writing for?
General Knowledgeable Expert

Show Set My Goals when I start a new document. Reset to defaults Done

1st Person / 3rd Person Past / Present

Contextual Rephrasings Active / Passive

B I U | H1 H2 | ⌂ | ⌓ ⌔ | ⌕

315 words ▲

The screenshot shows the Grammarly interface with the 'Echo Panel' tab selected. At the top, there are tabs for 'Untitled Document', 'Goals' (with a score of 89), and 'Overall Score'. The main area contains a writing sample about science fiction and technology. To the right, the 'Echo Panel' displays three 'Tone Mirrors' (Formal, Empathetic, Conversational) with their respective descriptions. Below this is a section for 'What do I want to do?' with a placeholder 'I want to...'. At the bottom, there are sections for 'Perspective Mirrors' (Active / Passive, 1st Person / 3rd Person, Past / Present) and 'Contextual Rephrasings' (Active / Passive). The bottom of the screen shows standard text editing tools and a word count of 315 words.

P2 redesigned Grammarly to encourage divergent thinking through the metaphor of AI as a Mirror. Instead of showing a single “correct” revision, the Echo Panel displays multiple reflective interpretations of the same sentence, allowing users to view their writing through different tones, perspectives, and intentions. By toggling between active and passive voice or shifting point of view, students can explore how their message transforms under different rhetorical lenses. The interface uses first-person UX writing—such as the prompt “Reflect this”—to create a more personal and reflective interaction, positioning AI as an agent that expands thinking rather than corrects it. This design aims to help students see their own text differently, provoking curiosity, stylistic play, and creative exploration.

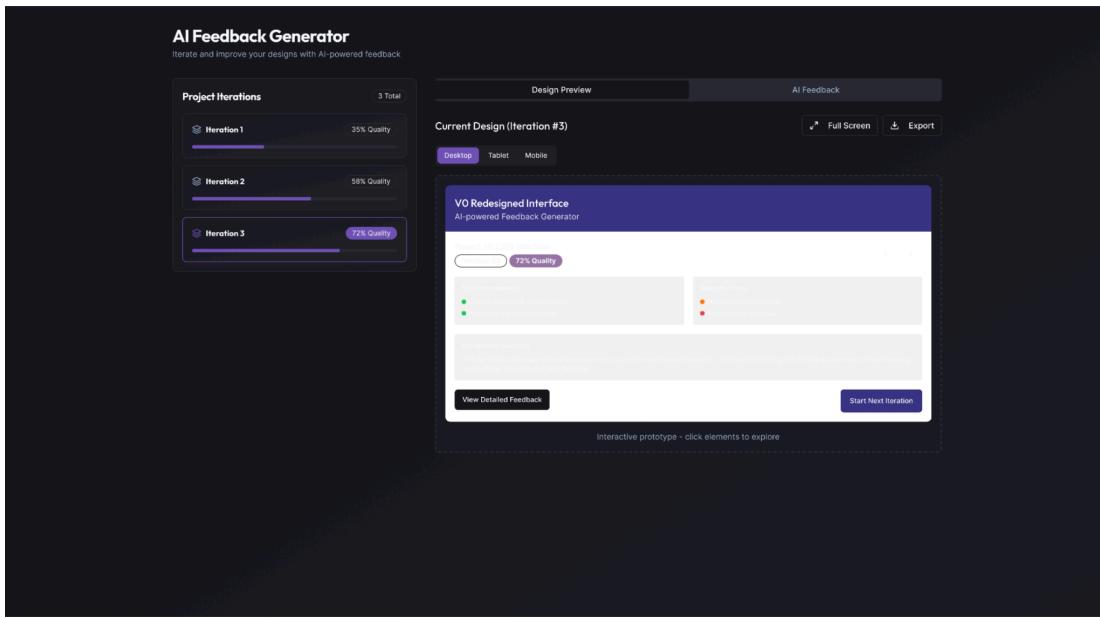
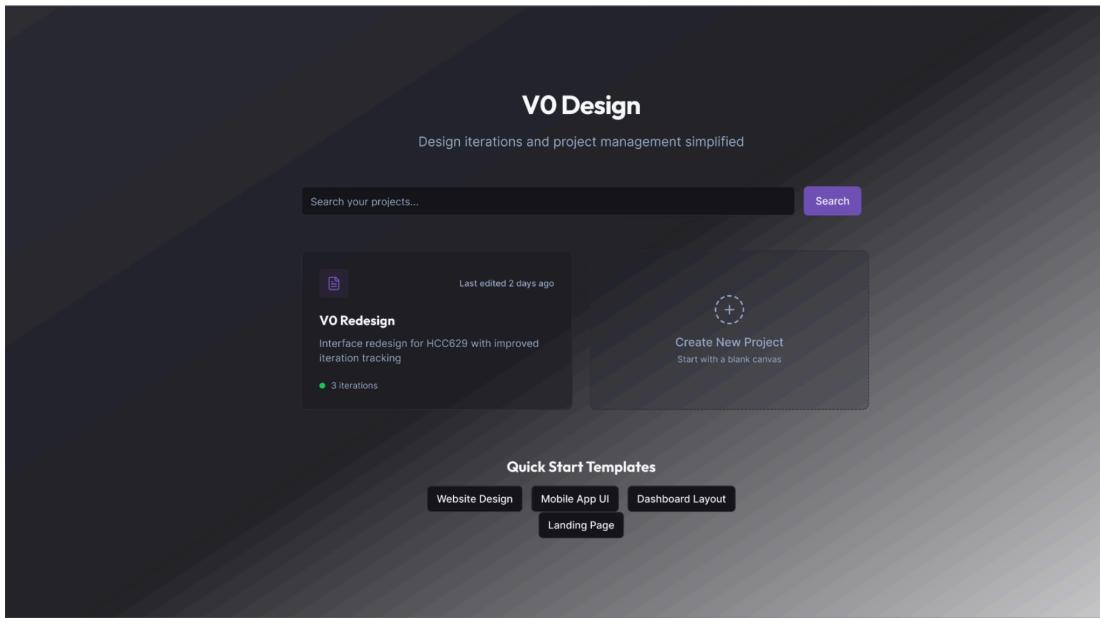
Faculty praised the strong engagement with the Mirror metaphor and the creative use of the Echo Panel to make students active participants in their writing. They noted that the tone and perspective customization had the potential to encourage students’ curiosity. However, several evaluators questioned how clearly the design addressed

divergent thinking as a learning objective, observing that the metaphor was strong but learning objective was less explicit. They also pointed out that the amount of information on the screen could be cognitively demanding and suggested clarifying the differences between tone variations e.g. what does this redesign make more empathic. This redesigned interfaces received the second-highest total score, tied with P8's redesign.

P3: V0

P3's guiding sentence was:

I am going to redesign the interface of V0 by using the conceptual model of AI as Feedback Generator in order to increase iteration(quantity and quality) in HCC629.



In order to encourage users to improve each design version step by step, P3 embedded a clear iteration history displayed with percentage indicators, showing progress over time and makes improvement visible at a glance. A “Start next iteration” button reinforces the sense of a feedback loop, turning the design process into a structured cycle of improvement. P3 emphasized that they used AI to

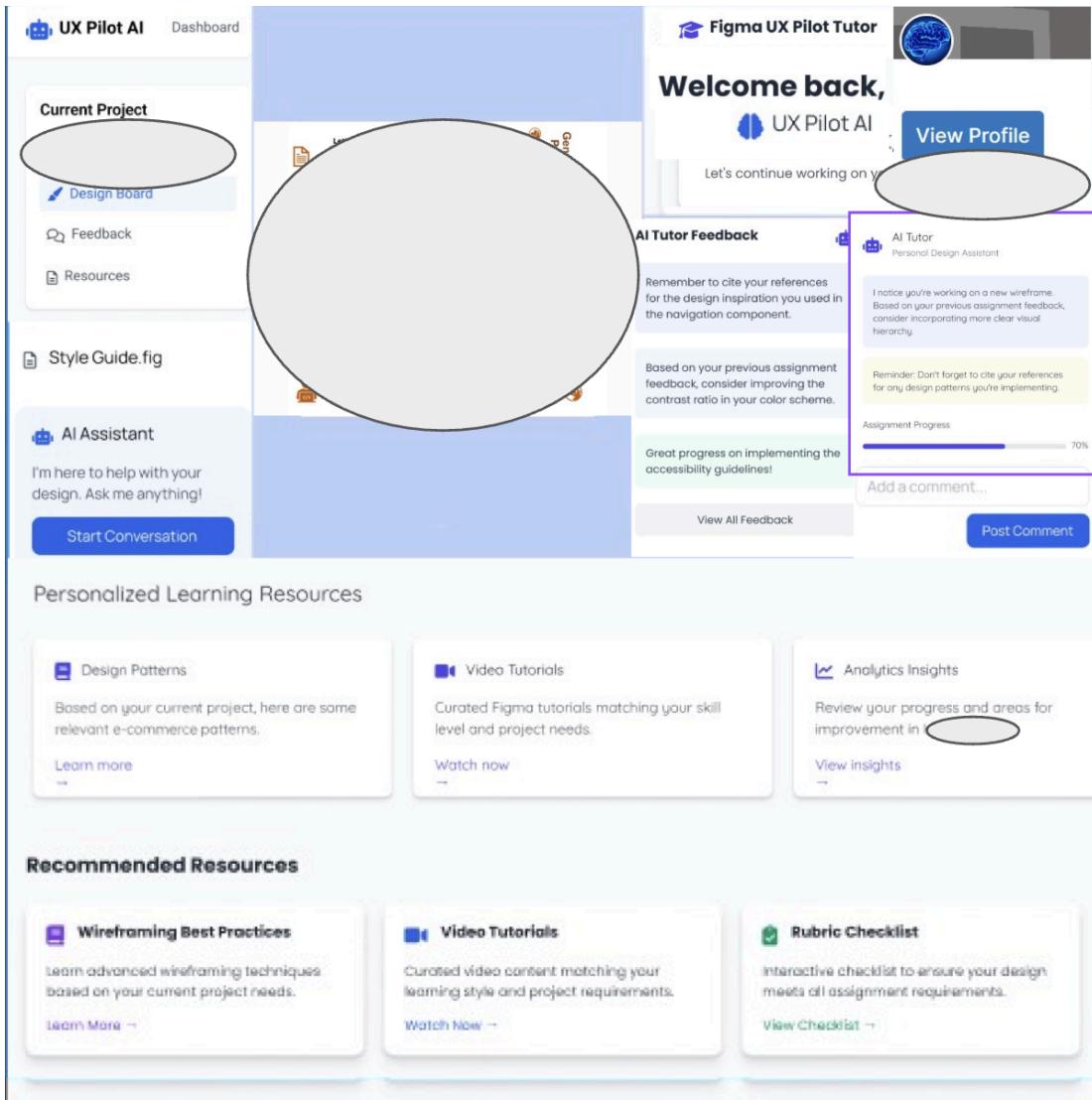
support—not replace—their design decisions, drawing visual inspiration from existing tools but maintaining personal authorship of the interface logic and feedback tone.

Faculty recognized that the redesign aligned conceptually with iterative design practices and appreciated the idea of a structured feedback loop. However, several evaluators found the interface difficult to read and interpret, citing issues such as weak text contrast, small font size, and text-heavy panels. They also found the iteration percentage indicators unclear, with one noting that “it’s not obvious what the numbers mean.” In addition, evaluators expressed uncertainty about how students would interact with the interface in practice, including how files would be uploaded and how feedback would be applied. Some suggested overlaying feedback directly onto the design to improve clarity and reduce cognitive load. Overall, while the learning objective alignment was strong, usability and metaphor integration were identified as key areas for refinement.

P4: UX Pilot Figma plugin

P4’s guiding sentence was:

*I am going to redesign the interface of **UX Pilot Figma plugin** by using the conceptual model of AI as a Personal Tutor in order to facilitate feedback on in-progress work in HCC629.*



The interface enables students to access targeted feedback and suggestions tied to rubric criteria or wireframing best practices, instead of allowing the AI to produce full wireframes or redesign. Students can initiate a conversation with the tutor when stuck, and the feedback adapts to their prior redesign history, saved within Figma. Rather than replacing student work, the system is intended to support deeper engagement with assignment expectations and design rationale. Faculty appreciated the tutoring metaphor and the intention to keep the student as the primary actor in the design process, but they also raised several concerns. Many

found the interface visually overwhelming, describing it as a “busy page” with too much information competing for attention. Several evaluators questioned why there were two separate tutor feedback windows, noting that this could confuse users and fragment the interaction. Some also felt that the tutor appeared directive rather than dialogic, potentially making students more passive rather than encouraging active engagement. Faculty suggested that if feedback is presented in a panel, the corresponding part of the design should be highlighted, which would make the interaction clearer and more actionable.

P5: ChatGPT

P5’s guiding sentence was:

I am going to redesign the interface of ChatGPT by using the conceptual model of AI as a Teammate in order to bolster divergent thinking in HCC629.



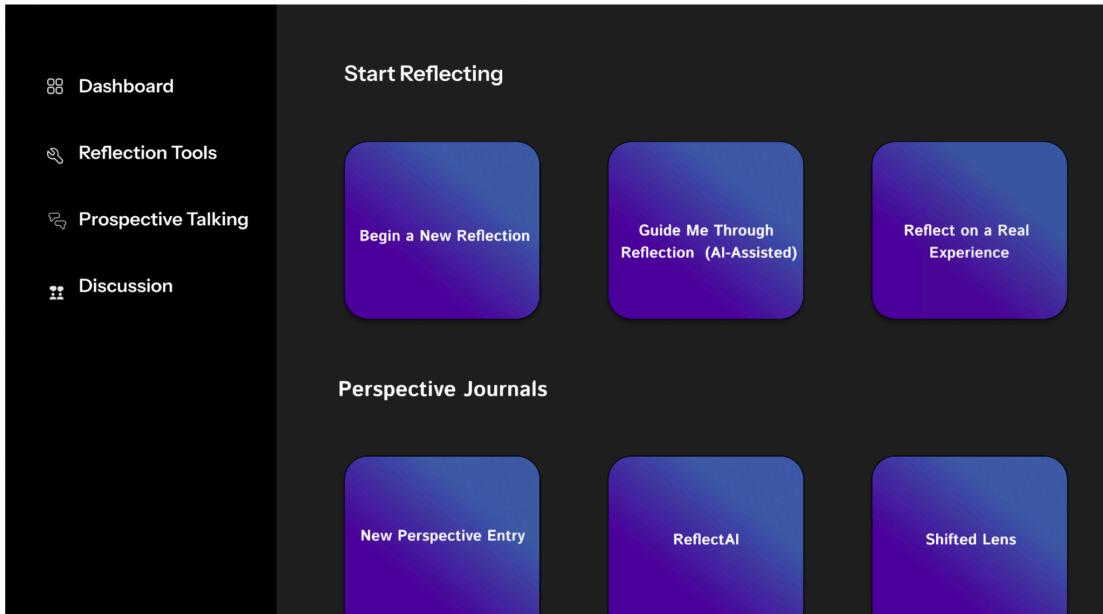
In order to frame ChtGPT as a teammate, P5 embedded five interaction modes: Pass,

Wild Ideas, Devil’s Advocate, Create Image, and Run a Play. Each option represents a different teammate role. Pass allows the AI to take the lead on the idea; Wild Ideas surfaces unconventional alternatives; Devil’s Advocate challenges the user’s perspective; Create Image provides a visual interpretation; and Run a Play triggers a spontaneous, unprompted response. The interface also includes a welcome message—“Creativity is a team sport—ready when you are!”—to set a collaborative tone. By offering multiple perspectives and entry points, the design aims to help students explore problems from different angles and strengthen divergent thinking. Faculty praised the clarity of the interface and recognized the potential of multiple teammate roles to support creative exploration. However, they also noted that several features were unclear in functionality, particularly the navigation flow and how users access this specific interface or switching to other modes. Some evaluators observed that the design resembled an idea generator more than an actual teammate, as users must initiate all actions rather than engage in mutual interaction. The “Run a Play” button was described as confusing and could be renamed to something clearer, such as “Randomize.” P5’s redesigned interface earned the highest total score among all participants.

P6: UIZard

P6’s guiding sentence was:

*I am going to redesign the interface of **UIZard** by using the conceptual model of AI as a Tool in order to improve students’ self-reflection and perspective-taking in HCC629.*



P6 redesigned this interface to focus on how AI enhances users's ability rather than acting autonomously. Features like “ReflectAI” and “New Perspective Entry” act as prompt generators and guides, helping students explore alternative viewpoints while keeping them in control of the process. The interface employs a simplified black-and-white visual scheme with clear content labels to underscore its tool-like function. Rather than producing answers, the AI scaffolds reflection through structured prompts, encouraging learners to shift perspectives, reflect, and engage more deeply with their own thinking.

Faculty appreciated the clarity of the written concept and the emphasis on user agency. However, several evaluators raised questions about how users would navigate to the function and what the output would look like in practice. They noted that some of the labels may be unclear to users unfamiliar with the tool and emphasized the need for visual indicators to distinguish between features. While the concept was seen as promising, one evaluator described the approach to perspective-taking and

self-reflection as “too literal,” suggesting that a more nuanced interaction design could better communicate the intended learning objective.

P7: UX Pilot

P7’s guiding sentence was:

I am going to redesign the interface of UX Pilot by using the conceptual model of AI as a Sensor (Not a Solution) in order to increase iteration (quantity and quality) in HCC629.

The screenshot shows the AI Design Assistant interface. On the left, a window titled "Scanning in progress..." displays a dark-themed UI design for a mobile application. Overlaid on this are several green rectangular highlights and a red circular icon with a "1" indicating a detected issue. On the right, a "Live Analysis" panel is active, showing three types of findings:

- Contrast Issue**: A red button with white text ("Te me led easily") has a background color (#E2E2E2) that fails WCAG contrast requirements.
- Inconsistent Spacing**: Padding between cards varies (16px vs 24px).
- Alignment Error**: Header elements are misaligned by 4px.

Summary metrics at the bottom indicate 3 Critical Issues, 7 Warnings, and an 85% Score.

The screenshot shows the AI Design Inspector interface. On the left, a dark-themed website for "Costmeule" is displayed. Several UI elements are highlighted with callout boxes pointing to specific issues:

- "Low contrast text" is highlighted on a button.
- "Inconsistent spacing" is highlighted on a section of the page.
- "Missing Alt Text" is highlighted on an image element.

 On the right, the "Analysis Results" panel shows the following findings under "Live Scanning":

- Contrast Issues**: Text contrast ratio is below 4.5:1.
- Spacing Inconsistency**: Padding varies between similar elements.
- Missing Alt Text**: 3 Images lack alt descriptions.

 Below this, "Key Metrics" show an Accessibility Score of 86% and 7 Issues Found.

Instead of generating UI screens directly, the interface surfaces design insights and issues such as misaligned elements, inconsistent padding, weak contrast, or unclear calls-to-action. By overlaying these insights on top of the existing design, the AI acts as a sensor that detects and highlights patterns but leaves the decision-making and problem-solving to the user. This encourages students to critically evaluate their

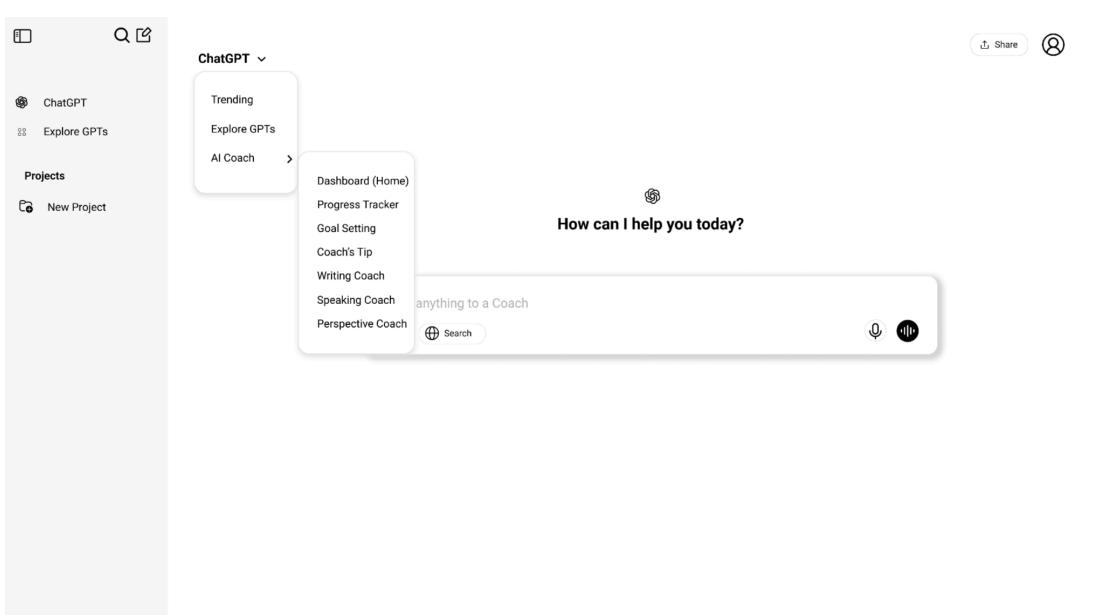
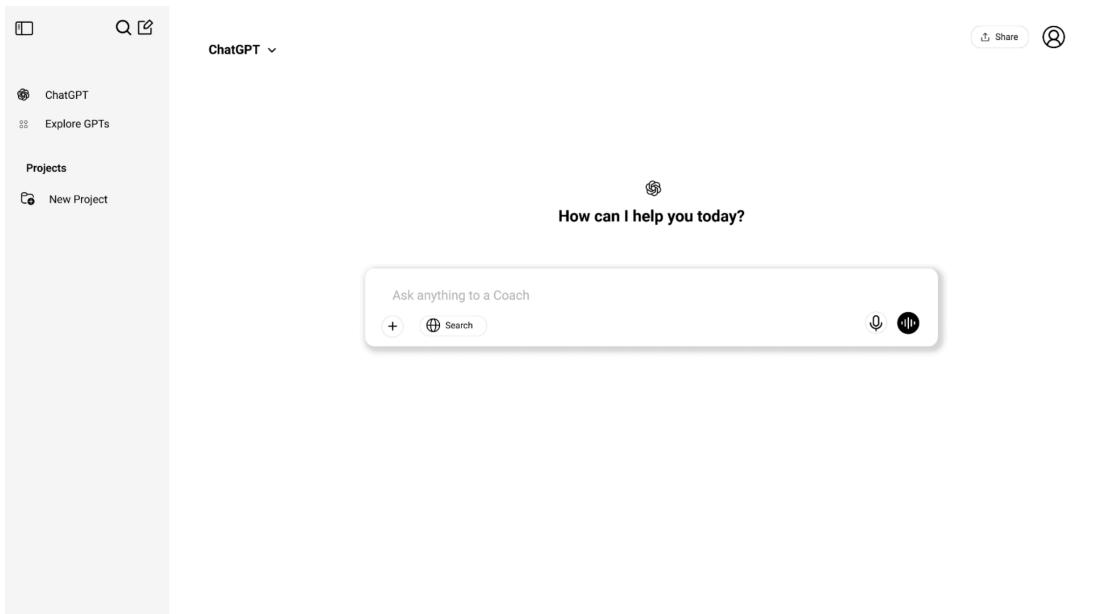
designs and make iterative improvements themselves, aligning with the goal of enhancing iteration quality.

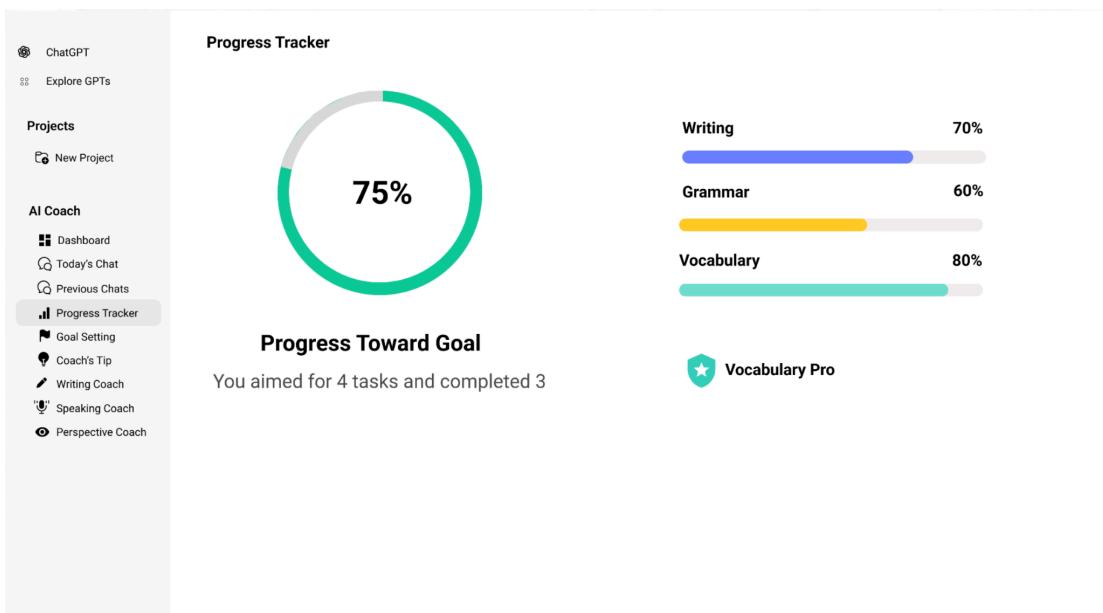
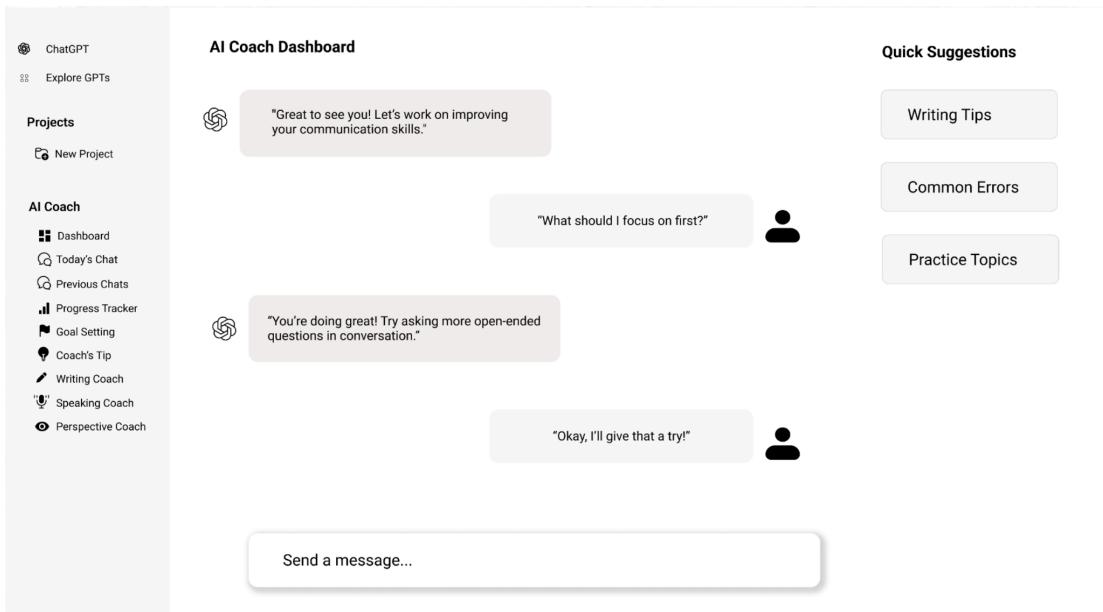
Faculty appreciated the clarity of the sensor metaphor and noted that overlaying feedback directly on the original design was an effective way to make issues visible without automating solutions. However, several evaluators questioned how this redesign would actually increase iteration quantity, even though it clearly supported iteration quality. Some faculty also mentioned that the interface resembled an accessibility checker, making it difficult to understand the unique contribution of the sensor metaphor.

P8: ChatGPT

P8's guiding sentence was:

I am going to redesign the interface of **ChatGPT** by using the conceptual model of **AI as a Coach** in order to **improve students' self-reflection and perspective-taking** in HCC629.





P8 embedded AI as a Coach metaphor by emphasizing guidance, encouragement, and personalized feedback. The left sidebar includes “Goal Setting,” “Coach’s Tip,” and “Progress Tracker” sections, where users can set goals, receive coaching advice, and monitor their growth over time. The main chat area enables real-time conversations with the AI, offering constructive tips and motivational feedback—mirroring how a

coach might guide reflection and improvement. The structured layout aims to build a supportive environment that encourages self-reflection and perspective-taking through sustained interaction.

Faculty praised the progress chart visualization and noted that it could help support self-reflection. However, several evaluators expressed that they wanted to see more visuals that show what the tool is actually coaching students on and found it difficult to understand how the interaction would progress over time. They also questioned the clarity of the perspective coach, indicating that its effectiveness was hard to determine and that the coach metaphor was not fully realized in the current design. Some suggested incorporating incentives or other elements to motivate users to continue engaging with the system. Faculty also found the quantitative feedback in the progress tracker difficult to interpret, pointing to a need for clearer representation. P8's redesigned interface received the second-highest total score, tied with P2's redesign.

Table 4: Five expert evaluators reviewed each workshop participants' redesigned interface of generative AI tool; redesigns adhered to a conceptual model in order to better support HCC629 learning objectives. P2, P5, and P6's redesigned interfaces were rated the highest.

P#	Learning Objective (ave/3)	Conceptual Metaphor (ave/3)	Usability (ave/3)	Overall (ave/3)	Total (ave/12)
1	2.2	2.2	2.0	2.2	8.6
2	2.8	2.4	2.6	2.6	10.4
3	2.2	2.6	1.2	1.8	7.8
4	3.0	2.8	1.4	2.0	9.2
5	3.0	2.6	2.4	2.6	10.6
6	2.4	1.8	1.6	1.8	7.6

7	2.0	2.6	2.6	2.2	9.4
8	2.2	3.0	2.6	2.6	10.4

Chapter 5: Discussion

Chapter Overview

In Chapter 5, I discuss how students' diverse perspectives reveal the instability and complexity of generative AI policies in higher education. I examine how fast-evolving tools, vague institutional guidelines, and uneven enforcement shape students' experiences and concerns, including issues of equity, transparency, access, and future workforce implications. I also highlight how creating safe, student-centered spaces enabled candid dialogue and surfaced nuanced policy gray areas that are often overlooked in top-down approaches. Finally, I discuss how linguistic barriers shape the experiences of English learners and how AI tools can serve as language partners rather than mere writing aids.

Centering Students in a Shifting AI Policy Landscape

Generative AI policies in higher education are unstable—shaped by fast-evolving tools, institutional norms, disciplinary needs, and uneven access (Flaherty, 2025; Ghimire and Edwards, 2024). Policy writing is therefore an ongoing negotiation, not a one-time fix. My goal was to move students—often sidelined—into that process. Even in a small sample, views varied widely: some embraced AI (P1–P8), others

rejected it (P9, P10), and many worried about over-reliance (P1, P2, P5, P6, P7, P8).

Students are not a monolith, and policy methods should reflect that heterogeneity.

Instructors also differ in tool knowledge and rarely make expectations explicit,

leaving students to infer rules from vague language and uneven enforcement.

Meanwhile, tools themselves shift (e.g., Grammarly's generative features), creating new ambiguities.

My findings extend several recent studies exploring student perspectives on generative AI. For example, in Pu et al. shared high school students' concerns about how AI might undermine the student–teacher relationship, particularly if educators unknowingly spread AI-generated misinformation due to limited understanding of the tools themselves (Pu et al., 2025). Similarly, students in our workshops were uneasy about the lack of transparency surrounding faculty use of generative AI. Across both studies, students called for new types of AI literacy tools. In our case, participants asked for features that would allow them to track how much of their work was AI-generated versus authored by them—less for enforcement and more as a reflective tool to understand their own dependency. Others voiced a desire for integrated bias detection tools that could surface potential blind spots or exclusions in AI outputs. Still others were curious about the environmental impact of their AI usage to make informed decisions. Participants also surfaced equity concerns, including the cost of paid AI tools, assumptions about access embedded into assignments, and the risk of penalizing students who opt out. In addition, participants expressed a desire for more formal training for how to use AI systems (which maybe instructors would also benefit from (Fitzpatrick, 2025)). These ideas point toward a broader vision of AI

literacy (Cotter, 2024). Some worried about developing habits that might disadvantage them in future jobs where AI is restricted (e.g., federal government or DoD positions). In both my study and Pu et al., students were already anticipating shifts in labor markets, wondering how reliance on AI might affect their job prospects or skill development. Yet faculty—who are often tasked with updating curricula—may not always be equipped or supported to address these forward-looking concerns in a rapidly evolving tech landscape (McDonald et al., 2025).

My study also complements and complicates prior work on student-centered policy tools like PolicyCraft (Kuo et al., 2025). While PolicyCraft allows students to make policy decisions in response to pre-determined AI use cases, my approach emphasized co-creating those use cases from the bottom up—surfacing real, situated examples that students may have been previously hesitant to share. This deliberative setting enabled students to disclose edge cases and gray areas that may not have been captured through static examples or individual reflection alone, such as hypocritical standards around student vs. faculty AI use transparency.

