

Students' Perceptions of Generative AI Use in Academic Writing

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Thank you for having us!





Agenda

Introduction: Paola V. Santamaría

Methods: Andrew S. Nelson

Discussion: Josephine S. Javens





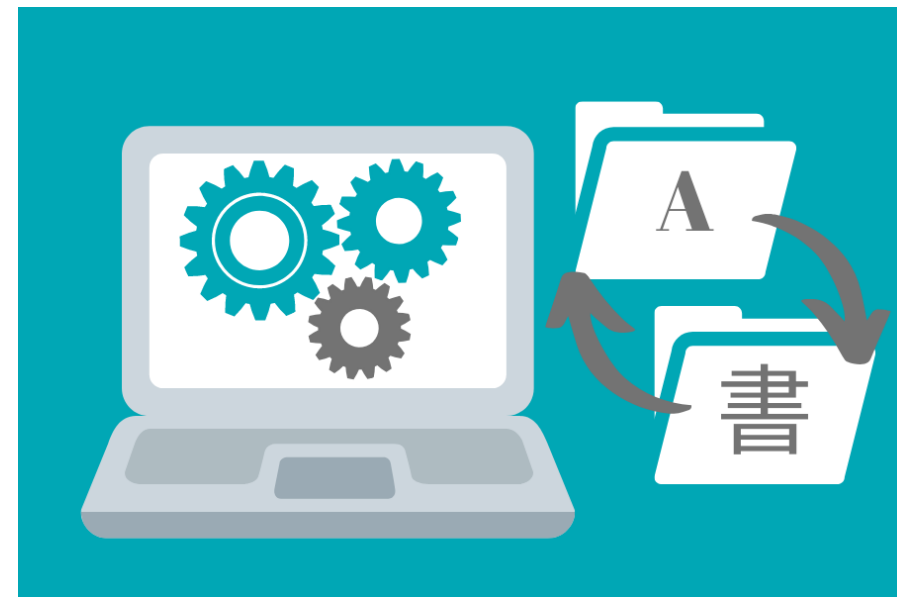
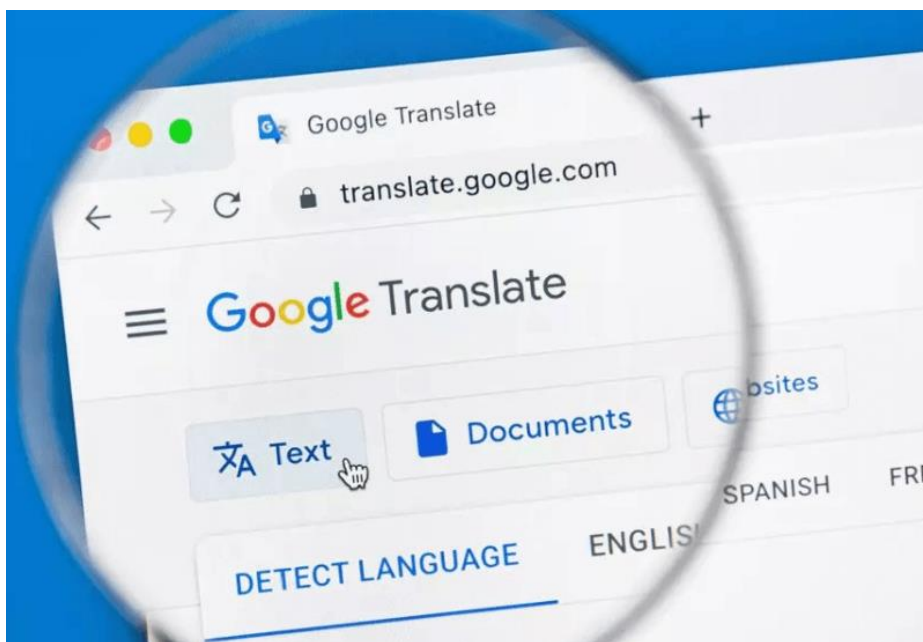
I. INTRODUCTION

Paola V. Santamaría





Introduction



Machine Translation (MT)

- While MT provides many benefits in aiding understanding and expression in a foreign language at efficient speed, students can use it to feign language skills that they do not possess, particularly in writing.





ChatGPT

Perceived Benefits

- A personalized education experience
- It can act as a personal tutor or mentor
- The answers to questions that are put to GPT are obtained quicker and more succinctly than from search engines
- A conversational partner that can correct students' mistakes.





Perceived Risks

- It can write an entire essay or a research paper in a humanly manner
- Introduces the potential for plagiarism that may be undetectable
- Generates authentic-sounding personal reflections on a given scenario
- It could damage the validity of grades, certifications, and degrees that are supposed to prove that a student possesses a certain level of skill and knowledge.





AI CONTENT DETECTOR

There is disagreement about the reliability of existing AI detectors.



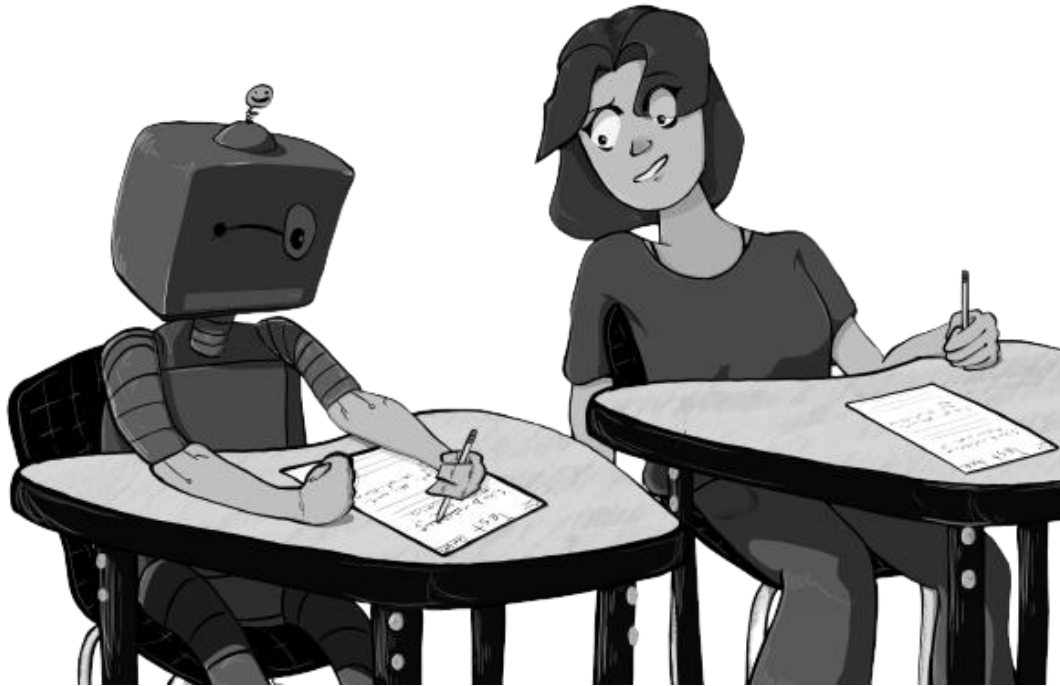
Alexander et al. (2023) stated, “that currently there seems to be no fully reliable way of establishing whether a text was written by a human or generated by an AI. Neither humans nor AI detectors proved able to detect AI efficiently and reliably” (p. 40).



Other researchers have stated that “AI-detectors are able to identify AI-generated text with high accuracy” with the qualification that “human writing, especially scientific writing, can still trigger AI-generated content probability if it follows a predictable pattern” (Ladha, Yadav, & Rathore, 2023, p. 3438).



