



Can teachers distinguish between AI and student work?

For more information, contact:
Leilah Graham
domain@bayhaven.org
8507747180
xgrahlj@bayhaven.org

Leilah Graham

North Bay Haven Career Academy, Panama city, Florida

Abstract

Objective: Determine the extent to which teachers can identify student work from AI generated work.

Methods: Using mixed methodology, a short 14 question survey was conducted to analyze teachers capability to distinguish AI from student art work, and writing while also gathering demographic information.

Results: It was found that teachers could not successfully identify AI and student work. Despite that history and math were the highest scoring departments.

Objectives

- Determine the extent to which Teachers can distinguish AI from student work
- Determine which subjects score highest

Limitations

- Limited number of participants, imbalance in gender, lack of teacher availability.

Conclusions

- Teachers could not successfully identify more than 50% of the work as AI or human. The highest scores were seen in history teachers with 5-10 years of experience and who preferred online and traditional teaching methods

Implications

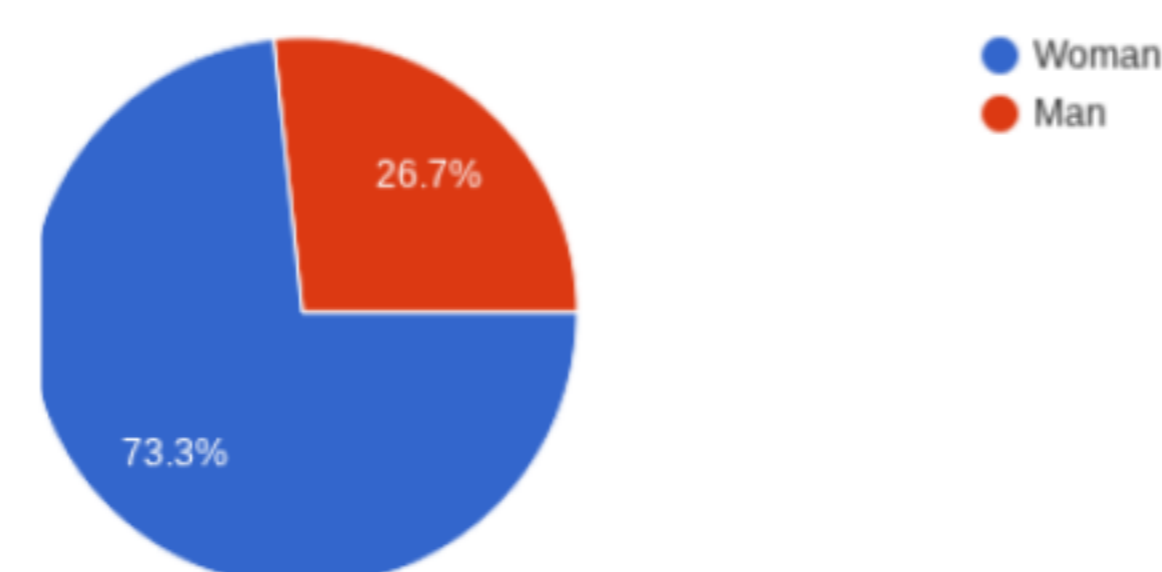
- teachers who teach subjects that require interpretation and reliance on critical thinking can identify AI more confidently