Safe Spaces as Preconditions for Honest Dialogue

Throughout this project, it became clear that creating safe, student-centered spaces was not simply a methodological preference, but a prerequisite for surfacing the kinds of concerns that most generative AI policies miss. As previous work has noted (Harrington et al., 2019), equitable participation technology design cannot be presumed—it must be actively cultivated through attention to power dynamics, the

same applies to governance of AI systems (Delgado et al., 2023). In this study, I contribute a detailed description of the particulars involved to co-create safe spaces from which to have honest dialogue and form the basis on policy discussions. Several participants noted that the way generative AI was introduced in higher education—often through fear-based rhetoric and strict enforcement policies—had created an environment of confusion and suspicion. Students feared that any question about AI policy might be interpreted as an admission of misconduct or as I distilled: questions are confessions. This chilling effect is not easily addressed through surveys or guidelines alone. Surveys and top-down guidelines, often framed as participatory, did little to alleviate this suspicion—especially when paired with institutional login requirements and opaque reporting structures. Le Dantec and DiSalvo describe publics as emerging through shared concerns and ongoing infrastructuring work—not simply through pre-existing communities (Le Dantec and DiSalvo, 2013). In this study, the workshops and zines created the conditions for such a public to take shape. Participants voiced concerns—about enforcement and institutional opacity—that they often felt unable to express elsewhere. Through co-writing policies and designing zines, students articulated their positions and circulated them in ways that invited debate and reflection. The zines functioned not only as outputs but as boundary objects (Star and Griesemer, 1989)—bridging private reflection and public discourse. As students shared these across campus, they challenged norms, contested assumptions, and began influencing how peers and faculty talked about AI policy. This shift was not immediate, but over time through repeated interaction, students moved from isolated uncertainty to collective articulation. In this way, the workshops

and zines supported not just participation, but the formation of a public actively negotiating AI's role in their learning environments.

Linguistic Barriers and the Role of AI in Academic Writing

Throughout the workshops, and as an English learner myself, I observed how linguistic barriers compound the academic challenges faced by students who study in a language that is not their own. English as Second Language (ESL) and English as Foreign Language (EFL) students navigate additional layers of complexity in their academic work, such as comprehending complex instructions, following lectures, and producing written assignments that meet academic standards as P8 mentioned. These demands often require extra time and cognitive resources, including looking up unfamiliar terminology, interpreting meaning, and integrating new vocabulary into disciplinary discourse. Prior research has long documented these difficulties: ESL students experience increased cognitive load, reduced confidence, and heightened language anxiety when studying in English-medium institutions (Andrade, 2006; Lee, 2009; Sawir, 2005). These factors can also exacerbate imposter syndrome and feelings of marginalization, particularly in high-stakes academic environments. As mentioned in the English learners' policy, participants (P1, P8, P7, and P2) feel frustrated that they are comfortably able to convey their thoughts and opinions clearly while capturing nuances differences between their own language and English. They appreciated that generative AI tools refine their writing, clarify language structures, and enhance their ability to communicate complex ideas, which also reduced anxiety, increased emotional resilience, and fostered self-reflection and creativity among EFL

learners (He et al., 2025). Similarly, studies have found that digital and AI-based writing tools can support vocabulary development, lower language anxiety, and improve overall writing performance (Kessler, 2018; Li and Cummins, 2019; Zhang, 2023). Importantly, participants emphasized not only using AI to correct grammar but also relying on explanations of linguistic refinements to actively develop their language skills over time. This illustrates how AI can serve as a language learning partner, not merely an editing tool.

P1, P8, P7, and P2 expressed difficulties in conveying their thoughts in English, given that English was not their primary language. Given limited vocabulary and grammatical structures, they discussed how their writing in English can be overly simple, and expressed frustration when they were unable to convey their thoughts clearly as desired. AI tools, in this case, were almost necessary to support writing at the academic level. Participants therefore emphasized that policies should explicitly recognize AI's role in helping them understand context and fully express ideas—including emotional nuance—without penalizing them. P2 pointed out that level of fluency should also be factored into their policy.

These findings highlight the urgent need for faculty awareness and explicit institutional policies that account for the linguistic diversity of their student populations. Ambiguous or overly restrictive AI policies risk deepening inequities by constraining those who rely on AI for legitimate language support, thereby limiting both academic engagement and emotional well-being. Instead of defaulting to punitive detection-based approaches, universities should adopt more equitable and transparent assessment practices that differentiate between AI use for language

scaffolding and AI use for content generation. As He et al. (2025) and others suggest, thoughtfully integrating AI into language learning environments can enhance learners' agency, confidence, and participation.

Chapter 6: Limitations and Future Work

Chapter Overview

In the final chapter, I outline the limitations of this study, including its small sample size and single-institution focus, and reflect on how these factors shape the scope and transferability of the findings. I then discuss future research directions, including adapting and evaluating the student-driven AI policy model across different disciplines and contexts. I also consider how participatory methods like workshops and zines can continue to foster trust, shared responsibility, and evolving “living” policies in educational settings. I conclude with a summary of this study’s key contributions and its broader implications for participatory AI policy-making in higher education.

Limitations

This study is limited by its small sample size and single-institution focus, drawing on students from one graduate-level design course at a minority-serving public university. While this limits generalizability, the small group and peer-led format were essential to building trust and enabling the kind of candid disclosure around AI use that larger or faculty-led studies often preclude. Still, we recognize that power dynamics may have shaped participants’ responses, even in this participatory setting as students were not used to such discussions. With more time, some students may have proposed policies that veered even farther from faculty rhetoric. Additionally, our findings reflect the perspectives of design-oriented students with some prior

exposure to generative AI—future work should explore how this model translates to other disciplines, institutions, and levels of AI familiarity.

Implications and Future Work

The workshops and zines described in this study were not designed to be one-off activities, nor should they be seen as the only route to inclusive AI policy-making in design classrooms. But they do offer a replicable model—one that centers student experience, producing tangible outcomes that circulate beyond the workshop walls. Faculty and administrators often lack structured channels to hear from students about generative AI use, and students rarely feel empowered to raise concerns, ask for clarification, or challenge policies they perceive as unfair. Our findings suggest that participatory processes like policy co-creation and zine-making not only foster intentionality in how students use AI, but also support a broader culture of trust and shared responsibility.

We encourage departments, instructors, and teaching centers to consider adapting this model to their local contexts. This might mean running workshops at the beginning of the semester, inviting students to share scenarios that feel unclear or troubling in a (truly) anonymized format, or offering small-group, student-driven deliberation sessions that culminate in class-wide agreements. Rather than relying on static documents or ambiguous university-wide guidelines, instructors could co-develop “living” policies that evolve alongside classroom needs and technological change. Finally, Dr. Yasmine Kotturi is currently implementing the student-driven policies generated from this project in the current offering of the same course taught last year.

This deployment provides an opportunity to evaluate the downstream effects of student-authored policies in a live classroom setting. Future research will assess how these policies are received, whether they prompt behavior change or discussion, and how they might evolve through repeated use. We are especially interested in the continued ricochet effects of this work: how zines continue to be shared among peers, policies circulated to faculty, and public discussions seeded in workshops might continue to shape institutional norms.

Conclusion

Although generative AI is rapidly reshaping education, most classroom policies are written without students and prioritize penalization for misuse, yielding confusion and fear-based use. In this study, I set out to explore two research questions: 1) “*How do students perceive AI policies and AI integration in a design course?*” 2) “*How might we support students to author student-driven AI policies in a design classroom?*” In other words, what scaffolding is required to assist students to write effective policies in a design classroom?” and 3) “*When given the opportunity and support to self-author AI policies, what are student-driven AI policy recommendations in a design classroom?*” In order to investigate these research questions, I conducted a three-part workshop series, and post-workshop interviews. I recruited 10 participants who took HCC629 in Fall 2024.

Findings revealed that students are not a monolith—their engagement with AI is diverse, shaped by differing levels of digital literacy and linguistic background. While some students embraced AI as a tool for creativity, learning, and self-expression,

others were cautious about overreliance or inequities created by unequal access to paid tools. Across participants, there was a shared desire for transparency around faculty AI use, explicit guidance on ethical boundaries, and recognition of AI's role in supporting English learners. The study also illuminated how safe, participatory spaces sans faculty, enabled students to openly discuss policy concerns that would otherwise remain unspoken in traditional classroom settings.

The workshops and zines in this study demonstrate a replicable model for inclusive AI policy-making—one that centers student experience and produces tangible outcomes extending beyond the classroom. Faculty and administrators rarely have structured channels to hear from students about AI use, and students often feel disempowered to voice concerns. Participatory approaches such as policy co-creation and zine-making offer a pathway toward greater trust, transparency, and intentionality in AI use. Departments and teaching centers might adapt this model locally, running workshops early in the semester to co-develop “living” policies that evolve with technological and pedagogical change.

Future work includes evaluating the deployment of student-authored AI policies currently being implemented in the next offering of the same course. This follow-up will examine how policies influence classroom practices, dialogue, and institutional norms over time. Longitudinal studies could also explore how participatory methods like these might scale across disciplines and contribute to broader frameworks for equitable, student-centered AI governance in higher education.

I conclude this thesis by presenting these findings and implications as a call to reimagine AI policy-making in higher education—not as a top-down compliance task, but as a collaborative, student-centered practice that values diversity, reflection, and shared responsibility in shaping the future of learning.

Appendices

Appendix A: Pre-Workshop Survey

Thank you for your interest in our research study. We are looking for students to participate in series of three interactive workshops exploring UMBC's current policy on Generative AI and how it impacts design courses in Human-Centered-Computing.

Section 1: AI Usage Questions

1. Name (First name and Last name)
2. How often do you use genAI tools?

Never 1 2 3 4 5 All the time (i.e. daily)

3. Which Generative AI tools have you used?

- ChatGPT
- Claude
- Gemini
- GitHub Co-Pilot
- Midjourney/DALL-E/Stable Diffusion
- Other:

4. Describe the last time you used a genAI tool.
5. Describe how you've used genAI in your courses.
6. What concerns do you have when using genAI in your courses?
7. These were the following Guidelines on Use of Generative AI in HCC629 last semester:

"The use of language models such as ChatGPT and other AI-based text, image, or video generation tools for assignments will be strictly regulated. Your work must be your own. AI generation tools will be required for the HCC in the News assignment. Outside of that, AI tools can be lightly used; however, they must be limited to a small part of any solution and must not contribute to the substance of your answer.

If you use any AI-based text, image, or video generation tools, you must:

Cite the tool used in the body text as well as in a list of references at the end. Omission of the inline citation may result in a reduced grade for the assignment.

Describe exactly how you used it and explain how the work is your own.

Include a log of all queries used in your submission AND include the original generation AND your edits. This applies to all text, videos and images.

Use of these tools must be declared in your submission. Not disclosing the use is a violation of UMBC's Academic Integrity Policy."

Do you agree with this policy for using Generative AI?

- Yes
- No
- I dont know
- Other

8. How would you improve the current AI policy above?
9. At UMBC, how do existing AI policies **support** your learning?
10. At UMBC, how do existing AI policies **hinder** your learning?

Section 2: Demographic Questions

11. What is your age range?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 or older
- Prefer not to say

12. Which gender do you identify with?

- Man
- Woman
- Non-binary

- Genderqueer
- Prefer not to say
- Other

13. How would you rate your English proficiency?

- Basic
- Conversational
- Fluent Native Speaker
- Prefer not to say
- Other

14. What's your current academic status?

- Undergraduate Student
- Master's Student
- PhD Student
- Other:

15. What year are you in your degree program?

- First year
- Second year
- Third year
- Fourth year
- Other

16. What is your degree in?

- Information Systems
- Hunan-Centered Computing
- Software Engineering
- Other

17. What grade did you receive in HCC 629? (Note: a lower grade does NOT lower your chances of being accepted to the workshop.)

- A
- A-
- B+
- B
- B-
- C+
- C
- C-
- D or lower
- Prefer not to say

18. Occupation (Select All that apply)

- Student
- Employed (full-time)
- Employed (part-time)
- Self-employed

Section 3: Just a few more questions!

19. This is a student-driven workshop where we want to have frank conversations about genAI use in a safe space.

Are you willing and able to share your honest experiences with using genAI?

- Yes, I am ready to share my experiences using gen AI in classes.
- No, I am not ready...
- Maybe, but I need to learn more...
- Other:

20. Please note: all audio transcripts will be de-identified by students overseeing research project before sharing with Dr. Kotturi to ensure confidentiality.

- Yes
- No
- Other:

21. The dates for each workshop are listed below. Please check off each workshop date you are able to attend - you must be able to attend all workshops to be considered. Workshops will take place on campus in ENG 333 - you must attend in person. Lunch will be provided.

- Friday, March 28th 12:00 - 3:00 PM
- Friday, April 11th 12:00 - 3:00 PM
- Friday, April 25th 12:00-3:00 PM

22. This study requires participation in all three workshops and completion of homework assignments. Participants will be paid after completion of all three workshops via cash (minimum \$180, maximum \$220)

Do you accept these terms and commit to attending all three workshops?

- Yes
- No

23. We will be providing lunch and refreshments during the workshops. Please let us know if you have any food/drink preference or any dietary restrictions.

Appendix B: Workshop 1 Feedback Survey

Thank you for your participation on workshop #1. This survey should take <5 minutes. PLEASE NOTE: **This survey is anonymous.**

1. How would you rate your overall experience in Workshop #1?

Very poor 1 2 3 4 5 Excellent

2. What are two things you liked about workshop 1?
3. If you could change one or two things about the workshop, what would they be?
4. What shocking/surprising insights did you get from other participants in workshop?
5. How effective was Activity 1's Think Pair Share discussion in reflecting on your experiences with GenAI?

Not effective 1 2 3 4 5 Excellent

6. How comfortable did you feel sharing your opinions during the discussion?

Not at all 1 2 3 4 5 Excellent

7. Were there any challenges you came across while answering the questions for activity #3? If so, please describe.

- Yes
- Maybe
- No
- Other:

8. Were the provided policy topics relevant to your experiences with generative AI?

- Yes
- Maybe
- No
- Other:

9. Do you feel prepared and motivated to continue participating in the next workshops?

10. Do you have any comments/questions?

Appendix C: Workshop 2 Feedback Survey

Thank you for your participation, and we would like to have your feedback on the workshop #2. This survey should take <5 mins. PLEASE NOTE: **This survey is anonymous.**

1. How would you rate your overall experience in Workshop #2?

Very poor 1 2 3 4 5 Excellent

2. What are two things you liked about today's workshop?

3. If you could change one or two things about the workshop, what would they be?

4. Was this your first time making a zine?

- Yes
- No

5. How would you rate the zine making activity?

Very poor 1 2 3 4 5 Excellent

6. What tools did you use to put together your zine pages?

7. Did you encounter any difficulties incorporating your policy into the zine while ensuring it was both informative in text and visually engaging?

8. Any other comments/concerns?

Appendix D: Post-Workshop Survey

Thank you for your participants in this policy workshop series! Please answer the questions below in order to receive payment.

Section 1: Redesign activity questions

1. What did you like about the redesign activity?

2. What did you dislike about the redesign activity?

Section 2: Overall workshop questions/reflection

1. Describe how student perspectives on genAI policy **are currently** taken into account UMBC.
2. Describe how you think student perspectives on genAI policy **should be** taken into account UMBC.
3. What did you learn from participating in this workshop series? consider what you learned from the workshop leaders (Kaoru + Manisha), guest presenters (Dr. Martin and Prof Sayo), and/or your peers!
4. I worry that I am not adequately prepared for the job market when it comes to knowing how to use genAI tools for design/creative tasks.

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. I feel confident in my knowledge of using genAI for design/creative tasks.

Strongly Disagree 1 2 3 4 5 Strongly Agree

6. I have much to learn when using genAI for design/creative tasks.

Strongly Disagree 1 2 3 4 5 Strongly Agree

Section 3: Just a few more questions...

7. After participating in these workshops, how did your views on AI policy change?
8. After participating in these workshops, how will you change how you use genAI tools in your coursework?
9. What are two things you liked about the workshops?
10. What are two things you disliked about the workshops?
11. If your interface is selected, do you want to stay involved in the research project?

- Yes
- No
- Maybe

- Others:

12. Last question! Did you achieve your goals for participating in this workshop series?

Appendix E: Interview Protocol

Classrooms Introduction (5 minutes)

1. **Welcome the participant** and thank them for their time and feedback.
2. **Restate the purpose** of the interview:
 - o “We’re gathering your insights to better understand student perspectives on AI policy and its role in design education. Your feedback will help refine AI policies for future classrooms and clarify any questions we have from what you’ve shared during the workshop.”
3. **Confirm consent to record** (if applicable) and remind them that their responses will remain confidential.

For Those who participated in the workshop series:

Section 1: Reflection on Workshop Experience (10 – 15 minutes)

4. **Understanding key takeaways:**
 - o “You mentioned during the workshop that _<insert participant's comment from workshop/worksheet>_, can you explain this further?”
5. **Future use of AI in coursework:**
 - o “How do you anticipate your approach to using AI in coursework will stay the same or change after participating in this workshop series?”
6. **Perceptions of AI policy:**
 - o “How would you explain AI policy to your peers or classmates?”
 - o “What aspects of AI policy do you think are the most important for students to understand?”

Section 2: Evaluating AI’s Role in a Design Classroom (10 – 15 minutes)

7. **Challenges of AI in design education + job market**
 - o how did you use AI in HCC629?
 - What do you see as the core challenges of using AI in a design classroom like HCC 629?
 - o How should HCC629 adequately prepare you for the job market when it comes to using genAI tools for design/creative tasks?
 - How comfortable do you feel discussing your GenAI use with your

peers? Does this differ with your instructors?

Section 3: Feedback on the Workshop Series (10 – 15 minutes)

9. Workshop impact and effectiveness:

- o “What did you learn from participating in this workshop series? ”

10. Suggestions for improvement:

- o “If we were to run this workshop again, what would you recommend we do differently?”

Section 4: Evolved thinking since the workshops took place?

1. Since the workshops, what follow up conversations or thoughts have you had regarding AI policy in the classroom?
2. Since the workshops, what follow up conversations or thoughts have you had regarding students' roles in articulating said policy?

For those who did not participate in the workshop:

GOAL: What are the concerns why they did not participate in the workshop

1. To the extent that you're comfortable sharing, why did you not participate in the workshop?
 - a. If DONT use AI, and didn't want to participate in the workshop:
 - i. What are your concerns with AI?
 - ii. What steps are you taking to have your voice heard with respect to your refusal of AI in the classroom (e.g. are you sharing concerns with faculty, policy makers, etc?)
 - iii. How can we better recruit students who don't want to use AI in the next round of policy workshops (to make sure that dissenting opinions are represented)?
 - b. If they DO use AI, but didn't want to participate:
 - i. Why?
 - c. Review all policies and gather feedback (walkthrough of the zine)
2. If they wanted to participate, but couldn't because of scheduling issue:
 - a. Here are all of the policies that students created (walk thru one by one)
 - i. TODO- insert all policies
 - ii. What do you like, what do you wish might change?
 - b. Here are all of the zine pages
 - i. What do you like, what do you wish might change?

Closing (5 minutes)

12. What questions do you have for me/us?

Thank the participant again for their time and valuable insights.

14. **Confirm incentive delivery** and remind them of the additional **\$20 compensation for their participation** in this interview.

Appendix F: Think-Pair-Share Activity

THINK (without any discussion w/ others) - 15 min:

- How did you use genAI in HCC629 (or other design courses)?
- What are two creative or unexpected ways you've used GenAI that helped you learn?
- What are two times GenAI use hindered your learning or creativity?
- What are two ways you used GenAI for a class assignment that felt “gray area” (neither fully allowed nor disallowed)?
- What's one way you used GenAI for a class assignment that was not allowed? Why?

PAIR (w/ one person at your table) - 15 min:

- How are your experiences similar or different?
- When do you feel like AI use supports you vs. holds you back?
- What support do you wish you had when using AI tools for classwork?

Appendix G: Policy Draft Activity

POLICY TOPIC #1:

- What is the challenge or question behind this topic?
- What learning outcome, specific scenario, and/or course activity is this most relevant to?
- Draft your policy statement - use clear verbs + conditions.

POLICY TOPIC #2:

- What is the challenge or question behind this topic?
- What learning outcome, specific scenario, and/or course activity is this most relevant to?
- Draft your policy statement - use clear verbs + conditions.

POLICY TOPIC #3:

- What is the challenge or question behind this topic?
- What learning outcome, specific scenario, and/or course activity is this most relevant to?
- Draft your policy statement - use clear verbs + conditions.

POLICY TOPIC #4:

- What is the challenge or question behind this topic?
- What learning outcome, specific scenario, and/or course activity is this most relevant to?
- Draft your policy statement - use clear verbs + conditions.

POLICY TOPIC #5:

- What is the challenge or question behind this topic?
- What learning outcome, specific scenario, and/or course activity is this most relevant to?
- Draft your policy statement - use clear verbs + conditions.

Appendix H: Redesign Interface Activity Worksheet:

Your name: _____

- I have completed my interface redesign and redesign description
 - Figma file is shared and editable
 - Worksheet is shared and editable
- I have completed the redesign activity reflection
- I have completed the post-workshop survey

Your learning objective:

- Bolster students' divergent thinking
- Facilitate feedback on students' in-progress work
- Increase students' iteration (quantity and quality)
- Improve students' self-reflection and perspective-taking

Your AI tool:

- Claude
- ChatGPT
- Grammarly
- UIZard
- UX Pilot Figma Plugin
- V0

Your metaphor:

- AI as a Tool: AI extends your abilities—like a calculator or spell-checker. It doesn't act on its own, but helps you do something faster or better.
- AI as a Co-Agent: AI is a creative partner that shares control. It actively helps you make decisions, generate ideas, and adapt to changes in your process.
- AI as a Coach: AI observes your work and offers tips or encouragement to help you improve. Like a sports coach, it gives advice—but doesn't do the work for you.
- AI as a Personal Tutor: AI delivers structured lessons and adapts based on your strengths and weaknesses. It's like having a private teacher guiding your progress.
- AI as a Feedback Generator: AI helps you reflect by giving critique, suggestions, or alternatives—like a peer or TA during a studio critique.
- AI as a Sensor (Not a Solution): AI detects patterns, surfaces insights, or shares data—but doesn't tell you what to do. It supports your judgment without replacing it.
- AI as a Critic or Provocateur: AI challenges your assumptions, asks hard questions, or shows unexpected results to spark new thinking.
- AI as a Teammate: AI works with you on shared tasks—like a group project partner. It needs to be responsive, predictable, and aware of your goals.
- AI as a Mirror: AI reflects your inputs, behaviors, or biases back to you—helping you notice things about your work or thinking that you might miss.
- AI as Infrastructure: AI shapes what's possible behind the scenes. It may not be visible in the interface, but it influences who can access what, and how.

Complete this sentence based on your assigned selections above:

I am going to redesign the interface of [Selected AI tool] by using the conceptual model of [Selected conceptual model] in order to [Selected learning objective] in HCC629.

Insert link to your Figma prototype:

Screenshot(s) of your redesign here:

Description of how you have implemented your assigned metaphor in your redesign (75 words minimum):

Description of how your redesign supports your assigned learning objective (75 words minimum):

Redesign activity reflection:

- 1) Compared to last semester's HCC629, how did you use genAI similarly to complete this redesign activity?
- 2) Compared to last semester's HCC629, how did you use genAI differently to complete this redesign activity?
- 3) Which AI policies were easiest to adhere to, and why?
- 4) Which AI policies were the hardest to adhere to, and why?
- 5) Based on these difficulties, how would you revise these policies? Please include revised policies in your response.

Appendix I: A Student-Driven AI Policy Recommendations Zine Pages

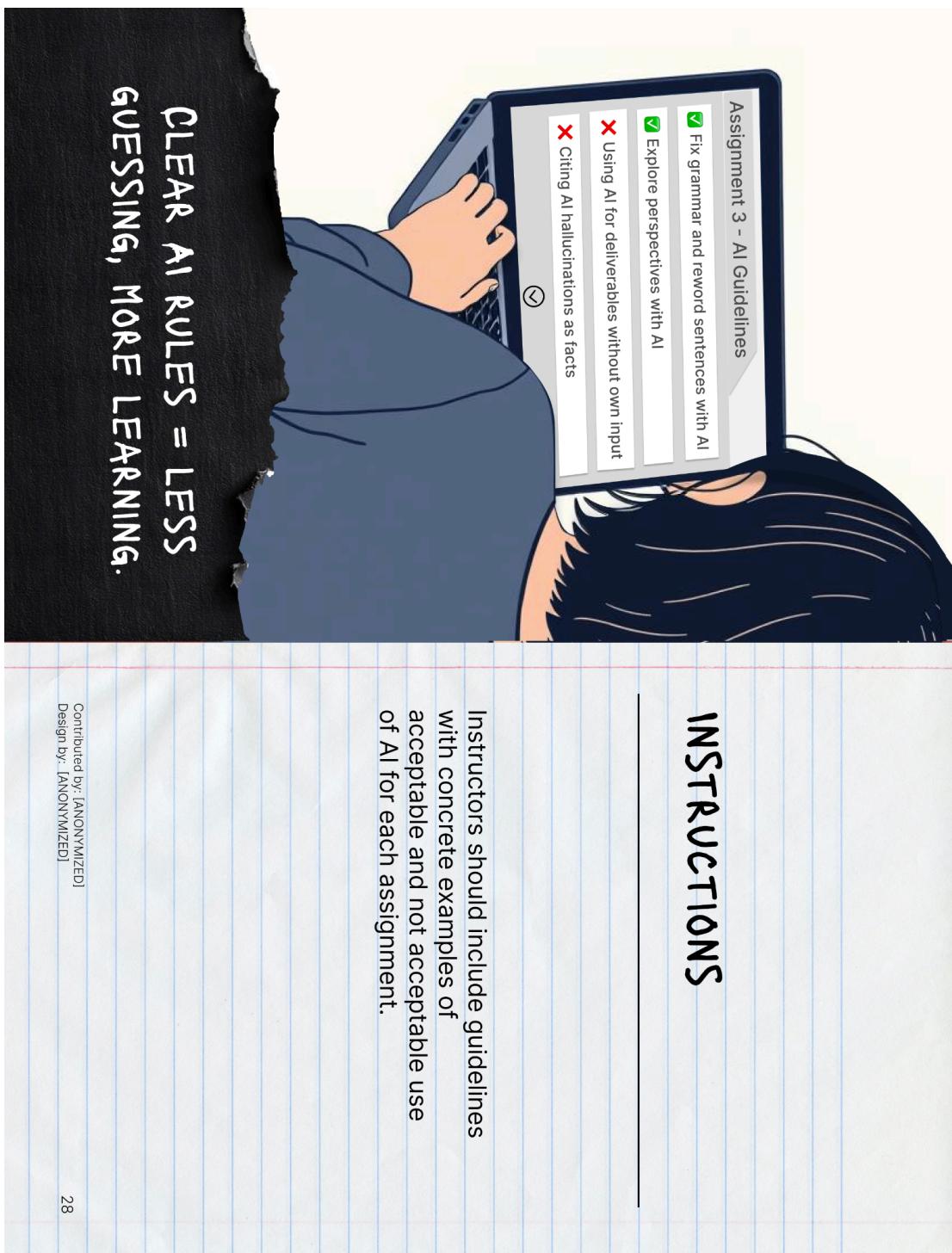


Fig. 1. Instructions

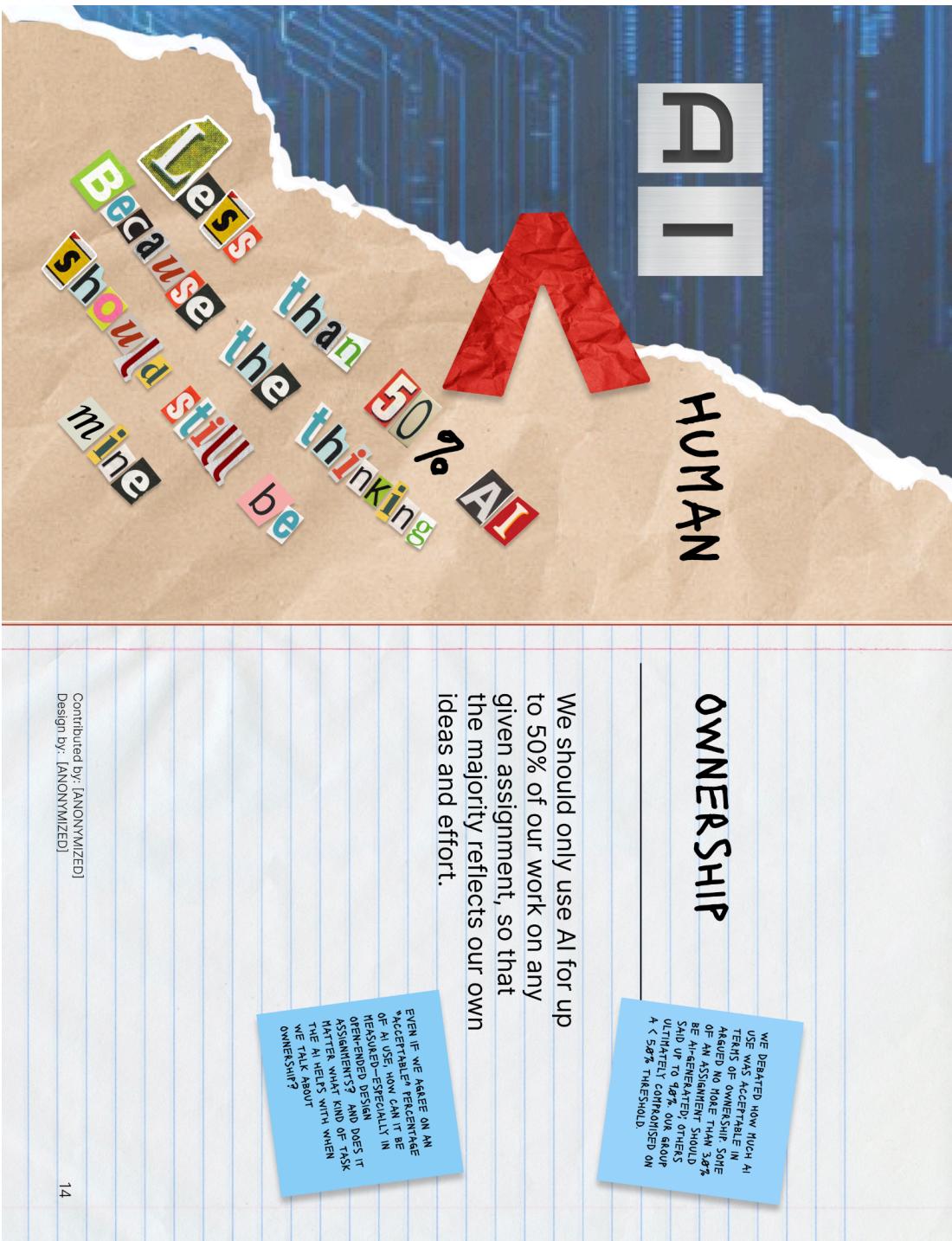


Fig. 2. Ownership

Contributed by: [ANONYMIZED]
Design by: [ANONYMIZED]

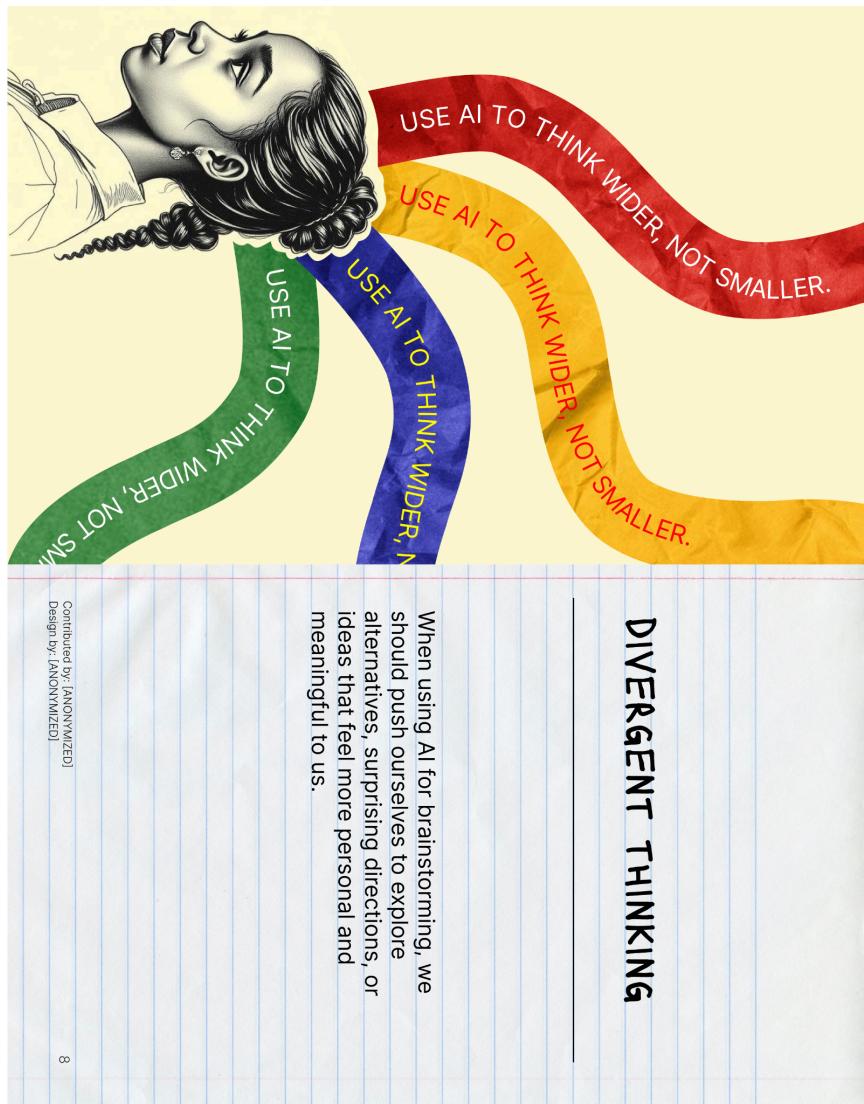
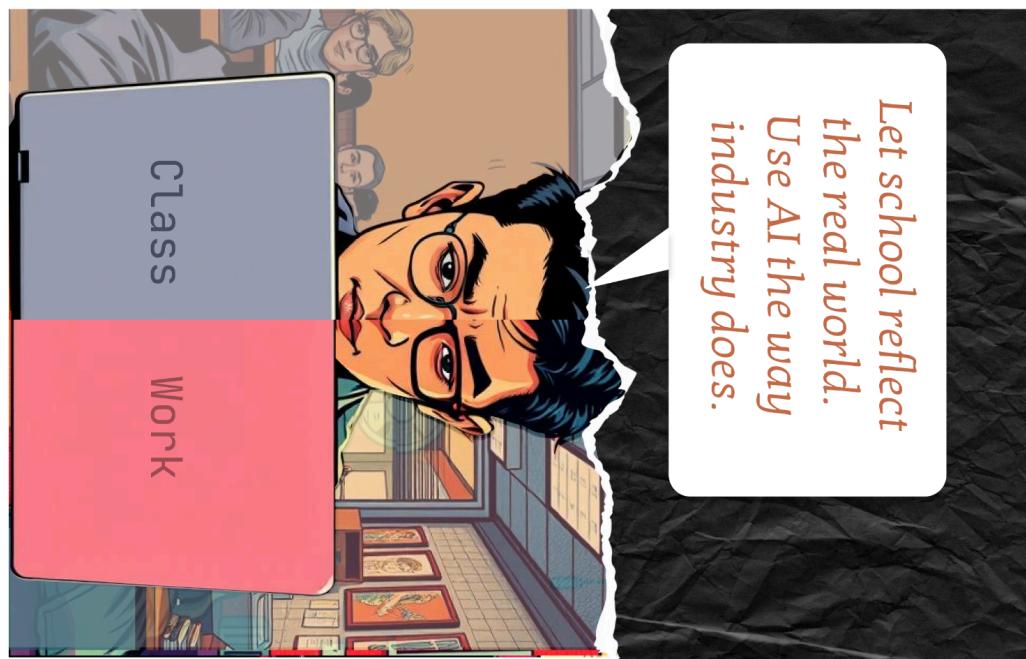


Fig. 3. Divergent Thinking



JOB SKILLS

We should be provided opportunities to use AI in ways that reflect how AI is used in real workplaces through coursework. Instructors should stay updated on how AI is used (and regulated) in industry.