Academic Dishonesty



Lo (2023) has stated “Despite its success, ChatGPT has introduced new challenges and threats to education...leading to concerns about AI-assisted cheating” (p.2).



While many educators have begun to integrate ChatGPT into their teaching practices with these benefits in view, others have expressed concern and rejected its use. This resistance arises largely from teachers' apprehension that students will use ChatGPT for dishonest purposes, for example submitting AI-generated writing as their own.



But what do the students themselves think? This study identified the perspectives of 56 English language learners at a university in Ecuador, using data gathered from a survey on the role of generative AI in academic writing.



Aim of Research

The present study employed a multiple-choice survey to explore Ecuadorian EFL students' perceptions of AI chatbots such as ChatGPT in the creation and improvement of their writing in English, with a specific focus on academic dishonesty. The survey explored how students define cheating, why they believe students use ChatGPT to cheat, the impact of these technologies on cheating rates, and what their opinions are on the detection, consequences, and prevention of cheating with AI. Additionally, it examined how students think these technologies can support student writing and whether they should be used for this purpose at all.



II. METHODS AND RESULTS

Andrew Nelson





Research Questions

RQ1.1: What definition and examples do students give for academic dishonesty in L2 writing with ChatGPT?

RQ1.2: What negative consequence of using AI dishonestly in their L2 writing can students identify?

RQ1.3: What do students believe their motivations for using AI dishonestly in their L2 writing are?



RQ2: What do students believe about how easy it is to detect AI generated textual content?

RQ3: What do students think teachers and institutions should do about AI-based academic dishonesty in writing in terms of response to and prevention of dishonesty?

RQ4: Do students think it is acceptable to use ChatGPT and similar technologies in their academic writing and what reasons do they give for using it?

RQ5: How do students think tools like ChatGPT have already affected academic integrity in writing and what predictions do they make about future generative AI use in writing?



Research participants and setting

The 56 participants who responded to the survey were B1-level EFL students enrolled in a university in Ecuador.



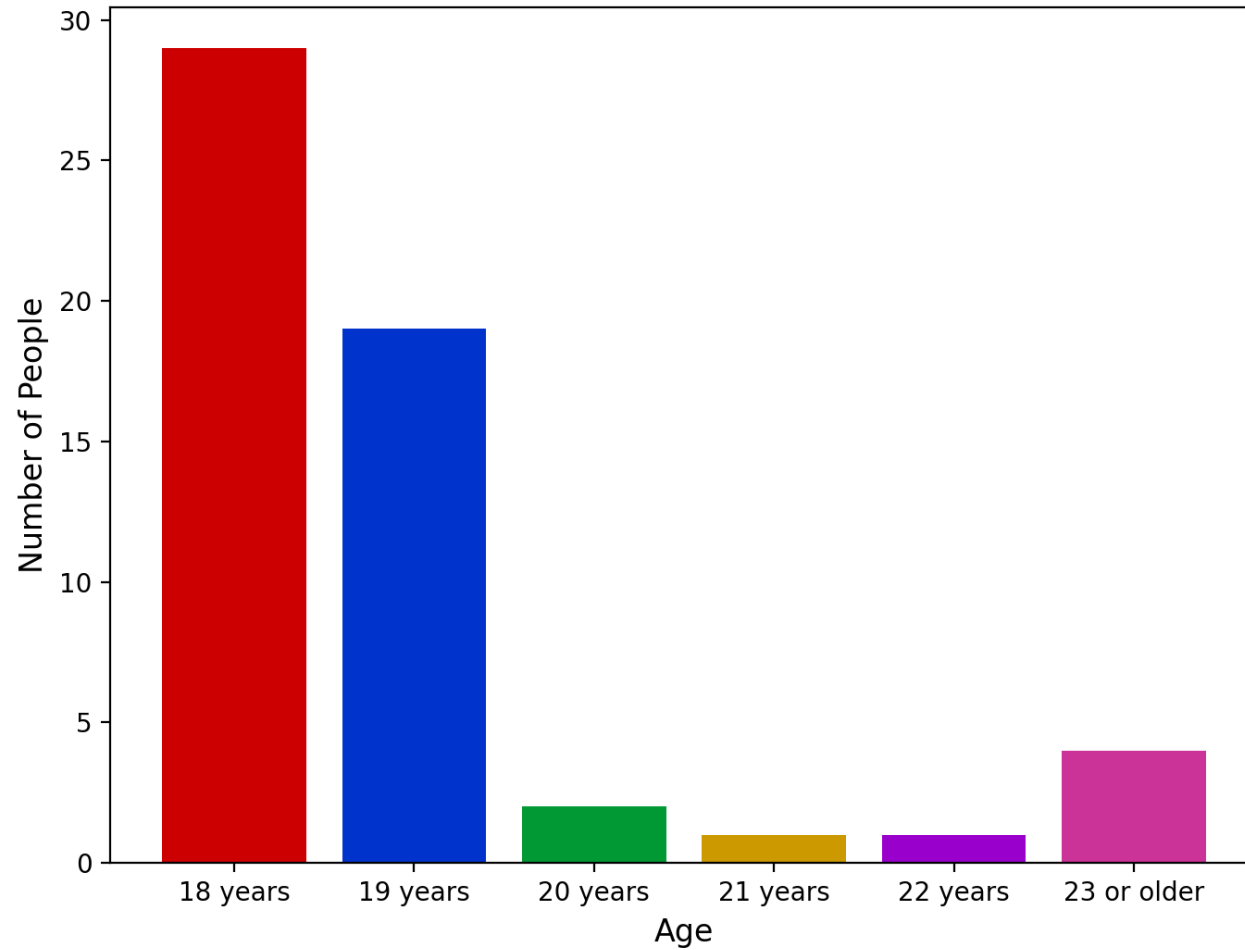
These undergraduate students had undeclared majors at the time of this study, but all had the intention to declare STEM majors, as their university exclusively offers this type of major to undergraduates. The students belonged to two sections of one of the author's B1 level, communicative EFL course, which was a required course for students.



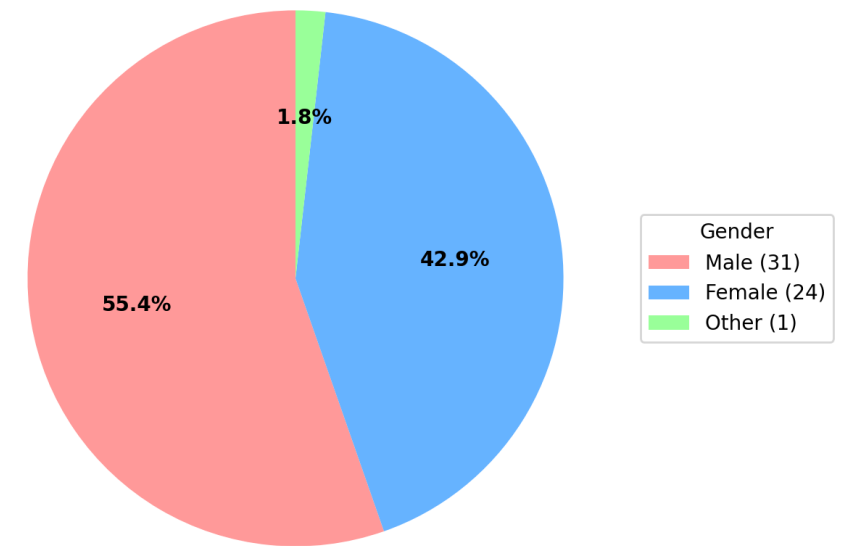
Data from 56 students were collected, which meets Hatch and Lazaraton's (1991) assertion that a sample size of 30+ participants is necessary to achieve a normal distribution (as cited in Dörnyei & Csizér, 2012). The response rate was 100%, which suggests a low "chance of significant response bias" (Babbie, 2023, p. 288).



