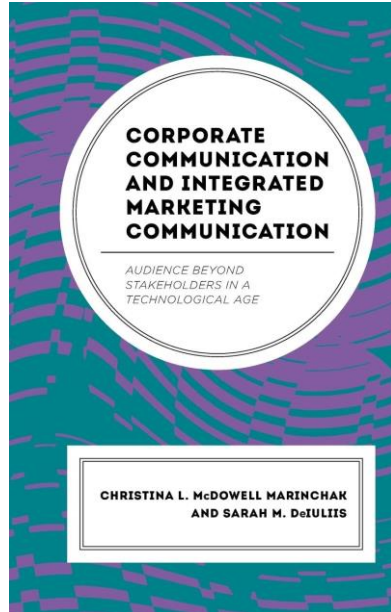


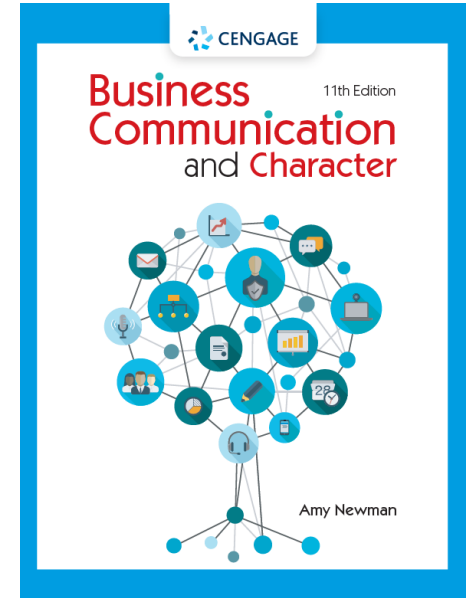


AI as Peer Reviewer



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Agenda

- Our Goals for AI Peer Reviews
- Student Reflections on the Feedback
- Student Reflections on the Dangers of Using AI

The Use Case Addressed Three Approaches to AI Assignments

AI USE	ROLE
Mentor	Provide feedback
Tutor	Give direct instruction
Coach	Prompt metacognition
Teammate	Increase team performance
Student	Receive explanations
Simulator	Deliberate practice
Tool	Accomplish tasks

The Use Case Focused on Benefits and Risks

AI USE	ROLE	PEDAGOGICAL BENEFIT	PEDAGOGICAL RISK
Mentor	Provide feedback	Frequent feedback improves learning outcomes, even if all advice is not taken.	Not critically examining feedback, which may contain errors.
Tutor	Give direct instruction	Personalized direct instruction is very effective.	Uneven knowledge base of AI. Serious confabulation risks.
Coach	Prompt metacognition	Opportunities for reflection and regulation improve learning outcomes.	Tone or style of coaching may not match student. Risks of incorrect advice.

Our Goals Included Improving Feedback and Using AI

- Give students opportunities to practice and improve giving feedback
- Provide students with more feedback on their own work
- Encourage students to examine feedback critically—from peers and from AI
- Inspire student reflection on benefits and risks of using AI tools

