#### LEARNING AND TEACHING DEVELOPMENT UNIT

# Report on the Trial of Plagiarism Detection Service:



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# Report on the Trial of Plagiarism Detection Service: Turnitin

Geoffrey Crisp, LTDU

#### Introduction

Towards the end of 2002 members of the University community discussed the growing publicity associated with plagiarism and the ability of various software products to detect plagiarism and collusion using digital versions of students' assessment work. The consortium representing the Victorian universities, CAVAL, approached the University of Adelaide with an offer for a licence for the plagiarism detection service from Turnitin.com.

A review was undertaken of documents available at the time on trials that had been conducted in the UK on numerous software products and service providers for the detection of plagiarism and collusion. JISC (Joint Information Systems Committee) had an extensive web site containing relevant educational documents, results from trials and reports on assessment practices (http://online.northumbria.ac.uk/faculties/art/information\_studies/Imri/JISCPAS/site/jiscpas.asp). On the basis of these reports, and after discussions with a number of University staff actively engaged in projects associated with plagiarism detection and assessment, funding was sought from the DVC(E) and Provost's discretionary budget to undertake a trial of Turnitin (Attachment 1). This trial involved the discipline areas of Philosophy, Adelaide Graduate School of Business, Applied Mathematics, Mechanical Engineering and English. The discipline area of Physiology had already taken out a trial licence for Turnitin and was also included.

Concurrent with the trial of Turnitin, the University Learning and Teaching Committee established a Working Party on Plagiarism. This working party reported to Academic Board on 5 November and the new Policy document, as well as 6 recommendations, were endorsed (https://www.adelaide.edu.au/academbd/archive/meetings2003/index.html).

Academic Board endorsed the recommendations from the Plagiarism Working Party on 5 November 2003.

# Results from the trial

A limited licence for the 6 discipline areas indicated was secured from Aldis (Attachment 2) and trials were commenced in semester 1 and continued throughout semester 2. The details of staff members associated with these trials are shown in the Table below. At the completion of semester 2, a proforma was sent to each of the staff indicated, requesting a summary of their experience of using Turnitin and any problems they had encountered. A total of 5 replies were received and are included as Attachment 3. In addition to these written reports, the LTDU conducted a seminar series in semester 2 under the heading of "Current Issues in Higher Education" and each of the staff involved in the trial was offered an opportunity to publicly discuss their use of the Turnitin service. Gerard O'Brien, Dan McHolm, Kristin Munday and Barbara Gare each presented on their experiences in using Turnitin for plagiarism detection and student development activities associated with appropriate acknowledgement and referencing in assessment work. LTDU staff Geoff Crisp, Ursula McGowan and Judi Baron also presented seminars on plagiarism issues, including updates from the Working Party on Plagiarism, learning and teaching approaches that minimise student opportunities for plagiarism and using rubrics for assessment (Attachment 4). Deane Fergie and Kate Kadman also presented seminars in the

series on wider issues associated with plagiarism but not related directly to Turnitin or detection software.

The seminar series generated considerable discussion amongst staff and Faculty Learning and Teaching Committees also had discussions about proposed changes to University policy on plagiarism issues during the year.

A summary of the recommendations from trial participants' reports is shown below.

Discipline	Contact Person	Recommend continued use of Turnitin?
Physiology	Dan McHolm	Yes, or another product, if suitable
Philosophy	Gerard O'Brien	Yes
Adelaide Graduate School of Business	Jenny Leggo	Left AGSB
Applied Maths	Barbara Gare	Yes, or another product, if suitable
Mechanical Engineering	Kristin Munday	Yes, if some issues resolved
English	Joy McEntee	No

On the whole, most of the trial participants found the Turnitin web-based service relatively straightforward to use. One staff member was not satisfied and experienced considerable frustration and disappointment with using Turnitin (see proforma reports in Attachment 3). The trial was deliberately conducted with minimum support for staff in order to test the ease of use of the Turnitin product and to determine, in a realistic manner, problems that staff and students would encounter when undertaking a process of using digital files for the detection of plagiarism. No specific software was needed on the staff or student computer, apart from a recent version of a web browser. The detection of potential cases of plagiarism in assessment work will take increased staff time and it is difficult to avoid this consequence. Although various techniques and workflow processes might be developed over time, it must be realized at the outset that plagiarism detection costs money and time.

The issues that need to be considered, should any electronic process be used for the detection of plagiarism, are:

#### Electronic submission of assessment work

Students will be required to submit digital versions of their assessment work if it is to be entered into the Turnitin database. It would be very time consuming to scan paper copies of assessment work and use optical character recognition to generate digital files. This approach is impractical as funds would not be available to support a central service. Some discipline areas already require digital versions of assessment work, either in addition to the paper version or as the primary mode of submission. However, this is a decision that will need to be made at the local level. Staff will need to work through the issues associated with digital submission of assessment work and ensure that students are aware of this requirement if they wish to use a service such as Turnitin. Alternative modes for student submissions will need to be considered for those students who cannot access or use a computer.

There are numerous options available for the digital submission of assessment work, including email attachments to staff or administrators, use of the Digital Dropbox in MyUni, student upload of assessment work directly into the Turnitin database or the use of third party software for digital file transfers. The two recommended options would be to use the Digital Dropbox in MyUni and/or to require students to upload their assessment work directly into the Turnitin database. It would be more convenient for staff to be able to download multiple digital files from the Dropbox in MyUni for transfer to Turnitin. This feature is

currently not available in MyUni. It is possible to either purchase or construct software that would allow this process to be more convenient for staff.