METHODS

- multiple-choice questionnaire

Gender distribution

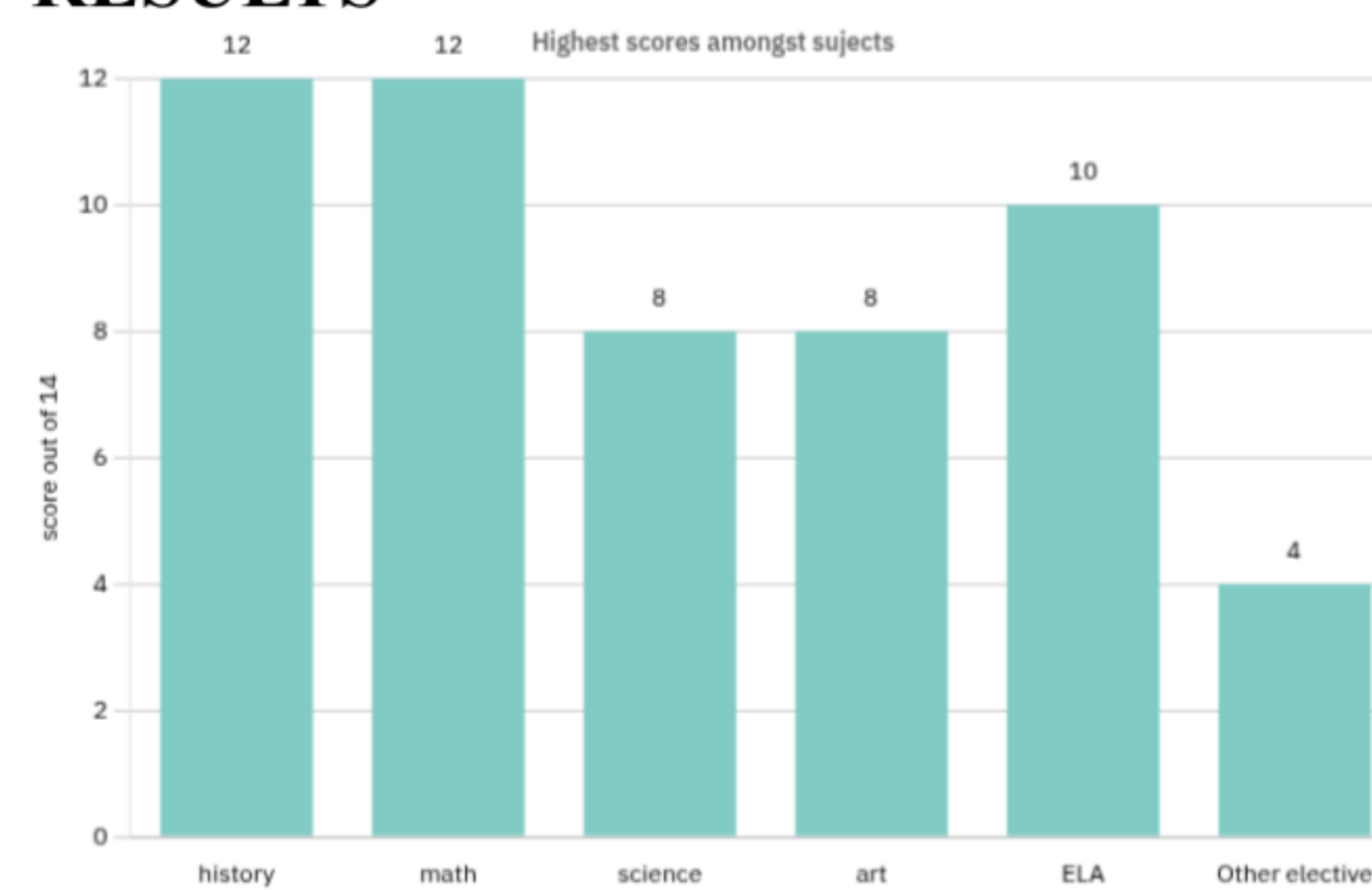
Overall, 22 of the participants were female, while 8 of them were male. It was determined that females tended to score higher, with a mean score of 6.3 out of 14 or 45.14%. On the other hand, males averaged a score of 5.5 questions out of 14 or 39.29%. Though the number of females significantly outweighed that of the males, both scored similarly close in range, with only a 5.85 difference in percentage. While the role of gender might be insignificant in this study, the data suggest that females could have a slight lead in AI identification.



Analysis

- Aside from gender, variables such as the subject a teacher taught were taken into consideration as well. The chart below displays the highest score for each department. It was found that history and math scored the highest.

RESULTS



Conclusions

- Concluding the analysis of the data that was received, validation of the predicted hypothesis that teachers could successfully identify AI and student-made work was not achieved. It was concluded that teachers who were used to using more critical thinking, analysis, and mixed methods of teaching could more confidently identify AI.
- The data implied the highest performing department was history. This could be due to the qualities that a myriad of history teachers utilize: critical thinking and evaluation-based skills. History teachers constantly exercise the use of interpretation and analysis, while compared to departments such as science, which rely on “correct” answers.
- Ultimately, this experiment addressed a gap in existing research and acts as an incentive for future research concerning teachers being able to discern between student and AI-generated work in the classroom. When analyzing this data, one possible application is that because teachers have a difficult time distinguishing between AI and student work, specific training could potentially be implemented to assist teachers in recognizing signs of AI