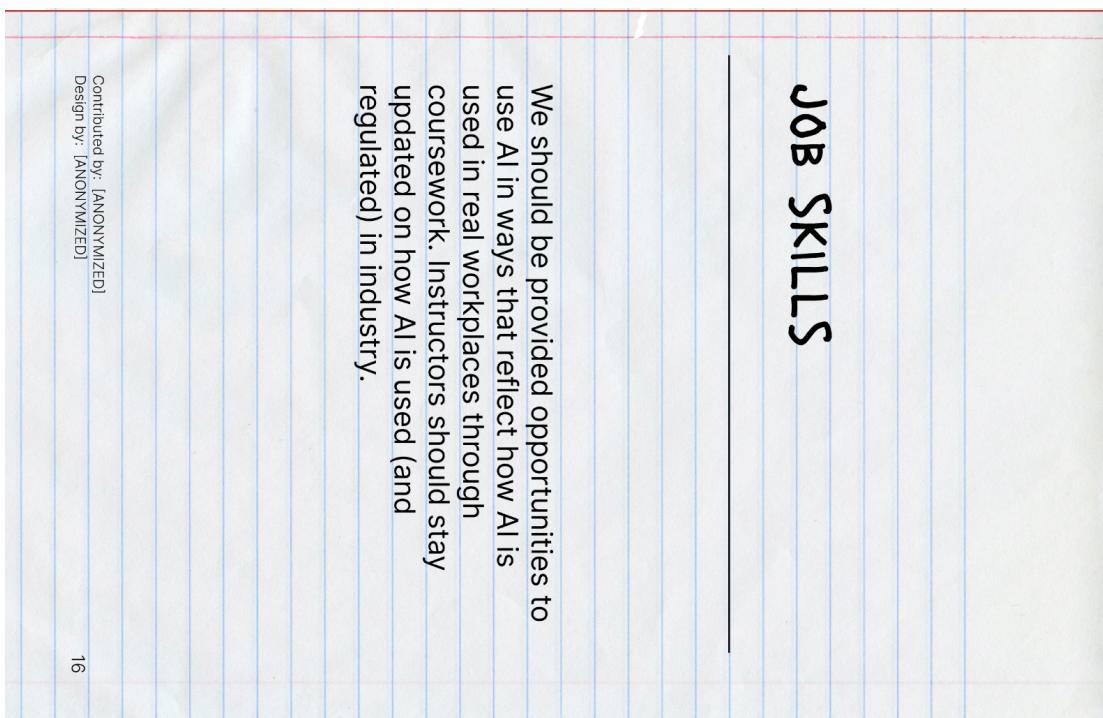


Fig. 4. Job Skills

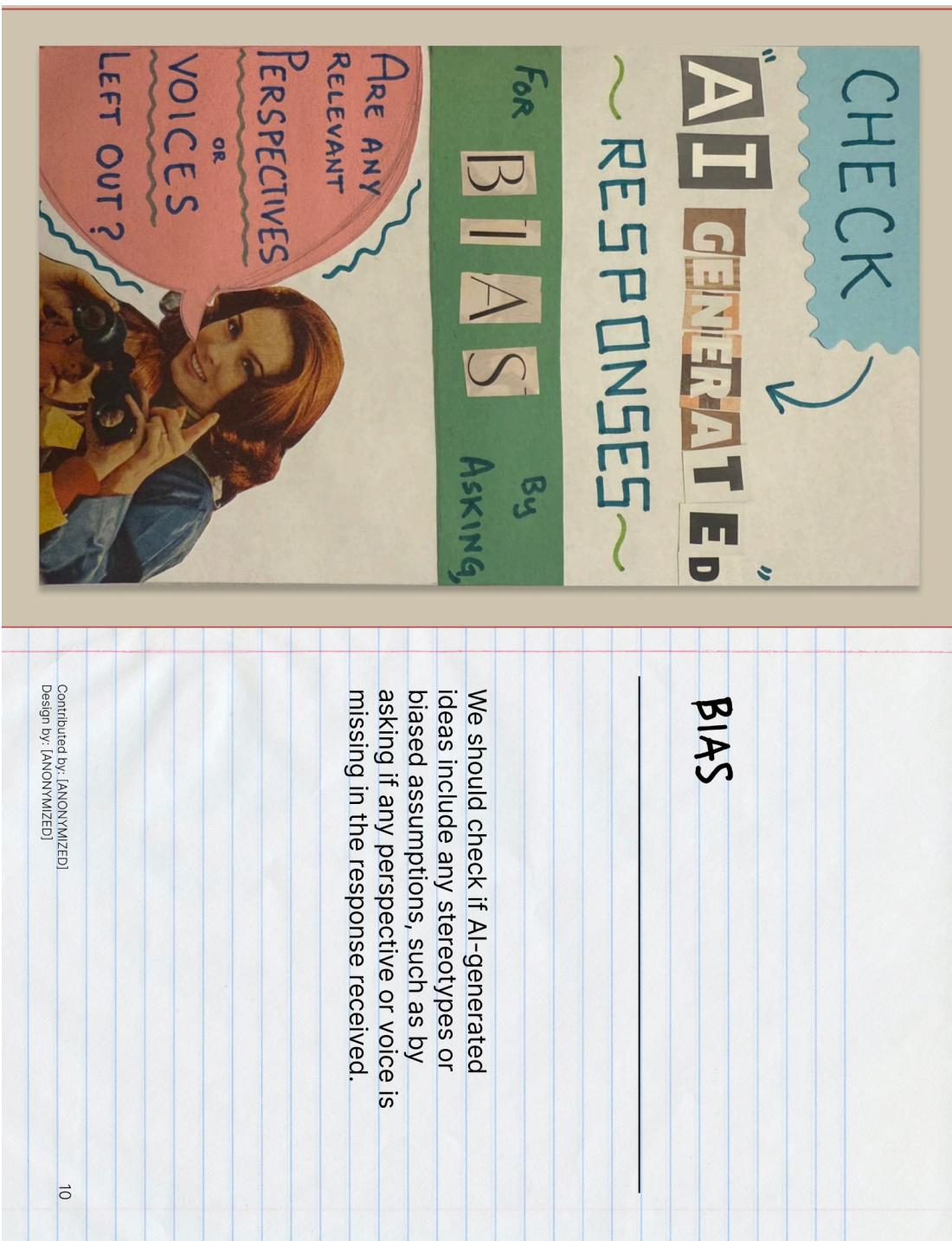


Fig. 5. Bias

AI ISN'T A

HOST
WRITER.



GIVE CREDIT WHERE
IT'S DUE.

CITING AI USE

It is important for us to credit AI where credit is due. However, sharing chat logs, as many instructors currently require, is tedious and ineffective for both students and graders. Instead, we should share a 2-3 sentence summary for each submission describing how and why we used AI.

Contributed by: [ANONYMIZED]
Design by: [ANONYMIZED]

Fig. 6. Citing Use (or Not)

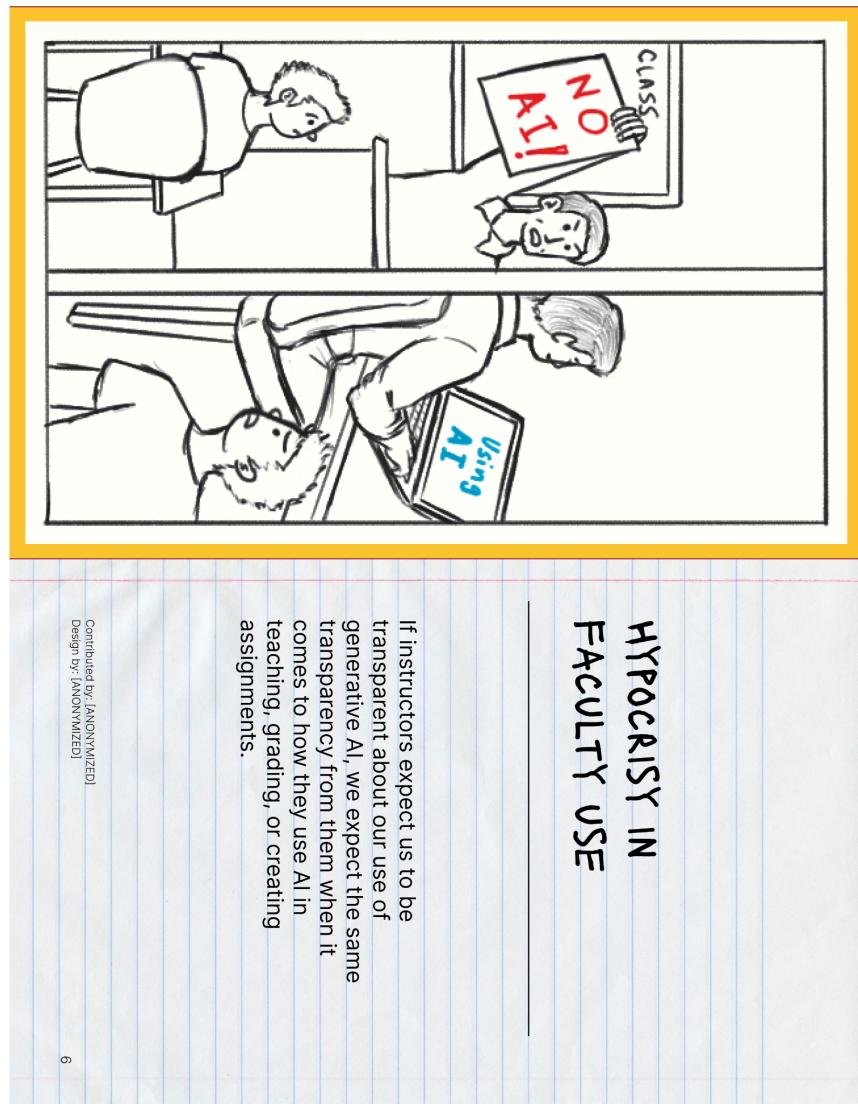


Fig. 7. Hypocrisy in Faculty Use

I feel the full

depth of meaning

of my thoughts,

but I can't always

convey these

feelings into

express them in

writing.

ENGLISH LEARNERS

For those of us who are English learners, we should be encouraged to use AI to support our English proficiency in writing by asking for refinement of our text. Also, we should ask for an explanation of the refinements made to further our language proficiency.

Contributed by: [ANONYMIZED]
Design by: [ANONYMIZED]

Fig. 8. English Learners

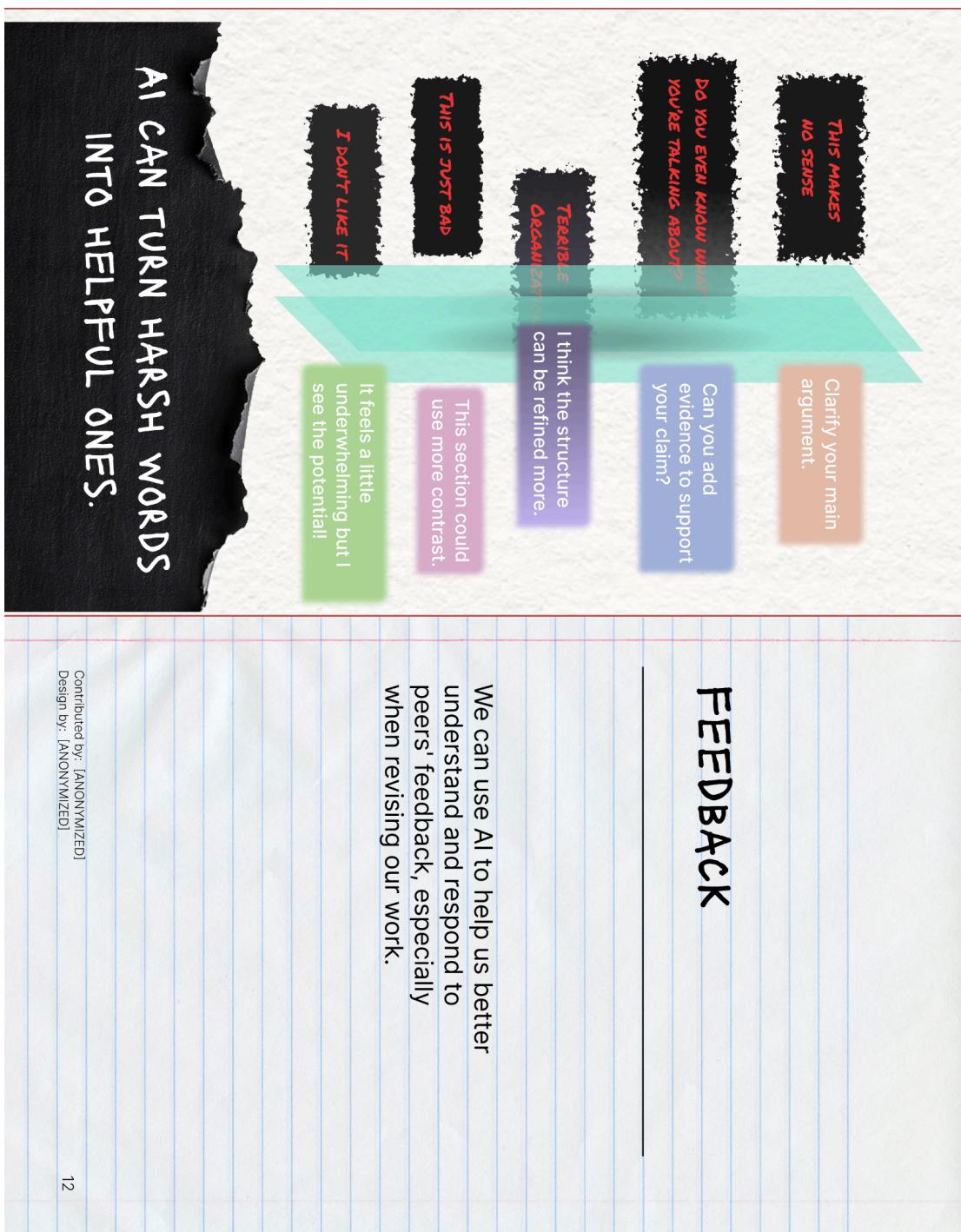


Fig. 9. Feedback

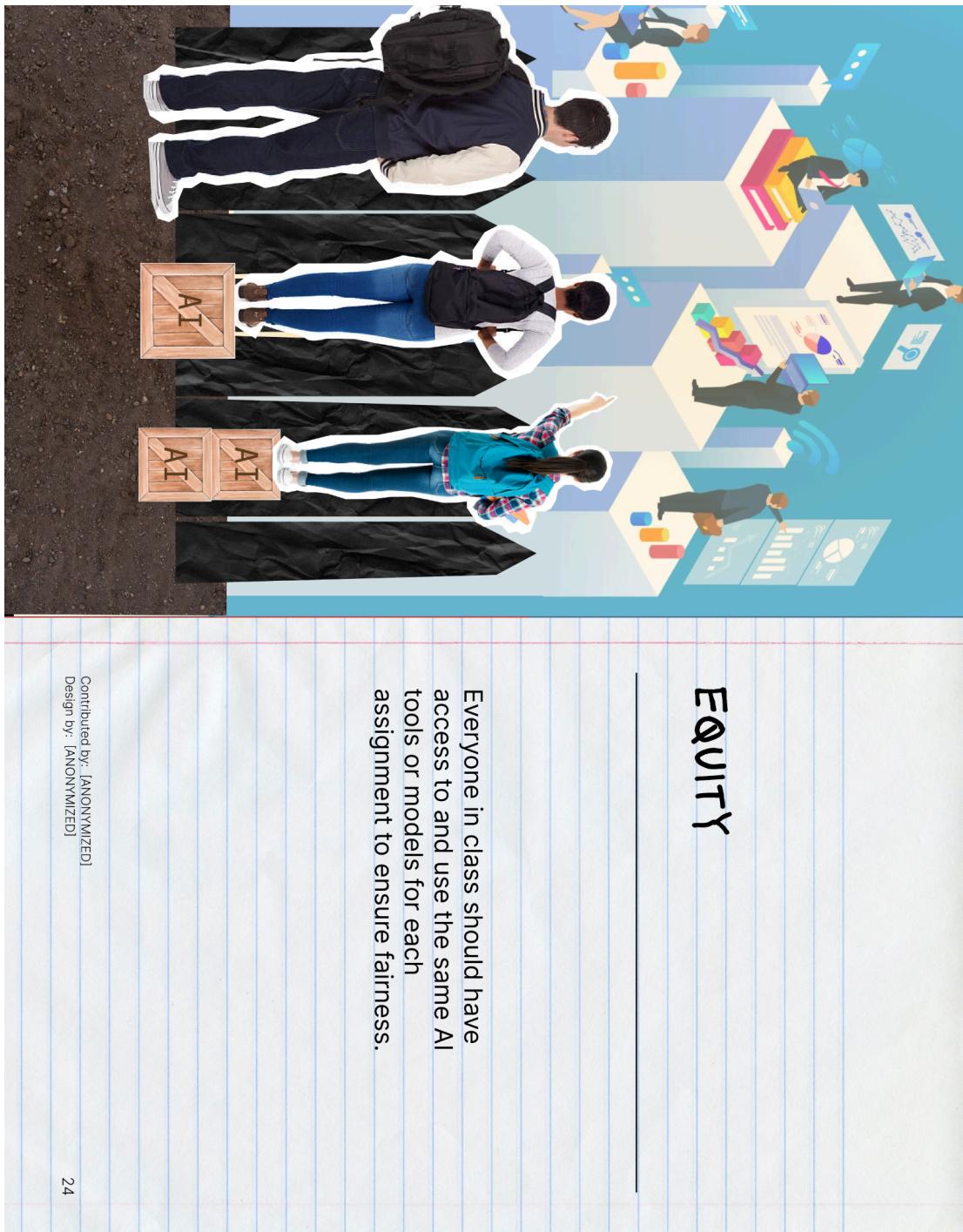


Fig.10. Equity

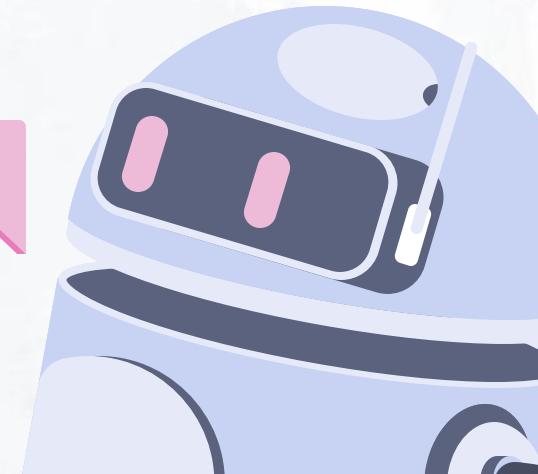
Contributed by: [ANONYMIZED]
Design by: [ANONYMIZED]

Student Perspectives on Generative AI Policy

Workshop #1: Frank Conversations



Scan here to complete the
pre-workshop survey if you
haven't already



Workshop series overview

Workshop #1: Policy drafting through frank conversations (today!)

Workshop #2: Policy in print through zine making (April 11)

Workshop #3: Policy in action through interface re-design (April 25)

The Big Picture

UMBC “policy” on AI use in the classroom is driven by faculty and administrators...

...however students are
the “lead” users

Von Hippel, Eric. "Lead users: a source of novel product concepts." *Management science* 32.7 (1986): 791-805.

What are some key challenges with current approaches to generating AI policy in the classroom?

- Overlook student perspectives
- Overly vague
- Fear mongering w/ academic integrity
- Lacks connection to job market
- Methodological issues
- Others?

Measures we are taking to ensure your privacy:

- Student-driven workshop series
- Audio recordings - no identifiable data will be shared with anyone besides Kaoru + Manisha i.e. PI (Dr. Kotturi) and any other faculty will not have access
- Google docs - no identifiable data will be shared with anyone besides Kaoru + Manisha i.e. PI (Dr. Kotturi) and any other faculty will not have access
- Photographs for presentation materials, devoid of anything you share in workshops

What's in this for you?

- Compensation! \$180-220, paid in cash after successful completion of ALL workshops
- Have your voice reflected in UMBC AI policy
- Publish a student-authored zine
- Be a part of research project
- Add to online portfolio
- Build your network of like-minded and passionate peers at UMBC

Student Workshop Leaders and Co-Hosts



Manisha

- Currently in last semester of Information Systems B.S + Accelerated M.S in Human Centered Computing
- Took HCC629 Fall '24
- Recently subscribed to ChatGPT Plus



Kaoru

- MS in HCC
- Took HCC629 Fall '23
- Recently learned how to do quantitative analysis on ChatGPT

Intros and ice breaker

- Your name
- Degree program and year
- What is the strangest response you have received from GenAI? What prompted this response?

Questions about the
research study?

Workshop #1 Agenda

- 12:30 - 1:40** → Activity #1: Frank Discussion on AI Experiences
- 1:40 - 1:50** → Break
- 2:00 - 2:30** → Activity #2: 15 min AI Committee Presentation by Dr. Lara Martin (CSEE), 15 min Q&A
- 2:30 - 3:00** → Activity #3: Reflection and Policy Topics Exploration

Activity #1 (12:30-1:40): Candid conversations

- 12:30-12:45** **Think:** how you use AI in HCC 629, how this hindered/helped learning, when uses were in “gray area” + not allowed
- 12:45-1:10p** **Pair:** similarities/differences between partners
- 1:10p-1:40p** **Share:** your partner’s responses with group

Activity #1 worksheet: <https://tinyurl.com/mwrbfh36>

Activity #2: The UMBC AI Committee

Dr. Lara Martin

Charge (Goals)

- 1. Defining AI:** Develop a comprehensive definition of artificial intelligence tailored to the educational landscape
- 2. Exploring AI Applications:** Investigate and catalog potential uses of AI technologies in classroom instruction, curriculum development, assessment methodologies, and student support services.
- 3. Identifying Unauthorized Uses:** Identify and analyze potential unauthorized or unethical applications of AI in the classroom, such as invasions of privacy, biased decision-making algorithms, or other misuse of AI technologies.
- 4. Policy Recommendations:** Formulate evidence-based policy recommendations to guide the ethical and responsible integration of AI technologies in teaching and learning environments
- 5. Reporting:** Providing regular updates on the progress of the inquiry, soliciting feedback from faculty members, and presenting finalized policy recommendations

Timeline

July 2024 - Committee was formed

September 2024 - Committee first met, Literature review

November 2024 - Faculty Survey finished

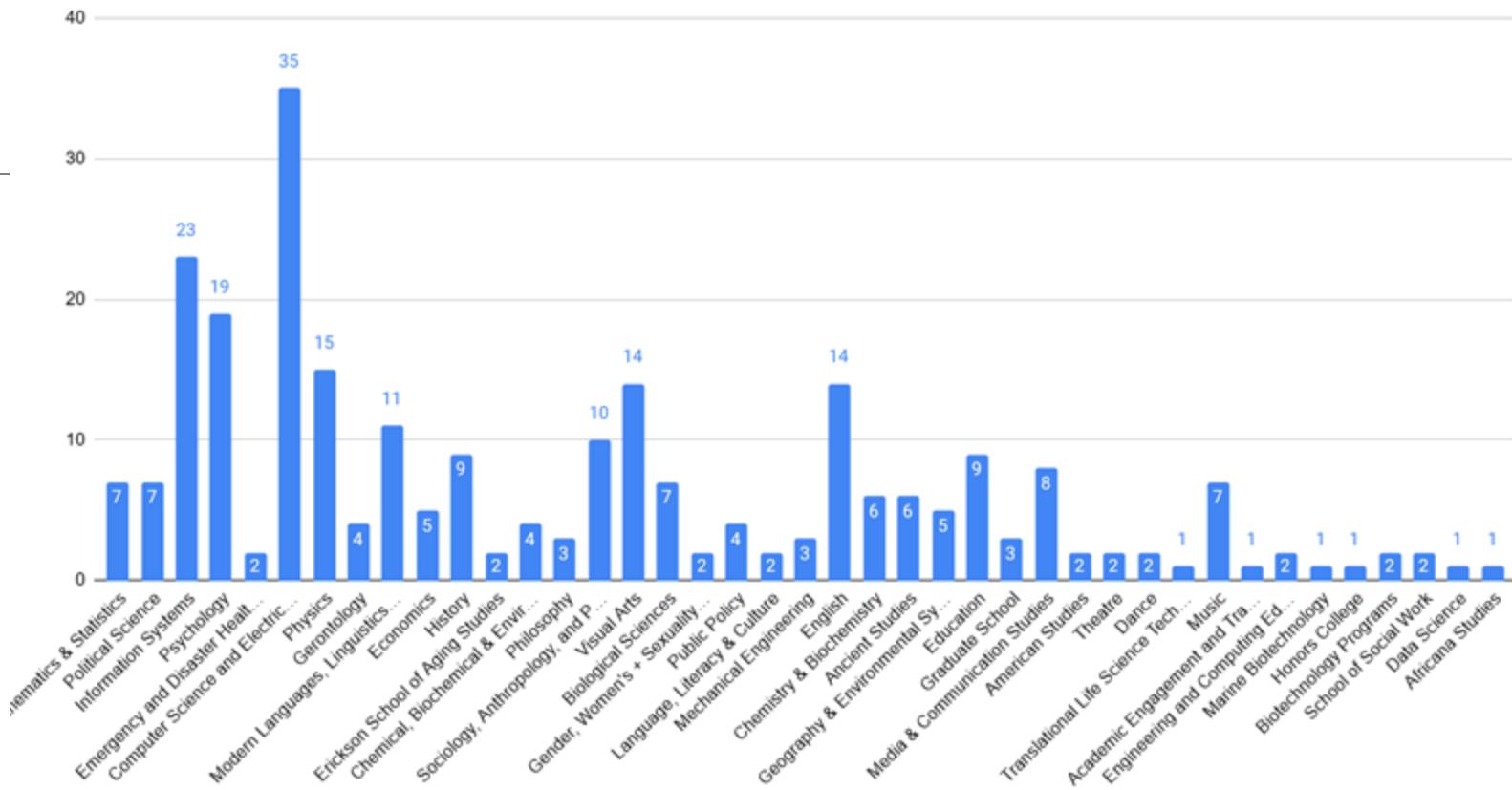
March 2025 - Student Survey finished, Faculty and student listening sessions