Age Distribution



Gender





An anonymous, multiple-choice Microsoft Forms questionnaire was created and delivered to students. It was written in English and included 24 items including questions about age and gender. Questions attempted to assess students' opinions of what might constitute academic dishonesty with generative AI applied to writing and what constituted appropriate use.

Ethical approval for this study was obtained from the university affiliated with the three authors and, all the survey questions were recorded with the participants' consent.

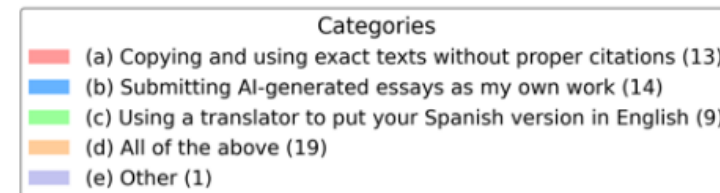
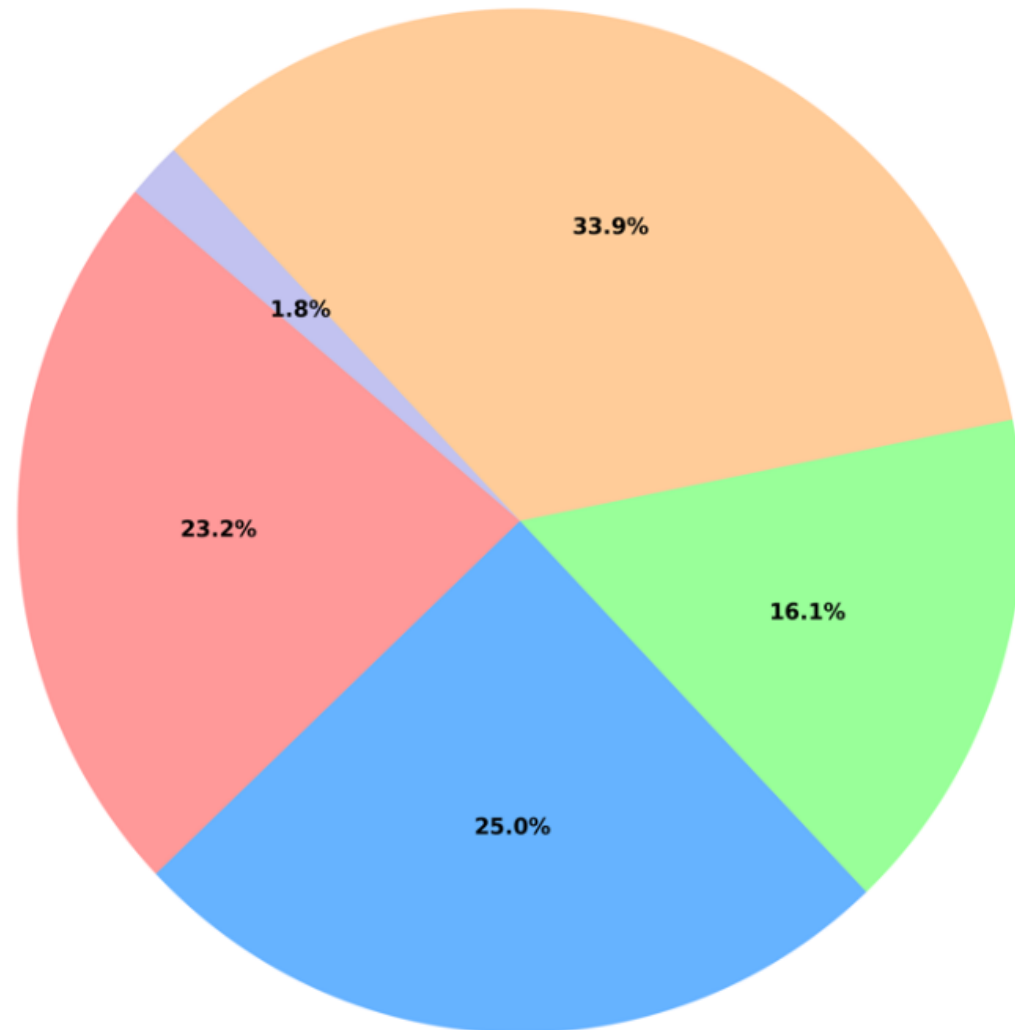


The questionnaire return rate was 100%.



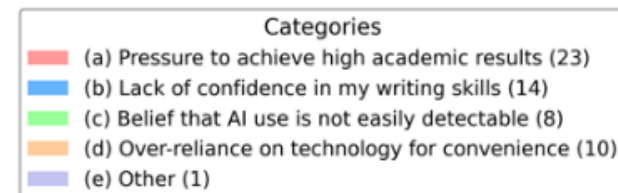
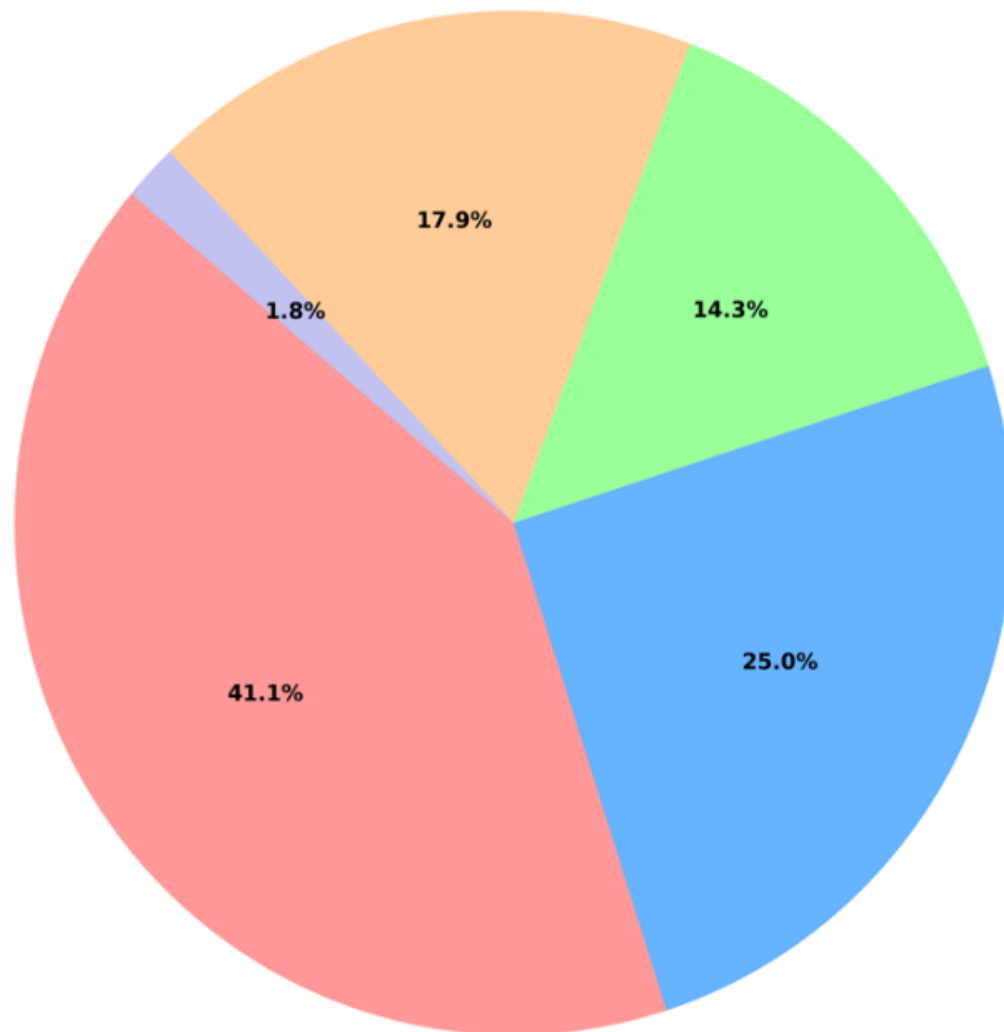


Q3. How do you define academic dishonesty involving AI technologies like ChatGPT in the context of your writing production?



