

Staff and Student Responses to a Trial of Turnitin Plagiarism Detection Software

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An evaluation of student and staff responses to the trial of the plagiarism detection service Turnitin indicates that both students and staff consider Turnitin (<http://www.turnitin.com>) to be a useful but limited tool for combating Internet-assisted plagiarism. The evaluation found that Turnitin is thought to be most useful as a deterrent rather than as a solution to Internet-assisted plagiarism, and that it would be wise to concurrently pursue other methods to reduce the problem of plagiarism in higher education. This paper charts the views expressed by staff and students participating in the trial of Turnitin.

Teaching staff reported broad support for the use of Turnitin though expressed reservations about its capacity and the complexity of its use. While students were also generally supportive, the research raised two warnings in regard to student objections. The first, that some students hold objections to Turnitin that relate to legal issues concerning privacy, copyright and ownership of labour. The second, that senior students are more likely to seriously object than junior students. The latter tendency is particularly noteworthy as it forewarns of a problem for the introduction of Turnitin in postgraduate courses. In conclusion, the paper offers a number of recommendations that respond to student and staff consideration of Turnitin.

1. Background

University students are increasingly using the Internet to conduct research. In doing so, many are finding ways to plagiarise. While plagiarism has always been a problem for higher education, the breadth of information and services readily available to students via the Internet has significantly increased the scope of the problem and presented new detection challenges. In a recent study, Jude Carroll (2002) discovered approximately 350 000 academic essays for sale on the web, yet even so found cutting and pasting to be the most common way for students to plagiarise from the Internet. This provides insight into the magnitude of the problem.

Seeking ways to address this problem, the Teaching and Learning Committee at the University of Sydney conducted an evaluation of plagiarism detection systems available in Australia. They recommended Turnitin as the most widely used and suitable detection system (Symons, 2003). The discipline of Government & International Relations (G&IR) then conducted a trial of Turnitin with students in two junior and two senior G&IR undergraduate units submitting their research essays to Turnitin during the first semester of 2003. The primary objective of the trial was to determine whether Turnitin could be used, and how it could be used, to combat Internet-assisted plagiarism. As part of this objective, the views of students and staff involved were sought. This paper reports on those views.

2. Method

The researcher discussed Turnitin with students in a series of focus group deliberations, each involving approximately 20 participants; 76 junior and 39 senior students took part. Face-to-face unstructured interviews were also conducted with 12 teaching staff from the 4 units participating in the trial. Participants were guaranteed anonymity to encourage a candid response.

3. Views of Students

3.1 Summary

Students initially reported bewilderment at the introduction of electronic scrutiny of essays, alleging ignorance of the breadth and scope of plagiarism, and concern that they were under suspicion. After deliberation about plagiarism and electronic scrutiny methods, most students subsequently reported either support for or ambivalence about Turnitin's use.

A small minority of mostly senior students continued to voice concern after deliberation. Among these, senior students were more articulate in framing their concerns around substantial legalistic arguments relating to rights and privacy, whereas junior students were more likely to express concern about an inability to correctly cite or to overcome the technical challenge of submitting to Turnitin.

The higher rate of concern among senior students is noteworthy because, if representing a trend, it may be assumed that postgraduate students will be the most likely to express objections. This is significant because teachers hypothesise that Internet-assisted plagiarism is prevalent among postgraduate students. While postgraduate students were not interviewed, participating teachers who used Turnitin in postgraduate units reported that these students were significantly vocal in their opposition.

3.2 Exposition

Most concerns raised by undergraduate students can be described as the acknowledgment of pre-existing conditions clarified by the discussion. Only a small number of students' concerns can be described as specific to electronic detection systems. Themes arising from discussions are interpreted below. These themes are categorised into three areas: (1) positive remarks; (2) concerns relating to technical issues; and (3) concerns relating to ethical issues. While the positive remarks require no further clarification, the two areas of concern are divided into a further two categories: (a) concerns relating to plagiarism detection generally; (b) concerns specific to electronic detection systems.

