

Using Turnitin with large classes to support student writing

Background

This paper describes an initiative at a University in the west of Ireland to use Turnitin formatively with large class sizes to support student writing. The University has approximately sixteen thousand students across five Colleges.

The Centre for Learning and Teaching is a central unit within the University, responsible for a wide range of activities including teaching and learning policy, academic staff development, support for teaching related activities and learning technologies. In particular, it provides pedagogical support to academic staff on good practice in the use of technological tools for teaching, learning and assessment.

Turnitin has been used within the University since September 2006. Initially part of a pilot study, it was used primarily by plagiarism advisors and other interested members of academic staff to investigate suspected incidences of plagiarism, in line with the University's code of practice for dealing with plagiarism. Because staff were accessing the Turnitin website directly, the service was not considered suitable for screening submissions in large classes.

However, a project within the College of Commerce in 2007 involved the submission to the Turnitin service of more than 600 essays from final year undergraduate students. The purpose of this project was to assess the usefulness of Turnitin in a large group setting. Findings from the report (Maloney and O'Kane, 2007) included that using the service was a factor in deterring plagiarism, but that the administrative burden far outweighed the benefits. It was also recognised that most of the issues highlighted in the originality reports generated by Turnitin involved poor student writing, rather than deliberate attempts to deceive. However the report concluded that "there was insufficient time to use the originality reports in a formative way that would have helped students to develop their writing and referencing skills".

In September 2008, as part of a larger externally funded project *From Pilot to Mainstream*, Turnitin was integrated with the institutional Virtual Learning Environment (VLE), Blackboard, using a building block. Since the VLE is also integrated with the university's student record system, so that course enrolments on Blackboard reflect the registration data, this removed a lot of the administrative burden for those academic staff who wanted to use Turnitin for large classes.

In tandem with the technological developments, the culture of the institution regarding academic integrity has also been evolving. From a focus on policy, procedures, detection and penalties, the groups responsible for overseeing aspects of academic integrity have started to consider plagiarism as a pedagogic issue, related to teaching, learning and assessment, and to address aspects of information literacy among students, and staff development to support this.

This paper describes a pilot study involving 3 case studies across 3 disciplines in the College of Arts and Social Sciences. These case studies involve large student groups, from 120 to 600 students, and address the use of Turnitin to support student writing and offer formative feedback, rather than focus purely on plagiarism detection.

Methodology

During the Summer of 2008, the Centre for Learning and Teaching was approached by three groups of academics who were keen to use Turnitin with their students using the Blackboard plug-in. In that sense, the case studies were all self-selecting and we were fortunate to work with very interested and committed teachers. The groups come from the disciplines of Psychology, History and English Literature, all within the College of Arts and Social Sciences. The three case studies involve large classes, two first year groups with 550 and 600 students respectively, and a final year undergraduate group with 120 students. These are depicted in Table 1.

Group	A	B	C
<i>Subject</i>	Psychology	History	English Lit
<i>Class size</i>	600	120	550
<i>Level</i>	First Year	Final Year	First Year

Table 1: Case Study groups showing subject, number of students and level

In each case, an initial meeting was held with the member of academic staff responsible, who may have been a lecturer (in group B) or a year co-ordinator (in groups A and C). The purpose of the initial meeting was to gather information about: the current form of assessment used as well as the processes for submission, marking and feedback; who was involved in the teaching of each group and how the two larger groups were organised; the motivation for using Turnitin and what expectations existed; the technical confidence of the academic staff member. We also took the opportunity to advise the academic staff about the limitations of Turnitin and what could realistically be expected.

With each of the three case studies, we wanted to emulate, as much as possible, the current form of assessment (see Table 2), and so there were variations in how Turnitin was used in each case.

Group	Assessments		Organisation	Teaching team
A	Essay x 4		Lectures Weekly tutorials	Lecturers and Tutors
B	Final essay		Lecture course	Lecturer only
C	Draft essay x 3 Final essay	Per semester	Lectures Weekly tutorials	Lecturers and Tutors

Table 2: Original assessment practice and teaching organisation

Case Study A: Psychology

First year Psychology is taught to a group of 600 students. As well as large lectures, the students are divided into 20 tutorial groups taught by 10 tutors, who are either members of academic staff or postgraduate students. The year co-ordinator explained that there had been a number of cases of plagiarism in previous years, the majority of these were problems with citation and referencing, mostly dealt with informally. However, it is difficult to adopt a consistent approach across 20 tutorial groups and there was a suspicion that collusion may be a problem. Turnitin was seen as a tool to

discourage plagiarism/collusion, to encourage good writing and literacy, but also as a tool to support tutors in their work.

