

Version Control Software And Its Possible Impact On Students Academic Integrity

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Introduction

Ensuring that students treat their work with integrity has become increasingly difficult in recent years.

The advent of Generative AI, Essay Mills, coupled with old fashioned plagiarism and a shift to "online" learning has created a huge shift in the domain of education.

Unfortunately, this has manifested as Academic misconduct in many cases and indeed, it could be speculated, that many cases of misconduct are not recognised or discovered.



Traditional Oversight Methods

Traditionally, proctored examinations and onsite supervision of students work, was used as an oversight tool but these methods have many drawbacks.

- Simple Repetition of existing material
- Exam Panic/Stress
- Difficulties for students with additional needs
- Etc..

However, we still need to assess our students and due to the move to online assessment this has become increasingly difficult to accomplish satisfactorily.



Plagiarism Detection Tools

Plagiarism detection tools became available in the late 1990's and recently Al detection tools have also become available, with varying degrees of success and accuracy. These tools can be helpful, but they deal with a final artifact that a student produces and do not show the process or progress of a student throughout the assessment.

- Turn it in
- Urkund
- Grammarly

These Tools were thought to be revolutionary at their inception but simple manipulation of the final artifact by the student can greatly reduce the accuracy and viability of any results.



Proposal - Version Control Software

If an examiner can see the progress and changes to a students work, throughout the assessment and the student is aware that this oversight is happening, I posit that the incidence of Academic misconduct through the lack of academic integrity could be greatly reduced.

Version control software has been available since 1972, and from humble beginnings in allowing software developers to revert to earlier versions of their programmes, has become a mainstay of many professional and commercial bodies.

Example: https://github.com/



Explanation of version control

In its most simplistic form, version control allows the user to see any change made to any file, who made the change, when the change was made and where the change was made. This does not just include code. Presentation files, such as PowerPoint, word or text files, pictures, spreadsheets indeed any file type that is used in the modern world can be tracked.

Entire projects can be monitored in real time or when complete, giving the assessor a clear and comprehensive view of the entire timeline of a project or report from inception to completion, in any domain of education.



Example of a simple insight graph



Application in Education

- Monitoring student progress and changes throughout assessments.
- Ensuring transparency and accountability.
- Straightforward and clear ability of the assessor to view the content of any project at any stage of the process, even if the project has been completed
- Ensure that the student is engaging in the assessment by simply viewing their progress
- Reduction in academic misconduct.
- Promotion of academic integrity.
- Comprehensive view of a student's work timeline.



Thank you for your time!

Any Questions?