3.2.1 Positive Remarks

- Electronic detection received support on the basis of enabling fairer assessment. Junior students particularly claimed to be unfamiliar with web-based essay writing and purchasing services and the extent of plagiarism. Concurring with Carroll's (2002) research, plagiarism was described by students to be the unsourced use of ideas and quotes rather than the submission of work produced entirely by somebody else. Students expressed dismay that plagiarism might be widespread and were concerned that plagiarised work may be graded higher than honest work.
- Students considered fear of detection to be a significant deterrent and thought Turnitin would increase the likelihood of detection.
- Students surmised that dispassionate electronic scrutiny would provide an incentive to develop citation skills, thus improving scholarship. Strong support for the maintenance of high academic standards was expressed.

3.2.2a Technical Issues Relating to Plagiarism Detection Generally

- Fear that the Turnitin software would detect unintentional plagiarism was the concern most commonly expressed by students. This was described in three categories:
 1. Incorrect citation where the difference between inept citation and intentional plagiarism might be overlooked if a computer detection system were the only arbiter. Junior students were particularly concerned that their citation skills were not sufficiently developed to withstand intense scrutiny.

2. Unconscious repetition where students might unknowingly repeat another author's phrase believing it to be their own.
3. Coincidental similarities where, in commonly researched areas, there is a chance that a student might coincidentally use the same combination of academic sources previously employed by another scholar.

3.2.2b Technical Issues Specific to Electronic Detection Systems

- Computer judgement: that Turnitin software, lacking discretion, be the sole arbiter without a human assessor scrutinising reports to ensure accuracy. The fear was widespread among focus group participants, though evoked only marginal levels of concern as students were confident this would not be the case.
- Resource inequality: not all students have access to computers and the Internet at home. Crowding and cost problems related to public access magnifies this disadvantage. There are two elements to these concerns:
 1. Computer access: additional requirements would widen existing disadvantage due to inequity of computer access. Notably, research indicates that 99 per cent of students currently complete assignments electronically (Symons, 2003).
 2. Internet access: while heavy Internet traffic was a problem for all students submitting essays to Turnitin, it particularly disadvantaged students without home facilities, due to limited time access to public facilities and significant associated costs.

3.2.3a Ethical Issues Relating to Plagiarism Detection Generally

- Two students were concerned that the request that all students submit their work for scrutiny assumed guilt and required that they prove their innocence. Students claimed this conflicted with the broader justice principle of presumed innocence.

3.2.3b Ethical Issues Specific to Electronic Detection Systems

- A number of students were concerned their privacy rights were breached when essays were made publicly available after submission to Turnitin.
- A number of students were concerned that all essays submitted were stored on the Turnitin database, and that such storage may be considered a violation of student copyright. The Teaching and Learning Committee report discussed this problem, indicating that some US universities had not signed up to Turnitin due to this issue, and that UK universities had required Turnitin to adjust essay storage methods to counter legal problems of this nature (Symons, 2003, p. 7).
- Two students expressed concern that a private organisation contracted by the university was profiting through the efforts of students without sharing the financial reward.

4. Views of Teaching Staff

4.1 Summary

Participating Government & International Relations teaching staff unanimously supported the introduction of the electronic web-based plagiarism detection system, though enthusiasm for the software varied slightly. While some expressed reservations, these were offered in the context of giving in-balance support, and no serious objection to use of the software was raised. Teaching staff anticipated all the concerns that were raised by students.

Notably, a pattern emerged with respect to the way that staff reported their understanding of the extent of the Internet-assisted plagiarism problem. Casual tutors were less likely to consider the problem of Internet-assisted plagiarism to be more significant than that of traditional plagiarism. Tenured lecturers considered that Internet-assisted plagiarism had significantly increased the incidence of plagiarism. This tendency might indicate insufficient knowledge about plagiarism at the junior level.

While staff considered Turnitin an excellent primary indicative tool and a useful backup system for confirming suspected plagiarism—and with which to confront plagiarism suspects—no staff member considered Turnitin provided a comprehensive solution. Staff also noted effective use of Turnitin was significantly time consuming, thus concurring with the Teaching and Learning Committee report finding that the necessary manual checking of Turnitin reports would add to workloads (Symons, 2003, p. 8).

4.2 *Exposition*

Views of academic staff are interpreted below with positive observations outlined first and potential problems following.