The existing practice was that students submitted 4 essays over the academic year on separate topics. Although they received written feedback from the tutors, there was no opportunity to feed forward and resubmit work. There was no policy within the discipline on electronic submission of essays and the first year group was required to submit hardcopies of essays, to save on printing costs.

As a first step, the teaching team, including academic staff and postgraduate tutors was brought together in a training workshop facilitated by the Centre for Learning and Teaching, to discuss general issues around student plagiarism, information literacy and expectations of student work within the discipline. We also spent considerable time in training the teaching team to make good use of Turnitin and how to interpret the originality reports, so that they would be comfortable and confident in working with their student groups.

A second workshop was organised to consider the organisation of students into groups on Blackboard. While some local technical support was available, the co-ordinator for the Psychology group needed a lot of support from the Centre for Learning and Teaching. Apart from the initial training workshops, the majority of support for staff was given via email and telephone.

Based on the existing assessment practice, we devised a plan for the use of Turnitin within the particular teaching and assessment context. As well as submitting a single hardcopy of each essay, students were also requested to submit an electronic version through Turnitin on Blackboard. The hardcopies were treated as the definitive version of the submission, in any case where the hardcopy differed from the electronic version. Students did not see their own originality reports, but tutors had access to the reports for their own groups and addressed any issues that came up. The assessment was not changed in any other way, except that students were given a talk on Turnitin within the lecture schedule and shown how to submit their essays online.

Case Study B: History

The final year History module is taught to 120 students, by a single lecturer who marks all the assessed work herself. The lecturer was concerned over the perceived levels of plagiarism and problems with citation and referencing. Collusion was much less of an issue than with the larger groups.

The existing practice was that students submitted two hardcopy versions of a final essay for the module, which was then marked. One copy of the essay was used to facilitate return of feedback to the students, while the second was retained for review by the external examiner.

A training workshop had been organised previously for academic staff within the discipline of History to discuss general issues around student plagiarism, information literacy and expectations of student work within the discipline. One further, more technical workshop was organised to demonstrate the capabilities (and limitations) of Turnitin. In this case study, the lecturer for group B already made considerable use of technologies in her teaching and also had some additional expertise within her peer group.

Based on the existing assessment practice, and on the requirements of the individual staff member, Turnitin was used largely as a tool to facilitate the detection of plagiarism. Students were asked to submit essays electronically, through Turnitin, and also two hardcopy versions. Students did not see their own originality reports, which were accessible only by the lecturer.

Case Study C: English Literature

First year English is taught to about 550 students through a system of large lecture classes and smaller group tutorials. Tutors are academic staff members and postgraduate students. As in case study A, the year co-ordinator reported a concern over problems with citation and referencing and Turnitin was seen as an attempt to encourage and recognise good writing and literacy skills. There was much less concern over actual plagiarism than in the two other groups, although collusion was identified as an issue. Instead, the departmental policy is to reduce the volume of paper being collected and stored, and a movement towards complete online submission was a significant motivation.

The existing assessment practice was that students submitted three draft essays per semester and received feedback on these, before submitting a final essay for assessment, incorporating changes based on the feedback. This approach to formative feedback allowed us to build in extra feedback for the draft essays, using the Turnitin originality reports.

As with the Psychology group, the teaching team, including academic staff and postgraduate tutors was brought together in a training workshop to discuss general issues around student plagiarism, information literacy and expectations of student work within the discipline. There was already some prior experience of using Turnitin by one lecturer within the discipline, which helped with the discussion over how best to use the tool with the particular group of students.