The University supported web browser is Netscape 4.7. This version of Netscape is not suitable for using the web-based Turnitin service. Either a later version of Netscape, or Internet Explorer, should be used. A suitable version of Internet Explorer is available on University computers and most students would use Internet Explorer on their home computers. This issue was one that particularly frustrated one of the trial participants, and is relatively easy to resolve.

The MyUni Instructor web site could be used to outline good practice examples for student submissions of digital versions of assessment work. Some discipline areas may choose to have administrative staff handle the downloading of student assessment work from the Digital Dropbox and loading these files into Turnitin (as was done by one of the discipline areas involved in the trial).

#### • Students loading their own assessment work into Turnitin or MyUni.

The training that students would require in order to load digital versions of their assessment work into the MyUni Dropbox or Turnitin should be minimal, but will still be necessary. Teaching staff will not want to spend significant amounts of time facilitating student workshops or training sessions on these technical details. The MyUni student web pages could be used to demonstrate how both the Dropbox and Turnitin should be used. The LTDU Online Education group could develop these web pages and the Online Education Helpdesk could be used for student technical support. It would be prudent for teaching staff to liaise with the Online Education Helpdesk when students are about to begin submitting their first assessment work to the Digital Dropbox or Turnitin and perhaps use a formative assessment task initially to assist with student training. This would reduce the anxiety for students should they experience technical difficulties during the submission process and allow for refinements to the MyUni student web site information.

Explicit instructions will be required for students on such aspects as naming files, how to access the MyUni Digital Dropbox and how to load files from a hard drive or external disk to the Turnitin website. Practice using such instructions could be part of Orientation Week induction sessions. It will need to be made clear to students that draft versions of assessment work should not be entered into the main Turnitin database, otherwise subsequent, or final, versions of their work will show that the content of the work pre-exists in the database. Turnitin does have a facility for students to submit draft versions of assessment work that does not become part of the main database.

# Copyright

Students own the copyright to their assessment work. CAVAL sought a legal opinion on the right of universities to enter student assessment work into a database service, such as Turnitin. The advice was that a cover sheet should be signed by students and attached to each piece of assessment work explicitly granting the university the right to reproduce the work and submit it to a database for the purposes of assessment and plagiarism detection. An example is shown as Attachment 5. The Working party on Plagiarism recommended:

"That Schools/Departments provide an "Assessment Cover Sheet" that requires the signature of the student declaring that all cited works have been clearly identified and acknowledged. For students submitting work electronically a suitable digital version of an "Assessment Cover Sheet" should be used. Examples of the former are attached as Appendix 3a and 3b.

That Schools/Departments provide explicit information to students in course guides explaining discipline-specific expectations with respect to acknowledging the works of others and referencing or citation conventions to be used in assessment work."

#### • Student Learning

The major benefit to be derived from the use of a plagiarism detection service, such as Turnitin, is the potential to significantly raise student awareness of plagiarism issues and the accepted standards associated with acknowledgement and referencing. This aspect was highlighted during the LTDU seminar series and by a number of the trial participants.

For staff too, the reports generated by Turnitin, are expected to be of benefit in assisting them to identify and address the kinds of difficulties experienced by students in relation to the incorporation and appropriate referencing of source materials into their assessment work

Although plagiarism detection can be seen as maintaining academic standards, it would significantly diminish its educational benefits if it were associated only with punitive processes. A much more important role would be to improve student learning outcomes.

# Will Turnitin detect all case of plagiarism?

The use of the Turnitin service will not lead to the detection of all cases of plagiarism or collusion. Only certain resources are available in digital format and Turnitin will only detect material that exists in a digital format and in a public space. The frequency with which the Turnitin database is updated by regular visits to web page on the internet, or other databases, will necessarily impact on the efficiency and depth of the comparison between new and existing material. Teaching staff will not be able to rely solely on Turnitin for the detection of plagiarised material. Staff will still need to be current with discipline specific literature, to be aware of changes in student writing style within an assessment work or between assessment works, and use keyword searches using Google etc. It would also be logical to assume that, due to the practical time limitations associated with loading and reading hundreds of individual pieces of assessment work, it is likely that a random selection of work from a course would be used in many cases.

The benefits to be derived from the use of Turnitin may differ significantly between discipline areas. Nevertheless, a number of participants in the trial did highlight the fact that student awareness of plagiarism is raised by informing them that their assessment work may be submitted to a service, such as Turnitin. Trial participants also emphasised that anonymous examples of reports from Turnitin could be used as an efficient teaching tool and enabled students to discuss standards and expectations for assessment work.

# Final recommendation

On the basis of the reports from the trial participants and staff discussions resulting from the LTDU seminar series, it would appear that a University wide licence for Turnitin would be beneficial. A current quote from Aldis for a 12-month licence for Turnitin for 2004 is presented as Attachment 6. Since the licence is renewed annually the University may review the benefits of the service on an annual basis and no additional software or hardware or maintenance is required.

The LTDU would be the appropriate academic support provider for staff development workshops and the Online Education Helpdesk could be the designated contact point for technical problems encountered by students or staff.