Planning to respond to charge and wrap up soon

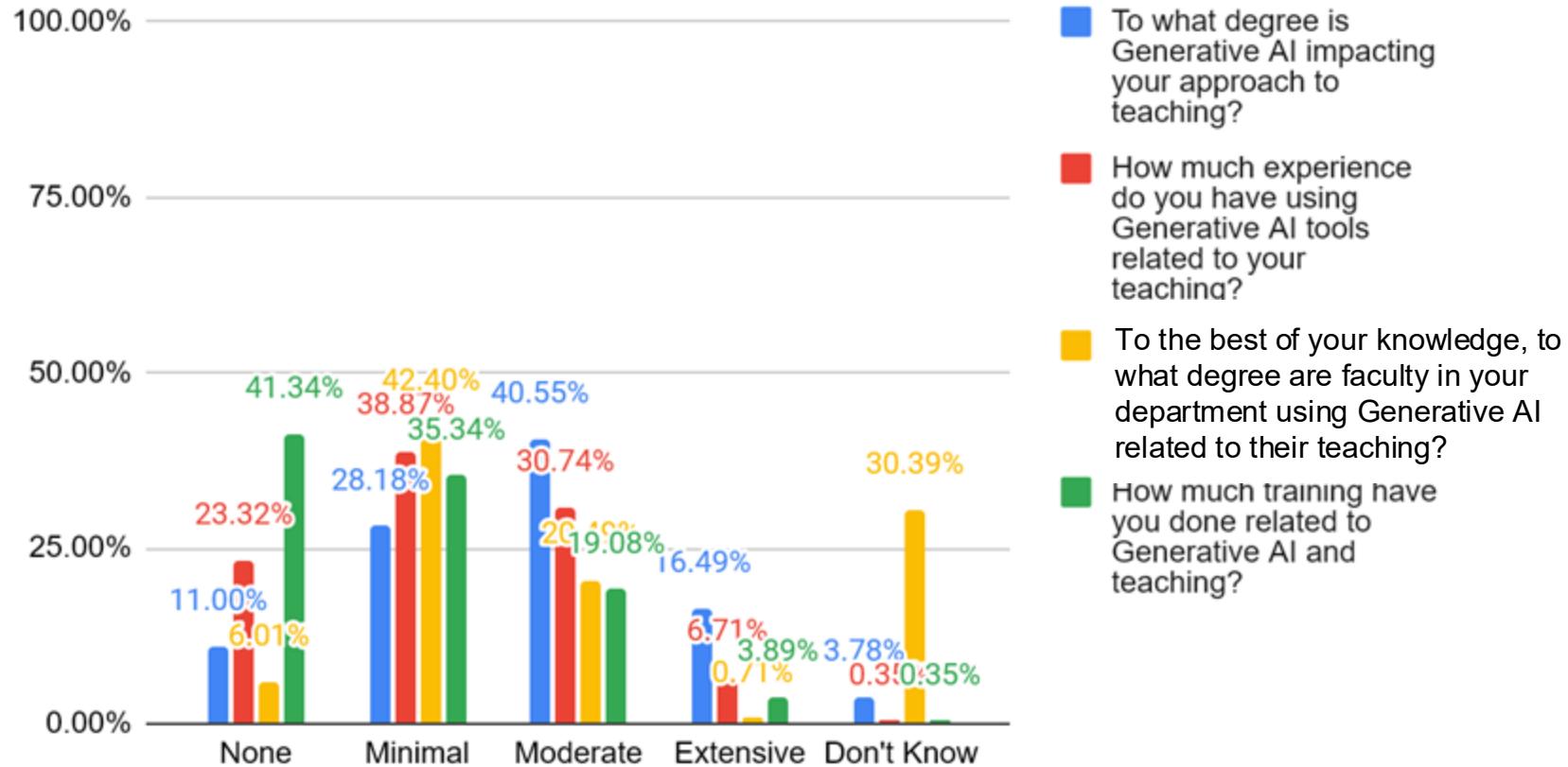
Faculty Survey Results

N= 284, 11/6/2024 - 11/18/2024

Respondents' department

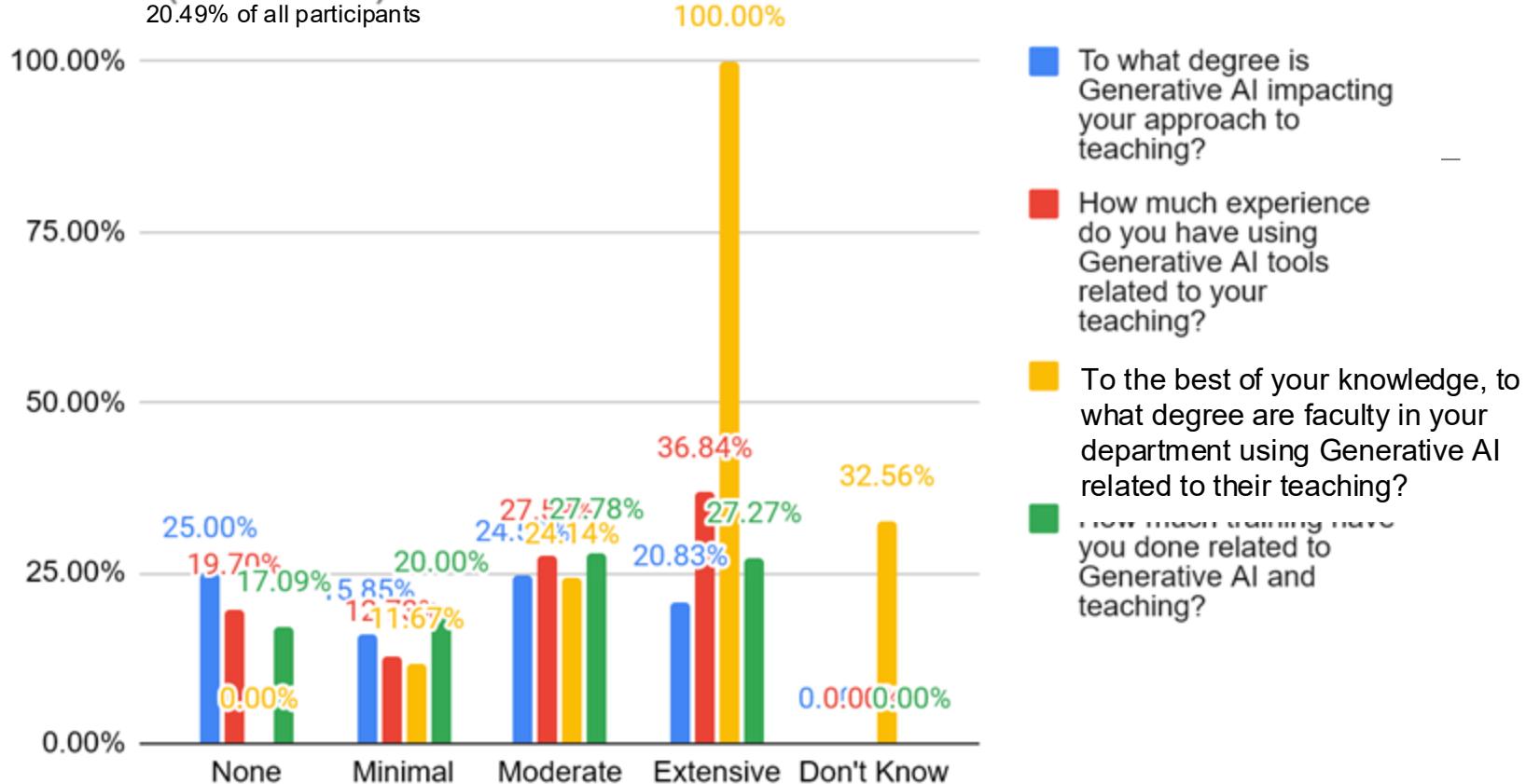


Extent

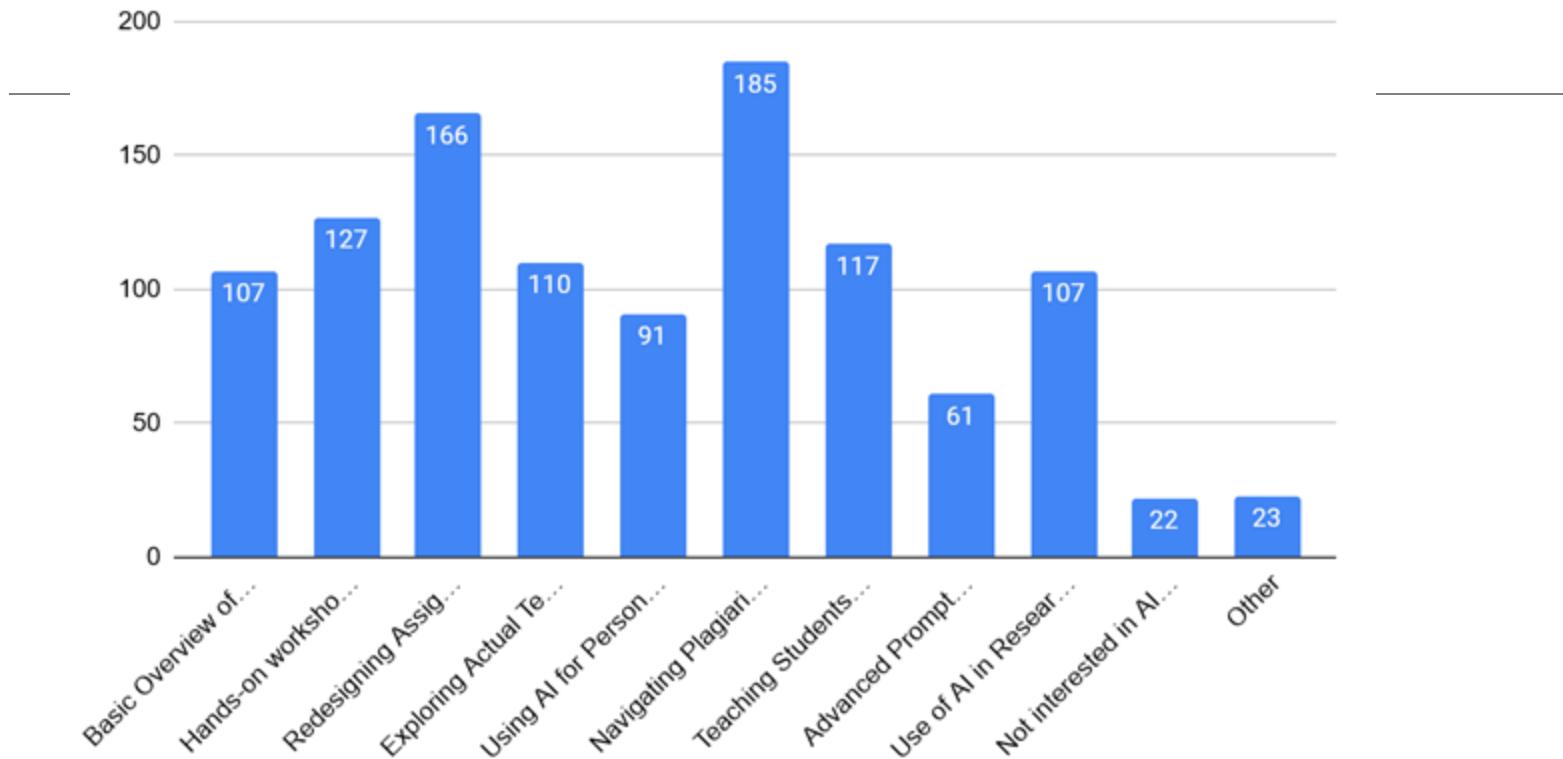


Extent (CSEE/IS)

20.49% of all participants



Which of the following AI training topics would you be interested in at UMBC?



From your faculty perspective, what immediate issues should the AI Committee explore?

Themes:

1. **University Policy on AI Use:** There is a strong call for a clear university policy on the use of AI tools, including guidelines on academic integrity and plagiarism.
2. **Impact on Critical Thinking, Reading, and Writing Skills:** Educators are concerned about how AI affects students' ability to develop critical thinking, reading, and writing skills.
3. **Training and Support for Faculty:** Educators need support and training to keep up with AI developments and effectively integrate AI into their teaching
4. **Detection and Prevention of AI Use:** Many respondents want effective methods for detecting and preventing unauthorized AI use in student assignments.
5. **Ethical and Privacy Concerns:** There are concerns about the ethical use of AI and the privacy implications of AI tools.

What else does AI Committee need to know regarding Generative AI + teaching @UMBC?

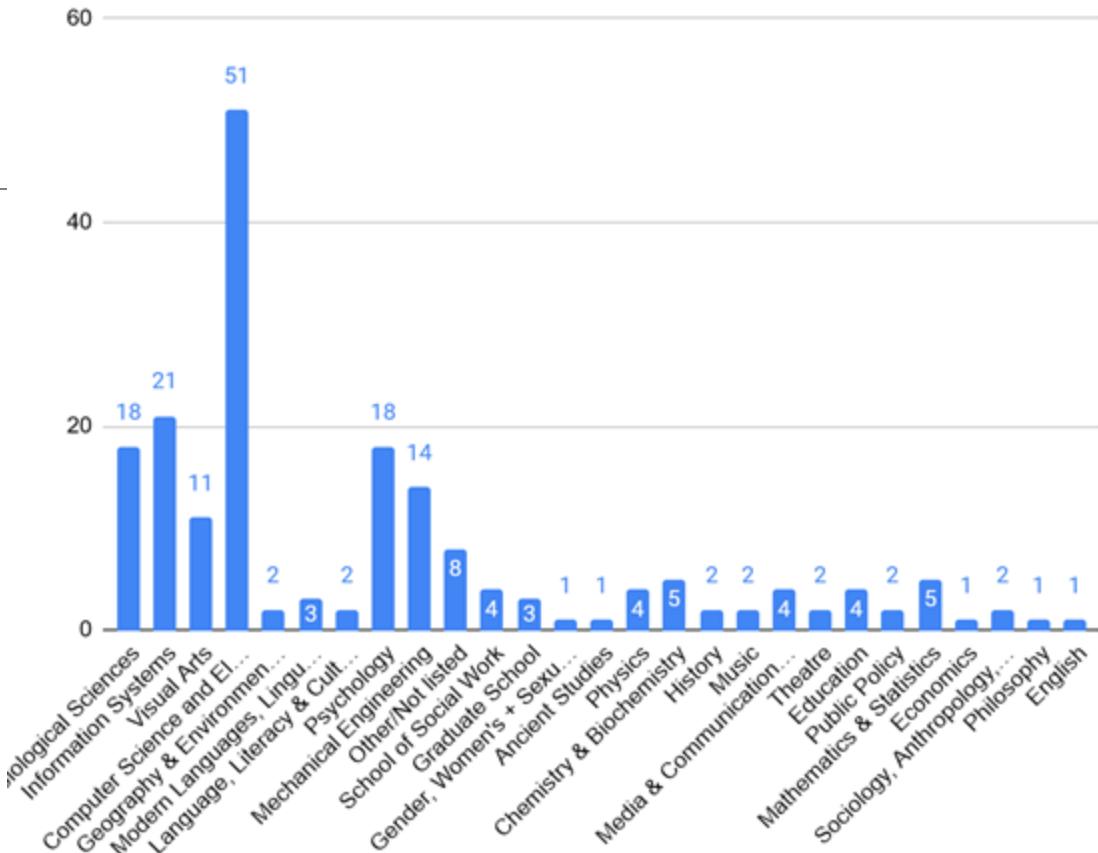
Themes:

1. **Guidelines and Training:** Respondents emphasize the need for clear guidelines on AI use and comprehensive training for both students and faculty.
2. **Impact on Student Learning:** Educators are worried about how AI affects students' learning, particularly their critical thinking and writing skills.
3. **Support for Faculty:** Many respondents feel overwhelmed by the rapid changes brought about by AI and need support to adapt their teaching methods.
4. **Environmental and Ethical Concerns:** There are significant concerns about the environmental impact of AI and the ethical implications of its use in education.
5. **Student Perspectives:** Some educators want to understand how students are using AI and involve them in discussions about AI policies and practices.

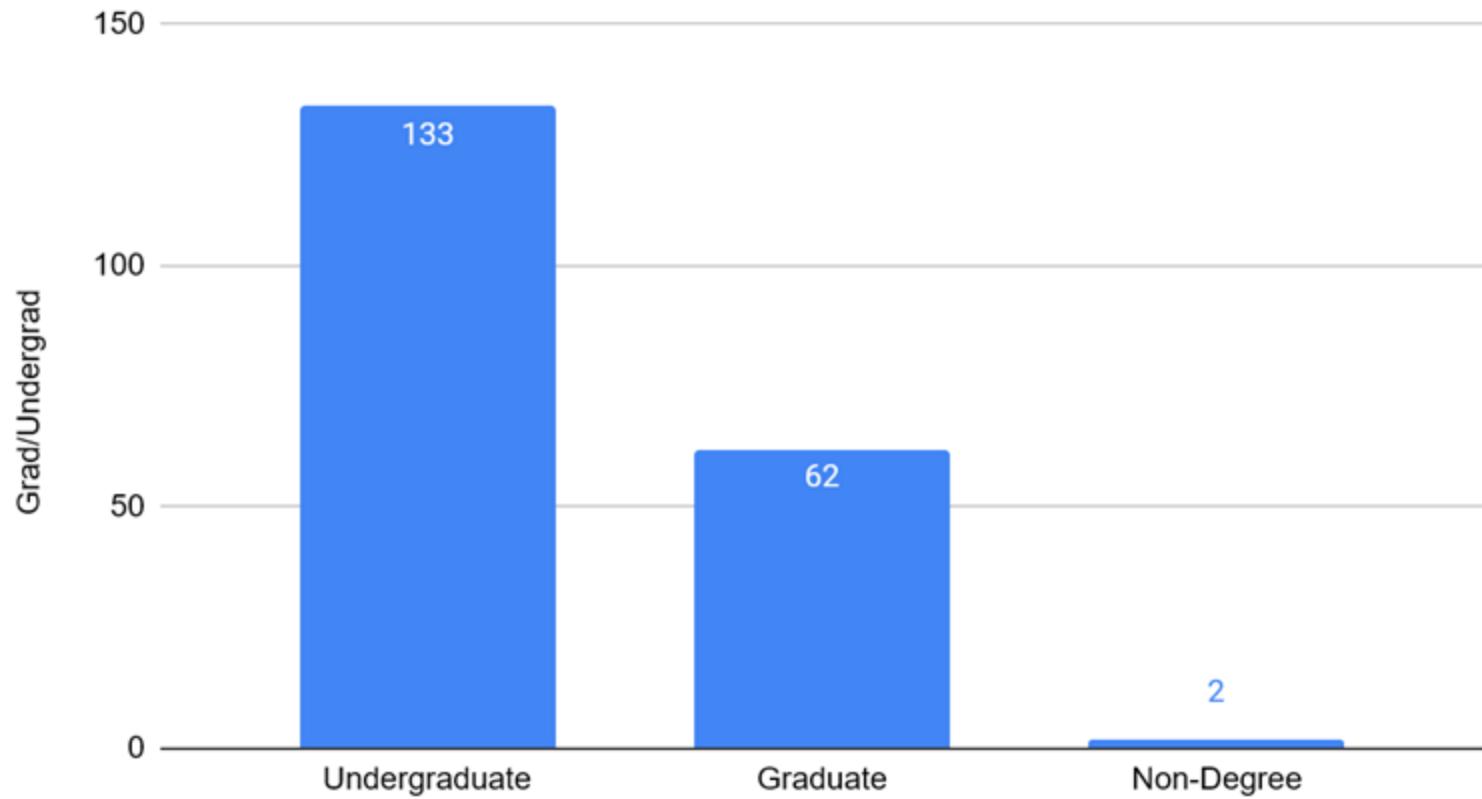
Student Survey Results

N = 200 2/27/2025 - 3/11/2025

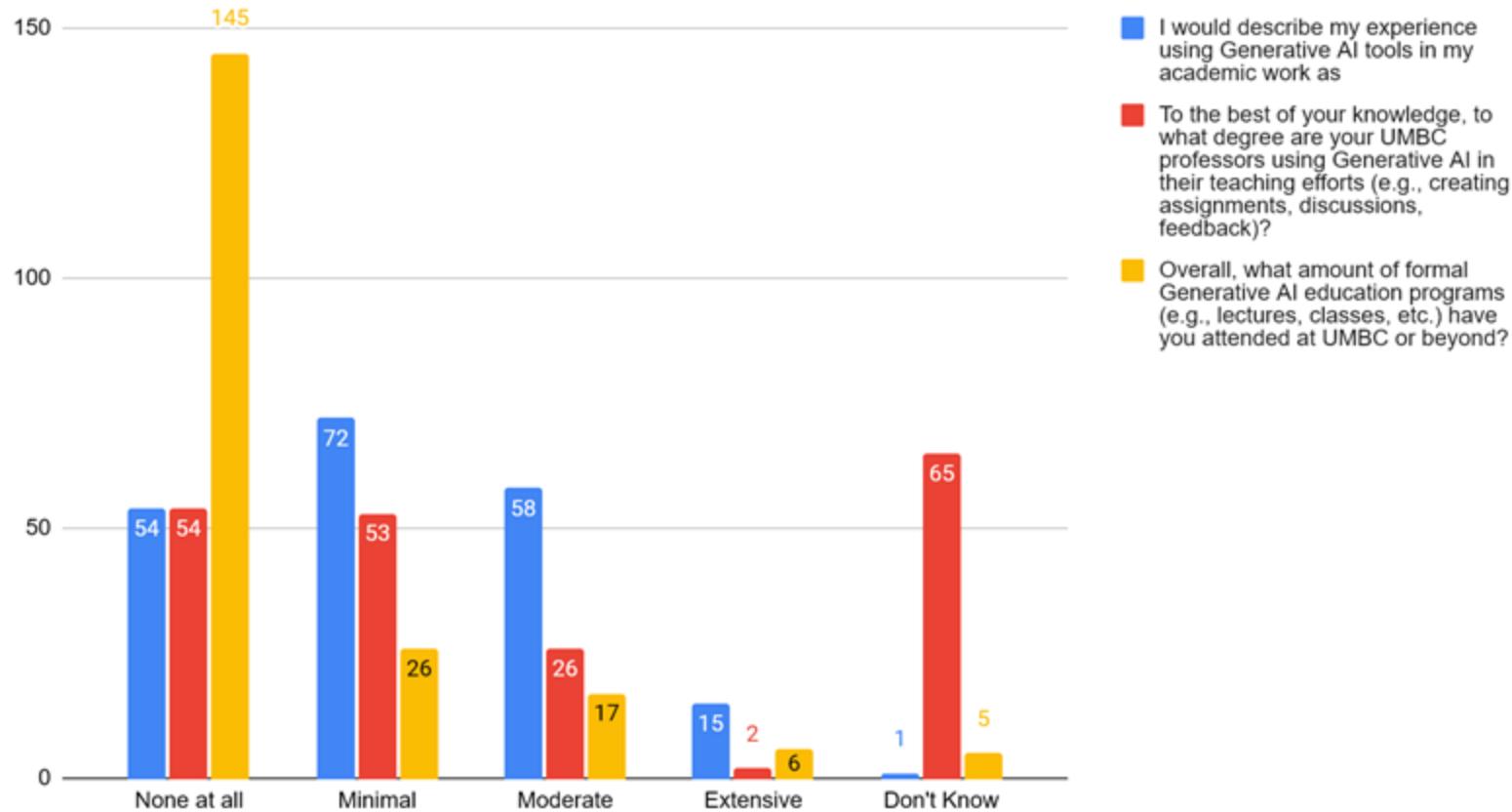
Respondents' majors



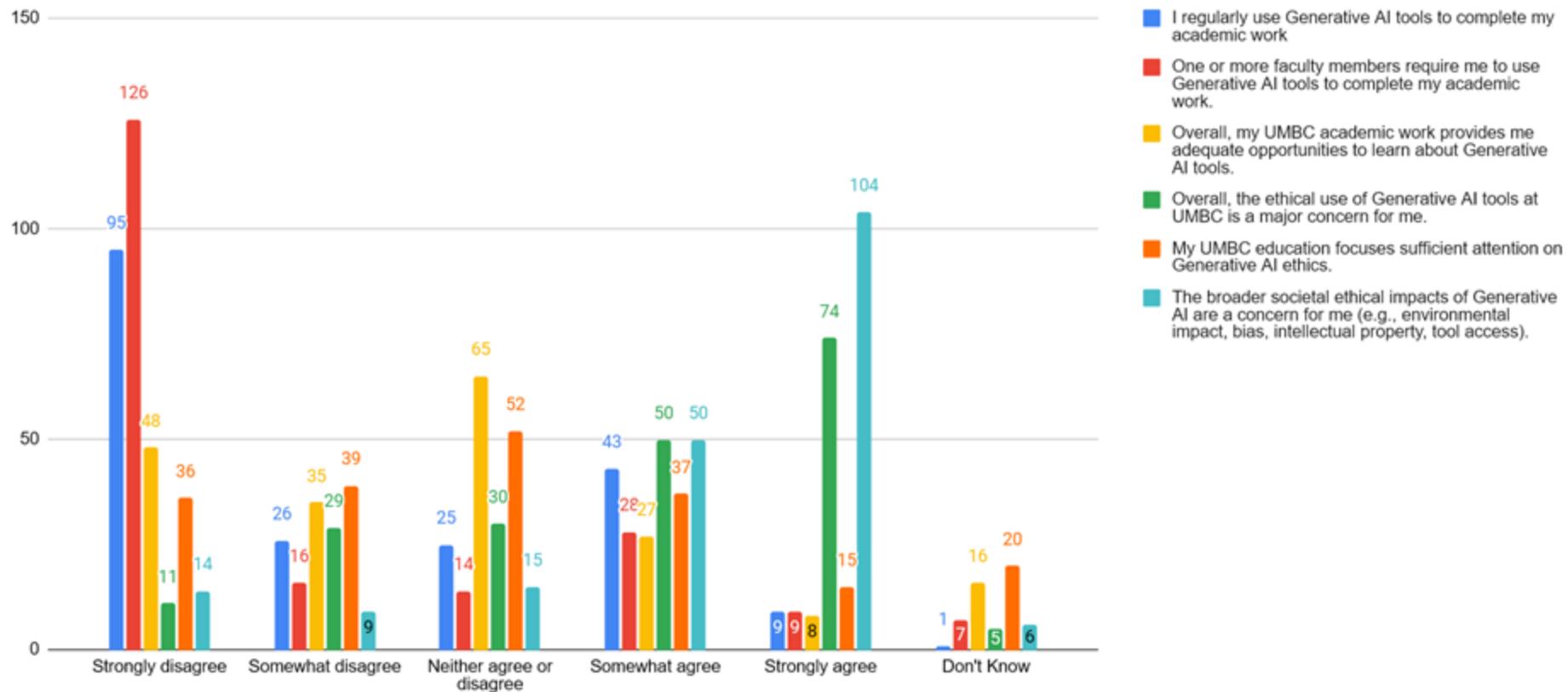
Grad/Undergrad

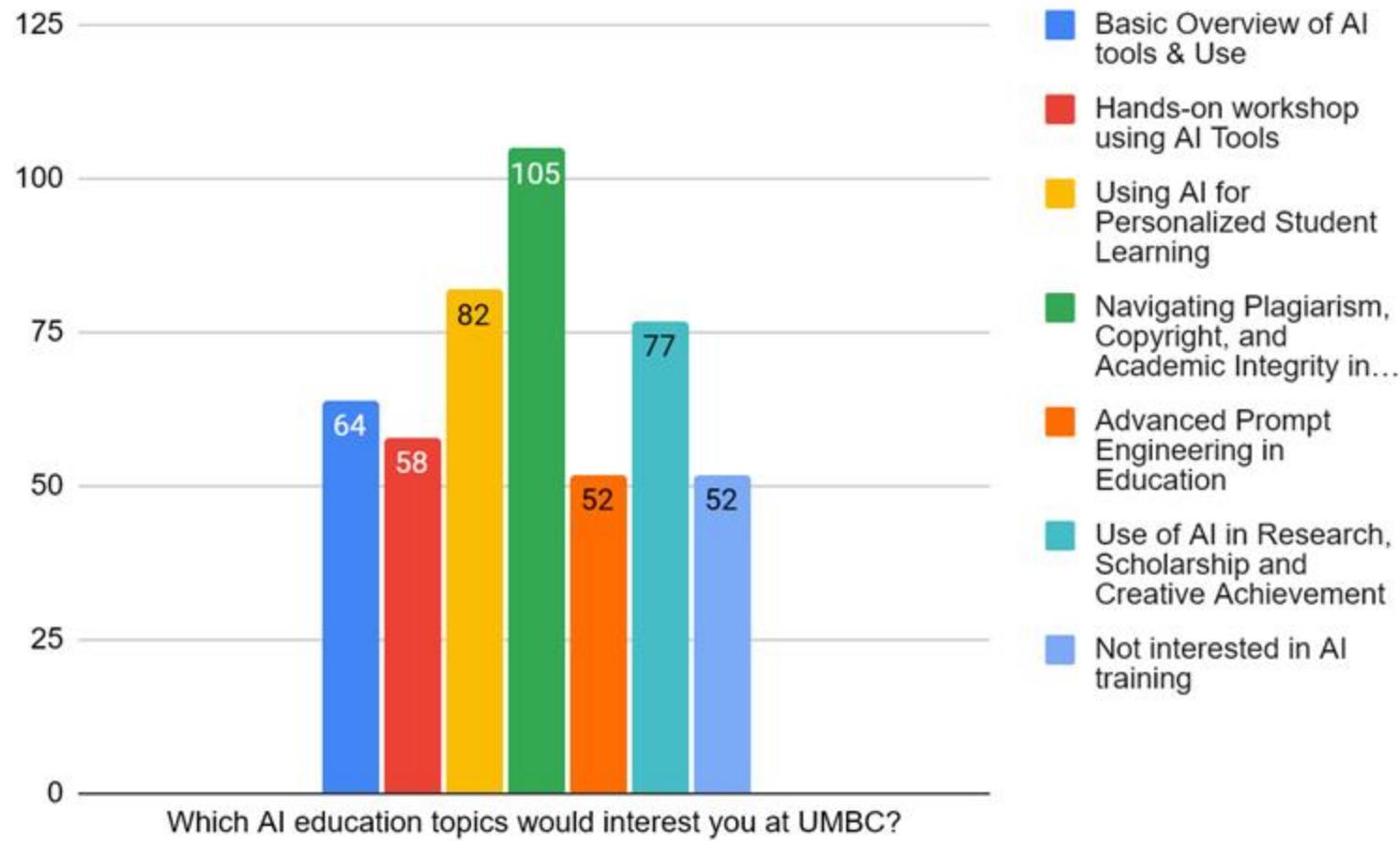


Degree of

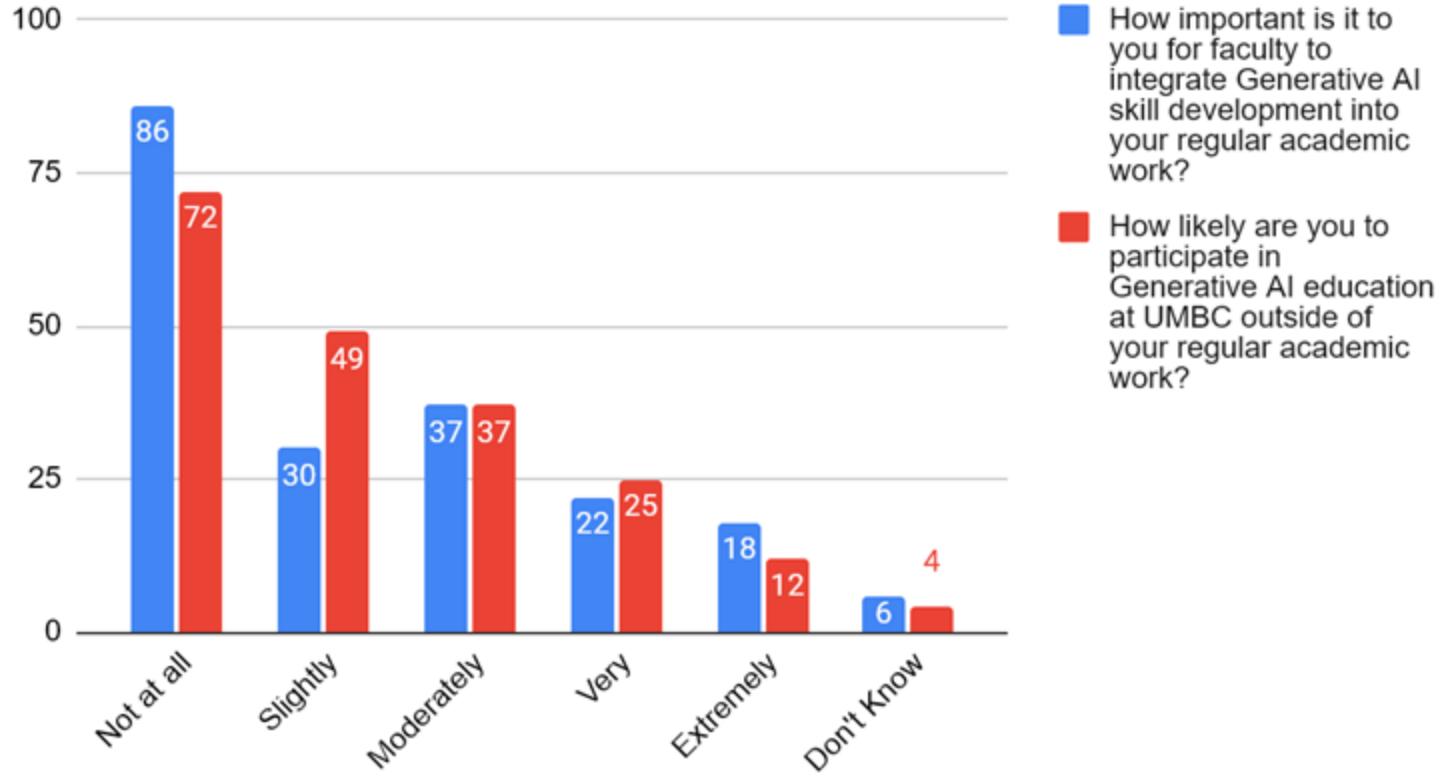


Agreement





How much?



Any questions for
Dr.Martin?

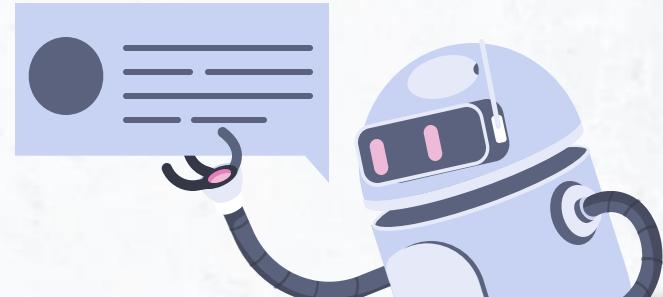
Student-driven discussion (sans faculty):

Reflecting on Dr. Martin's Presentation

What stood out to you the most?

Was anything surprising or particularly relevant to how you use GenAI tools?

Any noticeable differences between faculty and student responses?



Activity #3 (2:30-3:00p)

- Brainstorm and choose policy topics (next slide)
- Start drafting three sentences per policy topic within provided worksheet
- Email completed worksheet April 3 @ 11:59p
 - INCLUDE KAORU + MANISHA - CC DR. KOTTURI

AI Policy Topics - with prompting questions

Design + creative process

- **Divergent thinking:** How can generative AI encourage you to explore diverse ideas and inspire creative approaches to problem-solving?
- **Convergent thinking:** How can generative AI support you to refine your ideas and create polished artifacts?
- **Process:** How should you showcase your design process and evolution, when using genAI in HCC 629?
- **Feedback:** How can you effectively use feedback from generative AI to improve your own learning?
- **Reflection:** How can generative AI tools facilitate reflection when you are designing?
- **Design Ethics:** When all design can be considered redesign, where do you draw the line for ethical approaches to design?
- **Accuracy/Efficacy:** How should you make sure that genAI tools are providing accurate and high quality results?

Learning & Cognitive Development

- **AI literacy:** What are the practical skills you want to learn for how to use AI tools in HCC 629?
- **Agency:** How can you design generative AI interactions to enhance your sense of control?
- **Critical thinking:** What “shortcuts” do you think are appropriate to take versus those that will impede your learning in HCC 629?
- **Motivation and Engagement:** How can we leverage generative AI to enhance and sustain your interest in learning?
- **Instructions:** What instructions should be provided to students to help them clearly understand how and when generative AI can be used in a design class?
- **Grading/rubrics:** How should you be constructively evaluated when integrating GenAI into your work? Can faculty use genAI to help grade your work?
- **Job skills:** How do you want to be prepared to use AI when entering the job market?

AI Policy Topics - with prompting questions

Collaboration

- **Group Work:** How should group work be structured when genAI tools are used to complete projects?
- **Social Support:** What do you think when you witness your peers using generative AI for assignments and coursework?
- **Authenticity:** What does it mean to have your voice reflected in the work you've co-created with generative AI?
- **Ownership:** What does it mean to have a sense of ownership over your work created with genAI? Is ownership important? Why? Why not?