Based on the current assessment practice, which already used draft submissions for feedback, the group decided to allow their students to access their Turnitin originality reports directly, as additional feedback. Students could then use the feedback contained in the originality reports, as well as the feedback provided by tutors, to improve their writing in the final essay. This required considerable engagement with the students by the tutors so that they could correctly interpret the reports. Tutors were trained to support the students in their reading of the originality reports and were on hand to give advice on making improvements to writing. Students then submitted reworked versions of their essays in a single portfolio, as the final essay. They did not have access to the final originality reports.

Group C, in line with departmental policy, required online submission only.

Table 3 shows how the assessments were organised and who had access to the originality reports.

Group	Assessments		Access to Reports
A	Draft essay x 3 Final essay	Per semester	Students, Tutors Lecturers and Tutors only
B	Final essay		Lecturer only

C	Final essay x 4	Lecturers and Tutors only
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Table 3: New assessment practice and access to Originality Reports

At the end of the teaching period, in spring 2009, we interviewed each of the academic staff members to record their experiences, to identify any issues that had not been explicit during the year, to inform and document good practice, and to assist in refining the experience in each case for the next academic year.

Findings

Arising from the interviews with key staff, a number of findings were recorded, some expected and others unexpected.

Plagiarism Detection and Deterrence

As expected, as a tool to support plagiarism detection, Turnitin was found to have performed well. Across the three large classes, a number of minor cases of internet copying were found. In addition, the use of Turnitin confirmed that there is an issue with collusion in the two very large groups. With the two very large first year groups the cases of detected plagiarism/collusion were used as an educational opportunity to speak informally with the individual students involved. Moreover, tutors used summary data as the basis of a classroom discussion for the student groups as a whole, allowing them to openly discuss the issues during tutorial sessions.

Two more serious cases were detected and dealt with through the University's Code of Practice for Dealing with Plagiarism. One of these was in a first year group and was an issue of serial plagiarism.

The number of cases found in group A represented an increase over previous years, when Turnitin was not used. This may indicate the effectiveness of using Turnitin to support detection, but also that it did not act as an effective deterrent for this group.

Supporting Writing Skills

In the two groups where students did not have access to their originality reports (groups A and B) there is no evidence that the use of Turnitin supported writing skills. In fact, the lecturer for group B strongly expressed her doubt that learning technologies in general can be used to enhance student learning, although this comment was primarily aimed at the lower level functionality of the VLE.

However, the most interesting findings of the study were in group C, where students were given access to their originality reports for draft submissions and could use them to improve the final versions of submitted work. Turnitin was found to be particularly useful to highlight the importance of originality, and as a way of helping students understand what is expected of them at this level. Where students were using quotations to make up word counts, the originality reports helped to highlight the undesirability of this approach to writing essays.

The year co-ordinator for group C commented that the use of Turnitin helped the teaching staff to "see more clearly the students that are shining". As a result, the additional use of the originality reports as a feedback mechanism made the assessment "fairer for students".

Student Feedback

A limitation of this study is that no student feedback relating to the use of Turnitin was explicitly sought in any of the three case studies. However, no issues, positive or negative, were raised in the end of term module feedback that is routinely collected. A single student comment read “Turnitin system a bit awkward”. In general, students seemed to accept it as part of the submission process.

The co-ordinator of the English Literature group commented that there had been an initial anticipation that mature students might have issues with the technical use of Turnitin. In fact, these worries proved to be unfounded and in reality mature students welcomed the ability to be able to submit assessments and view originality reports from home.

Significantly, another large first year group (with 950 students) approached the Centre for Learning and Teaching in the second semester of the academic year about using Turnitin, based on demand from students. Many of these students would have also been in groups A and/or C.

Supporting the teaching team

In groups A and B, it was found that the introduction of Turnitin resulted in additional work for the teachers, tutors and the year co-ordinator. In the Psychology group, this could be attributed to the steep learning curve involved, as the teaching team had not previously made extensive use of the VLE at all. Despite the additional work reported, the tutors voted unanimously in favour of using the system again for the next academic year.

The co-ordinator for the English Literature group, on the other hand, reported that using Turnitin was found very useful for the tutors to identify problems with referencing, to support plagiarism detection, to identify excellent work and to raise issues generally in class around student writing. For herself, as year co-ordinator but not directly teaching the group, it was also useful in giving visibility into the student group as a whole.

