

What is the most interesting tweak you were able to make that resulted in an unexpected (and maybe unwarranted) change in your plagiarism/uniqueness score?

The initial interesting observation I made was that, upon pasting the exact article into the plagiarism checker, I received an 81% plagiarism score. This is despite the fact that, as a direct copy of a full article from one of the premiere scientific journals, it should be fairly straightforward to determine it is 100% plagiarized. This already calls the score's accuracy into serious question.

When pasting a portion of the article that I translated to Spanish and back using Google Translate, this plagiarism score fell to 50%. A significant change in score, particularly for a process that took approximately 5 seconds. However, one must note that, at 50%, it is still sufficiently high to flag potential concerns.

However, as the persistent student I am, I invested another 15 seconds and cracked out the infamous Chat-GPT. Ever-lazy, I typed out the following six-word prompt: "Please totally rewrite the following text." This resulted in actually a rather well written response that was determined to have a plagiarism score of 0%. Safe to say the checker was totally bamboozled! This emphasises the ease of circumnavigating the software, should a motivated party discover Google.

Slightly more rudimentarily than all this new-fangled AI business, simply changing every fifth word for a portion of the text dropped the plagiarism score to 14%---below certain journals' published thresholds.

Although, it is worth noting there are likely more sophisticated plagiarism detection solutions on the market for those willing to invest more than 0\$.

Considering the concerns brought up in the article and the results of your experiments, how can we best make use of plagiarism checkers?

As the article discusses in depth and my tests quickly revealed, the plagiarism percentage is deeply inaccurate and should not be interpreted as such. Rather, I think it should be instead used as an initial check to flag where further investigation may be necessary. Crucially, it's outputs should always be reviewed manually where action is to be taken. For example, one shouldn't reject a paper outright due to a poor plagiarism score alone, because (as discussed in the article) of its tendency for false positives.

However, we should also acknowledge that, where plagiarism is seriously detrimental such an algorithm cannot be solely relied upon, and perhaps the other methods discussed in the article should too be considered. For example, in relation to publishing scientific literature. Although, manually reviewing all submissions is infeasible, and

hence some hybrid approach should be taken and a balance between risk and prevention must be struck.

To summarise, in my opinion, it must be used only as an option within the toolbox of prevention---specifically a pre-screening device. That is not to say that we would be better without plagiarism detecting algorithms. In my opinion, they serve a clear and useful purpose. The only issue is when users overestimate or misunderstand their capabilities. As discussed within the article, I believe the main issues lie within the practical human context surrounding their use.