Equity and Fairness

- **Accessibility:** How can you ensure equitable access among your peers to Generative AI tools, regardless of ability?
- **Equity:** How do you ensure use of genAI is approachable regardless of technical background?
- **Accountability:** What does it mean to be accountable when using genAI to complete your coursework?
- **Academic Integrity:** How do you think about academic integrity when using genAI to complete your assignments?
- **Transparency:** Should you report use of genAI tools on assignments? If yes, why and how? If not, why not?
- **Hypocrisy in Faculty Use:** What standards should faculty members be held to in regards to their use of AI?

What other policy topics are missing?

Choose 5 policy topics

All policies topics need at least one person assigned

Jihye - reflection, convergent thinking, feedback, divergent thinking, Group work

Lokika - accountability, accessibility, divergent thinking, job skills, group work

Vishal – ownership, convergent thinking, divergent thinking, authenticity, hypocrisy in faculty use

Aasmita - authenticity, design ethic, motivation and engagement, Agency, critical thinking

Aniqa - AI literacy, critical thinking, Grade/Rubric, academic integrity, equity

Ali - transparency, job skills, social support, Grade/Rubric, Agency

Pooja - accountability, feedback, accuracy, instructions, ownership,

Jay - accountability, process, hypocrisy in faculty use, group work, job skills

Write three sentences per each policy topic

1. What is the challenge or question behind this policy topic?
1. What **learning outcome**, specific scenario, and/or course activity is this most relevant to?
1. Draft your recommendation (i.e. policy statement) using clear verbs + conditions.

Activity #3 Worksheet: <https://tinyurl.com/4av5ys5v>

For example: “Process”

1. What is the challenge or question behind this policy topic?
At what step in our design process should we integrate gen AI?

1. What learning outcome, specific scenario, and/or course activity is this most relevant to?
Going through the steps of the design sprint process: empathize, ideate, convergent thinking, prototyping, testing

1. Draft your recommendation (i.e. policy statement) using clear verbs + conditions.
After completing the first draft of work on their own, students should ask AI to help refine their work.

**Worksheets due Thursday April 3 @ 11:59p
- email Kaoru + Manisha (CC Kotturi)**

**Please respond to any follow up emails
promptly**

If you get stuck, email us

Next workshop Fri April 11 12-3p - ENG 333

Questions?

Housekeeping

Before leaving, please do the following:

- Clean up any trash in your area / on the tables
- Push your chairs back into the tables
- Don't forget any belongings!

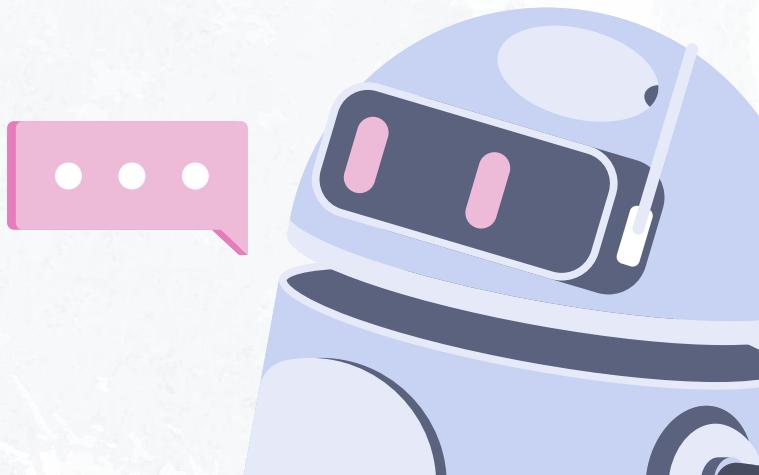
This room has been graciously loaned to us and we would like to leave it the way we found it :)

Complete workshop #1
feedback survey!

Student-Driven Generative AI Policy in Design

Workshop #2: Zine Making

April 11, 2025



Workshop #2 Agenda

12:00-12:20 → Reflections from Data Analysis

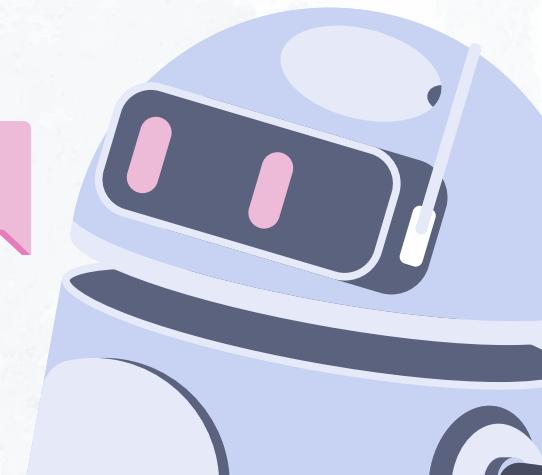
12:20-12:40 → How to Make a Zine with Prof. Sayo

12:40 - 1:00 → Review of Policy Recommendations

1:00-3:00 → Zine Making! (break as needed)

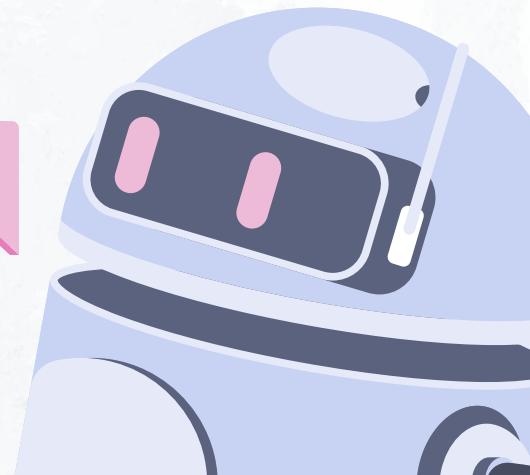
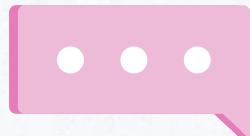
What do you want to get out of this workshop series?

Let's look at worksheet responses...

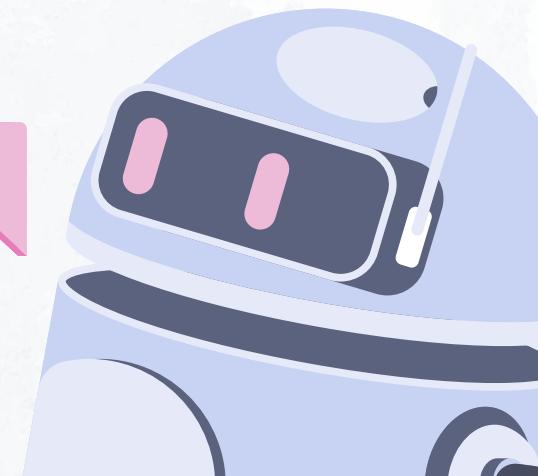




“It’s inevitable that genAI will be a part of our lives. If so, I would like to at least do it in a way that is ethical and doesn’t leave me feeling like I’ve **committed a crime**.”



“I believe **students perspective** should be more considered while deciding these policies.”



Pre-survey likert scale responses

5 strongly agree ← → 1 strongly disagree

Students' perspective **should** be taken into account when creating UMBC AI Policy.

(-) Average = **4.875**

Students' perspectives **are** currently into account in current UMBC AI Policy.

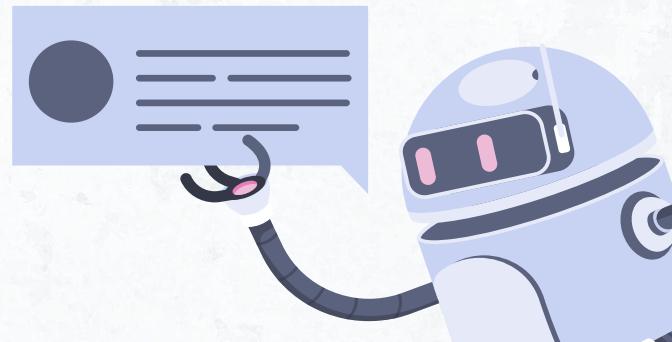
(-) Average = **3.375**

The Big Picture: Student-Driven AI Policy in a Design Classroom

- (-) Students are the lead users, the experts
- (-) Student-driven workshop design
- (-) Student-drive data collection + data analysis
(steps to de-identify)
- (-) Focus on design, HCC629 in particular

Reflections from policy recommendations

- (-) It can be really hard to center your own perspective!
- (-) **Disagreement** in AI policy recommendations (e.g. do/don't use gen AI in divergent/convergent stages only, text-based rationales)
- (-) **Contradiction** in policy versus practice (e.g. citing use of genAI, screenshots of all prompts, etc)
- (-) other thoughts?



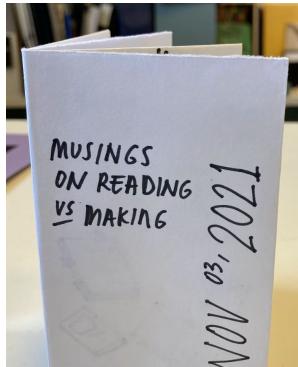
What's in this for you?

- Compensation! \$220, paid in cash after successful completion of ALL workshops
- Have your voice reflected in UMBC AI policy
- Publish a student-authored zine
- Be a part of research project
- Add to online portfolio
- Build your network of like-minded and passionate peers at UMBC

[VISUAL ARTS PROF NAME]

Graphic designer & educator

Assistant Prof, Visual Arts @ UMBC



AUTOBIOGRAZINES

ARCHIVING, STORYTELLING + COMMUNITY



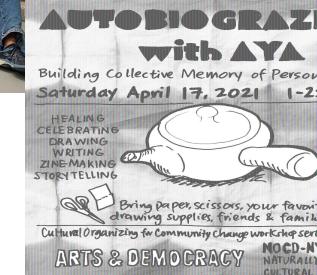
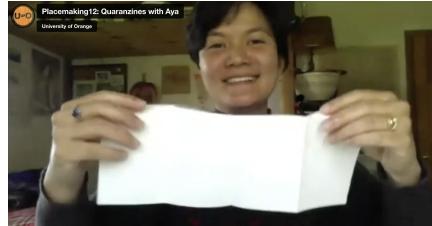
WITH AYA AND JULIE

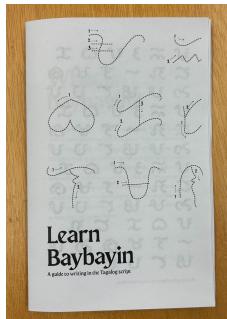
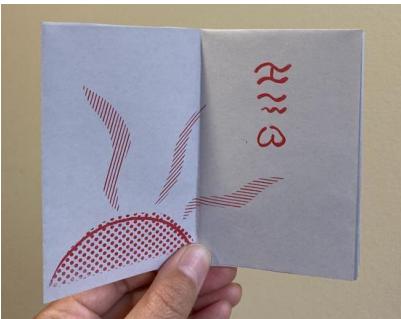
MAY 21, 2024 UCDA IMMERSE CONFERENCE, MESA, ARIZONA

IMMERSE UC | ASU

We are two artists, design professors and practitioners of the Filipino diaspora coming together with a shared practice around zines;

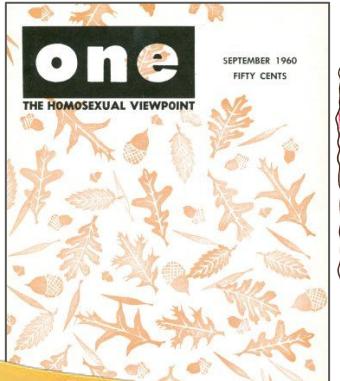
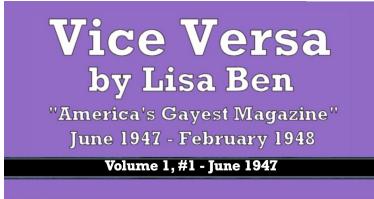
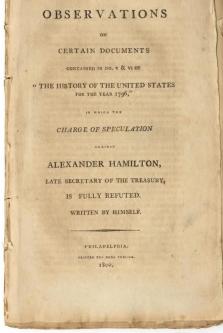
we see zine-making as a shared act of resistance, an exercise of imagination, a medium for self-expression and a tool for liberation.





What's a zine?

- *Zines are self-published printed materials like booklets, broadsides and pamphlets.*
- *It's both an **object** and **method** to disseminate information, express and connect.*
- *It's also a **way of being**, a way for us to exist in archives.*

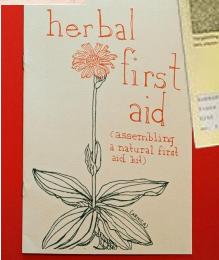
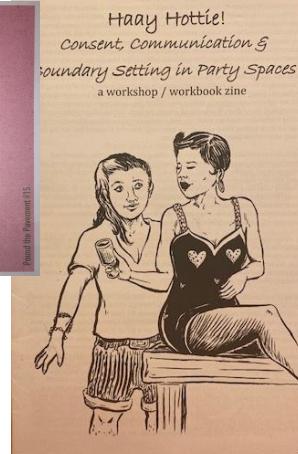
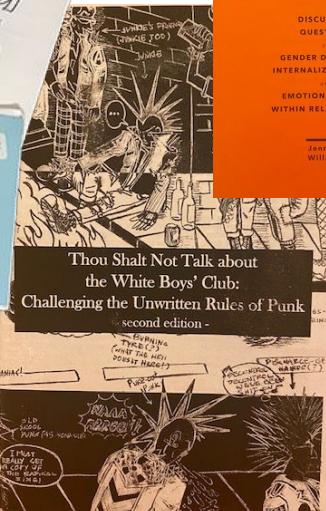


June, 1947

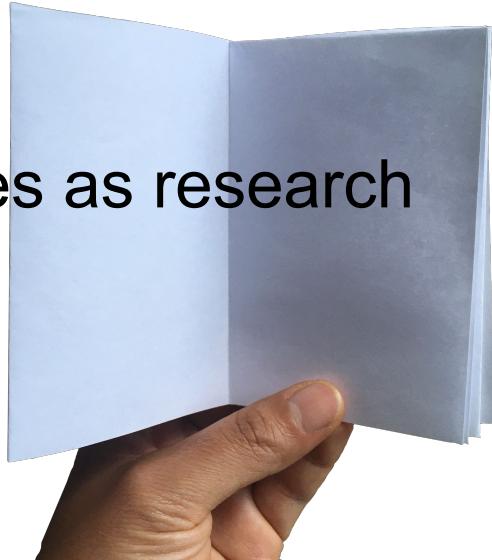
Volume I, Number 1

TABLE OF CONTENTS

IN EXPLANATION.....
DRAMA REVIEW.....
FILM REVIEW.....



Zines as research



What would it feel like to write our own stories?

How do we control our narrative?

What stories will they read about us in the future?

Zines as research

What does it mean
when

- we document our own stories,
- reference each other's lived truths,

- produce work for future ancestors to cite and connect to,
- and steward a collective archive?



Zine-making Time

1. Grab a piece of paper
2. Markers, pens, pencils
3. Open up Figma (link forthcoming)

Cover

Parts of a zine



Spread

Page

Page

Margins

Back Cover



Space Type Generator

PRIDE!

Select...

CYLINDER: Radius 250
CYLINDER: Count 1
CYLINDER: Rotate -5
CYLINDER: Offset 0

WAVE: Count 2
WAVE: Speed 0
WAVE: Latitude 0
WAVE: Longitude 0
WAVE: Ripple 0
WAVE: X-Scale 0
WAVE: Y-Scale 0

TYPE: X-Scale 20
TYPE: Y-Scale 40
TYPE: Weight 2

Use to smooth form after LATITUDE (x,y) or RIPPLE (z) adjust

TWAK: X Rotation 0
TWAK: Y Rotation 0
TWAK: Z Rotation 0

CAMERA: X Rotation 0
CAMERA: Y Rotation 0
CAMERA: Z Rotation 0

PRESETS

Simple Jellyfish Crown Complex Weave Zebra Hoops

I-TRY-ALL-THINGS;-I-
ACHIEVE-WHAT-I-CAN.//

SPACE TYPE GENERATOR
_ V. CYLINDER 1 . 1

a kinetic type generator from [kielm](#)
[Buy me a coffee](#) to help support STG

ReadMe

ASCII Art Generator

Main Controls - *FIGlet and AOL Macro Fonts Supported*

Font: Graffiti

Character Width: Default

Character Height: Default

Test All More Opts About

Student-Driven AI Policy

Other Stuff From patorjk.com That You Might Like:

- [My YouTube Channel](#)
- [Keyboard Layout Analyzer](#)
- [Text Color Fader](#)
- [Snake Game](#)
- [Scrolling Text Time Waster](#)
- [Main Page](#)



Noun Project (Icons + photos)

The screenshot shows a Google Docs interface with the title "Noun Project and Google Docs". The sidebar on the right is titled "Noun Project" and displays a search bar with the query "detective". Below the search bar is a grid of icons related to detectives, including magnifying glasses, hats, and briefcases. At the bottom of the sidebar, it says "1-100 of 570 icons". The main content area of the document contains the text "Easily Search & Insert Icons" with a magnifying glass icon above it, and "Right from your task pane — stay in your workflow."

Noun Project and Google Docs

Secure | https://docs.google.com/document/

Noun Project

detective

Easily Search & Insert Icons

Right from your task pane — stay in your workflow.

1-100 of 570 icons

DALL-E

as a student, what policies would you want to have? and generate image of the policy

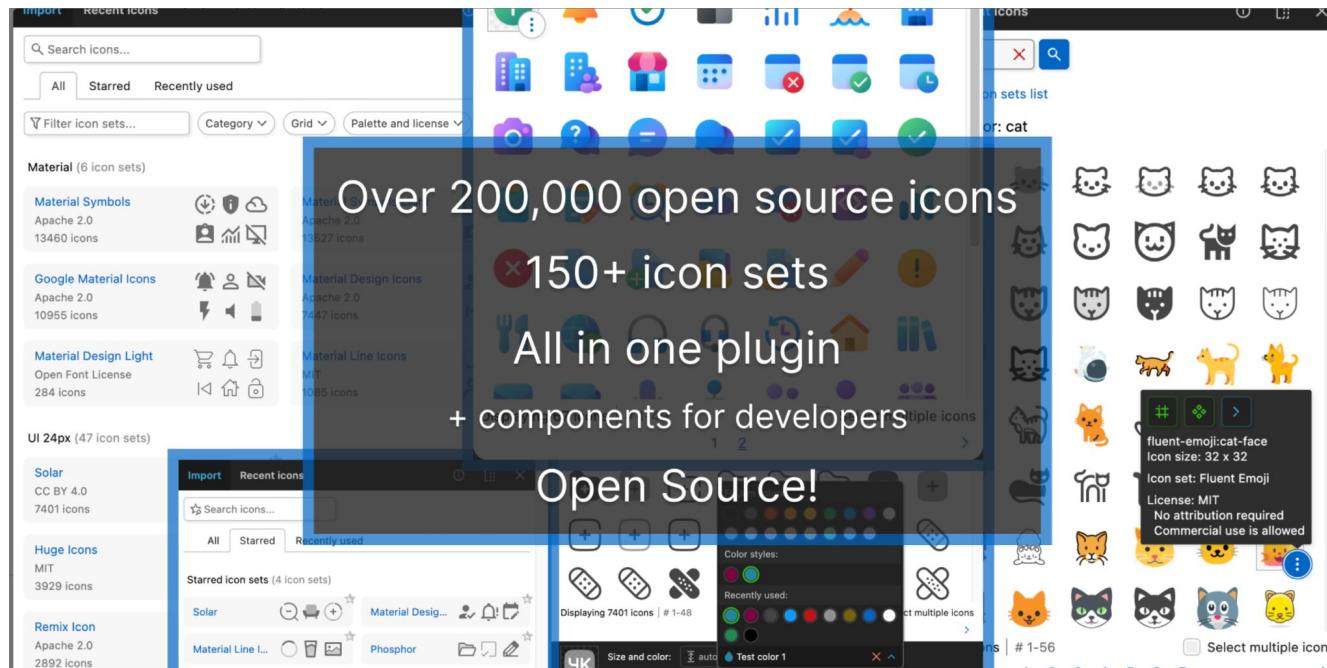
Now generating an image to represent these student-driven AI policies...

Image created

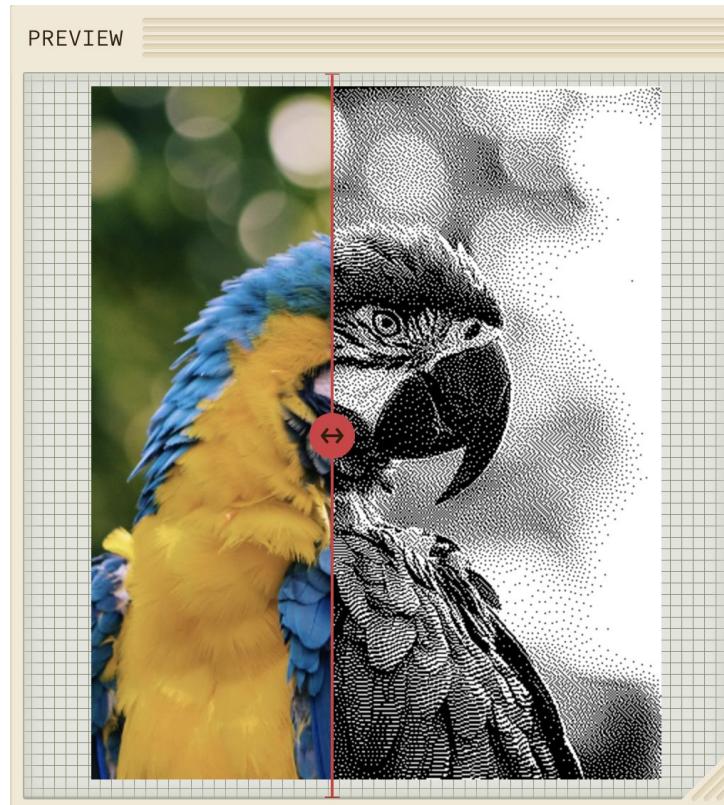
**STUDENT-DRIVEN
AI POLICIES**

- TRANSPARENCY IN AI USAGE AT SCHOOL**
Schools must clearly disclose when and how AI tools are being used.
- AI LITERACY FOR ALL STUDENTS**
AI literacy courses should be required for all students starting in middle or high school
- FAIR ACCESS TO AI TOOLS**
Schools must ensure all students—regardless of socioeconomic status—have access to approved educational AI tools
- OPT-OUT RIGHTS FOR STUDENTS**
Students should have the right to opt out of AI systems used for surveillance
- ETHICAL GUIDELINES FOR AI-GENERATED CONTENT USE**
AI-generated content should be allowed with proper disclosure and critical

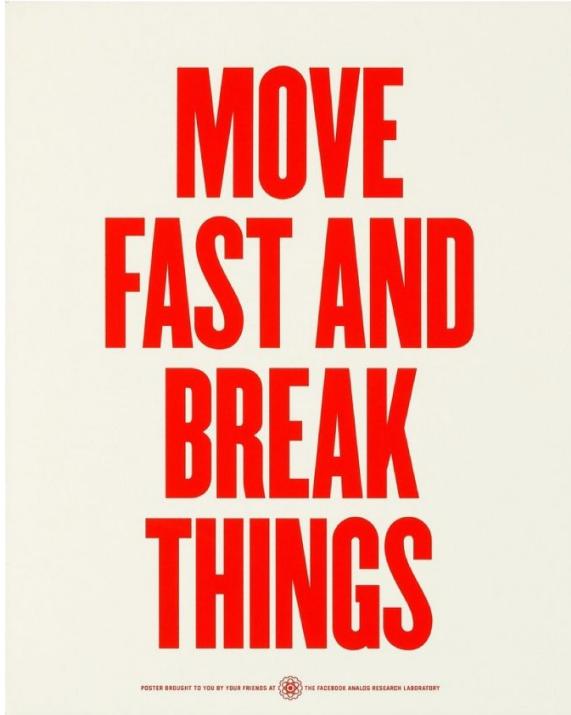
Iconify - Figma Plugin



Dither Me This



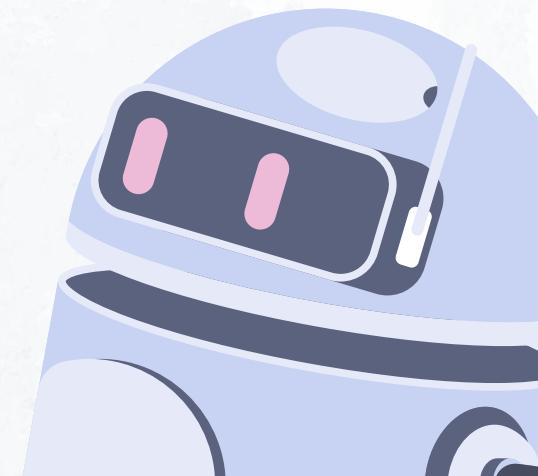
What words or ideas do you want to emphasize?



Typographic Posters

11 *draft* policy recommendations

- Student-driven (could not be written by faculty)
- Actionable, concrete
- Reduce redundancy - combined multiple recs
- Respond to AI policy discussions @ UMBC
- **Need to strengthen connection to HCC629**



Equity →

The same GenAI tools and models should be used by all students for each assignment.

Feedback →

Students should use AI to help them analyze and address their peers' critiques.

Instructions →

Instructors should include guidelines with concrete examples of acceptable and not acceptable use of AI for each assignment.

Grading/Rubrics →

Less than half of the work should be generated with AI.

Design Ethics →

Students should check if their AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.

Faculty Use →

To avoid hypocrisy, faculty should model the transparency they expect from students when it comes to GenAI use in teaching, assignments, and grading.

Accessibility →

The university should provide access to essential AI tools through institutional licenses or recommend free alternatives.

Ownership →

Ownership over our decisions - whatever I am using AI for, I am accepting it.

Divergent Thinking →

“There’s a real challenge in making sure that these AI-suggested ideas don’t become a limit to my own imagination”

Job Skills →

Assignments should include opportunities to use AI tools in ways that mirror industry practices; faculty should research company policies on the ethical use of AI.

English Learners Use of GenAI



English Learners can use genAI to refine their drafted text by asking not only for refined text but also a list of the refinements made.

But first ✨planning✨

1. Highlight, underline what you think is the most important part of your selected AI policy.
2. Do some research on different lettering, font or poster styles. Gather 5-6 images that will act as your inspiration.
3. Thumbnail sketching: On a sheet of paper draw 3-5 thumbnail sketches out your design that emphasize important parts of your AI policy.

Figma Zine Template

Each person is assigned a page with their name on the left hand side.

URL:

Password:



Zine Resources

- Space Type Generator → <https://spacetypegenerator.com/>
- ASCII Art Generator → <https://www.asciiart.eu/image-to-ascii>
- Noun Project → <https://thenounproject.com/>
- DALL-E → <https://chatgpt.com/>
- Iconify → <https://tinyurl.com/y2fmtnmu>
- Dither Me this → <https://doodad.dev/dither-me-this/>
- Blobmaker → <https://www.blobmaker.app/>
- Font Squirrel → <https://www.fontsquirrel.com/>

Zine pages due Thursday April 17th

- Digital pages due at 11:59PM by email
- Analog pages due at 8:00 PM to [ROOM#]

Please respond to any follow up emails promptly

If you get stuck, email us

Next workshop Fri April 25 12-3p - [ROOM#]

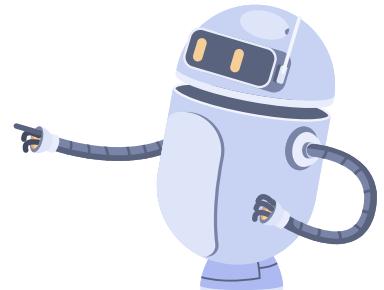
Questions?

Housekeeping

Before leaving, please do the following:

- Clean up any trash in your area / on the tables
- Push your chairs back into the tables
- Don't forget any belongings!

This room has been graciously loaned to us and we would like to leave it the way we found it :)

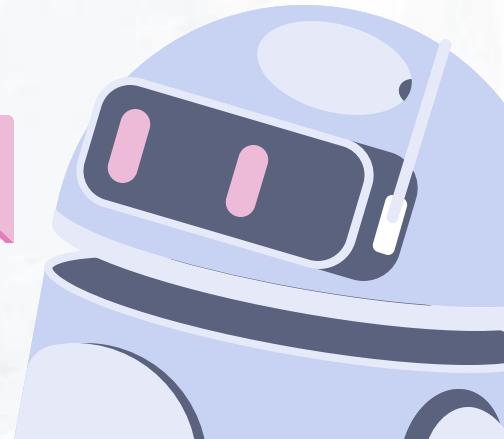


Complete workshop #2
feedback survey!

Student-Driven Generative AI Policy in Design

Workshop #3: Interface Redesign

April 25, 2025



Overview of workshop series

Workshop #1: Policy drafting through frank conversations

Workshop #2: Policy in print through zine making

Workshop #3: Policy in action through interface redesign

Overview of workshop series

Workshop #1: Policy drafting through frank conversations

Workshop #2: Policy in print through zine making

Workshop #3: Policy in action through interface redesign (today!!)

Workshop #3 Agenda

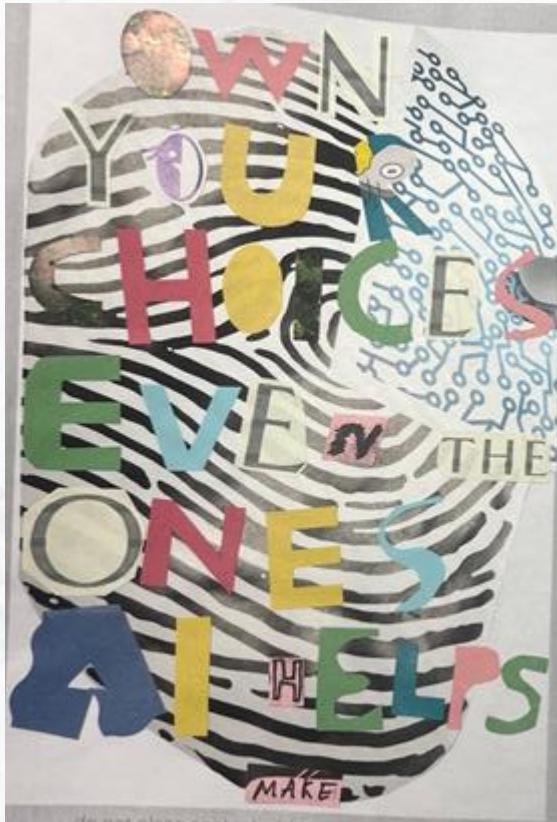
12:00-12:40 → Reviewing zines!