Lessons Learned

Both of the larger groups expressed the intention to continue with Turnitin for the academic year 2009-10, with some modifications. Both identified that the initial introduction of Turnitin to the students would be better handled by the tutors within the tutorial setting than in the larger lecture groups.

The Psychology group, feeling a lot more confident with the technology, decided that for the following year, the number of essays should be reduced and that students would be given the opportunity to submit drafts, have access to originality reports and get tutor feedback before submitting final versions.

The discipline of English decided to roll out the paperless submission system and the use of Turnitin to all three years of the undergraduate programme. The first year co-ordinator also introduced a self-reflective writing exercise, allowing students to assess their learning in the subject by the end of the semester.

Other Issues

Both groups A and B required hardcopy as well as online submission. This raised two significant issues. First, which is the definitive version? For the Psychology group, it was clear that the hardcopy was definitive, but it was less clear in the case of History. In particular, in the one serious case of plagiarism it was found that the electronic copy had been changed from the originally submitted hardcopy. The second issue arose in group A, where a small number of students submitted hardcopies of their work, but didn't submit anything electronically. Ultimately, the students were not penalised, but they may have benefitted in comparison with those students who did submit electronically and had a penalty applied for detected plagiarism/collusion.

Discussion

In embarking on this initiative, the Centre for Learning and Teaching had a number of questions to be answered. Given the shift in focus from policy, procedures, detection and penalties, can Turnitin be effectively used to support learning and teaching? In particular, is it possible to use the electronic text matching service to support teaching of large students groups? And can this be done in a formative manner, to support student writing? Further, what are the implications for teaching teams in terms of administrative overhead, and for the Centre for Learning and Teaching in terms of academic staff development, training and support.

There are many studies that warn against using electronic detection tools, such as Turnitin, as a panacea for plagiarism, for example (Badge and Scott, 2009; Sutherland-Smith and Carr, 2005; Warn, 2006). Many authors indicate that electronic detection can be used as part of the educational context, rather than primarily as a deterrent (Bretag, 2009; Cheah and Bretag, 2008; Davis and Carroll, 2009; Davis, 2007; Ledwith and Risquez, 2008). Barrett and Malcolm (2006) argue strongly that electronic detection software must link the use of the originality reports to the education of students in information literacy.

Our findings were that the use of Turnitin did support the academic staff and tutors in their teaching and assessment. Although there was some administrative overhead associated with the very large classes of students, group A voted unanimously in continuing for another year, with some modifications, while group C extended the practice throughout all three years of the undergraduate programme.

Davis (2007) and (Davis and Carroll, 2009 pp. 58-70) used Turnitin formatively with small groups of pre-Masters level students, using one-to-one feedback and small groups. She recommends using Turnitin with first drafts, before assessment. In our work with group C, we tried to adapt this approach to a large group of first year, undergraduate students. In general, we found the approach to be very successful, with some unanticipated benefits. Therefore, we argue that it is possible to use electronic text-matching in a formative way to support student writing in very large groups.

Our study can be compared to those of Ledwith and Risquez (2008) and Cheah and Bretag (2008), both of whom used Turnitin with large groups, although smaller than the numbers reported here. Both studies report a reduction in the incidence of internet plagiarism. More importantly, we think, the use of Turnitin provided an opportunity

to raise awareness of the issues of academic integrity in the classroom situation, also reported in Sutherland-Smith and Carr (2005).

The administrative overhead was noted in group A, where the teaching team had to come to terms with the use of the VLE as a platform for teaching. In fact, the integration of Turnitin with the VLE vastly reduced the amount of administrative effort, compared to the initial case study in the Faculty of Commerce (Maloney and O'Kane, 2007). Both Goddard and Rudzki (2005) and Warn (2006) highlight that electronic detection tools should be linked to the VLE and that self-submission by students is the optimum method to reduce the administrative burden on teaching staff.

We consider that the role of the teaching team was vital to the success of the intervention, also suggested by Ledwith and Risquez (2008). The exercise using Turnitin was academic-led, brought into the classroom as part of the assessment practice, and was not treated as an add-on to teach literacy skills. This required substantial commitment by each of the teaching teams. The initial workshops with the Centre for Learning and Teaching were a very important part of this, since all teaching team members were trained and supported to, in turn, support their students. A significant part of the initial workshops was spent on agreeing a consistent definition of plagiarism and a consistent approach to dealing with it, within the discipline. Thus academic honesty became a shared value across the teaching team, giving a consistent message to students.