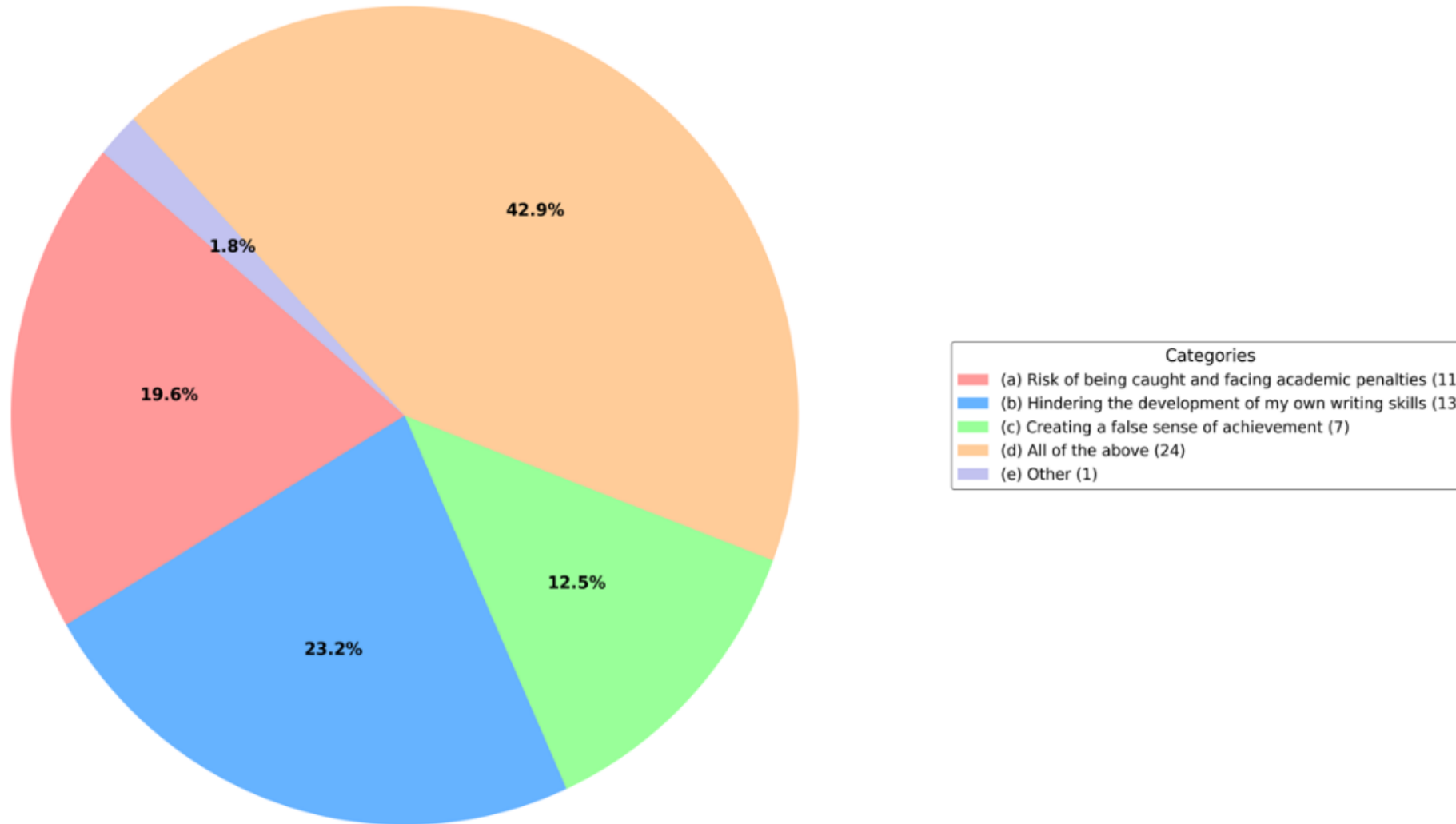


Q7. What are the main reasons someone might use AI technologies dishonestly in your writing production?



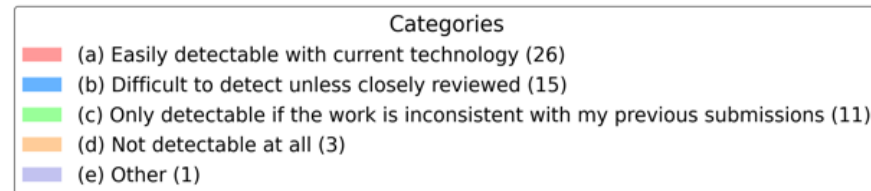
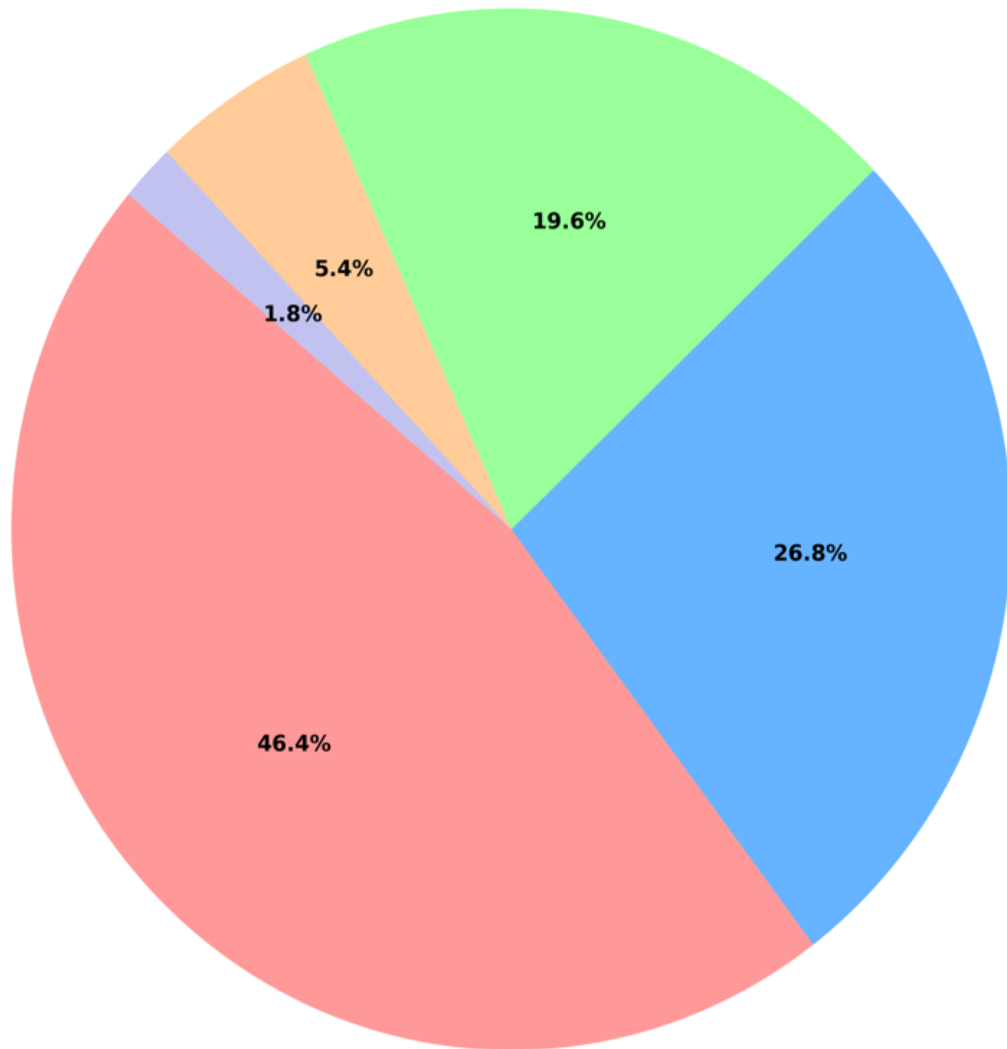