12:45-1:15 → Redesign activity instructions

1:20 - 2:40 → Redesign activity

2:40-3:00 → Wrap up + final steps to receive payment

Ownership



Ownership over our decisions - whatever I am using AI for, I am accepting it

Pooja



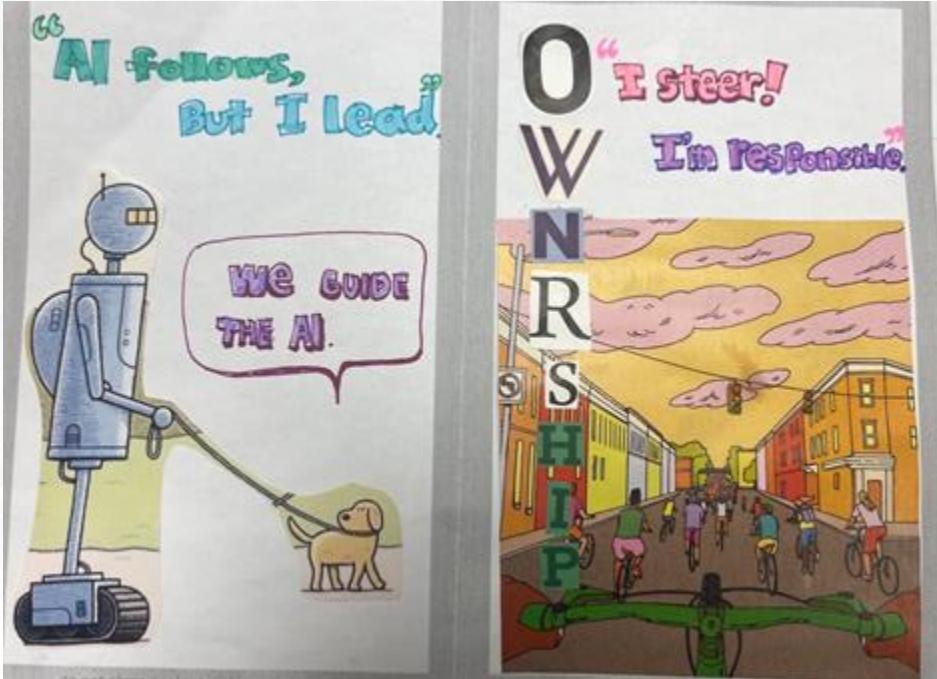
Ownership

Ownership over our decisions - whatever I am using AI for, I am accepting it

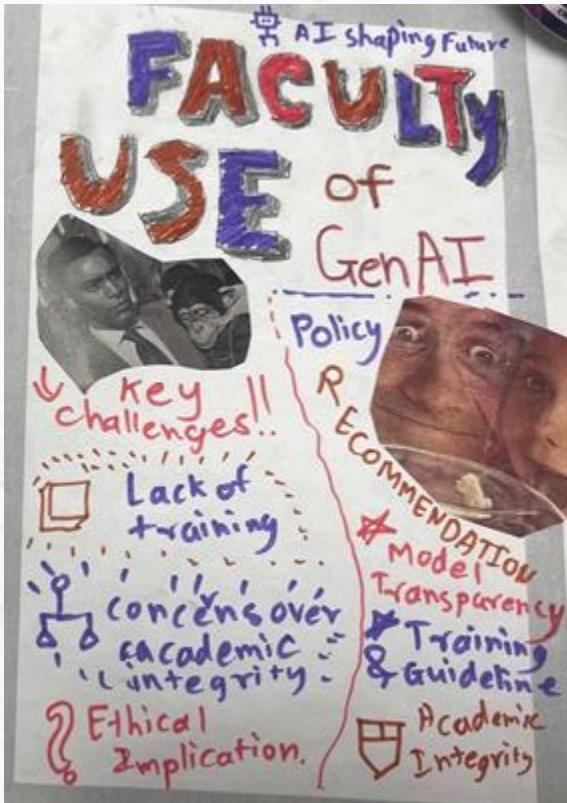
Aasmita

Ownership

Ownership over our decisions - whatever I am using AI for, I am accepting it



Jihye



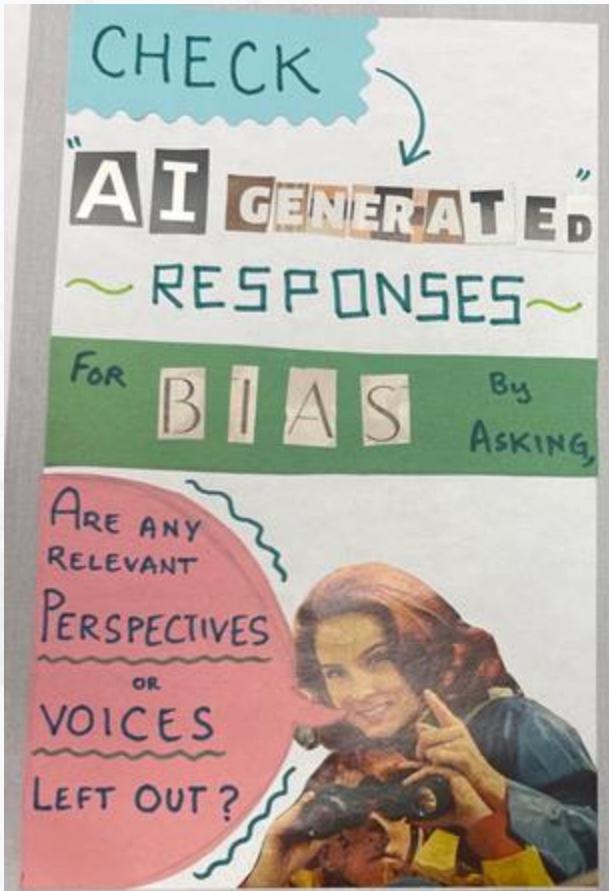
Faculty Use

To avoid hypocrisy, faculty should model the transparency they expect from students when it comes to GenAI use in teaching, assignments, and grading.

Divergent Thinking



Vishal



Aasmita

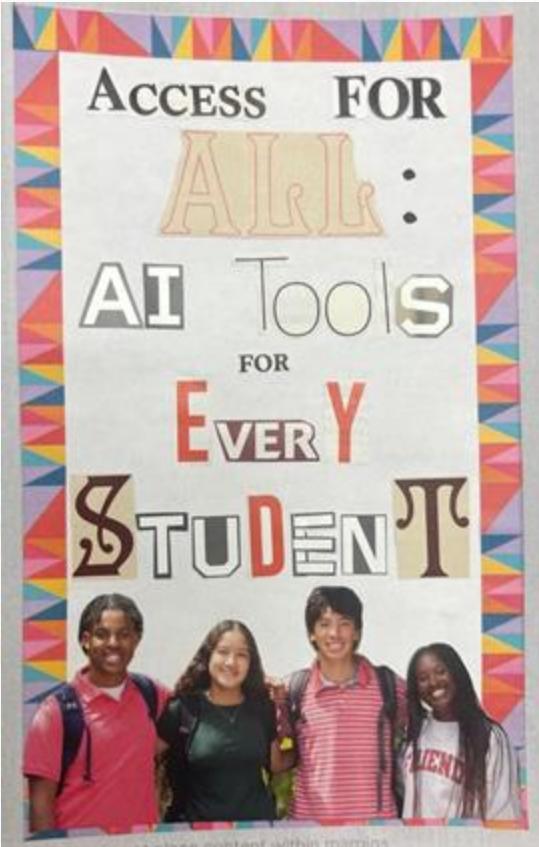
Design Ethics

Students should check if their AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.

Design Ethics

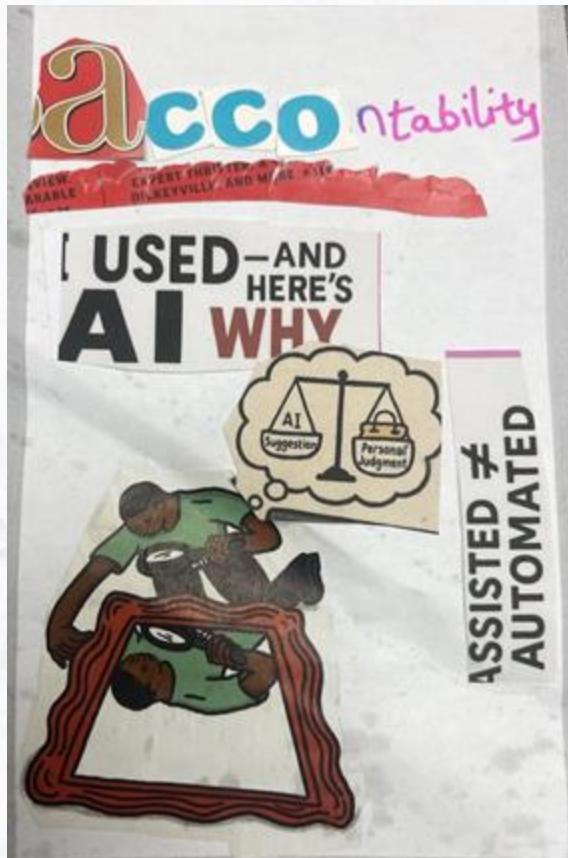
Students should check if their AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.





Accessibility

The university should provide access to essential AI tools through institutional licenses or recommend free alternatives.



Jay

Accountability

Accountability should mean understanding and justifying the “why” behind every decision, even if an idea came from AI.

Non-native English Speakers

Non-native English speakers can use genAI to refine their drafted text by asking not only for refined text but also a list of the refinements made.



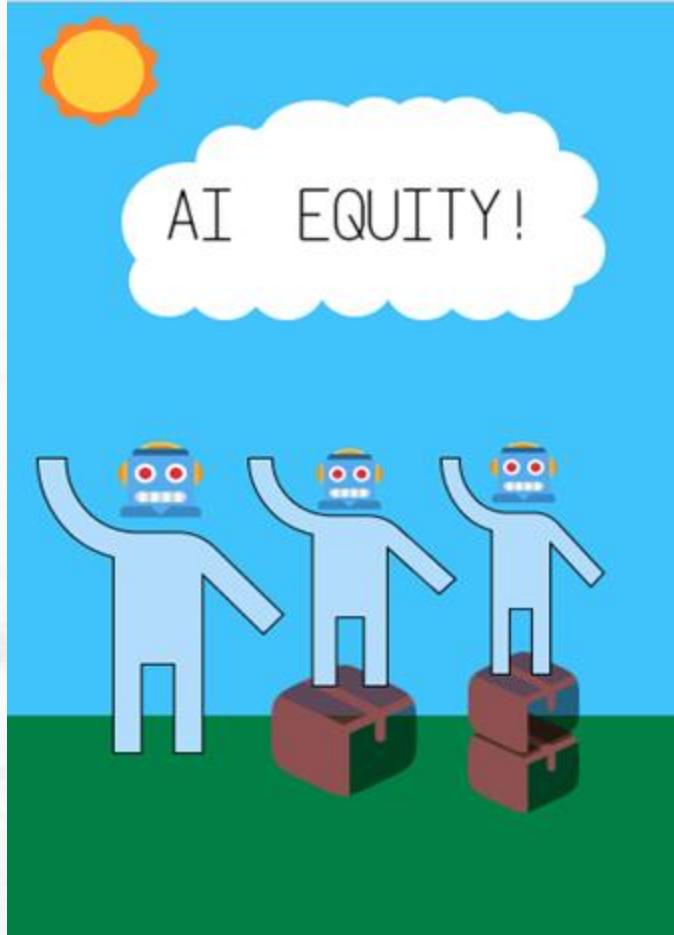
Aniqa



AI
HELPS
MY
WORDS,
NOT MY
THINKING.

Non-native English Speakers

Non-native English speakers can use genAI to refine their drafted text by asking not only for refined text but also a list of the refinements made.



Ali

Equity

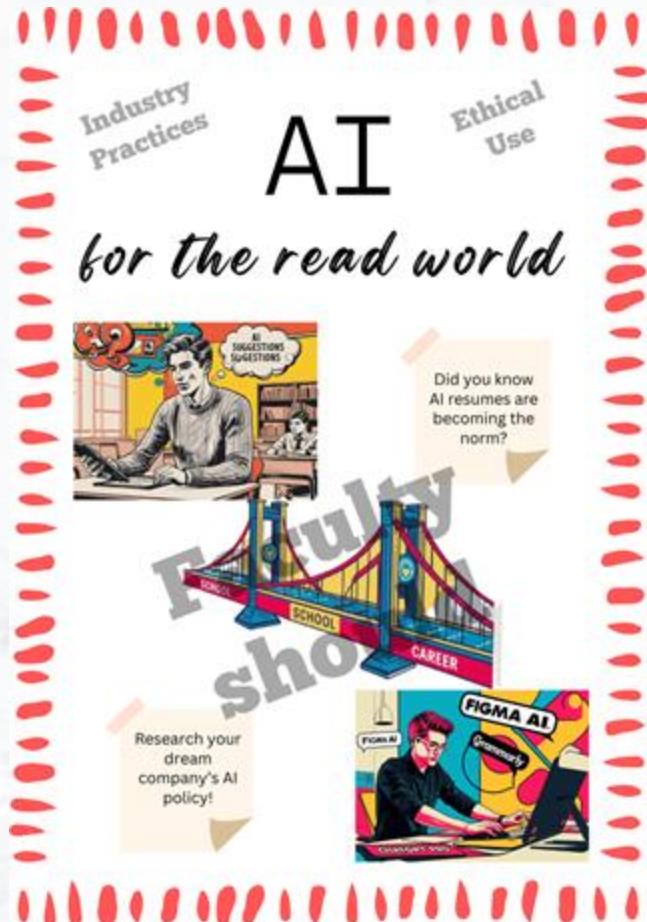
The same GenAI tools and models should be used by all students for each assignment.



Ali

Feedback

Students should use AI to help them analyze and address their peers' critiques.



Lokika

Job skills

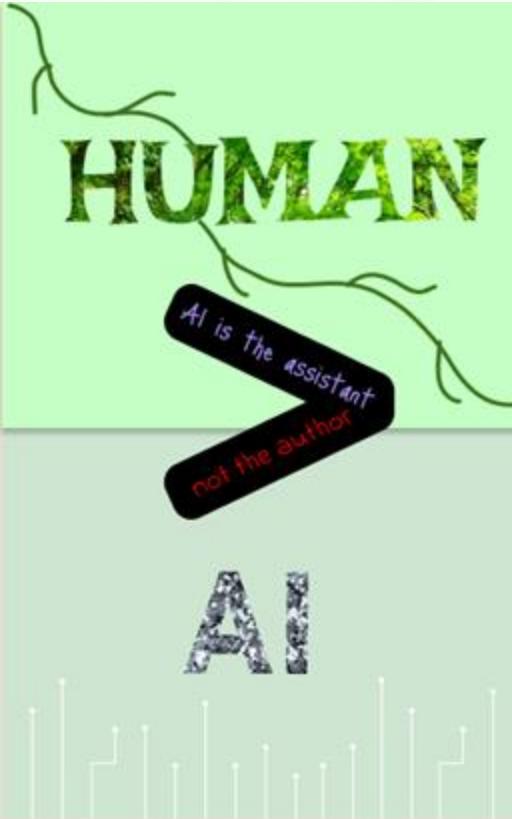
Assignments should include opportunities to use AI tools in ways that mirror industry practices; faculty should research company policies on the ethical use of AI.

Grading/ Rubric

Less than half of the work should be generated with AI.



Aniqa



Grading/ Rubric

Less than half of the work should be generated with AI.

Pooja

Difficulties when making zines?

“One difficulty I encountered was finding the right balance between text and visuals—I wanted to include all the important details of the policy, but too much text started to make the page feel crowded”

“My analog version turned out more on text heavy based side, but i am having little difficulty for digital version as to what to put on it and how can it look visually appealing while saying the policy.”

Rest assured – we will work with experts to refine and curate!

Zine next steps

- April 28 - May 9: **Curation** - we will work with experts to curate
- May 12 - May 15: **Printing**
- May 16: **Share + circulate** on campus and beyond!

Super important - we will need your final approval ~May 9 before printing via email. If we don't hear from you, we will assume you've given your approval

Super super important - if you do NOT want to be an author of the zine, let us know before the end of today's workshop

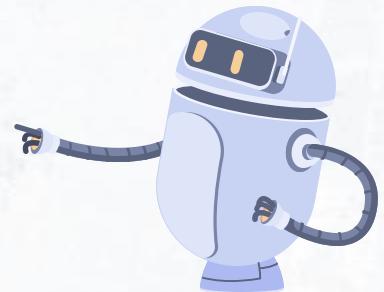
Break?



Workshop #2 feedback

“I really didn't know how these zines would help you research in AI policies. I believe this task was good but was not that much related to the main concern of subject.”

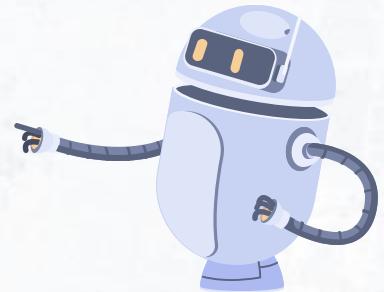
**Let's recall the redesign activities we did in
HCC 629...**



Interface Redesign Activity (5 steps)

1. Redesign an interface of genAI technology, using Figma
2. A metaphor will guide your conceptual model in your redesign
3. Interfaces will improve HCC629 learning outcomes
4. Must FOLLOW the policies while doing your redesign and complete activity reflection
5. Experts will review and rank interfaces
 - a. Top interface(s) will be built in the next phase of this research project (~Fall 2025)

Step 1: GenAI interface options



Interface #1: Claude (text-generation)

The screenshot shows the Claude AI interface. On the left is a sidebar with options like "New chat", "Chats", and "Recent". The main area has a title "Guidance for Writing Assignment" and a "Share" button. A file attachment for "AI as Team Coach" is shown, along with a "PDF" link. Below this is a button labeled "summarize the attached paper". The summary text reads:

Summary of "AI as Team Coach: Elevating the Success of Group Work"

This paper by Ethan Mollick and Lilach Mollick (September 2023) explores how AI can facilitate group work in educational settings by serving as a team coach.

The authors highlight common challenges with team projects - students often view them as busy work, struggle with coordination, and experience uneven workload distribution. However, research shows that well-structured teams outperform individuals.

The paper focuses on using large language models (LLMs) to help teams create "team charters" - documents outlining how team will work together, defining:

- Roles (who does what)
- Goals (short and long-term objectives)
- Norms (interaction, communication, and treatment expectations)

These charters help teams address potential issues upfront and establish clear expectations. The authors provide a detailed prompt template for using AI as a team coach to facilitate charter creation, guiding students through a structured conversation about their project, goals, roles, and norms.

The paper emphasizes that students should understand they remain in charge of determining how they work together, not the AI. It acknowledges AI limitations, noting that students should assess the AI's advice and redirect it if needed.

At the bottom, there's a "Reply to Claude..." input field and a toolbar with icons for "New chat", "Chats", "Recent", and "Claude AI Sonnet".

Interface #2 - Grammarly (text-generation)

The screenshot displays the Grammarly web interface. At the top, it shows a "Demo document" with an "Overall score" of 60. Below this, the "Review suggestions" section is open, showing four categories: Correctness, Clarity, Engagement, and Delivery. Under "Pro suggestions", there are several items:

- Correct your spelling effect
- Remove the comma commas,
- Remove a space punctuation ..
- Add the word(s) .
- Change the verb form showed
- Remove wordiness Underlines that are blue

On the left side, under "The basics", there is a paragraph about misspellings and grammatical errors. Below that, another paragraph discusses how Grammarly Premium can provide helpful feedback for writing style and passive voice.

The basics

Misspellings and grammatical errors can effect your credibility. The same goes for misused commas, and other types of punctuation. Not only will Grammarly underline these issues in red, it will also showed you how to correctly write the sentence.

Underlines that are blue indicate that Grammarly has spotted a sentence that is unnecessarily wordy. You'll find suggestions that can possibly help you revise a wordy sentence in an effortless manner.

But wait...there's more?

Grammarly Premium can give you very helpful feedback on your writing. Passive voice can be fixed by Grammarly, and it can handle classical word-choice mistakes. It can also help with inconsistencies such as switching between e-mail and email or the U.S.A. and the USA.

It can even help when you wanna refine ur slang or formality level. That's especially useful when writing for a broad audience ranging from businessmen to friends and family, don't you think? It'll inspect your vocabulary carefully and suggest the best word to make sure you don't

874 words ▾

Interface #3 - ChatGPT (text-generation)

The screenshot shows the ChatGPT web interface. On the left is a sidebar with various AI personality options like "SearchGPT", "WebGPT", "Cyberpunk Artist", etc., and sections for "Recent" conversations and "Explore GPTs". The main area shows a conversation about summarizing a paper. A file icon with "AI as Team Coach _ Harvard Busine..." and "PDF" is shown, with a button to "summarize attached paper". The text summary reads:

Summary of "AI as Team Coach" by Ethan and Lilach Molick (Harvard Business Publishing Education, 2023):

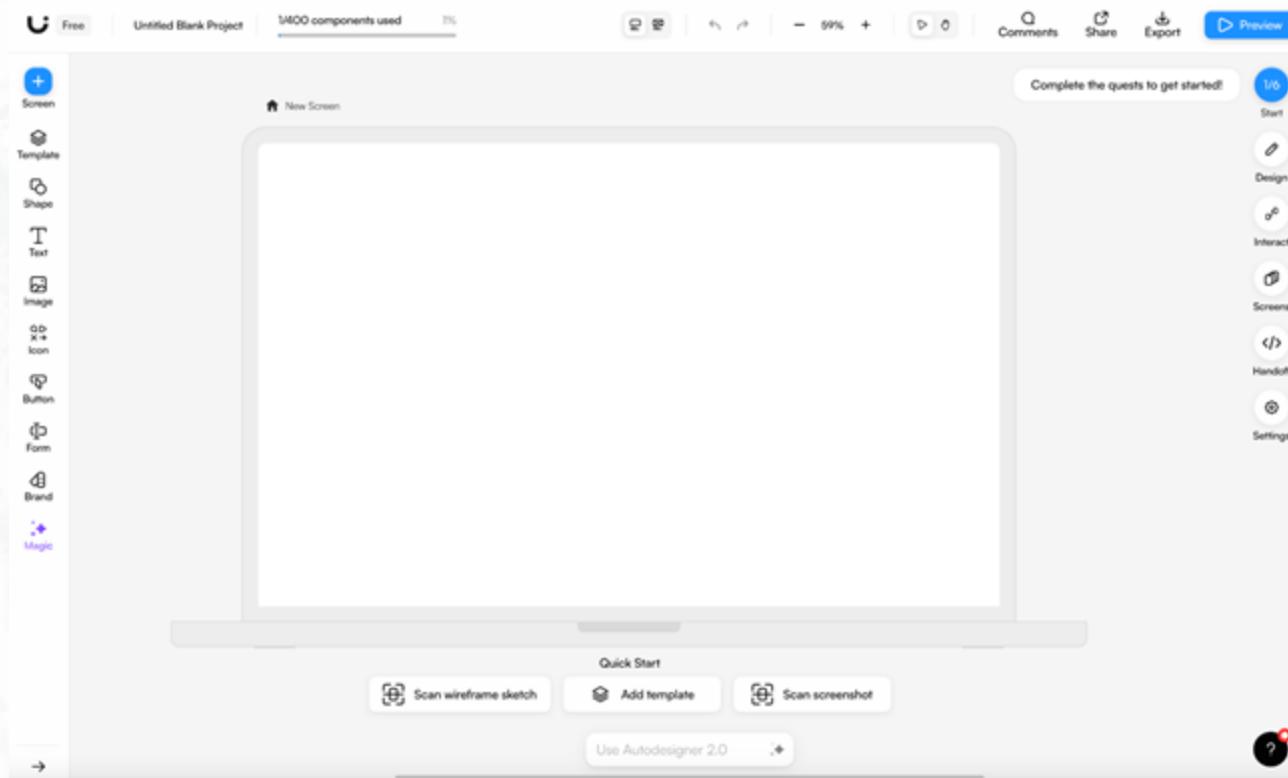
This article explores the use of generative AI, particularly large language models (LLMs) like ChatGPT-4, as a team coach to improve the effectiveness of student group work. Group projects are often perceived negatively by students due to coordination issues and unequal workloads. However, well-structured teams can outperform individuals, and AI can play a crucial role in setting up those teams for success.

Key Points:

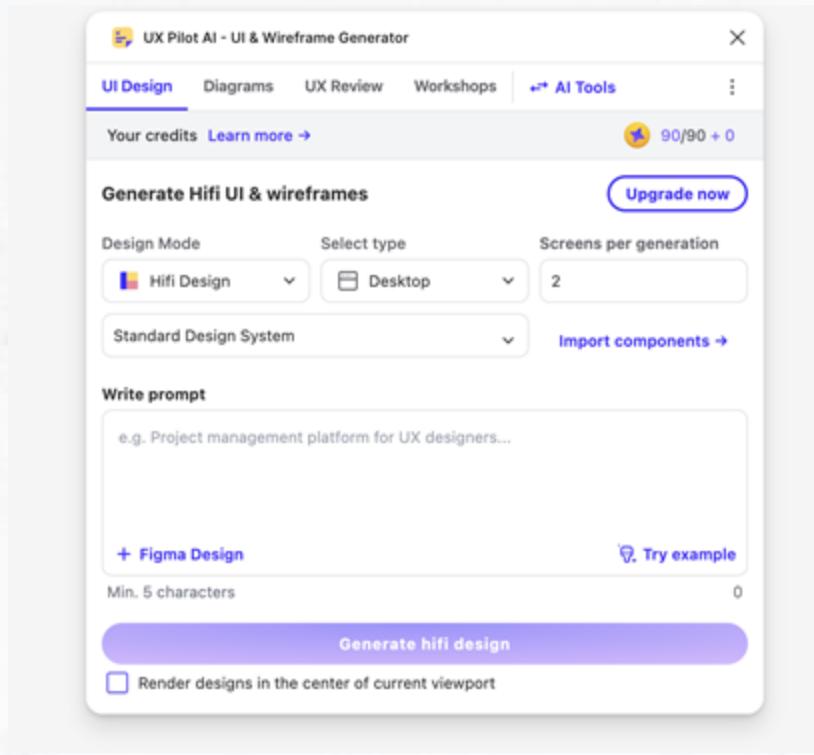
- **Team Charters:** A core recommendation is for students to create team charters outlining team roles, goals, and norms (e.g., communication methods, behavior expectations, task tracking). These charters establish mutual expectations and reduce future conflicts.
- **AI's Role:** AI can facilitate this process by guiding students through the charter creation via structured prompts, helping them have important conversations early in the project.
- **Prompt Design:** A sample prompt is provided to help AI act as a friendly, wise coach. The AI asks sequential questions, prompting students to define their project, set goals, assign roles, and establish norms.
- **Student Autonomy:** Students must understand that they are in charge and AI serves as a tool—not a

At the bottom, there's a footer note: "ChatGPT can make mistakes. Check important info." and a "Ask anything" input field with a microphone icon.

Interface #4 - UIZard (UI/Image generation)



Interface #5 - UX Pilot (UI/Image generation)



Interface #6 - v0 (UI/Image generation)

[Sign In](#)[Sign Up](#)

What can I help you ship?

Ask v0 to build...

No project selected ▾

[Clone a Screenshot](#)[Import from Figma](#)[Landing Page](#)[Sign Up Form](#)[Calculate Factorial](#)

From the Community

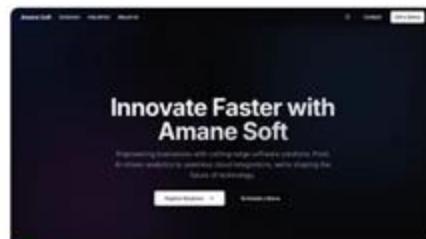
Explore what the community is building with v0.

[Browse All >](#)

File Manager
4.8K Forks

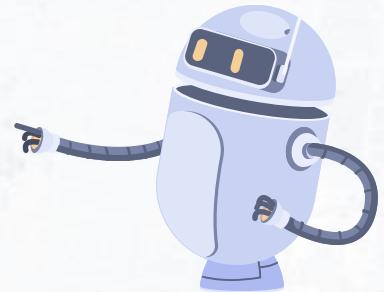


Next.js + Charts
4.1K Forks



Innovate Faster with
Amane Soft
Streamline innovation with cutting-edge software solutions. From AI-driven analytics to dynamic user interfaces, we're paving the way for a future of innovation.

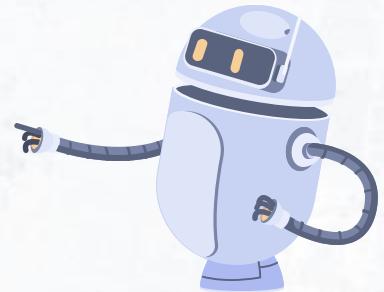
Step 2: Metaphor options



Metaphor options: “AI as...”

- **AI as a Tool:** AI extends your abilities—like a calculator or spell-checker. It doesn’t act on its own, but helps you do something faster or better.
- **AI as a Co-Agent:** AI is a creative partner that shares control. It actively helps you make decisions, generate ideas, and adapt to changes in your process.
- **AI as a Coach:** AI observes your work and offers tips or encouragement to help you improve. Like a sports coach, it gives advice—but doesn’t do the work for you.
- **AI as a Personal Tutor:** AI delivers structured lessons and adapts based on your strengths and weaknesses. It’s like having a private teacher guiding your progress.
- **AI as a Feedback Generator:** AI helps you reflect by giving critique, suggestions, or alternatives—like a peer or TA during a studio critique.
- **AI as a Sensor (Not a Solution):** AI detects patterns, surfaces insights, or shares data—but doesn’t tell you what to do. It supports your judgment without replacing it.
- **AI as a Critic or Provocateur:** AI challenges your assumptions, asks hard questions, or shows unexpected results to spark new thinking.
- **AI as a Teammate:** AI works with you on shared tasks—like a group project partner. It needs to be responsive, predictable, and aware of your goals.
- **AI as a Mirror:** AI reflects your inputs, behaviors, or biases back to you—helping you notice things about your work or thinking that you might miss.
- **AI as Infrastructure:** AI shapes what’s possible behind the scenes. It may not be visible in the interface, but it influences who can access what, and how

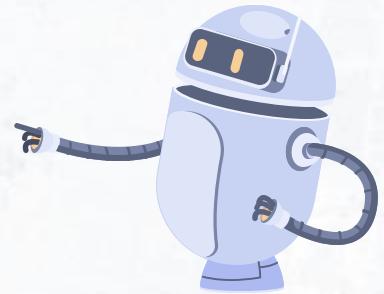
Step 3: Learning objective options



Learning objectives to strengthen design studio culture and critique in HCC629:

- Bolster students' divergent thinking
- Facilitate feedback on students' in-progress work
- Increase students' iteration (quantity and quality)
- Improve students' self-reflection and perspective-taking

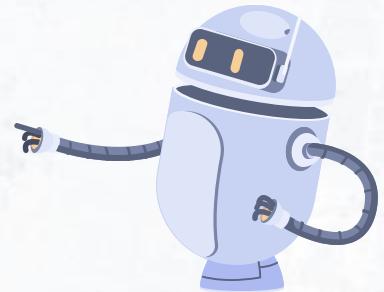
Step 4: Follow AI policies!



Final AI Policies

- 1. Include a 2-3 sentence summary of how you used genAI to complete your redesign**
- 2. Less than half of the work should be generated with AI.**
- 3. Students should check if their AI-generated ideas include any stereotypes or biased assumptions, such as by asking if any perspective or voice is missing in the response received.**
- 4. Accountability should mean understanding and justifying the “why” behind every decision, even if an idea came from AI.**
- 5. Ownership over our decisions - whatever I am using AI for, I am accepting it -**
- 6. When using generative tools for brainstorming, push beyond initial suggestions to explore alternative, unexpected, or personally meaningful directions.**
- 7. Non-native English speakers can use genAI to refine their drafted text by asking not only for refined text but also a list of the refinements made.**
- 8. The same GenAI tools and models should be used by all students for each assignment.**
- 9. To avoid hypocrisy, faculty should model the transparency they expect from students when it comes to GenAI use in teaching, assignments, and grading.**
- 10. The university should provide access to essential AI tools through institutional licenses or recommend free alternatives.**
- 11. Students should use AI to help them analyze and address their peers’ critiques.**
- 12. Instructors should include guidelines and rubrics with concrete examples of acceptable and not acceptable use of AI for each assignment.**
- 13. Assignments should include opportunities to use AI tools in ways that mirror industry practices; faculty should research company policies on the ethical use of AI.**

Step 4a: Redesign activity reflection



Redesign activity reflection questions:

- Compared to last semester's HCC629, how did you use genAI similarly to complete this redesign activity?
- Compared to last semester's HCC629, how did you use genAI differently to complete this redesign activity?
- Which AI policies were easiest to adhere to, and why?
- Which AI policies were the hardest to adhere to, and why?
- Based on these difficulties, how would you revise these policies?

Putting it all together...

- 1. AI tool: ChatGPT**
- 2. Metaphor: AI as provocateur**
- 3. Learning objective: Improve my self-reflection and perspective-taking**

“I am going to redesign the interface of __<insert AI tool>__ by using the conceptual model of __<insert metaphor>____ in order to __<insert learning objective>____ in HCC629.”

Interface Assignments

Text-Based

- Claude (1)
 - Lokika
- Grammarly (1)
 - Aasmita
- ChatGPT (2)
 - Jihye
 - Ali

UI/Image-Based

- UIZard (1)
 - Pooja
- UX pilot figma plugin (2)
 - Aniqa
 - Jay
- V0 (1)
 - Vishal

Learning objective assignments:

Bolstering divergent thinking (2)

- Aasmita
- Ali

Facilitating feedback on in-progress work (2)

- Aniqa
- Lokika

Increasing iteration (quantity and quality) (2)

- Jay
- Vishal

Self-reflection and perspective-taking (2)

- Pooja
- Jihye

Metaphor options:

- **AI as a Tool (Pooja)**
- **AI as a Co-Agent**
- **AI as a Coach (Jihye)**
- **AI as a Personal Tutor (Aniqa)**
- **AI as a Feedback Generator (Vishal)**
- **AI as a Sensor (Not a Solution) (Jay)**
- **AI as a Critic or Provocateur (Lokika)**
- **AI as a Teammate (Ali)**
- **AI as a Mirror (Aasmita)**
- **AI as Infrastructure**

Interface Redesign **due Thursday May 1, 11:59p**

- Share Figma file to Manisha, Kaoru, Dr. Kotturi (make sure w/ permission to edit)
- Share completed worksheet with interfaces, descriptions, and policy reflections
 - Make sure to include 2-3 sentence summary of how you used genAI to complete your redesign
- Picking up payment (**\$220** each person):
 - Monday May 5, in ITE 472 (11:00-4:00)
- You can only receive payment once redesign assignment AND post-workshop survey are complete

A note about payment + taxes

- You have to fill out W-9 (for US citizen)/W-8 (for international students) + informed consent
- **Payment-related information** may be shared with the IRS or other entities as required by law
- Payments for participation in human subject research constitute **taxable income** to the participant for purposes of U.S. Federal and Maryland state income tax.
- If you receive over \$599 from institutions in a calendar year, the institutions must report it to the IRS via Form 1099.

To get started, make a **copy** of this
~~worksheet~~
Scan Me!



<https://tinyurl.com/39cbwfky>

Before you go, quick group-wide reflection

“What do you want to get out of these workshops”

→ “It’s inevitable that genAI will be a part of our lives. If so, I would like to at least do it in a way that is ethical and doesn’t leave me feeling like **I’ve committed a crime.**”

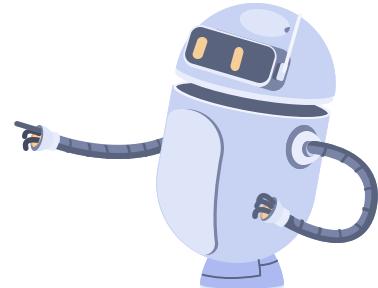
What do you feel you got out of these workshops?