4.2.1 *Positive Observations*

1. Turnitin can serve as a deterrent to plagiarism, particularly if advertised widely.
2. While Turnitin was helpful in uncovering a number of instances of plagiarism, the low levels of detection suggest that its deterrence potential is its leading quality.
3. Turnitin can help to provide a level playing field with regard to assessment and, in doing so, can help to remove an incentive to plagiarise.
4. Turnitin can provide academic staff with support in detecting plagiarism.
5. Turnitin can provide staff with reassurance, particularly when marking large numbers of essays, that the detection of plagiarism is not solely their responsibility.
6. Turnitin provides an incentive to improve citation (as noted during the trial).
7. Turnitin has the potential to raise standards by increasing the likelihood of discovery of plagiarism and poor citation.
8. Turnitin represents an improvement on the current system of electronic scrutiny.

4.2.2 *Potential Problems*

1. Turnitin does not distinguish between cited and uncited material, hence the reports must be scrutinised carefully in order to be useful.
2. There is a possibility that students might bring forward legal action, as they have in the United States, in regard to their intellectual property ownership.
3. Essay sites make available new, undetectable, responses to every conceivable essay question, hence innovative assessment modes should also be considered rather than simple detection.
4. Turnitin only accesses constructed web sites and not electronic copies of whole texts, hence it cannot offer assistance in regard to all material that is on the web. For this reason, students who plagiarise from electronic (or paper) books will not be discovered.
5. Devious students may realise that if they have plagiarised in the production of an assignment, they would be sensible to send a different piece of work to Turnitin than the one containing the

plagiarised content. A teacher will only know that a different piece of work has been sent if all electronic copies of assignments are compared comprehensively with paper copies. This is labour intensive, particularly in large courses.

5. Conclusion

Staff and student responses during interviews indicated that while Turnitin is broadly considered a useful tool for combating Internet-assisted plagiarism, both staff and students hold concerns about its limitations and use. An interesting pattern in the expression of these concerns emerged. Senior staff members were more likely to express concern about electronic plagiarism than their junior colleagues, and senior students were more likely to express concern about electronic essay scrutiny than their junior peers. A possible explanation for this, on both counts, is experience. Senior staff members have greater experience and capacity than juniors to both recognise plagiarism and consider the many and varied ways in which it might be practiced. This suggests that training for junior staff is necessary. Senior students may know more about ways to plagiarise than juniors, and are more likely to have applied these—even if marginally—or know of other students who have. This suggests that scrutiny of senior work is necessary. They might equally be articulating their greater understanding of rights and laws.

6. Recommendations

A number of recommendations were developed to address some of the concerns raised in interviews. Those relating to the use of Turnitin generally—and not the University of Sydney specifically—are listed below:

- 6.1 THAT citation instruction should become a mandatory element of the first year teaching programme, and that teaching of citation be intense not adjunct.
- 6.2 THAT casual tutors receive instruction about plagiarism techniques and detection.
- 6.3 THAT where used, Turnitin should be advertised widely to ensure its deterrence potential is maximised.
- 6.4 THAT detection of plagiarism by Turnitin is advertised to assist deterrence.
- 6.5 THAT Turnitin is not used as the sole arbiter—staff scrutiny of positive Turnitin detection is necessary.
- 6.6 THAT the submission time for Turnitin be substantial (several weeks) to minimise heavy Internet traffic and minimise costs and inconvenience.
- 6.7 THAT course coordinators using Turnitin switch off the public access option ensuring that student essays and reports are visible only to instructors.
- 6.8 THAT all, not simply a selection of, students submit their work to Turnitin.
- 6.9 THAT Turnitin reports be compared randomly with the hard copies of essays to ensure that students have submitted their essays and not alternate innocuous documents.
- 6.10 THAT universities seek legal advice regarding whether Turnitin breaches student privacy and copyright, or fails to compensate students' labour contribution.

References

Carroll, J. (2002). *A handbook for deterring plagiarism in higher education*. Oxford: Oxford Centre for Staff and Learning Development.

Symons, R. (2003, July). *Plagiarism detection software, its use by universities, and student attitudes to cheating: A report for the University of Sydney Teaching and Learning Committee*, 1st Draft.

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