Q9. What do you believe are the consequences of using AI dishonestly in your writing?



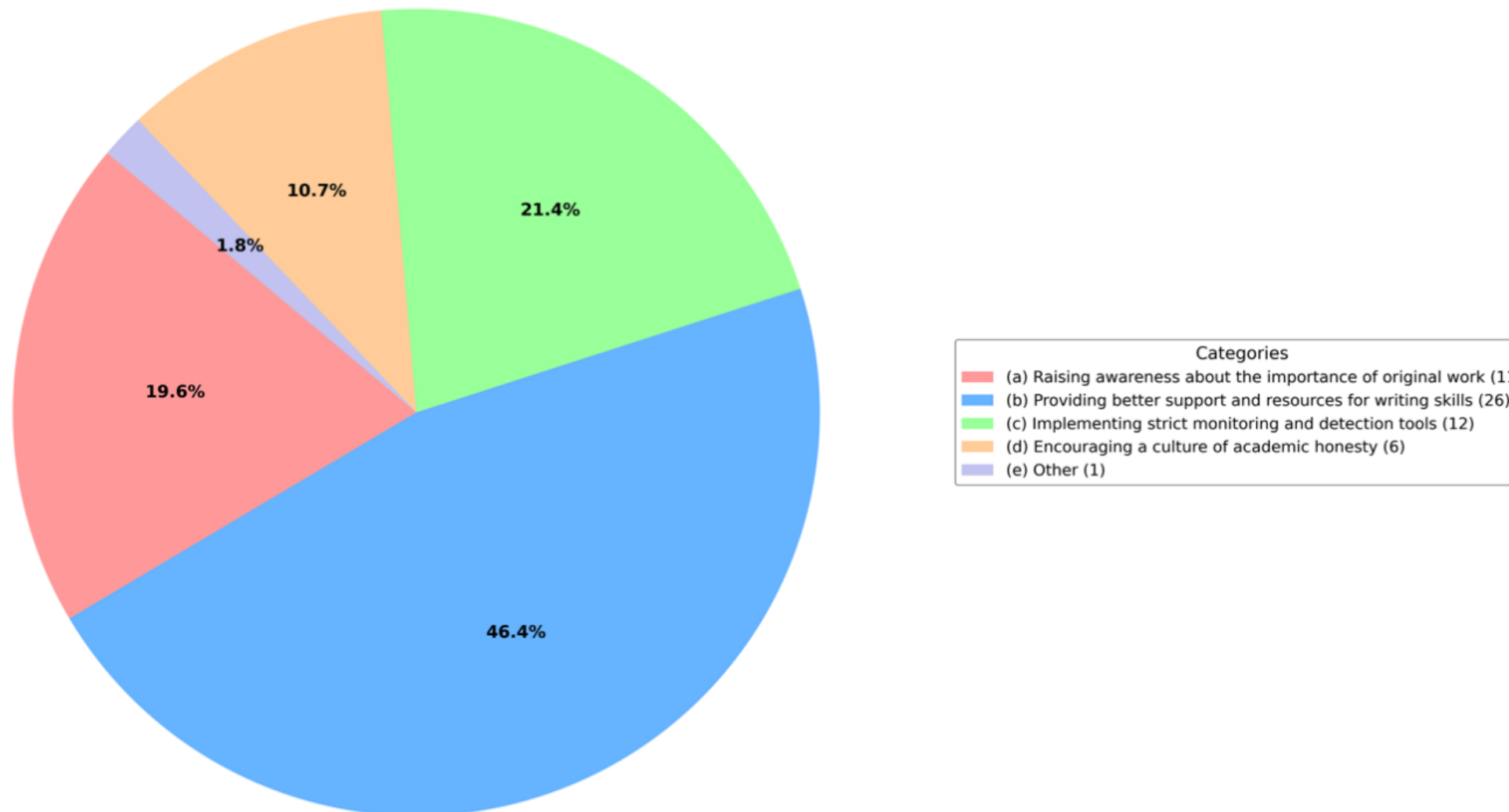


Q11. How do you perceive the detection of AI-based academic dishonesty in your writing?



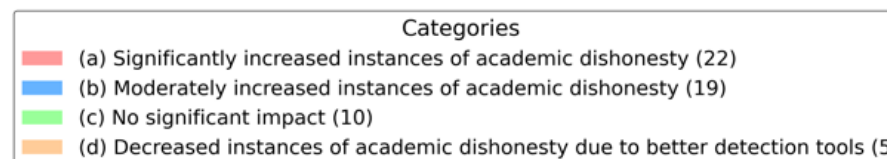
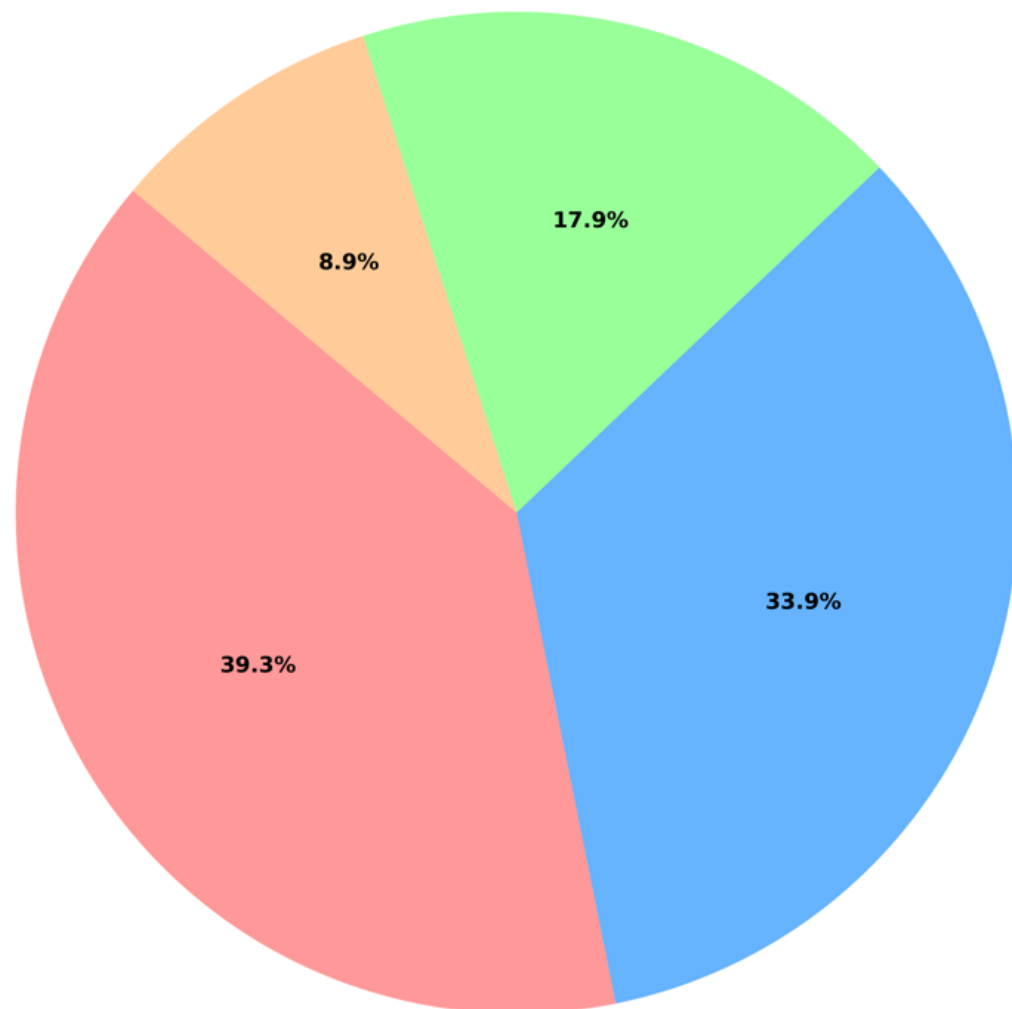


