

Plagiarism prevention in educational institutions is extending to biomedical journals

The *Bioinformatics* paper of Errami and others rocked the scientific world with allegations of plagiarism and duplication [1,2], especially after it effected the retraction of a published article—written by somebody at Harvard no less [3]. I can imagine that many more are bracing themselves for other revelations to come. But really, we should have seen it coming. Many people are actually surprised that this hasn't happened sooner.

Plagiarism and duplication in science—these are nothing new, really. Biomedical journals have been aware for quite some time that such scientific misconducts occur more often than we would like to think. In a special report in 2005, “academic publishers have told *Nature* they hope that software designed to catch cheating students could soon be used to unmask academics who plagiarize other researchers’—or their own—work”[4].

This made me recall my premedical writing career (2004–2006) as a scientific and medical English teacher. The Internet made life easier for students due to the enormous amount of information they have access to. But it also made it easier for us teachers to check for plagiarism without turning the whole library upside down. My colleague Annie L and I would hammer on our keyboards to ‘google’ suspiciously beautiful sentences and paragraphs from term papers. It was a tedious exercise and certainly not foolproof. We never heard of antiplagiarism software back then. but we did the best we could.

Only recently I became aware that such types of software have been in existence for over a decade now, mainly as software to deter copying of computer programming codes. It evolved into free-text matching programs or ‘originality detection’ tools [5]. Nowadays, web-based antiplagiarism software is routinely used in colleges and universities. Many educational institutions also make use of services of companies that conduct plagiarism checks.

Turnitin and its ‘plagiarism prevention system’ seem to be especially popular [6,7]. Term papers and admission essays are sent in and the output is a feedback on each paper ‘...in the form of a customized Originality Report. Results are based on exhaustive searches of billions of pages from both current and archived instances of the internet, millions of student papers previously submitted to Turnitin, and commercial databases of journal articles and periodicals’ [6].

In a commentary in *Nature*, Errami and Garner (2008) write that the use of plagiarism detection tools in educational institutions enable us to “... hold our children up to

a higher standard than we do our scientists” [2]. Not everyone agrees with this approach. In 2004, a student at McGill University refused to submit his assignments to Turnitin, claiming he was being accused of “being guilty until proven innocent.” The university eventually granted his wish that his work be graded without going through antiplagiarism screening [8].

In 2006, in a rare move, Mount Saint Vincent University in Halifax, Canada banned the use of plagiarism detection software by professors. Students lobbied against the practice based on the following objections [9]:

It creates a “culture of mistrust, a culture of guilt”.

“Intellectual property is not valued the way it should” and keeping term papers in their (Turnitin’s) database may actually be a form of intellectual property infringement.

A student never gets a chance to defend himself/herself. It’s his/her word against the software, or rather against the company using the software.

So is this what Déjà vu database and eTBLAST have created? A culture of mistrust, a culture of guilt in the scientific community? Will it force us towards scientific integrity or towards more sophisticated ways of cheating?

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Three articles which provide interesting further reading on this topic were published in *TWS*'s 2004 December issue:

1. Katavic V. The ‘cheating’.com academic society
2. Roig M. On the causes of academic dishonesty
3. Parkhurst C and Moore E. Nipping plagiarism in the bud: Using Turnitin to teach novice science writers how to paraphrase