Finally, on the topic of Turnitin as a teaching tool, like other teaching tools it can be used badly or it can be used effectively, but this can depend on the teaching context. We do not think it is helpful to have a single, university-wide policy on using Turnitin. In our three case studies, group C was the most successful in terms of supporting student learning. But this was only possible because of existing experience with the tool and a group of academics who had a clear vision of how Turnitin could be used throughout the discipline. Group A had no existing expertise, and the intervention was modelled to use Turnitin to support their existing assessment model. Based on the experience and success of the first year, not without its difficulties, the discipline has now moved on to a more sophisticated model where students submit drafts and have access to their own originality reports.

Significantly, group B was the least successful of the three studies, where plagiarism detection was the main motivation for using Turnitin. Other parallel studies in the same discipline, with much fewer students, have been more successful, and in fact the academic staff member did continue to use Turnitin in the following academic year.

Conclusion

This paper has described three case studies at a University in the west of Ireland, where Turnitin was used with large classes of up to 600 students. We found that, by integrating Turnitin with our VLE, the administrative burden on staff was manageable.

Turnitin was found to be a useful teaching tool, and to support teaching teams in their assessment practices. Moreover, when students are given direct access to their originality reports on draft submission, accompanied by support from tutors, student writing is enhanced.

The consistency of message relating to academic integrity from the teaching teams is an important factor and there is a significant implication for staff development, training and support, through the Centre for Learning and Teaching.

The intervention has continued in the academic year 2009-10, with development of the initial case studies and the inclusion of other groups, some from other Colleges, and one with a first year intake of 950 students. We are currently collecting student feedback to include in our analysis.

References

Badge, J and Scott, J (2009) Dealing with plagiarism in the digital age. Available at: http://evidencenet.pbworks.com/f/Badge_Scott_plagiarism.pdf (Accessed: 26 March 2010).

Barrett, R and Malcolm, J (2006) 'Embedding plagiarism education in the assessment process', *International Journal for Educational Integrity*, 2(1), pp. 38-45.

Bretag, T (2009) 'A model for determining student plagiarism: Electronic detection and academic judgement', *Journal of University Teaching & Learning Practice*, 6(1)

Cheah, SW and Bretag, T (2008) 'Making technology work for academic integrity in Malaysia', *Third International Plagiarism Conference*. Northumbria University. Northumbria University: nLearning. Available at: http://www.plagiarismadvice.org/images/stories/old_site/media/2008papers/P18_Cheah_Bretag.pdf (Accessed: 26 March 2010).

Davis, M and Carroll, J (2009) 'Formative feedback within plagiarism education: Is there a role for text-matching software?', *International Journal for Educational Integrity*, 5(2), pp. 58-70.

Davis, M (2007) 'The Role of Turnitin within the Formative Process of Academic Writing', *The Brookes eJournal of Learning and Teaching*, 2(2) [Online]. Available at: http://bejlt.brookes.ac.uk/article/the_role_of_turnitin_within_the_formative_process_of_academic_writing/ (Accessed: 26 March 2010).

Goddard, R and Rudzki, R (2005) 'Using an Electronic Text-Matching Tool (Turnitin) to Detect Plagiarism in a New Zealand University', *Journal of University Teaching & Learning Practice*, 2(3)

Ledwith, A and Riskey, A (2008) 'Using anti-plagiarism software to promote academic honesty in the context of peer reviewed assignments', *Studies in Higher Education*, 33(4), pp. 371-384.

Maloney, M and O'kane, C (2007) *Using Turnitin in a large class*. Unpublished.

Sutherland-smith, W and Carr, R (2005) 'Turnitin.com: Teachers' Perspectives of Anti-Plagiarism Software in Raising Issues of Educational Integrity', *Journal of University Teaching & Learning Practice*, 2(3)

Warn, J (2006) 'Plagiarism software: no magic bullet', *Higher Education Research & Development*, 25(2), pp. 195-208.