Q15. What measures do you believe could effectively prevent AI-based academic dishonesty in writing?





Q17. In your opinion, how has the arrival of AI technologies like ChatGPT impacted academic integrity in your writing production?





III. DISCUSSION

Josephine S. Javens





Key Insights: Students' Perspectives

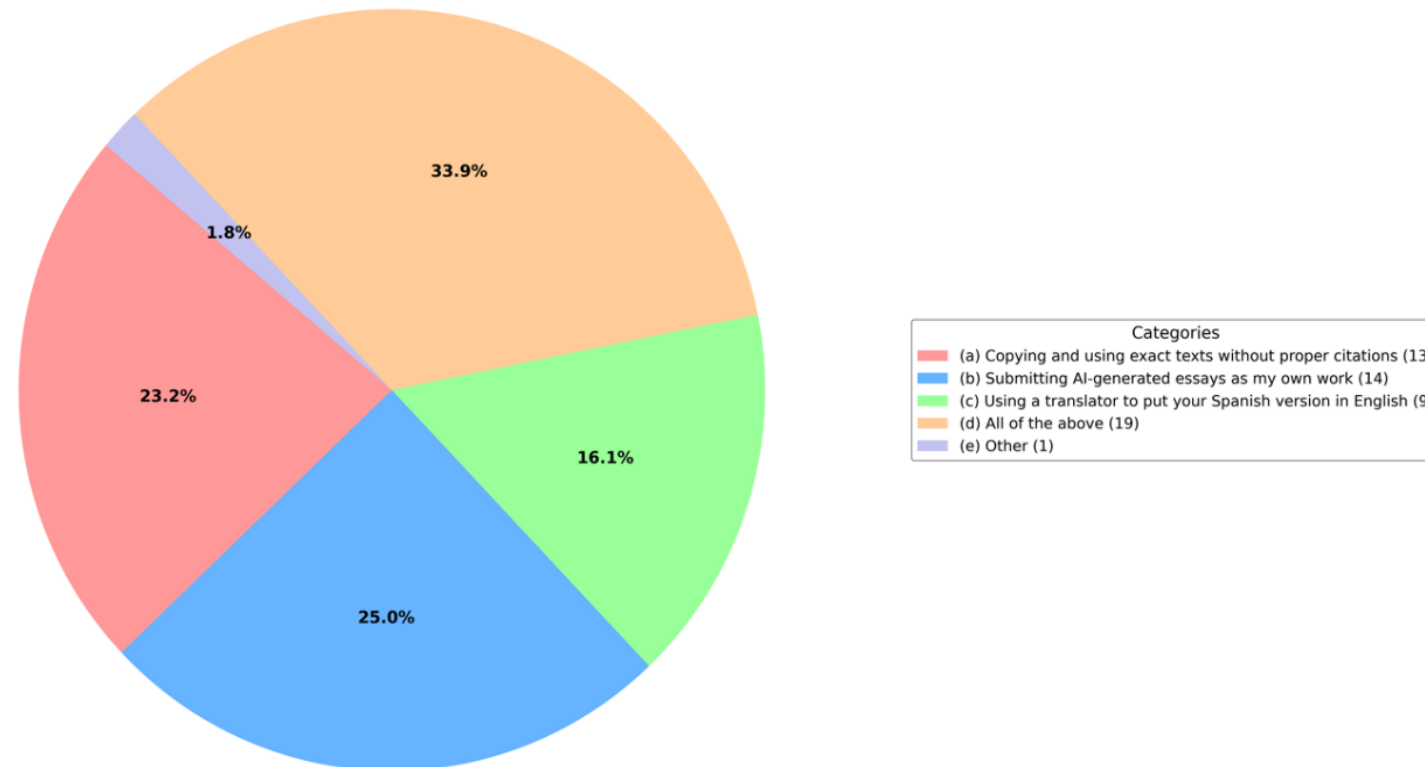
- Turning in an AI generated text is academically dishonest (25%+)
- Translation is not often viewed as cheating (16.1%)
- Cheating with AI has intrinsic negative consequences (23.2%+ compared to 19.6%* extrinsic consequences)
- Students believe AI generated texts are easy to detect (46.4%)
- AI as a source for ideas and inspiration in writing (33.9%)





Turning in an AI-generated text is academically dishonest (25%+)

