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# BRAINWAVES: EVOLUTION

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# ISSUES WITH TURNITIN'S AI DETECTOR

## AI Detection Scores Don't Equal Proof

- AI detectors like Turnitin's tool analyze writing patterns to guess if text was generated by AI, but they rely on probabilities, not certainties. This means they're not foolproof and can make mistakes, which makes them very different from plagiarism detectors that find exact matches with existing sources.
- They look for things like repetitive phrasing or unusual sentence structures, but human writing can mimic these too, especially in academic work.
- Remember, no detector is 100% accurate.

## Recognize Possible Biases in AI Detectors

- Tools like Turnitin may unfairly flag writing from non-native English speakers as AI-generated due to differences in language patterns.
- This bias can also affect neurodivergent students, who may not even be comfortable sharing their condition.
- Be cautious: If a student's work is flagged, consider their background and use the score as just one clue, not the deciding factor.

## Highlighted Sentences Can Mislead

- Turnitin admits that their tool often flags sentences that are actually human-written. At the same time, real AI-generated text can slip by undetected.
- Because highlighting is inconsistent, there is no effective way to determine which parts of students' texts actually are AI-generated.

## Additional Resources



## False Positives Are a Real Risk

- A false positive happens when human-written text is wrongly flagged as AI-generated.
- Clear, simple, or highly structured writing (lab reports, scientific abstracts, summaries, etc.) often looks "AI-like" to the detector.
- Using detection scores as the only evidence can lead to investigations based on flawed data—always verify with other methods like reviewing drafts or discussing with the student.

## How the Tool Works Isn't Transparent

- Turnitin does not fully disclose how its AI models are trained or tested.
- Reported error rates are limited and not independently verified.
- The company itself warns that results should be interpreted with caution.

## Over-Reliance Hurts Trust

- Treating AI scores as proof of cheating can harm student-teacher relationships.
- False accusations can discourage motivation and create lasting stress.
- Students may become afraid to write in their natural style, fearing penalties (some even resort to filming themselves while writing to have a proof in case they get falsely flagged, which adds a lot of anxiety to the learning process).

Feel free to reach out to us personally should you have any questions or suggestions!

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