Six Assignment Components Inspired Reflection

Step 1: Submit Your Assignment 1 Draft Outline

Step 2: Review Two Students' Outlines

Step 3: Ask ChatGPT for Feedback

Step 4: Reflect on Your Experience with ChatGPT

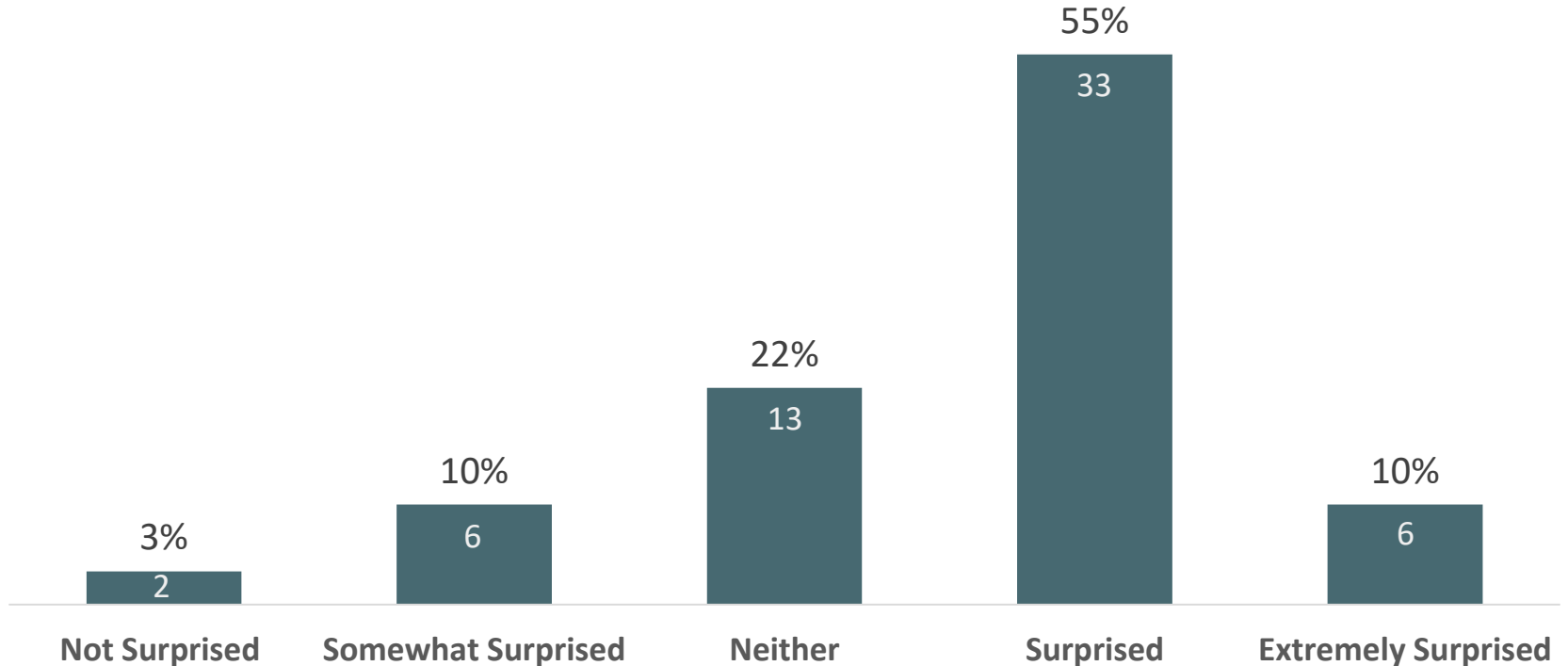
Step 5: Compare AI and Human Feedback

Step 6: Reflect on Peer Feedback



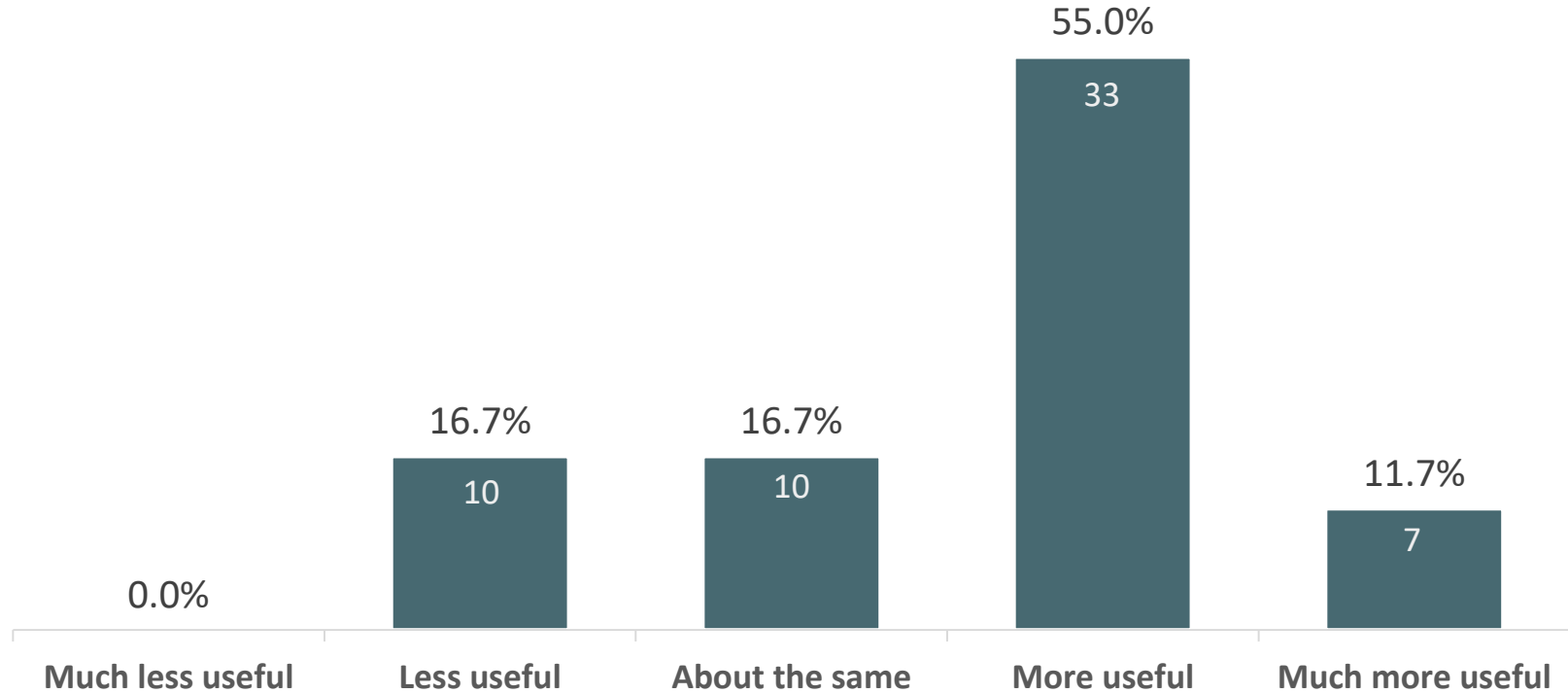
Students Reflected on ChatGPT's Feedback Skills