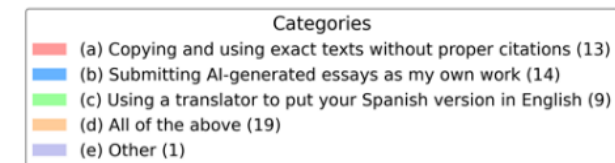
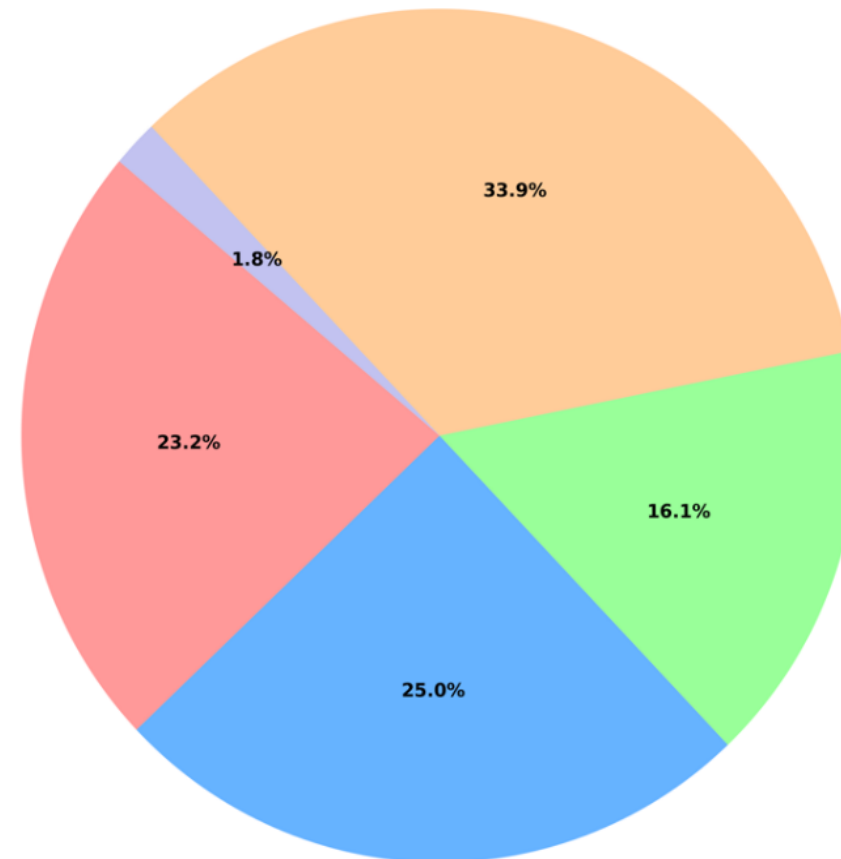
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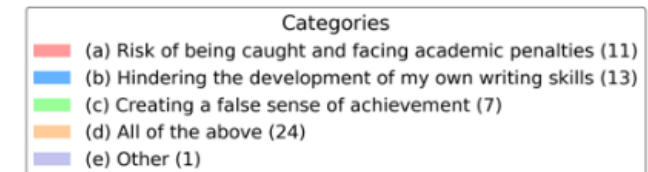
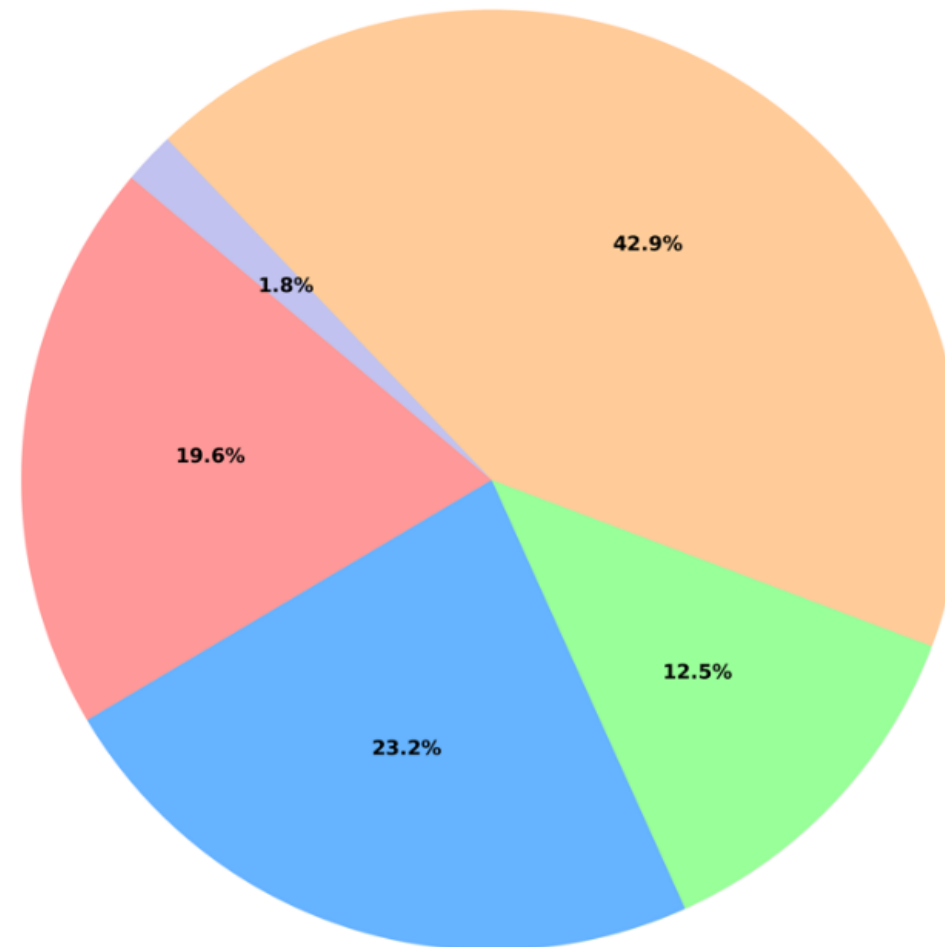




Cheating with AI has intrinsic negative consequences

(23.2%+)

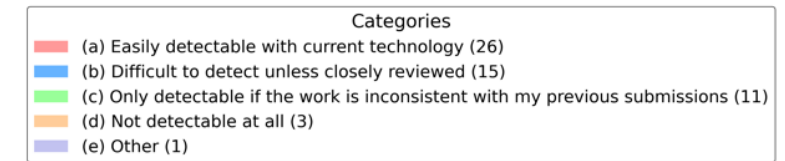
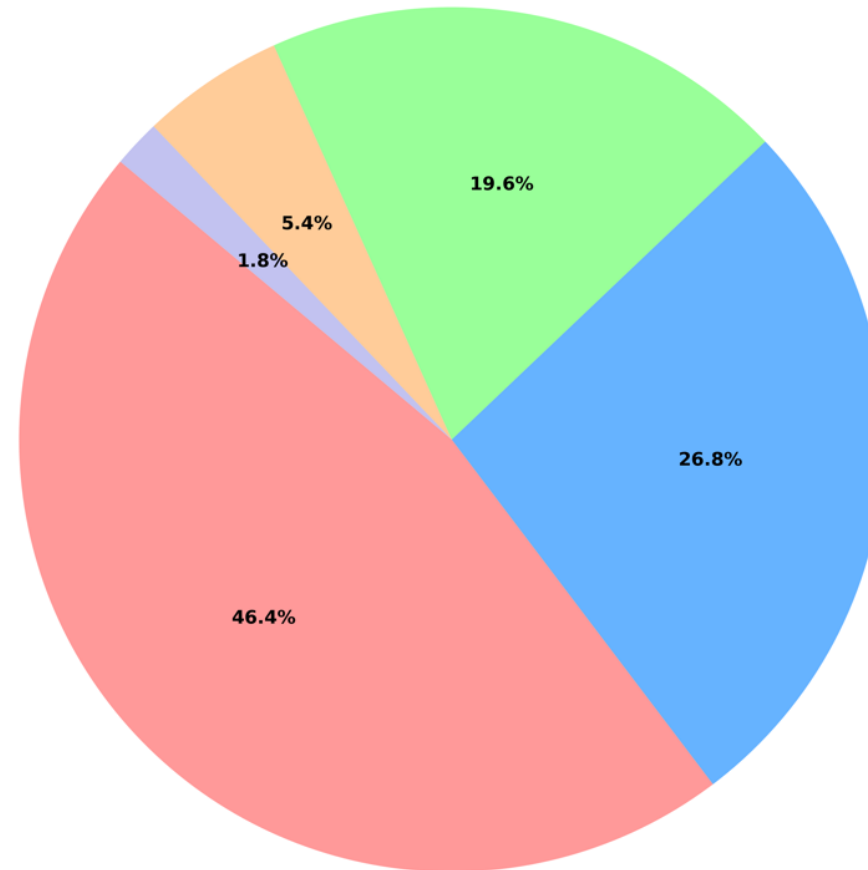
Q9. What do you believe are the consequences of using AI dishonestly in your writing?