Housekeeping

Before leaving, please do the following:

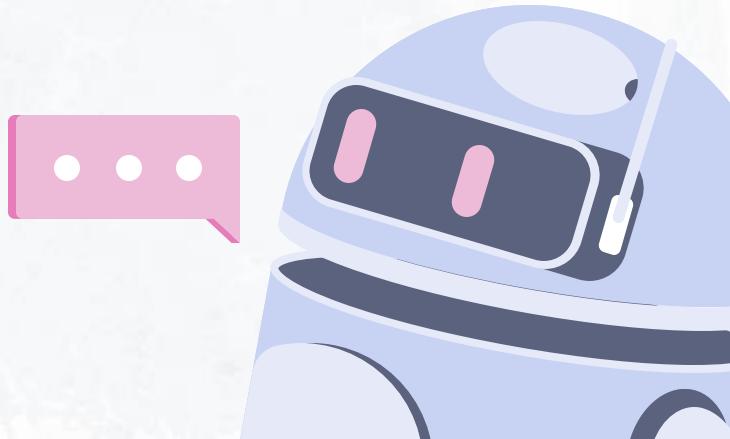
- Clean up any trash in your area / on the tables
- Push your chairs back into the tables
- Don't forget any belongings!

This room has been graciously loaned to us and we would like to leave it the way we found it :)



Student-Driven Generative AI Policy in Design

Evaluating GenAI Interface
Redesigns



Project Recap

- (-) AI policies are driven by faculty and administrators
- (-) Policies are vague and ineffective; fear-mongering in Gen AI use
- (-) Students are the “lead users” (Von Hippel, 2006)

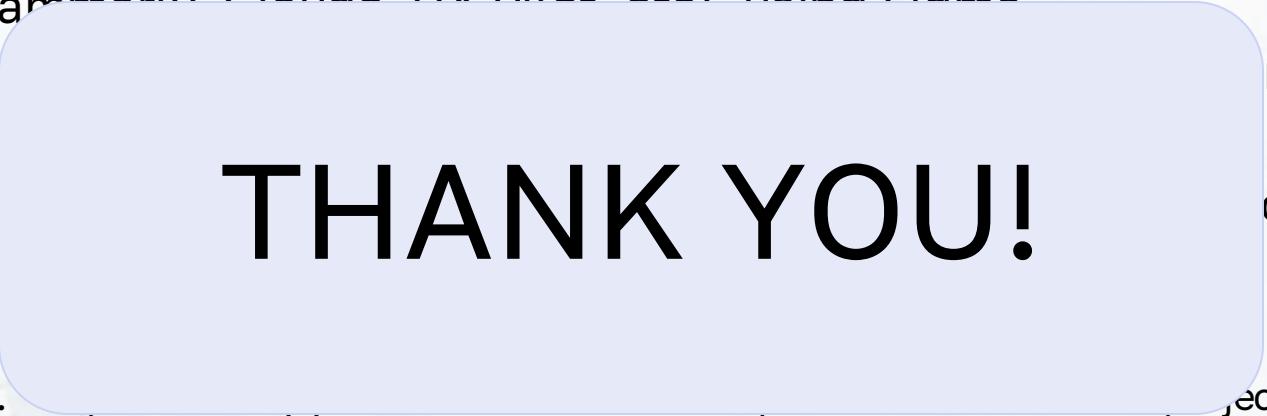
Participants

8 former HCC 629 (Fundamentals of Human-Centered Computing) students from Fall 2024 - taught by Dr. Kotturi

Methods

- (-) Three-part participatory workshop series
- (-) Post-workshop Interviews
- (-) Pre- and Post-Workshop surveys

Interface Redesign Overview

1. Redesign an interface of genAI technology (e.g. ChatGPT, Grammarly, Claude, UX Pilot, etc.) using Figma
 2. Animate the redesign process (e.g. screen recordings or redesigns)
 3. Integrate the redesigns into a presentation
 4. Submit the redesigns and presentation to the professor for review
 5. Explain the redesigns in a presentation
- a. Present the redesigns and presentation to the class (~Fall 2025)
- 
- THANK YOU!**

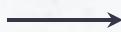
Overview of the evaluation rubric

Learning
Objective



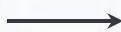
Does the redesign meaningfully support the assigned learning goal (e.g., bolstering divergent thinking, iteration, or reflection)?

Conceptual
Model



Does the interface reflect the assigned metaphor (e.g., AI as Mirror) in both design and interaction? Is it used to guide the experience?

Usability



Is the redesigned interface usable and intuitive? Does it respect design principles such as feedback and navigation?

Overall

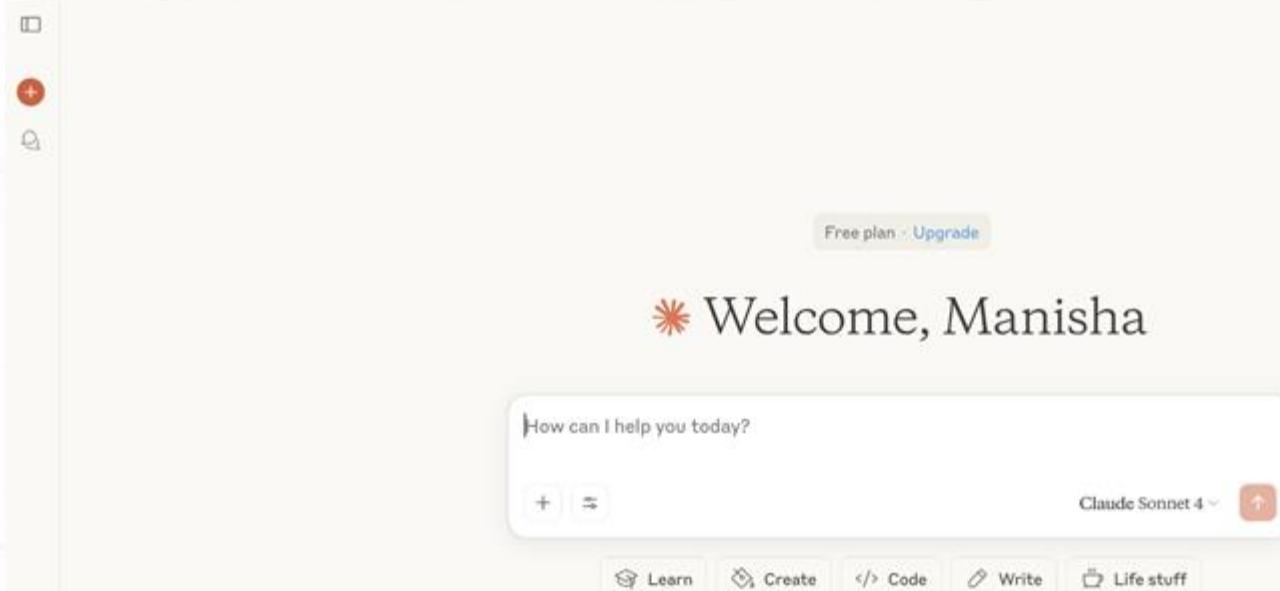


How well does the redesign come together as a cohesive, intentional solution? Does it integrate metaphor, learning goal, and usability into a strong concept?

P1

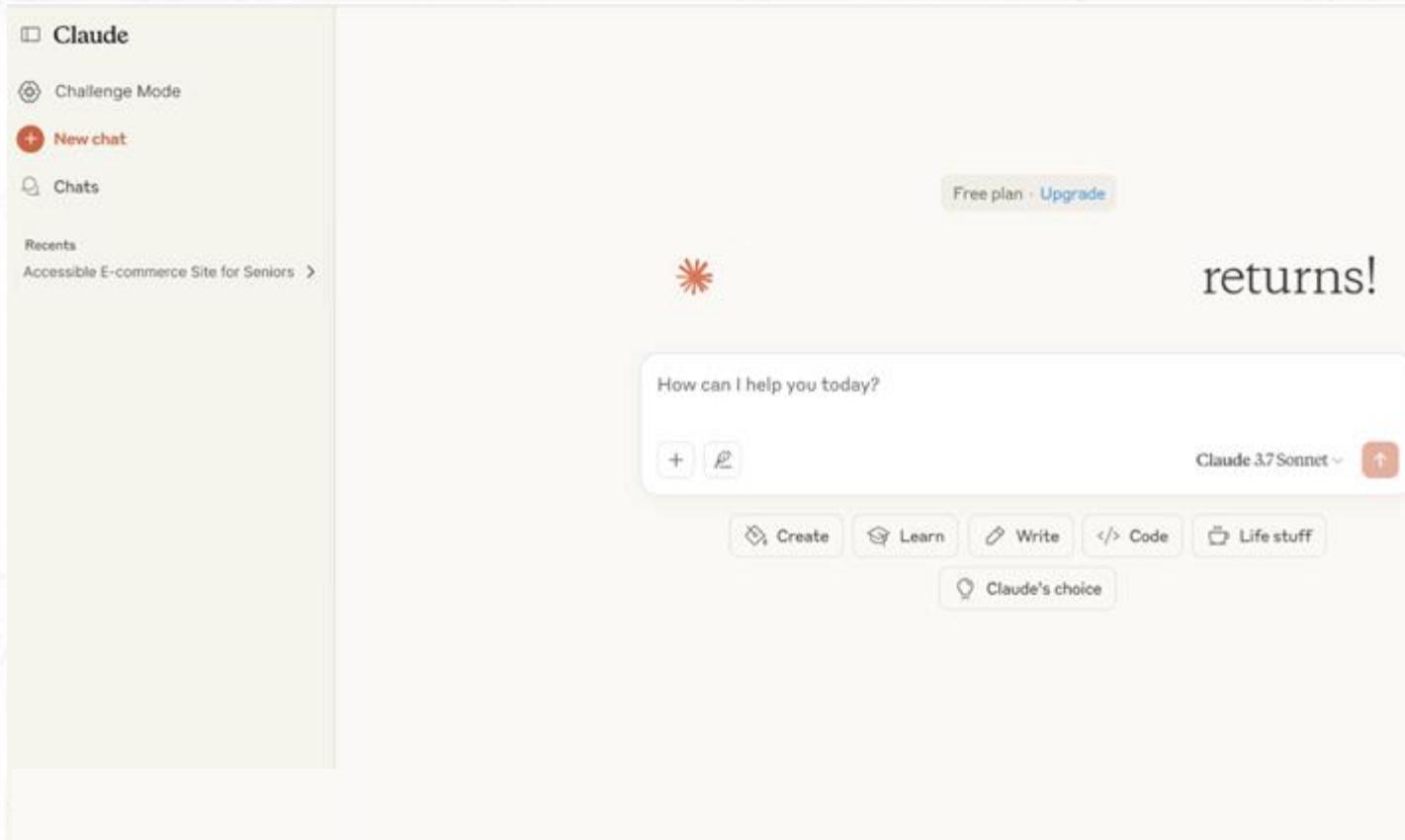
- **Tool:** Claude
- **Conceptual metaphor:** AI as a Critic or Provocateur
- **Learning objective:** Facilitate feedback on students' in-progress work

Claude Original Design



Claude Redesign

- **Conceptual metaphor:** AI as a Critic or Provocateur
- **Learning objective:** Facilitate feedback on students' in-progress work



- **Tool:** Claude
- **Conceptual metaphor:** AI as a Critic or Provocateur
- **Learning objective:** Facilitate feedback on students' in-progress work

Claude Accessible E-commerce Site for Seniors Share

Challenge Mode New chat Chats Recents Accessible E-commerce Site for Seniors >

LP To design an e-commerce site for seniors - a emphasizes its usability, and accessibility for older adults. Including simple navigation, large text, and voice search, and use some.

1. Why assume that older adults will prefer simple navigation? Research might reveal diverse preferences.
2. Are you considering voices of seniors with disabilities? The design should also accommodate their needs.
3. What if large text leads to information overload? Have you tested this assumption with users?

Bias detector: Focusing on seniors as a homogeneous group risks reinforcing ageist stereotypes.

Reply to Claude... Claude 3.7 Sonnet + ↗ Show desktop

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P2

- **Tool:** Grammarly
- **Conceptual Metaphor:** AI as a mirror
- **Learning Objective:** Bolster students' divergent thinking

Grammarly Original Design

The screenshot displays the Grammarly original design interface. At the top, there's a navigation bar with a 'G' icon, a three-line menu, and tabs for 'Demo document', 'Goals', and 'Overall score'. Below the navigation is a toolbar with icons for bold, italic, underline, strikethrough, and font size.

The basics

Mispellings and grammatical errors can effect your credibility. The same goes for misused commas, and other types of punctuation. Not only will Grammarly underline these issues in red, it will also showed you how to correctly write the sentence.

Underlines that are blue indicate that Grammarly has spotted a sentence that is unnecessarily wordy. You'll find suggestions that can possibly help you revise a wordy sentence in an effortless manner.

But wait...there's more?

Grammarly Premium can give you very helpful feedback on your writing. Passive voice can be fixed by Grammarly, and it can handle classical word-choice mistakes. It can also help with inconsistencies such as switching between e-mail and email or the U.S.A. and the USA.

It can even help when you wanna refine ur slang or formality level. That's especially useful when writing for a broad audience ranging from businessmen to friends and family, don't you think? It'll inspect your vocabulary carefully and suggest the best word to make sure you don't

Below the text area, there are status indicators for battery, signal, and battery level, along with a word count of 174 words.

Review suggestions

Review suggestions (11)

Correctness Clarity Engagement Delivery

Pro suggestions (11)

Correctness - Correct your spelling effect

Misspellings Misspellings and grammatical...

Accept Dismiss ⌂ ...

- Correct your spelling effect
- Remove the comma commas,
- Remove a space punctuation .
- Add the word(s) ,
- Change the verb form showed
- Remove wordiness Underlines that are blue

Check for plagiarism and AI text

Grammarly Redesign

- **Conceptual Metaphor:** AI as a mirror
- **Learning Objective:** Bolster students' divergent thinking



Untitled Document



89 Overall Score

Echo Panel

I am one of those who say that I am more fantasy-inclined than science fiction. Yet, when I read the excerpt of 'Make It So', I understood that sci-fi was inherently in all the media I have consumed since a young age. From the multitude of gadgets in Doraemon's pockets to the steampunk-themed world of Arcane integrating magic with science, the book guides one to think of the possibilities in the physical world through a study that connects design to science fiction media.

Reflect this

With technology evolving through leaps and bounds, what remains to invent? To inspire? The book aspires to do just that. To look beyond the obvious and think of something that doesn't exist in the world yet. It suggests that fictional technology seen in sci-fi sets audience expectations for what the future might hold. Motorola's example gives us a concrete example of this. The creators utilized Star Trek's popularity and brought something into the world that was not only new but also something that adhered to people's mental model.

This book is filled with such relatable examples. Be it a novice, a design enthusiast, or a fiction connoisseur, the book has something to strike anyone's fancy. I for one, could connect to the example of Georges Méliès' 'A Trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

- **Conceptual Metaphor:** AI as a mirror
- **Learning Objective:** Bolster students' divergent thinking

Untitled Document Goals 89 Overall Score Echo Panel What am I writing about today?

I am one of those who say that I am more fantasy-inclined than science fiction. Yet, when I read I understood that sci-fi was inherently consumed since a young age. From Doraemon's pockets to the steampunk integrating magic with science, there are the possibilities in the physical world that connects design to science fiction.

With technology evolving through the ages, what remains to invent? To inspire? The question is, To look beyond the obvious and what exists in the world yet. It suggests that in sci-fi sets audience expectations to hold. Motorola's example gives us hope. The creators utilized Star Trek's potential to bring something into the world that wasn't something that adhered to people's expectations.

This book is filled with such relateable characters, from the design enthusiast, or a fiction connoisseur, to someone who wants to strike anyone's fancy. The example of Georges Méliès' 'A Trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

Set My Goals
Get tailored writing suggestions based on your goals and audience.

Tonal Lenses How do I want my readers to feel?
Conversational Ease

Style Intent What kind of impact do I want to have?
Inspire new thinking Explain with clarity Spark curiosity
Persuade Boldly Invite Reflection

Audience Who am I writing for?
General Knowledgeable Expert

Show Set My Goals when I start a new document. **Reset to defaults** **Done**

Contextual Rephrasings
1st Person / 3rd Person
Past / Present
Active / Passive

B I U | H1 H2 | ⌂ | ☰ | ☱ ☲ | ↴

315 words ^

- **Conceptual Metaphor:** AI as a mirror
- **Learning Objective:** Bolster students' divergent thinking

Untitled Document

Goals

89 Overall Score

I am one of those who say that I am more fantasy-inclined than science fiction. Yet, when I read the excerpt of 'Make It So', I understood that sci-fi was inherently in all the media I have consumed since a young age. From the multitude of gadgets in Doraemon's pockets to the steampunk-themed world of Arcane integrating magic with science, the book guides one to think of the possibilities in the physical world through a study that connects design to science fiction media.

With technology evolving through leaps and bounds, what remains to invent? To inspire? The book aspires to do just that. To look beyond the obvious and think of something that doesn't exist in the world yet. It suggests that fictional technology seen in sci-fi sets audience expectations for what the future might hold. Motorola's example gives us a concrete example of this. The creators utilized Star Trek's popularity and brought something into the world that was not only new but also something that adhered to people's mental model.

This book is filled with such relatable examples. Be it a novice, a design enthusiast, or a fiction connoisseur, the book has something to strike anyone's fancy. I for one, could connect to the example of Georges Méliès' 'A Trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

X Echo Panel

What am I writing about today?

Tone Mirrors

Formal

As technology continues to advance at an unprecedented pace, one may wonder: what innovations remain undiscovered?

Empathetic

Technology is moving so quickly—it's only natural to ask: what's left for us to create?

Conversational

Tech's moving faster than ever—so what's even left to invent these days?

What do I want to do? (Ask yourself with Gen AI)

I want to...

Perspective Mirrors

Active / Passive



1st Person / 3rd Person



Past / Present



Contextual Rephrasings

Active / Passive



- **Conceptual Metaphor:** AI as a mirror
- **Learning Objective:** Bolster students' divergent thinking

Untitled Document Goals 89 Overall Score Echo Panel

I am one of those who say that I am more fantasy-inclined than

Set My Goals

Get tailored writing suggestions based on your goals and audience.

Tonal Lenses How do I want my readers to feel?

Conversational Ease

Style Intent What kind of impact do I want to have?

Inspire new thinking Explain with clarity Spark curiosity
Persuade Boldly Invite Reflection

Audience Who am I writing for?

General Knowledgable Expert

Show Set My Goals when I start a new document. [Reset to defaults](#) [Done](#)

the example of Georges Melies' 'A Trip to the Moon'. I have seen this film a hundred times yet the book's perspective was a

B I U | H1 H2 | ⌂ | ⌓ ⌔ | ⌕

315 words ▲

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P3

- **Tool:** V0
- **Conceptual Metaphor:** AI Feedback Generator
- **Learning Objective:** Increasing iteration (quality and quantity)

V0 Original Design

New: The v0 API is now in beta. Learn More >

What can I help you build?

New Project v0-1.5-md

+

Clone a Screenshot

Import from Figma

Landing Page

Sign Up Form

Calculate Factorial

Starter Templates

Get started instantly with a framework or integration of your choice.

 **Next.js**
Build full-stack React apps

 **Supabase**
Spin up Postgres with auth

 **Neon**
Start with Serverless Postgres

 **Upstash**
Get started with Serverless Redis

V0 Redesign

- **Conceptual Metaphor:** AI Feedback Generator
- **Learning Objective:** Increasing iteration (quality and quantity)

VO Design

Design iterations and project management simplified

Search your projects...

Search



Last edited 2 days ago

VO Redesign

Interface redesign for HCC629 with improved iteration tracking

3 Iterations



Create New Project

Start with a blank canvas

Quick Start Templates

Website Design

Mobile App UI

Dashboard Layout

Landing Page

- **Conceptual Metaphor:** AI Feedback Generator
- **Learning Objective:** Increasing iteration (quality and quantity)

AI Feedback Generator

Iterate and Improve your designs with AI-powered feedback.

Project Iterations 3 Total

- Iteration 1 35% Quality
- Iteration 2 58% Quality
- Iteration 3 72% Quality

Design Preview AI Feedback

Current Design (Iteration #3) Full Screen Export

Desktop Tablet Mobile

VO Redesigned Interface
AI-powered Feedback Generator

72% Quality

View Detailed Feedback Start Next Iteration

Interactive prototype - click elements to explore

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P4

- **Tool:** UX Pilot Figma plugin
- **Conceptual Metaphor:** AI as a personal tutor
- **Learning Objective:** Facilitating feedback on in-progress work

UX Pilot Original Design

UX Pilot AI - UI & Wireframe Generator

UI Design Diagrams UX Review Workshops [AI Tools](#) :

Your credits [Learn more →](#)  90/90 + 0

Generate Hifi UI & wireframes [Upgrade now](#)

Design Mode:  Hifi Design Select type:  Desktop Screens per generation: 2

Standard Design System [Import components →](#)

Write prompt
e.g. Project management platform for UX designers...

+ Figma Design [Try example](#)

Min. 5 characters 0

Generate hifi design

Render designs in the center of current viewport

UX Pilot Redesign

- **Conceptual Metaphor:** AI as a personal tutor
- **Learning Objective:** Facilitating feedback on in-progress work

The screenshot displays the UX Pilot Redesign interface, featuring a sidebar navigation and several main sections.

Left Sidebar:

- Current Project:** HCC629 Redesign
- Design Board:** Shows a wireframe of a mobile application with various components like a navigation bar, a central content area, and a footer.
- Feedback:** A section for user feedback.
- Resources:** A section for design assets.
- Style Guide fig:** A preview of the style guide.
- AI Assistant:** A chatbot interface with a message: "I'm here to help with your design. Ask me anything!" and a "Start Conversation" button.

Main Content Area:

Welcome back, UX Pilot AI

Let's continue working on your HCC 629 redesign project.

AI Tutor Feedback:

Remember to cite your references for the design inspiration you used in the navigation component.

Based on your previous assignment feedback, consider improving the contrast ratio in your color scheme.

Great progress on implementing the accessibility guidelines!

AI Tutor: UX Pilot AI

Remember: Don't forget to cite your references for any design patterns you're implementing.

Assignment Progress: [Progress Bar]

Add a comment... **Post Comment**

Personalized Learning Resources:

- Design Patterns:** Based on your current project, here are some relevant e-commerce patterns. [Learn more](#)
- Video Tutorials:** Curated Figma tutorials matching your skill level and project needs. [Watch now](#)
- Analytics Insights:** Review your progress and areas for improvement in HCC 629. [View insights](#)

Recommended Resources:

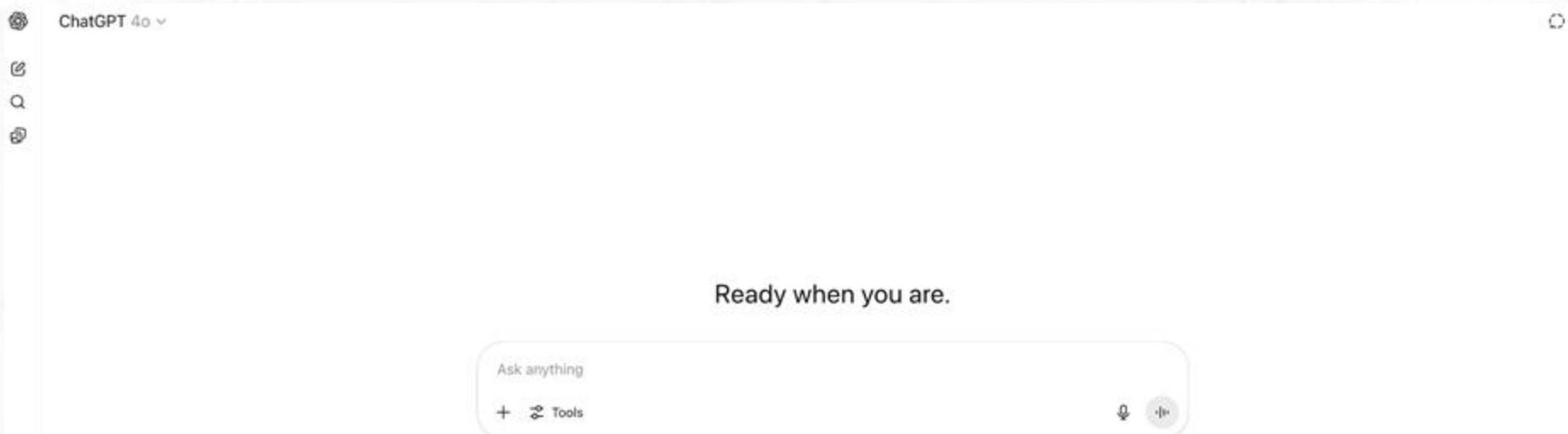
- Wireframing Best Practices:** Learn advanced wireframing techniques based on your current project needs. [Learn More](#)
- Video Tutorials:** Curated video content matching your learning style and project requirements. [Watch Now](#)
- Rubric Checklist:** Interactive checklist to ensure your design meets all assignment requirements. [View Checklist](#)

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P5

- **Tool:** ChatGPT
- **Conceptual Metaphor:** AI as a Teammate
- **Learning Objective:** Bolster divergent thinking

ChatGPT Original Design



ChatGPT Redesign

- **Conceptual Metaphor:** AI as a Teammate
- **Learning Objective:** Bolster divergent thinking

ChatGPT ▾

Temporary

Creativity is a team sport—ready when you are!

I'm ready when ever you need me!



Pass



Wild Ideas



Devil's Advocate



Create Image



Run a Play

...



Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P6

- **Tool:** Ulzard
- **Conceptual Metaphor:** AI as a tool
- **Learning Objective:** Improve students' self-reflection and perspective-taking

Ulzard Original Design

The screenshot displays the Ulzard interface, which is a free design tool. The top navigation bar includes a user icon, a "Free" status indicator, and a search bar. On the left sidebar, there are links for "Projects" (0), "Templates", "Team", "Brand" (Beta), and "Learn". A call-to-action button "Refer" is also present. The main area is titled "Start creating" and offers four options: "New blank project", "Generate with Autodesigner" (Beta), "Start from screenshot", and "Start from template". Below this, a project list shows one item: "Untitled Blank Project" by "Marisha Vijay", updated 2 months ago. At the bottom, a progress bar indicates "39/400 components used" at 10% completion.

Start creating

New blank project

Generate with Autodesigner Beta

Start from screenshot

Start from template

Projects 1

Untitled Blank Project
Updated 2 months ago

Recommend Ulzard
and get 1 month Pro for free

Refer

39/400 components used 10%

MV Marisha Vijay

Ulzard Redesign

- **Conceptual Metaphor:** AI as a tool
- **Learning Objective:** Improve students' self-reflection and perspective-taking

Dashboard

Reflection Tools

Prospective Talking

Discussion

Start Reflecting

Begin a New Reflection

Guide Me Through
Reflection (AI-Assisted)

Reflect on a Real
Experience

Perspective Journals

New Perspective Entry

ReflectAI

Shifted Lens

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P7

- **Tool:** UX Pilot
- **Conceptual Metaphor:** AI as a Sensor (not a solution)
- **Learning Objective:** Increase iteration (quantity and quality)

UX Pilot Original Design

UX Pilot AI - UI & Wireframe Generator

UI Design Diagrams UX Review Workshops [AI Tools](#) :

Your credits [Learn more →](#)  90/90 + 0

Generate Hifi UI & wireframes [Upgrade now](#)

Design Mode:  Hifi Design Select type:  Desktop Screens per generation: 2

Standard Design System [Import components →](#)

Write prompt
e.g. Project management platform for UX designers...

+ Figma Design [Try example](#)

Min. 5 characters 0

Generate hifi design

Render designs in the center of current viewport

UX Pilot Redesign

- **Conceptual Metaphor:** AI as a Sensor (not a solution)
- **Learning Objective:** Increase iteration (quantity and quality)

AI Design Assistant

Features Docs Pricing Try Now

Scanning in progress...

Carnings

Aligments

Contrast

If You Need

Escially

Alignment

Live Analysis

Active

1 Contrast Issue

Button text (#FFFFFF) on background (#E2E2E2) fails WCAG contrast requirements

2 Inconsistent Spacing

Padding between cards varies (16px vs 24px)

3 Alignment Error

Header elements are misaligned by 4px

3 Critical Issues

7 Warnings

85% Score

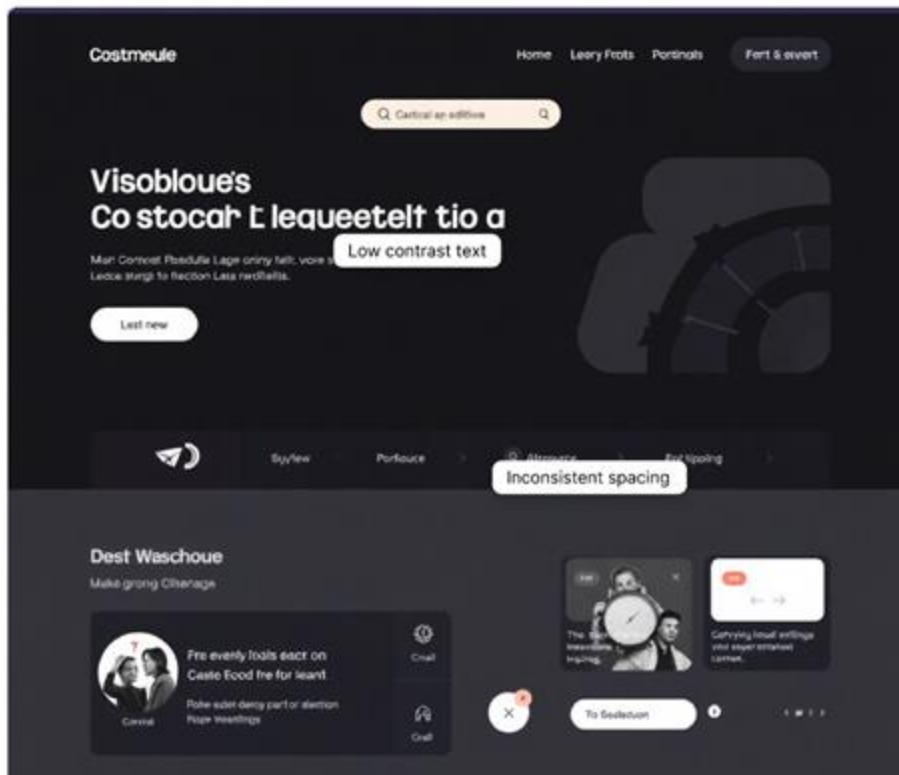
UX Pilot Redesign

- **Conceptual Metaphor:** AI as a Sensor (not a solution)
- **Learning Objective:** Increase iteration (quantity and quality)

 AI Design Inspector

Features Pricing Documentation Support

Try Now



Analysis Results

Live Scanning

Contrast Issues

Text contrast ratio is below 4.5:1

Spacing Inconsistency

Padding varies between similar elements

Missing Alt Text

3 images lack alt descriptions

Key Metrics

Accessibility Score

86%

Issues Found

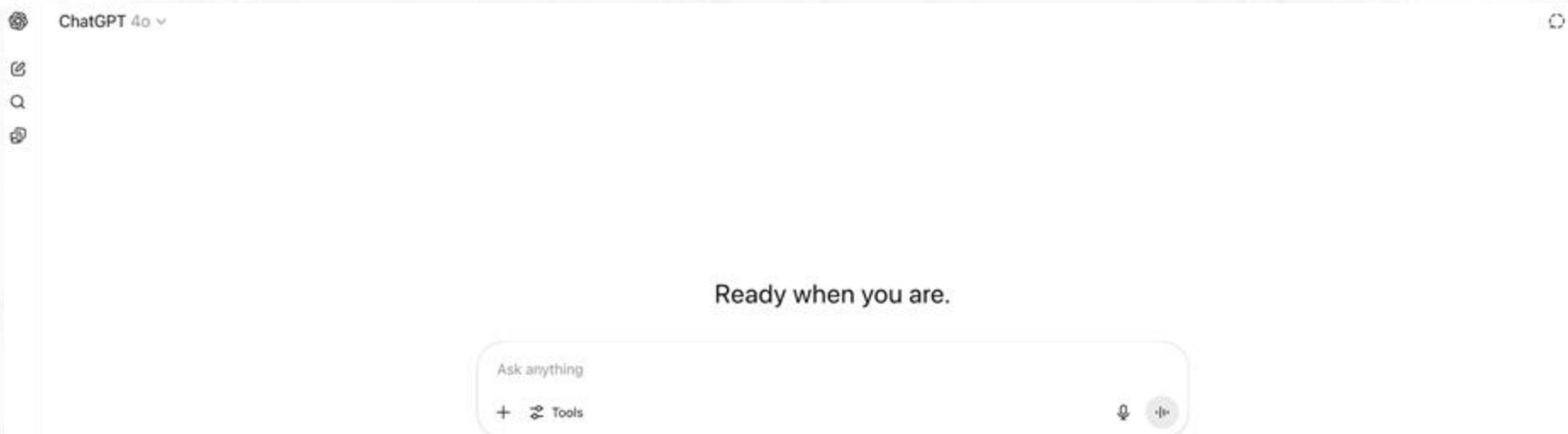
7

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

P8

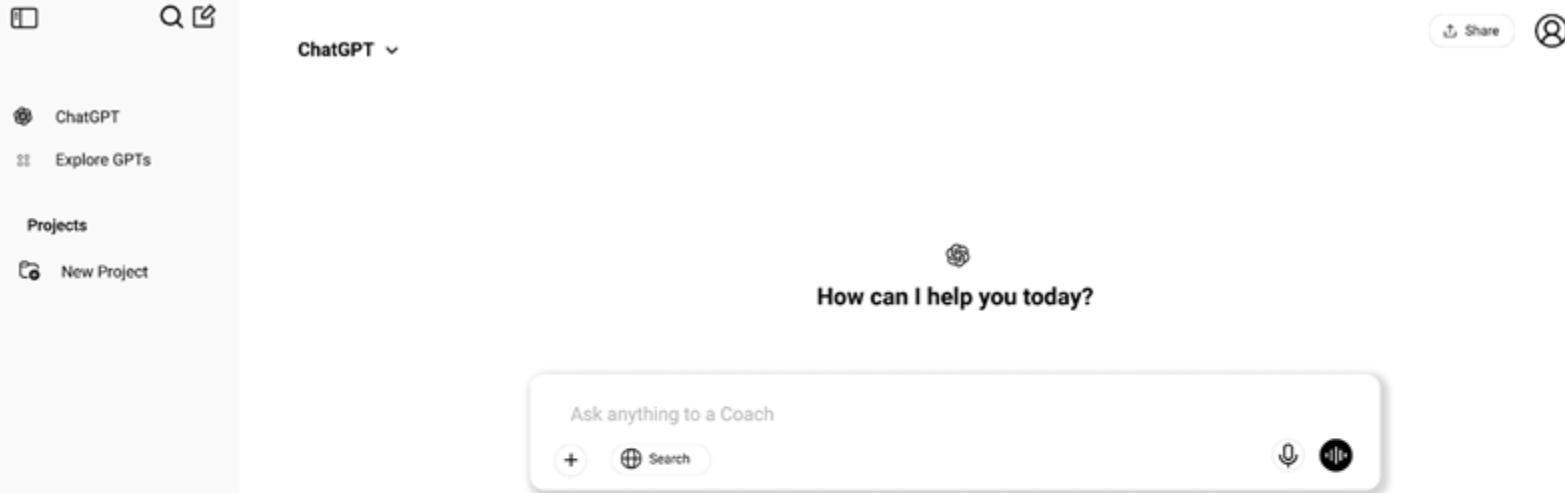
- **Tool:** ChatGPT
- **Conceptual Metaphor:** AI as a Coach
- **Learning Objective:** Improve students' self-reflection and perspective taking