How surprised were you at how skilled ChatGPT was in analyzing your work? (n=60)



Students Compared Activity to Previous Peer Feedback

How did this process compare to previous peer feedback activities? (n=60)



Students Compared Anonymous and In-Class Feedback

Anonymous Peer Feedback

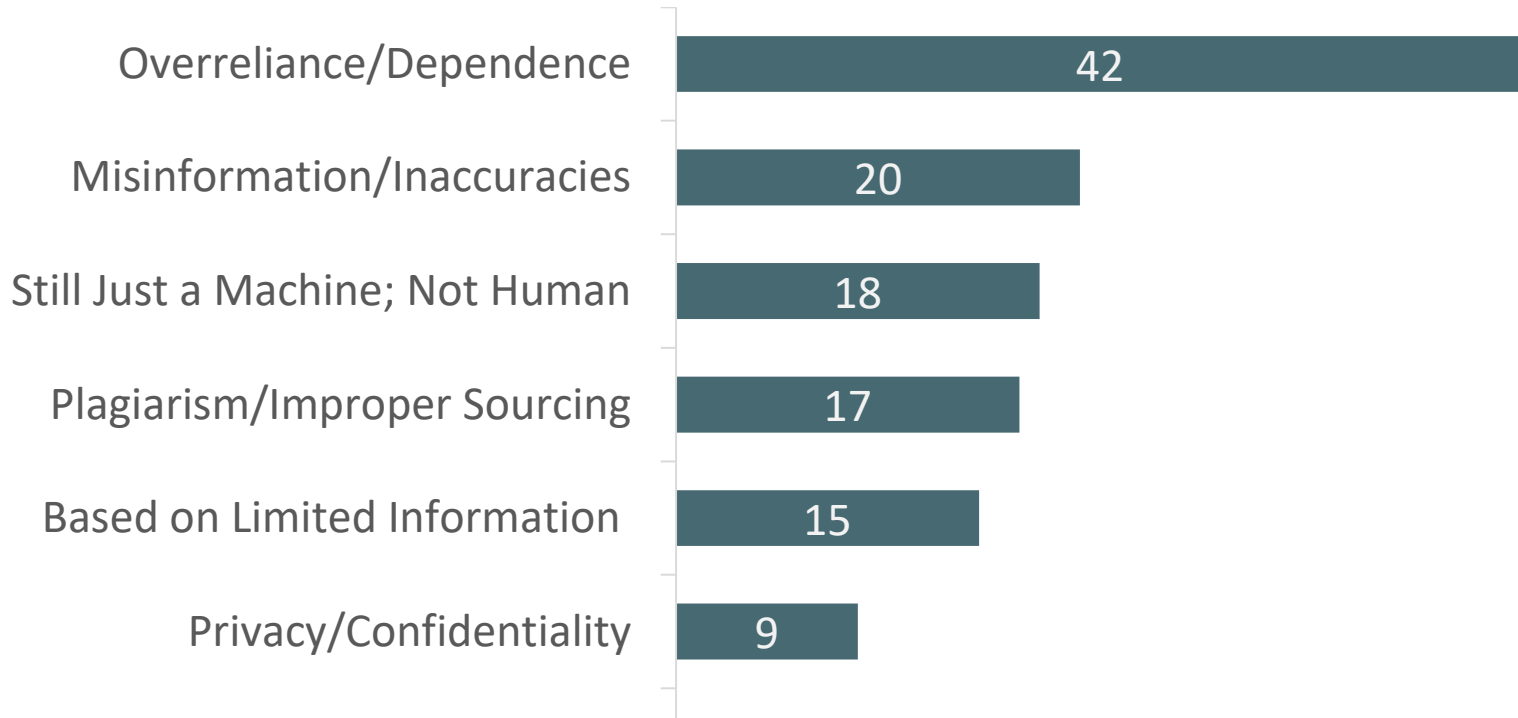
- Critical
- Constructive
- Honest
- Less detailed/surface-level

vs.

In-Class Peer Feedback

- Personal and emotional
- Detailed/in-depth
- Idea-driven
- Affirming

Students Reflected on Dangers of Using AI



Number of mentions from 71 students

We Revised the Assignment in Two Significant Ways

Sample Prompt

- 1) Changed “tutor” to “instructor”
- 2) Added audience analysis

Reference

Mollick, Ethan R. and Mollick, Lilach. Assigning AI: Seven Approaches for Students, with Prompts. September 23, 2023. <http://dx.doi.org/10.2139/ssrn.4475995>.



Thank you!

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