AI generated texts are easy to detect (46.4%)

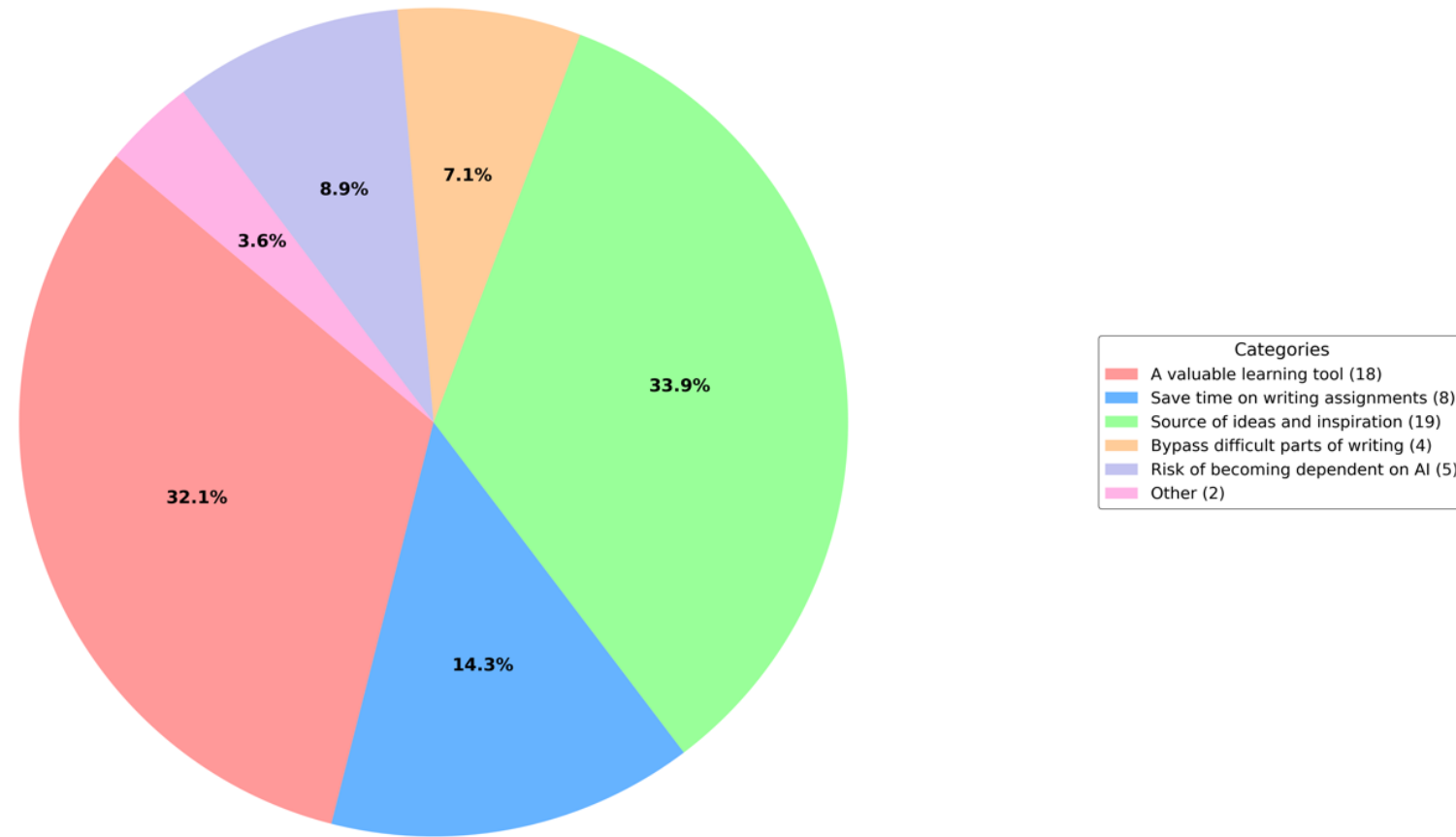
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AI as a source for ideas and inspiration in writing (33.9%)

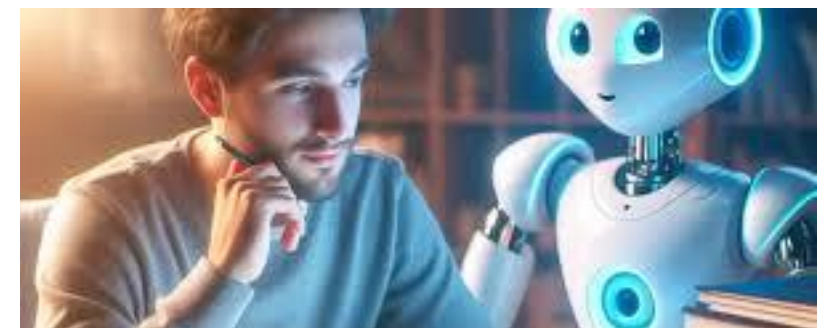
Q19. How do you perceive the use of AI tools like ChatGPT as a support for your writing tasks?





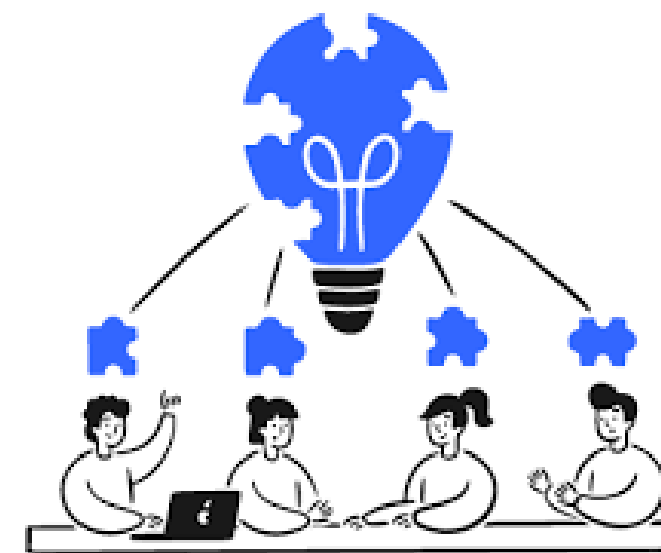
Take Aways for Teachers

- Discuss and educate about academic integrity and proper AI use
 - Understanding our students' and our own perspectives is the basis of a productive conversation
 - Stress intrinsic negative consequences
 - Encourage appropriate use
 - Brainstorming, writing prompt generation
 - Self study
- Shore up students' weaknesses, improve confidence in own skills (25%-lack of confidence → cheating)



Suggestions for Further Research

- Perspectives of students in other countries and contexts
- Larger sample size (<56+)
- Longitudinal studies
- How student perspectives shape their AI use
- How to shape students' and teachers' perceptions of AI use





References

Alexander, K., Savvidou, C., & Alexander, C. (2023). Who wrote this essay? Detecting AI-generated writing in second language education in higher education. *Teaching English with Technology*, 23(2), 25–43.

Babbie, E. (2013). *The practice of social research* (13th ed., International ed.). Wadsworth, Cengage Learning.

Dörnyei, Z., & Csizér, K. (2012). How to design and analyze surveys in second language acquisition research. In *Research methods in second language acquisition: A practical guide* (pp. 74–94). Wiley-Blackwell.

Ladha, N., Yadav, K., & Rathore, P. (2023). AI-generated content detectors: Boon or bane for scientific writing. *Indian Journal of Science and Technology*, 16(39), 3435–3439. <https://doi.org/10.37406/ijst/2023/16/39/3435>

Lo, C. K. (2023). What is the impact of ChatGPT on education? A rapid review of the literature. *Education Sciences*, 13(4), 410. <https://doi.org/10.3390/educsci13040410>



Thank you!

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