ChatGPT Original Design



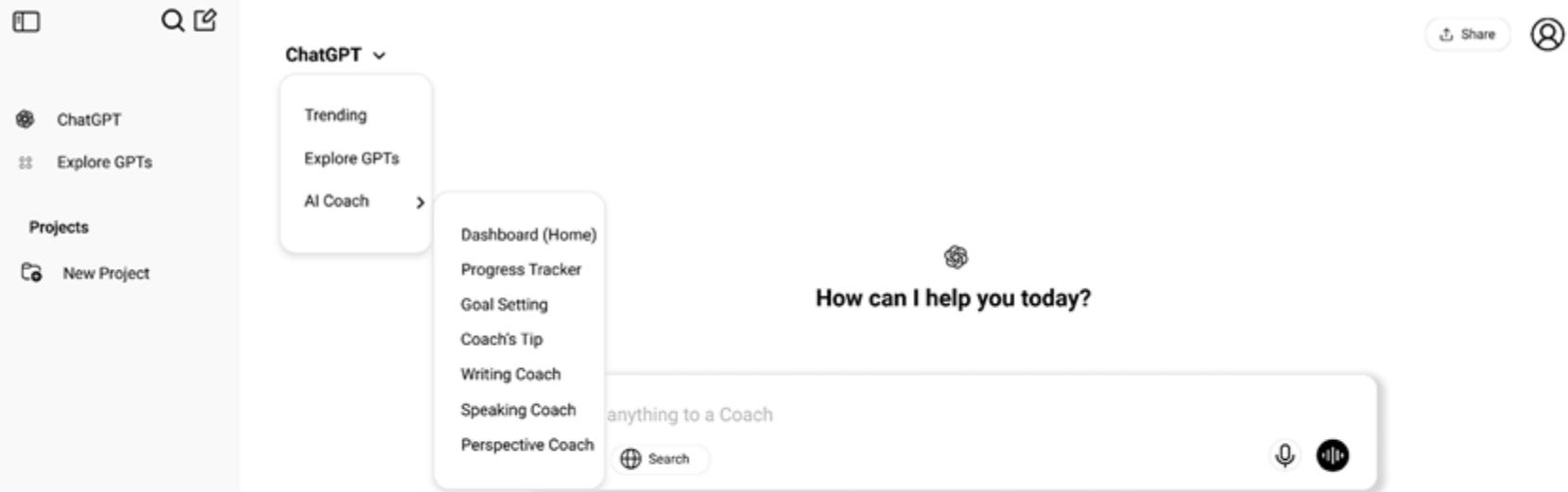
ChatGPT Redesign

- **Conceptual Metaphor:** AI as a Coach
- **Learning Objective:** Improve students' self-reflection and perspective taking



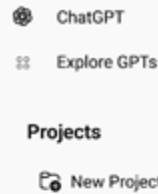
ChatGPT Redesign

- **Conceptual Metaphor:** AI as a Coach
- **Learning Objective:** Improve students' self-reflection and perspective taking



ChatGPT Redesign

- **Conceptual Metaphor:** AI as a Coach
- **Learning Objective:** Improve students' self-reflection and perspective taking



AI Coach Dashboard



"Great to see you! Let's work on improving your communication skills."

Quick Suggestions

Writing Tips

Common Errors

Practice Topics

"What should I focus on first?"



"You're doing great! Try asking more open-ended questions in conversation."



"Okay, I'll give that a try!"

Send a message...

ChatGPT Redesign

- **Conceptual Metaphor:** AI as a Coach
- **Learning Objective:** Improve students' self-reflection and perspective taking

ChatGPT

Explore GPTs

Projects

New Project

AI Coach

Dashboard

Today's Chat

Previous Chats

Progress Tracker

Goal Setting

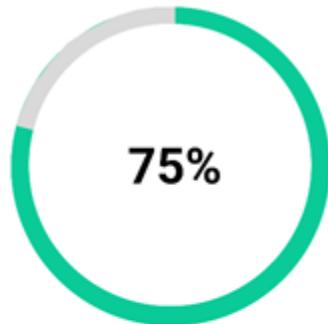
Coach's Tip

Writing Coach

Speaking Coach

Perspective Coach

Progress Tracker



Progress Toward Goal

You aimed for 4 tasks and completed 3

Writing

70%

Grammar

60%

Vocabulary

80%



Vocabulary Pro

Rubric Criteria	3 - Strong	2 - Adequate	1 - Needs Improvement
Learning objective	The redesign clearly and compellingly addresses the assigned learning objective (e.g., divergent thinking) through thoughtful interface changes. It introduces interactions or visual structures that directly support the target learning goal.	The redesign partially addresses the assigned learning objective. There is some alignment, but implementation is surface-level or underdeveloped.	The redesign does not clearly reflect or engage with the assigned learning objective. The connection feels weak, generic, or missing.
Conceptual model	The metaphor (e.g., AI as Mirror) is integrated throughout the interface in both visual and interaction design. It guides the user's experience and aligns with AI behavior and system framing.	The metaphor is present but not consistently reflected in interface elements. It may be described in text but is not fully realized in design choices.	The conceptual model is missing, misapplied, or tokenistic. There is little evidence the metaphor shaped the interface design.
Usability	The redesign demonstrates clear attention to user flow, accessibility, affordances, and feedback. Interface components are intuitive and support user agency.	Basic usability principles are considered, but some elements may be confusing, unintuitive, or missing standard UX conventions.	Usability is significantly lacking. The interface feels disjointed, hard to navigate, or ignores user needs and conventions.
Overall	The redesign is conceptually strong, visually coherent, and shows originality and intention. It integrates learning goals, metaphors, and usability into a unified, thoughtful experience.	The redesign shows effort and some coherence, but may feel unfinished, inconsistent, or only partially successful.	The redesign lacks cohesion or clear design logic. It may feel rushed, incomplete, or disconnected from core assignment goals.

Works Cited

- [1] Rami Alshareefen and Naji Al Sayari. 2025. Examining academic integrity policy and practice in the era of AI: a case study of faculty perspectives. *Frontiers in Education* 10 (2025). doi:10.3389/feduc.2025.1621743
- [2] Yunjo An, Ji Hyun Yu, and Shadarra James. 2025. Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration. *International Journal of Educational Technology in Higher Education* 22, 1 (2025), 10.
- [3] M. S. Andrade. 2006. International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education* 5, 2 (2006), 131–154.
- [4] M. Ardid, J. A. Gómez-Tejedor, J. M. Meseguer-Dueñas, J. Riera, and A. Vidaurre. 2015. Online exams for blended assessment: Study of different application methodologies. *Computers & Education* 81 (2015), 296–303. <https://doi.org/10.1016/j.compedu.2014.10.010>
- [5] Mariam Asad and Christopher A. Le Dantec. 2017. Tap the "Make This Public" Button: A Design-Based Inquiry into Issue Advocacy and Digital Civics. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*. ACM, Denver Colorado USA, 6304–6316. doi:10.1145/3025453.3026034
- [6] Chris Atton. 1999. A reassessment of the alternative press. *Media, Culture & Society* 21, 1 (1999), 51–76. doi:10.1177/016344399021001003

- [7] Abeba Birhane, William Isaac, Vinodkumar Prabhakaran, Mark Diaz, Madeleine Clare Elish, Iason Gabriel, and Shakir Mohamed. 2022. Power to the People? Opportunities and Challenges for Participatory AI. In *Proceedings of the 2nd ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization* (Arlington, VA, USA) (EAAMO '22). Association for Computing Machinery, New York, NY, USA, Article 6, 8 pages.
doi:10.1145/3551624.3555290
- [8] David Birks and John Clare. 2023. Linking artificial intelligence facilitated academic misconduct to existing prevention frameworks. *International Journal for Educational Integrity* 19, 20 (2023), 1–15.
doi:10.1007/s40979-023-00142-3
- [9] J. Bond. 2023. Official letter on Artificial Intelligence and academic integrity. Internal university communication.
- [10] José Antonio Bowen and C. Edward Watson. 2024. *Teaching with AI*. Johns Hopkins University Press. doi:10.56021/9781421449227
- [11] Alice Cai, Ian Arawjo, and Elena L Glassman. 2024. Antagonistic ai. *arXiv preprint arXiv:2402.07350* (2024).
- [12] Cecilia Ka Yuk Chan. 2023. A Comprehensive AI Policy Education Framework for University Teaching and Learning. *International Journal of Educational Technology in Higher Education* 20, 1 (July 2023), 38.
doi:10.1186/s41239-023-00408-3
- [13] Kathy Charmaz. 2006. Constructing grounded theory: *A practical guide through qualitative analysis*. sage.

- [14] Liuqing Chen, Yaxuan Song, Jia Guo, Lingyun Sun, Peter Childs, and Yuan Yin. 2025. How Generative AI Supports Human in Conceptual Design. *Design Science* 11 (Jan. 2025), e9. doi:10.1017/dsj.2025.2
- [15] E. Chew, S. L. Ding, and G. Rowell. 2015. Changing attitudes in learning and assessment: Cast-off “plagiarism detection” and cast-on self-service assessment for learning. *Innovations in Education and Teaching International*, 52, 5 (2015), 454–463. Retrieved October 15, 2025 from <https://pure.cardiffmet.ac.uk/en/publications/changing-attitudes-in-learning-and-assessment-cast-off-plagiarism>
- [16] Kelley Cotter. 2024. Practical knowledge of algorithms: The case of BreadTube. *New Media & Society* 26, 4 (2024), 2131–2150.
- [17] ColorWhistle. 2025. Evolution of edutech industry. Retrieved October 15, 2025 from <https://colorwhistle.com/evolution-of-edutech-industry/>
- [18] Christopher A Le Dantec and Carl DiSalvo. 2013. Infrastructuring and the formation of publics in participatory design. *Social Studies of Science* 43, 2 (2013), 241–264.
- [19] Antonella De Angeli, Silvia Bordin, and María Menéndez Blanco. 2014. Infrastructuring participatory development in information technology. In *Proceedings of the 13th Participatory Design Conference: Research Papers - Volume 1 (PDC '14)*. Association for Computing Machinery, New York, NY, USA, 11–20. doi:10.1145/2661435.2661448

- [20] D. Dessart. 1986. Effects of hand-held calculators in pre-college mathematics: A meta-analysis. *Journal for Research in Mathematics Education*, 17, 2 (1986), 83–99.
- [21] Fernando Delgado, Stephen Yang, Michael Madaio, and Qian Yang. 2023. The Participatory Turn in AI Design: Theoretical Foundations and the Current State of Practice. In *Proceedings of the 3rd ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '23)*. Association for Computing Machinery, New York, NY, USA, 1–23.
doi:10.1145/3617694.3623261
- [22] Stephen Duncombe. 1997. Notes From Underground: *Zines and the Politics of Alternative Culture*. Microcosm Publishing, Cleveland, OH.
- [23] Figma, Inc. 2025. Figma [Online collaborative design platform].
<https://www.figma.com/> Software.
- [24] Financial Times. 2024. Science students lead use of AI tools in assessments.
<https://www.ft.com/content/d591fb1a-9f6c-4345-b5fc-781e091ae3f8>. Accessed: 2025-09-11.
- [25] Dan Fitzpatrick. 2025. 76% Of Teachers Feel Unprepared For AI. Why Training Is Urgent.
<https://www.forbes.com/sites/danfitzpatrick/2025/03/15/76-of-teachers-feel-unprepared-for-ai-why-training-is-urgent/>. Accessed: 2025-09-11.
- [26] Colleen Flaherty. 2025. Half of Colleges Don't Grant Students Access to Gen AI Tools. <https://www.insidehighered.com/news/tech-innovation/>

[artificial-intelligence/2025/04/21/half-colleges-dont-grant-students-access](https://www.semanticscience.org/paper/2025/04/21/half-colleges-dont-grant-students-access)

Accessed: 2025-09-11.

- [27] N. J. Francis, S. Jones, and D. P. Smith. 2025. Generative AI in Higher Education: Balancing Innovation and Integrity. *British Journal of Biomedical Science* 81 (2025), 14048. doi:10.3389/bjbs.2024.14048
- [28] Aashish Ghimire and John Edwards. 2024. From Guidelines to Governance: A Study of AI Policies in Education. arXiv:2403.15601 [cs.CY]
<https://arxiv.org/abs/2403.15601>
- [29] M. Giannakos, R. Azevedo, P. Brusilovsky, M. Cukurova, Y. Dimitriadis, D. Hernandez-Leo, ... B. Rienties. 2024. The promise and challenges of generative AI in education. *Behaviour & Information Technology* 44, 11 (2024), 2518–2544. <https://doi.org/10.1080/0144929X.2024.2394886>
- [30] Levent Giray. 2024. The Problem with False Positives: AI Detection Unfairly Accuses Scholars of AI Plagiarism. *The Serials Librarian* 85, 5–6 (2024), 181–189. doi:10.1080/0361526X.2024.2433256
- [31] A. Guzmán and B. Trilling. 1989. Effects of hand-held calculators in pre-college mathematics education. *Journal for Research in Mathematics Education*, 17, 2 (1989), 83–99.
- [32] Bingyi Han, Sadia Nawaz, George Buchanan, and Dana McKay. 2025. Students' Perceptions: Exploring the Interplay of Ethical and Pedagogical Impacts for Adopting AI in Higher Education. *International Journal of Artificial Intelligence in Education* (Jan. 2025). doi:10.1007/s40593-024-00456-4

- [33] Christina Harrington, Sheena Erete, and Anne Marie Piper. 2019. Deconstructing community-based collaborative design: Towards more equitable participatory design engagements. *Proceedings of the ACM on human-computer interaction 3*, CSCW (2019), 1–25.
- [34] Kiersten Hay. 2022. Zineography: Exploring the participatory design process of collaborative zine making. In *Proceedings of the Participatory Design Conference 2022-Volume 2*. 313–316.
- [35] M. He, B. N. Abbasi, and J. He. 2025. AI-driven language learning in higher education: An empirical study on self-reflection, creativity, anxiety, and emotional resilience in EFL learners. *Humanities and Social Sciences Communications* 12 (2025), 1525.
- [36] Gerald F Hess. 2007. Collaborative course design: Not my course, not their course, but our course. *Washburn LJ* 47 (2007), 367.
- [37] Hsiu-Ling Hsiao and Hsien-Hui Tang. 2024. A Study on the Application of Generative AI Tools in Assisting the User Experience Design Process. In *Artificial Intelligence in HCI*, Helmut Degen and Stavroula Ntoa (Eds.). Springer Nature Switzerland, Cham, 175–189.
- [38] J. S. Jauhiainen and A. Garagorry Guerra. 2024. Generative AI and education: Dynamic personalization of pupils' school learning material with ChatGPT. *Frontiers in Education* (19 Nov 2024).
<https://doi.org/10.3389/feduc.2024.1288723>
- [39] Heather Johnston, Rebecca F. Wells, Elizabeth M. Shanks, Timothy Boey, and Bryony N. Parsons. 2024. Student Perspectives on the Use of Generative

Artificial Intelligence Technologies in Higher Education. *International Journal for Educational Integrity* 20, 1 (Dec. 2024), 1–21.

doi:10.1007/s40979-024-00149-4

- [40] D. Kalniņa, D. Nīmante, and S. Baranova. 2024. Artificial intelligence for higher education: Benefits and challenges for pre-service teachers. *Frontiers in Education* 9 (Nov 2024). <https://doi.org/10.3389/feduc.2024.1501819>
- [41] Enkelejda Kasneci, Kathrin Seßler, Stefan Küchemann, Maria Bannert, Daryna Dementieva, Frank Fischer, Urs Gasser, Georg Groh, Stephan Günemann, Eyke Hüllermeier, et al. 2023. ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and individual differences* 103 (2023), 102274.
- [42] G. Kessler. 2018. Technology and the future of language teaching. *Foreign Language Annals*.
- [43] Adrianna Kezar. 2020. Why the top-down governance structures of higher education need revitalizing. Essay, USC Rossier School of Education News & Insights.
https://rossier.usc.edu/news-insights/news/why-top-down-governance-structures-higher-education-need-revitalizing?utm_source=chatgpt.com
- [44] René F. Kizilcec, Elaine Huber, Elena C. Papanastasiou, Andrew Cram, Christos A. Makridis, Adele Smolansky, Sandris Zeivots, and Corina Raduescu. 2024. Perceived Impact of Generative AI on Assessments: Comparing Educator and Student Perspectives in Australia, Cyprus, and the

- United States. *Computers and Education: Artificial Intelligence* 7 (Dec. 2024), 100269. doi:10.1016/j.caeari.2024.100269
- [45] Yasmine Kotturi, Angel Anderson, Glenn Ford, Michael Skirpan, and Jeffrey P Bigham. 2024. Deconstructing the Veneer of Simplicity: Co-Designing Introductory Generative AI Workshops with Local Entrepreneurs. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24)*. Association for Computing Machinery, New York, NY, USA, 1–16. doi:10.1145/3613904.3642191
- [46] Tzu-Sheng Kuo, Quan Ze Chen, Amy X. Zhang, Jane Hsieh, Haiyi Zhu, and Kenneth Holstein. 2025. PolicyCraft: Supporting Collaborative and Participatory Policy Design through Case-Grounded Deliberation. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. 1–24. arXiv:2409.15644 [cs] doi:10.1145/3706598.3713865
- [47] Lin Kyi, Amruta Mahuli, M Six Silberman, Reuben Binns, Jun Zhao, and Asia J Biega. 2025. Governance of Generative AI in Creative Work: Consent, Credit, Compensation, and Beyond. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. 1–16.
- [48] J. J. Lee. 2009. Size matters: The impact of class size on international students' academic adjustment. *Higher Education* 58, 3 (2009), 289–305.
- [49] J. Li and J. Cummins. 2019. Digital scaffolding for EFL learners: Effects on writing performance and anxiety. *Language Learning & Technology*.
- [50] Jie Li, Hancheng Cao, Laura Lin, Youyang Hou, Ruihao Zhu, and Abdallah El Ali. 2024. User experience design professionals' perceptions of generative

- artificial intelligence. In *Proceedings of the 2024 CHI conference on human factors in computing systems*. 1–18.
- [51] Adela C Licona. 2012. Zines in third space: *Radical cooperation and borderlands rhetoric*. Suny Press.
- [52] Fang Liu, Junyan Lv, Shenglan Cui, Zhilong Luan, Kui Wu, and Tongqing Zhou. 2024. Smart "Error"! Exploring Imperfect AI to Support Creative Ideation. *Proc. ACM Hum.-Comput. Interact.* 8, CSCW1 (April 2024), 121:1–121:28. doi:10.1145/3637398
- [53] Jiahui Luo. 2024. A critical review of GenAI policies in higher education assessment: A call to reconsider the “originality” of students’ work. *Assessment & Evaluation in Higher Education* 49, 5 (2024), 651–664.
- [54] Jiahui Luo (Jess). 2024. A Critical Review of GenAI Policies in Higher Education Assessment: A Call to Reconsider the “Originality” of Students’ Work. *Assessment & Evaluation in Higher Education* 49, 5 (July 2024), 651–664. doi:10.1080/02602938.2024.2309963
- [55] Frank Lyman. 1981. The responsive classroom discussion: The inclusion of all students. Mainstreaming digest. *College Park, MD: University of Maryland* (1981).
- [56] Stephen Marshall, Lia Blaj-Ward, Namhee Dreamson, Joan Nyanjom, and Maria T. Bertuol. 2024. The reshaping of higher education: technological impacts, pedagogical change, and future projections. *Higher Education Research & Development* 43, 3 (2024), 521–541.
doi:10.1080/07294360.2024.2329393

- [57] Kelly E Matthews. 2018. Engaging students as participants and partners: An argument for partnership with students in higher education research on student success. *International Journal of Chinese Education* 7, 1 (2018), 42–64.
- [58] C. Merino-Campos. 2025. The impact of artificial intelligence on personalized learning in higher education: A systematic review. *Trends in Higher Education* 4, 2 (2025), 17. <https://doi.org/10.3390/higheredu4020017>
- [59] Nora McDonald, Aditya Johri, Areej Ali, and Aayushi Hingle Collier. 2025. Generative Artificial Intelligence in Higher Education: Evidence from an Analysis of Institutional Policies and Guidelines. *Computers in Human Behavior: Artificial Humans* 3 (March 2025), 100121.
doi:10.1016/j.chbah.2025.100121
- [60] Nora McDonald, Sarita Schoenebeck, and Andrea Forte. 2019. Reliability and inter-rater reliability in qualitative research: Norms and guidelines for CSCW and HCI practice. *Proceedings of the ACM on human-computer interaction* 3, CSCW (2019), 1–23.
- [61] Andrew McNutt. 2021. On the potential of zines as a medium for visualization. In *2021 IEEE Visualization Conference (VIS)*. IEEE, 176–180.
- [62] Ethan Mollick and Lilach Mollick. 2023. AI as a Team Coach. *Harvard Business Publishing* (2023).
<https://hbsp.harvard.edu/inspiring-minds/ai-asteam-coach> Published on September 25, 2023.
- [63] Isabel Moreno-Lopez. 2005. Sharing power with students: The critical language classroom. *Radical Pedagogy* 7, 2 (2005), 23–49.

- [64] Jonas Oppenlaender, Rhema Linder, and Johanna Silvennoinen. 2025. Prompting AI art: An investigation into the creative skill of prompt engineering. *International journal of human-computer interaction* 41, 16 (2025), 10207–10229.
- [65] Otter.ai, Inc. 2025. Otter.ai [AI notetaking and transcription software]. <https://otter.ai/> Software.
- [66] Weina Pang and Zhe Wei. 2025. Shaping the future of higher education: A technology usage study on generative AI innovations. *Information* 16, 2 (2025), 95.
- [67] Tina M Park, Adriana Alvarado Garcia, Juana Catalina Becerra Sandoval, Jiyoo Chang, Bill Curtis-Davidson, Remi Denton, Seeta Peña Gangadharan, Lara Groves, Jeremy Holland, Kenneth Holstein, et al. 2024. Practicing Inclusivity in AI: Stakeholder Engagement Policy in Action. In *Companion Publication of the 2024 Conference on Computer-Supported Cooperative Work and Social Computing*. 748–751.
- [68] Tiffany Petricini, Sarah Zipf, and Chuhao Wu. 2024. Perceptions About Generative AI and ChatGPT Use by Faculty and Students. *Transformative Dialogues: Teaching and Learning Journal* 17, 2 (Nov. 2024). doi:10.26209/td2024vol17iss21825
- [69] Tiffany Petricini, Sarah Zipf, and Chuhao Wu. 2025. RESEARCH-AI: Communicating academic honesty: teacher messages and student perceptions about generative AI. *Frontiers in Communication* 10 (jun 2025). doi:10.3389/fcomm.2025.154443

- [70] Jessie Pink. 2016. Tracing the beginnings of the punk fanzine. *Dazed* (May 6 2016). <https://www.dazedsdigital.com/artsandculture/article/30999/1/mark-perry-tracing-the-beginnings-of-the-punk-fanzine> Accessed: 2025-09-10.
- [71] Tejaswi Polimetla and Katy Ilonka Gero. 2025. A Paradigm for Creative Ownership. *arXiv preprint arXiv:2505.15971* (2025).
- [72] Isabella Pu, Prerna Ravi, Linh Dieu Dinh, Chelsea Joe, Caitlin Ogoe, Zixuan Li, Cynthia Breazeal, and Anastasia K. Ostrowski. 2025. "How Can We Learn and Use AI at the Same Time?": Participatory Design of GenAI with High School Students. In *Proceedings of the 24th Interaction Design and Children*. ACM, Reykjavik Iceland, 204–220. doi:10.1145/3713043.3727057
- [73] Queer Music Heritage. n.d.. Lisa Ben & Vice Versa. <https://queermusicheritage.com/viceversa.html>. Accessed: 2025-09-11.
- [74] Advait Sarkar. 2023. Enough with “human-AI collaboration”. In *Extended abstracts of the 2023 CHI conference on human factors in computing systems*. 1–8.
- [75] Arvind Satyanarayan and G. Michael Jones. 2024. Intelligence as Agency: Evaluating the Capacity of Generative AI to Empower or Constrain Human Action. *An MIT Exploration of Generative AI* (2024). doi:10.21428/e4baedd9.2d7598a2
- [76] E. Sawir. 2005. Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal* 6, 5 (2005), 567–580.

- [77] Devansh Saxena, Zoe Kahn, Erina Seh-Young Moon, Lauren Marietta Chambers, Corey Jackson, Min Kyung Lee, Motahhare Eslami, Shion Guha, Sheena Erete, Lilly Irani, et al. 2025. Emerging Practices in Participatory AI Design in Public Sector Innovation. In *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. 1–7.
- [78] S. Silverman and B. Iasevoli. 2024. *How has technology changed education?* Houghton Mifflin Harcourt. Retrieved October 29, 2025 from <https://www.hmhco.com/blog/how-has-technology-changed-education>
- [79] Sandeep Singh Sengar, Affan Bin Hasan, Sanjay Kumar, and Fiona Carroll. 2024. Generative artificial intelligence: a systematic review and applications. *Multimedia Tools and Applications* (Aug. 2024). doi:10.1007/s11042-024-20016-1
- [80] Phoebe Sengers, Kirsten Boehner, Shay David, and Joseph 'Jofish' Kaye. 2005. Reflective Design. In *Proceedings of the 4th Decennial Conference on Critical Computing: Between Sense and Sensibility*. ACM, Aarhus Denmark, 49–58. doi:10.1145/1094562.1094569
- [81] Ira Shor. 1996. *When students have power: Negotiating authority in a critical pedagogy*. University of Chicago Press.
- [82] C. Estelle Smith, Kylee Shiekh, Hayden Cooreman, Sharfi Rahman, Yifei Zhu, Md Kamrul Siam, Michael Ivanitskiy, Ahmed M. Ahmed, Michael Hallinan, Alexander Grisak, and Gabe Fierro. 2024. Early Adoption of Generative Artificial Intelligence in Computing Education: Emergent Student Use Cases and Perspectives in 2023. In *Proceedings of the 2024 on Innovation*

and Technology in Computer Science Education V. 1 (Milan, Italy) (ITiCSE 2024). Association for Computing Machinery, New York, NY, USA, 3–9.
doi:10.1145/3649217.3653575

- [83] Adele Smolansky, Andrew Cram, Corina Raduescu, Sandris Zeivots, Elaine Huber, and Rene F Kizilcec. 2023. Educator and student perspectives on the impact of generative AI on assessments in higher education. In *Proceedings of the tenth ACM conference on Learning@ Scale*. 378–382.
- [84] Susan Leigh Star and James R Griesemer. 1989. Institutional ecology, translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social studies of science* 19, 3 (1989), 387–420.
- [85] Alison Stone. 2022. Student Perceptions of Academic Integrity: A Qualitative Study of Understanding, Consequences, and Impact. *Journal of Academic Ethics* (2022), 1–19. doi:10.1007/s10805-022-09461-5 Advance online publication.
- [86] Linus Tan and Max Luhrs. 2024. Using Generative AI Midjourney to Enhance Divergent and Convergent Thinking in an Architect's Creative Design Process. *The Design Journal* 27, 4 (July 2024), 677–699.
doi:10.1080/14606925.2024.2353479
- [87] Maryam Tohidi, William Buxton, Ronald Baecker, and Abigail Sellen. 2006. Getting the Right Design and the Design Right. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '06)*. Association

- for Computing Machinery, New York, NY, USA, 1243–1252.
doi:10.1145/1124772.1124960
- [88] Tyton Partners. 2025. Time for Class 2025: Empowering Educators, Engaging Students. https://4213961.fs1.hubspotusercontent-na1.net/hubfs/4213961/Publications/Time%20for%20Class/Tyton%20Partners_Time%20for%20Class%202025.pdf
- [89] H. A. Usoof, B. Hudson, and E. Lindgren. 2014. *Plagiarism: Catalysts and not so simple solutions*. In *Academic Dishonesty: An Educator's Guide* (pp. 42–57). IGI Global. DOI: 10.4018/978-1-4666-4486-1.ch003
- [90] Eric Von Hippel. 2006. *Democratizing innovation*. the MIT Press.
- [91] Samangi Wadinambiarachchi, Ryan M. Kelly, Saumya Pareek, Qiushi Zhou, and Eduardo Veloso. 2024. The Effects of Generative AI on Design Fixation and Divergent Thinking. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24)*. Association for Computing Machinery, New York, NY, USA, 1–18. doi:10.1145/3613904.3642919
- [92] Qian Wan, Siying Hu, Yu Zhang, Piaohong Wang, Bo Wen, and Zhicong Lu. 2024. "It Felt Like Having a Second Mind": Investigating Human-AI Co-creativity in Prewriting with Large Language Models. *Proc. ACM Hum.-Comput. Interact.* 8, CSCW1 (April 2024), 84:1–84:26.
doi:10.1145/3637361
- [93] A. Watters. 2015. A brief history of calculators in the classroom. *Hack Education* (12 Mar 2015). Retrieved October 15, 2025 from https://hackeducation.com/2015/03/12/calculators?utm_source=chatgpt.com

- [94] James Weichert, Dayoung Kim, Qin Zhu, Junghwan Kim, and Hoda Eldardiry. 2025. Assessing Computer Science Student Attitudes Towards AI Ethics and Policy. *AI and Ethics* (Aug. 2025). arXiv:2504.06296 [cs]
doi:10.1007/s43681-025-00817-2
- [95] Fredric Wertham. 1973. *The World of Fanzines: A Special Form of Communication*. Southern Illinois University Press, Carbondale, IL.
- [96] Wendy Fangwen Yu. 2025. AI as a co-creator and a design material: Transforming the design process. *Design Studies* 97 (2025), 101303.
- [97] C. Zhai, S. Wibowo, and L. D. Li. 2024. The effects of over-reliance on AI dialogue systems on students' cognitive abilities: A systematic review. *Smart Learning Environments* 11 (2024), 28.
<https://doi.org/10.1186/s40561-024-00316-7>
- [98] Hongbo Zhang, Pei Chen, Xuelong Xie, Chaoyi Lin, Liyan Liu, Zhuoshu Li, Weitao You, and Lingyun Sun. 2024. ProtoDreamer: A Mixed-prototype Tool Combining Physical Model and Generative AI to Support Conceptual Design. In *Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology (UIST '24)*. Association for Computing Machinery, New York, NY, USA, 1–18. doi:10.1145/3654777.3676399
- [99] J. Zhang. 2023. Exploring ChatGPT's role in EFL writing classrooms. *System*.
- [100] Chengbo Zheng, Kangyu Yuan, Bingcan Guo, Reza Hadi Mogavi, Zhenhui Peng, Shuai Ma, and Xiaojuan Ma. 2024. Charting the Future of AI in Project-Based Learning: A Co-Design Exploration with Students. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing*

Systems (CHI '24). Association for Computing Machinery, New York, NY,
USA, 1–19. doi:10.1145/3613904.3642807

(Intentional blank page – Delete this comment)